

Selective Reproduction in NP-Ellipsis

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| | |
|--|-----|
| 1. Introduction..... | 125 |
| 2. Puzzles: Interpretive and Grammatical Contrasts | 126 |
| 3. Previous Analyses of NPE and Their Problems | 128 |
| 3.1 A PF Deletion Approach..... | 128 |
| 3.2 An Empty Pronominal Approach | 129 |
| 3.3 A Dependency Theory Approach | 130 |
| 4. Proposals | 133 |
| 4.1 A Referential Feature [REF]..... | 133 |
| 4.2 Selective Feature Copy at LF | 135 |
| 5. Summary | 139 |

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Selective Reproduction in NP-Ellipsis*

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1. Introduction

In this paper, we are concerned with the interpretation of NP-Ellipsis (henceforth **NPE**) in Korean (and Japanese). Taking various observations made by S. Kim (1999) as our starting point, we first examine some unexpected interpretive and grammatical properties that NPE exhibits when it replaces the reflexive pro-form *caki* 'self' or a name. We then briefly review some of the major approaches to NPE proposed in the literature and point out their problems. As an alternative approach, we propose and argue for a novel analysis. We argue in particular that NPE involves reproduction at LF in which referential features of an antecedent nominal expression are 'selectively copied' onto the ellipsis site.

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2. Puzzles: Interpretive and Grammatical Contrasts

When the first utterance in a discourse involves *caki* 'self' in its object position as in (1A) below, a puzzling interpretive contrast arises between the two alternative second utterances, (1B) and (1B').

- (1) A: John-un *caki*-lul chaykmanghaysse
 John-TOP self-ACC blamed
 'John blamed himself.'
- B: Bill-to **caki**-lul chaykmanghaysse
 Bill-also self-ACC blamed
 = Bill blamed **Bill**, too
 ≠ Bill blamed **John**, too (Strict identity **unavailable**)
- B': Bill-to [E] chaykmanghaysse
 Bill-also blamed
 = Bill blamed **Bill**, too
 = Bill blamed **John**, too (Strict identity **available**)

Before addressing the contrast here, let us reconfirm three well-known properties of *caki*, which we will pay close attention to throughout this work. First, as a 'dependent' reflexive pro-form, *caki* must be syntactically bound within an utterance (the 'obligatory binding condition'). Second, unlike reflexive anaphors like *himself/herself* in English, *caki* need not observe Binding Condition A insofar as it is bound (even by a non-local antecedent). Third, unlike *zibun* 'self' in Japanese, *caki* has an antecedent restriction which requires its antecedent to be a third-person nominal expression. That is, *caki* cannot take as its antecedent a first- or second-person nominal expression (the antecedent condition'). With these properties of *caki* clarified, we now are ready to return to the paradigm in (1) above. When the overt *caki* is repeated as in (1B), it cannot be interpreted with strict identity (i.e. referring to *John*). When *caki* in the object position is elided as in (1B'), on the other hand, this ellipsis site (indicated by [E]) can be interpreted with strict identity. The 'obligatory binding condition' imposed on *caki*, in other words, apparently need not be satisfied in this NPE construction. If we simply take [E] in (1B') to be interpreted on a par with its antecedent *caki*, we would be misled to the incorrect prediction that [E] would permit only a sloppy identity interpretation (i.e. as *Bill*). Let us call this mysterious interpretive contrast between *caki* and its elided counterpart the 'strict *caki* puzzle'.

Another interpretive puzzle, which was first pointed out by S. Kim (1999: 272), concerns the interpretive restrictions imposed on *caki* in the second utterance of a discourse as in (2).

- (2) A: John-un caki-lul chaykmanghaysse
 John-TOP self-ACC blamed
 'John blamed himself.'
- B: **Na*-to **caki**-lul chaykmanghaysse
 I-also self-ACC blamed
 ≠ I blamed **myself**, too (Sloppy identity **unavailable**)
 ≠ I blamed **John**, too (Strict identity **unavailable**)
- B': *Na*-to [E] chaykmanghaysse
 I-also blamed
 = I blamed **myself**, too (Sloppy identity **available**)
 = I blamed **John**, too (Strict identity **available**)

When *caki* is overt in the second utterance as in (2B), the sentence is not even grammatical. The subject *Na* 'I' in (2B) is not third-person, and hence cannot serve as the binder of *caki* due to its 'antecedent condition'. The subject *John* in (2A) cannot serve as the binder of *caki* in (2B) either because of the 'obligatory binding condition' on *caki*. *Caki* in (2B) therefore remains to be unbound and hence is not interpretable. Quite surprisingly, however, in the NPE construction in (2B'), the 'elided' counterpart of *caki* ([E]) can be bound by the first person *Na* and yield a sloppy identity interpretation in addition to a strict identity interpretation. We refer to this interpretive contrast as the 'sloppy *caki* puzzle'.

Still another puzzle involving NPE was observed in a discourse as in (3) below, again by S. Kim (1999: 268).

- (3) A: Na-nun [John_J-uy imo]-lul cohaha-nuntey,
 I-TOP John-GEN aunt-ACC like-but
- B: **ku**_J-nun [**John**_J-uy imo]-lul cham silhehanta
 he-TOP John-GEN aunt-ACC much hates
 ≠ 'I like John's aunt, but he (= John) hates John's aunt very much.'
- B': **ku**_J-nun [E] cham silhehanta
 he-TOP much hates
 = 'I like John's aunt, but he (= John) hates John's aunt very much.'

When the name *John* is bound by a pro-form *ku* as in the second conjunct (3B), the sentence is ruled out by the Binding Condition C (Condition D, to be precise). Interestingly, however, in a similar sentence but with its object noun phrase elided as in (3B'), such binding seems to be permitted and the sentence becomes grammatical. Let us call this grammatical contrast the 'Condition C puzzle'.

The interpretive/grammatical contrasts between NPE and their overt counterparts observed so far lead us to offer some novel generalization on

NPE: (i) Elided nominals are often not subject to some conditions imposed on their overt counterparts — e.g. the 'obligatory binding condition' or the 'antecedent condition' on *caki* and the Binding Condition C on names. (ii) As a result, NPE tends to exhibit more freedom in its interpretations. This generalization suggests that the ellipsis site in NPE ([E]) need not necessarily be interpreted 'entirely on a par' with its antecedent while the way its lexical contents are retrieved suggests that it must still be interpreted 'more or less on a par' with its antecedent. In what follows, we first point out that none of the approaches previously offered in the literature seem to be capable of capturing this generalization. We then attempt to demonstrate that the interpretive flexibility observed on NPE can be attributed to the interactions between the feature system of nominal expressions and the syntactic processes involved in the proper derivation of the LF for NPE.

3. Previous Analyses of NPE and Their Problems

3.1 A PF Deletion Approach

Perhaps the most popular approach to the ellipsis constructions in general is a PF-deletion approach, in which the ellipsis site is argued to be base-generated with a full-fledged internal structure and lexical contents that are identical to those of its antecedent. The surface effect is then achieved by the full deletion (or non-pronunciation) of these materials at PF. The PF-deletion analysis can handle properly the VP-ellipsis construction (henceforth, VPE) in English that involves a pronoun as in (4).

(4) John will [_{VP} wash his car], and Bill will [_{VP} e], too

The elided VP in (4) is argued to have an identical representation as its antecedent VP in every stage of derivation in narrow syntax and then ends up being deleted at PF as in (5).

(5) a. **LF:** John_J will [_{VP} wash his_J car] & Bill_B will [_{VP} wash **his**_{J/B} car], too
 b. **PF:** John_J will [_{VP} wash his car] & Bill_B will [_{VP} ~~wash his car~~], too

When *his* in the first conjunct refers to *John*, *his* in the second conjunct can be interpreted with either sloppy identity (i.e. *Bill*) or strict identity (i.e. *John*). The pronoun *his* in the second conjunct, in other words, is interpreted in the same way whether it is pronounced or not pronounced, sharing the same LF representation as in (5a). When the elided pro-form and its overt counterpart give rise to an identical range of interpretations as in this case, the PF-deletion approach does not encounter any problem.

Crucially, however, the PF-deletion approach cannot be directly extended to the analysis of the NPE in Korean (and Japanese), as has already been pointed out by S. Kim (1999: 273). A problem arises when the

overt and elided pro-forms are not interpreted in an identical way, for instance, as in the case of the 'strict *caki* puzzle' discussed in (1) above. In the PF-deletion approach, the ellipsis site at LF has the full-fledged contents and internal structure identical to those of its antecedent NP, while this NP is deleted at PF under some type of identity condition. The LF and PF representations of (1B') then would look like (6a) and (6b), respectively.

- (6) a. LF: Bill-to [_{NP} **caki**-lul] chaykmanghaysse ⇒ **Interpreted**
 b. PF: Bill-to [_{NP} ~~caki-lul~~] chaykmanghaysse ⇒ Pronounced

The prediction under this approach thus is that the overt *caki* and its elided counterpart ([E]) in (1) would yield the same range of interpretations based upon the identical LF representation (6a). As observed earlier, however, the overt *caki* in (1B) prohibits a strict identity reading while NPE in (1B') permits it. This contrast suggests that the LF representation of the NPE should not be identical to that of the overt *caki* contrary to what is expected in the PF-deletion analysis. The same problem is encountered when we apply the PF-deletion analysis to the paradigms that induced the 'sloppy *caki* puzzle' as in (2) and the 'Condition C puzzle' as in (3) above. We are, therefore, led to the conclusion that [E] in NPE is not a mere gap created at PF by a phonetic deletion operation.

3.2 An Empty Pronominal Approach

One may try to solve the 'strict *caki* puzzle' hypothesizing that NPE involves a base-generated null pronominal argument which simply corefers with the antecedent in the previous utterance, as in (7B).

- (7) A: **John**_J-un caki-lul chaykmanghaysse
 John-TOP self-ACC blamed
 'John blamed himself.'
 B: Bill-to **pro**_J chaykmanghaysse
 Bill-also blamed

This approach, however, would fail to account for the strict identity interpretation available in (8B).

- (8) A: [John-kwa Bill]_X-un [*caki*_X-uy komwun]_Y-ul conkyenghay
 John-and Bill-TOP self-GEN advisor-ACC respect
 '**John** respects **John's** advisor and **Bill** respects **Bill's** advisor.'
 B: [talun haksayng-tul]-to [E]_Y conkyenghay
 other student-PL-also respect
 = Each of other students also respects **his or her own advisor**
 = Other students also respect **them** (= **John's advisor & Bill's advisor**)

Here, $[E]_Y$ can be interpreted as collectively referring to a plural entity 'John's advisor and Bill's advisor' (with strict identity). This interpretation, however, would have to be established by associating $[E]_Y$ with the NP_Y *caki-uy komwun* 'self's advisor', which is singular because *caki* interpreted as a variable bound by a plural antecedent as in (8A) is singular-denoting. $[E]_Y$ analyzed as *pro*, in other words, would have to denote a plural entity by coreferring with a singular entity NP_Y .¹ This clearly is an impossible task to be fulfilled, and the strict identity reading in (8B) would be incorrectly prohibited.²

3.3 A Dependency Theory Approach

Fiengo and May (1994) propose a Dependency Theory approach to handle mostly the interpretation of VPE in English. In their approach, an index of a nominal expression is a complex object consisting of an indexical 'type' as well as an indexical 'value'. An index may also have multiple 'occurrences' in a syntactic structure, and each such occurrence may be either dependent on another occurrence or independent of other occurrences. The occurrence bearing a **dependent** indexical type is called a **β -occurrence**, and that bearing an **independent** one an **α -occurrence** (indicated by a superscripted α or β as in (9A) below). The indexical 'value' of a β -occurrence is determined based upon the indexical value of its antecedent (e.g. his^β_1 in (9A-i)); and that of an α -occurrence is determined inherently and independently of other occurrences (e.g. his^α_1 in (9A-ii)).

- (9) A: (i) Mike $^\alpha_1$ [_{VP} loves **his $^\beta_1$** wife $^\alpha_2$].
 (ii) Mike $^\alpha_1$ [_{VP} loves **his $^\alpha_1$** wife $^\alpha_2$].

B: John $_2$ does [_{VP} e], too.

- (i) John $_2$ does [_{VP} love **his $^\beta_2$** wife $^\alpha_2$] \Rightarrow Sloppy identity
 (ii) John $_2$ does [_{VP} love **his $^\alpha_1$** wife $^\alpha_2$] \Rightarrow Strict identity

With these assumptions, it is claimed that, if the reconstructed contents of the elided VP involve a nominal that bears a β -occurrence, sloppy identity arises (e.g. (9B-i)) while a nominal that bears an α -occurrence is involved, strict identity arises (e.g. (9B-ii)).

¹ A coreferential construal of *caki* with a plural (referential) subject can only be made possible by attaching the plural marker *-tul* 'PL' to the end of *caki* (i.e. *caki-tul* 'self-PL').

² It is not the case, however, that we deny the existence of a phonetically empty pronominal category. In fact, we postulate it at least in a sentence like (i) (and its equivalent in Korean).

- (i) sonna tokoro-de **pro** nani-o sagasiteru-no?
 such place-at what-ACC searching-Q
 'What are **you** looking for in a place like that?'

This approach was directly extended to the interpretation of NPE in Korean by S. Kim (1999). He argues that NPE involves a genuine empty phrase-marker which is base-generated without any internal contents and, hence, must undergo reconstruction of the indexical structure of the antecedent nominal expression. In particular, it is claimed: (i) that *caki* can bear either a β -occurrence or an α -occurrence, and (ii) that the sloppy-strict ambiguity of *caki* in (10) is ascribed to the possibility that the indexical structure of *caki* in the antecedent clause (10a) can have either of the two distinct LF representations as in (11) below.

- (10) a. Mike-ka [**caki**-uy ai]-lul ttayly-ca
 Mike-NOM self-GEN child-ACC hit-when
 'When Mike hit his own child.'
- b. Jeanne-to [NP **E**] ttaylyessta
 Jeanne-also hit
 = Jeanne hit **Jeanne's** child, too (Sloppy identity)
 = Jeanne hit **Mike's** child, too (Strict identity)
- (11) a. Mike ^{α} ₁-ka [NP **caki** ^{β} ₁-uy ai]-lul ttayly-ca \Rightarrow Sloppy identity
 b. Mike ^{α} ₁-ka [NP **caki** ^{α} ₁-uy ai]-lul ttayly-ca \Rightarrow Strict identity

The object NP in LF representation (11a) involves *caki* with a β -occurrence. When this NP is reproduced into [E] (with a new indexical value '2' established in the course of reconstruction) in (10b), a sloppy interpretation arises. When the object NP in (11b) is reproduced into (10b), on the other hand, a strict identity interpretation arises because this NP involves *caki* with an α -occurrence with the indexical value '1'.

We would like to point out, however, that this approach encounters a system-internal problem when it is confronted with a discourse like (12).

- (12) A: [John-kwa Bill]-un [**caki**-uy ai]-lul chingchanhaysse
 John-and Bill-TOP self-GEN child-ACC praised
 'John praised John's child, and Bill praised Bill's child.'
- B: Harry-to [E] chingchanhaysse
 Harry-also praised
 = Harry praised **Harry's** child, too
 = Harry praised **those** children (= John's child and Bill's child), too

In (12B), a strict identity reading of the reconstructed *caki* ('Harry praised **John's** child and **Bill's** child.') is clearly available. In the antecedent clause (12A), however, the singular-denoting *caki* is interpreted as a variable bound by a plural antecedent (just as in (8) above). It follows then that *caki* in (12A) cannot bear an α -occurrence, and the only indexical type available to *caki* is a β -occurrence. The legitimate LF representation of (12A)

therefore must be (13A) below, and the LF representation for the strict identity in (12B) would have to be (13B), in which the reproduced interpretive contents of [E] involve *caki*^β₁.

(13) A: [John-kwa Bill]₁-un [**caki**^β₁-uy ai]-lul chingchanhaysse
self-GEN child-ACC

B: Harry₂-to [**caki**^β₁-uy ai-lul] chingchanhaysse

In (13B), *caki* bears a β-occurrence and hence must be dependent on the subject *Harry₂-to* 'Harry also' within its sentence. The indexical value '1', which it must inherit from (13A) for strict identity, however, inevitably causes a conflict with the indexical value '2' on its antecedent. This approach therefore makes an incorrect prediction that the strict identity reading is not possible, contrary to the fact observed in (12) above.³

S. Kim (1999: 274) attempts to justify the postulation of an α-occurrence of *caki* by presenting a proverb-like sentence in (14).

(14) **caki**-ka caki-uy il-ul an tolpo-myen,
self-NOM self-GEN work-ACC not take.care.of-if

nwu-ka tolpokeyss-nunka
who-NOM take.care.of-Q

'If one does not take care of one's own business, who would?'

Directing his attention to the *caki* in boldface in (14), he argues that this *caki* can stand alone without any antecedent that binds it and hence must be analyzed as an α-occurrence. What is regarded as an 'unbound' *caki* as in (14), however, is quite limited in use. As S. Kim himself is aware, it must be interpreted as arbitrary or generic people. The bold face *caki* in (14), for instance, can be quite naturally paraphrased as *salam-tul* 'person-PL'. If this seemingly unbound *caki* must always be associated with such particular interpretations, it clearly deviates from the general use of *caki* and is hardly analyzable as a reflexive anaphoric item. Such arbitrary/generic interpretations never seem to be required for the *caki*^α that is postulated to capture the strict identity of [E] in (10b)/(12B), either.

³ Fiengo and May (1994: 167-9) do assume that strict identity can be derived when a β-occurrence is reconstructed without its indexical value altered from the antecedent clause. This option, however, is claimed to be available only when the antecedent clause and the ellipsis clause happen to share an identical antecedent of the reconstructed β-occurrence as well as a parallel syntactic structure. In the case of (13B), for example, its subject would have to be 'John and Bill' rather than 'Harry' for strict identity to arise with a β-occurrence.

Instead of postulating *caki*^α, whose property is quite elusive, we would rather appeal to what seems to be a more viable alternative analysis as in (15) below, in which a more familiar entity **PRO**_{arb} is postulated.

- (15) **PRO**_{arb} [caki-ka caki-uy il-ul an tolpo-myen], ...
 |__Bind__|
 'Speaking of people, if each of them does not take care of his or her own business, ...'

Alternatively, we could also adopt the analysis in (16), in which a generic operator (**OP**_{gen}) is postulated.

- (16) **OP**_{gen} [caki-ka caki-uy il-ul an tolpo-myen], ...⁴
 |__Bind__|
 'Generally, if one does not take care of one's own business, ...'

In either of these analyses, *caki* is bound by the item to which we can comfortably ascribe the arbitrary/generic readings *caki* comes to acquire. We thus conclude that the validity of the α-occurrence of *caki* is highly questionable. To sum up, the Dependency Theory approach encounters a problem when it attempts to capture strict identity interpretations in the NPE in Korean (and Japanese), whether it postulates *caki*^β or *caki*^α.

4. Proposals

We have seen so far the inadequacy and/or the insufficiency of the three popular analyses of NPE proposed in the literature. In this section, we propose and argue for an alternative analysis resorting to what we call 'selective feature copy' at LF. To be more specific, we argue that covert computation for NPE involves the reproduction of **minimally** necessary features rather than **total** lexical contents of the antecedent NP. We first propose to postulate a new feature system for nominal expressions and then describe the way selective feature copy applies.

4.1 A Referential Feature [REF]

In order to be semantically interpreted, NPs generally must either 'refer' by itself or be 'dependent' on some other NP. We propose to capture this property of NPs by postulating two subtypes of a semantic feature [REF]. In particular, we hypothesize that a name always bears [REF] with its 'referential value' inherently specified (indicated as, e.g. [REF]_J for *John*) while an anaphoric item like *caki* is introduced into syntax with [REF] with

⁴ See Han (2009: See this volume) and Han and Storoshenko (2009) for a bound variable analysis of *caki* by the generic operator.

- (19) taypwupwun-uy salam-tul-i { **caki**/**ku**-}uy him-ul kwasinhanta
 most-GEN people-NOM self-/3.S.M-GEN ability-ACC overrate

With *caki*: Each of most people overrates his own ability.

With *ku*: Most people₁ overrate his₂ ability.

Finally, the elided object ([E]) in NPE is specified as [PR], i.e. a pro-form, with no [REF] feature involved ((18d)).⁸ We will argue below that [PR] of [E] plays a key role in permitting one type of interpretive flexibility of NPE ('Condition C Puzzle').

4.2 Selective Feature Copy at LF

Our approach to NPE incorporates this feature system into what we call the 'selective feature copy' analysis, in which the interpretive contents of a base-generated [E] are covertly copied from its antecedent NP in the form of a feature bundle.⁹ We crucially assume that (i) covert copy for NPE does not necessarily have to reproduce the entire contents of the antecedent NP at the ellipsis site [E], (ii) the [REF] feature can be copied separately from other features of an NP, (iii) such selective feature copy does not take place arbitrarily but is regulated by a type of economy constraint, and (iv) the covert feature copy may freely mingle with other computational processes, in particular with Valuation of [REF] (see Kitagawa (1991) for VPE and Kitagawa (1999a) for NPE). The economy constraint mentioned in (iii) can be stated as in (20) below, which probably is a corollary of a more fundamental economy constraint imposed on lexical information in general (Kitagawa (1999b)).

- (20) Economy on feature reproduction:
 Reproduction of features is **minimized** (up to full interpretation).

In the remainder of this paper, we will attempt to demonstrate that this 'selective feature copy' approach correctly solves the three puzzles on NPE introduced in Section 2.

First, the strict identity interpretation in (1) (repeated below as (21)) is made possible when Copy applies **after** Valuation applies. That is, it arises when the [REF_{<J>}] of *caki* as in (17 ii) is selectively copied onto [E]. This derivation is illustrated by the 'oval and arrow' on the right end in (21).

⁸ The assumption that [E] is specified with the PR feature distinguishes our approach from S. Kim's (1999), in which [E] is analyzed as a genuine empty phrase-marker base-generated without any internal contents (see subsection 3.3 above).

⁹ See Kitagawa (1991) and Oku (1998) for an approach incorporating the partial/selective copy of formal features such as Φ -features in dealing with the VPE in English.

- (21) A: John-un **caki**-lul chaykmanghaysse *John ... caki*
 John-TOP self-ACC blamed REF_J ... REF_{<>} ⇒ REF_{<J>}
 'John blamed himself.'
- B: Bill-to [E] chaykmanghaysse *Bill ... [E] or [E]*
 Bill-also blamed REF_B ... REF_{<>} REF_{<J>}
 'Bill also blamed { Bill / **John** }, too.'
- ↓ ↓
 REF_{}

A sloppy identity interpretation ([E] = REF_{}), on the other hand, arises when Copy applies **before** Valuation does — that is, when [REF_{<>}] in (17 i) is copied onto [E] and then undergoes Valuation. This derivation is illustrated by the other 'oval and arrow' in (21). On the contrary, when the **overt caki** appears instead of [E] in the second utterance (21B), it must be bound by *Bill* due to the 'obligatory binding condition', and there is no room for strict identity to arise. This is how we can solve the 'strict *caki* puzzle'.

The surprising sloppy identity observed in (2) (repeated below as (22)) also follows from the 'selective feature copy'.

- (22) A: John-un **caki**-lul chaykmanghaysse *John ... caki*
 John-TOP self-ACC blamed REF_J ... REF_{<>}+ [3P] ⇒ REF_{<J>}
 'John blamed himself.'
- B: *Na*-to [E] chaykmanghaysse *Na ... [E] or [E]*
 I-also blamed REF_I ... REF_{<>} REF_{<J>}
 'I blamed { John / **myself** }, too.'
- ↓ ↓
 REF_{}

Again, sloppy identity becomes possible when Copy applies **before** Valuation does. Crucially, [REF_{<>}] on the antecedent *caki* in (22A) can be selectively copied onto [E], leaving behind the [+3P] feature. The referential value of the copied [REF_{<>}] thus can be provided by the first-person subject *Na* in (22B) without disturbing the 'third-person antecedent condition'. This derivation is illustrated by the left-hand side 'oval and arrow' in (22). On the contrary, when the **overt caki** appears in place of [E] in the second utterance (22B), the lexical requirement [+3P] imposed on *caki* would prohibit its [REF_{<>}] from undergoing Valuation with the first-person antecedent *Na*. This is how we can solve the 'sloppy *caki* puzzle'.

Finally, the unexpected amelioration of the Condition C violation in (3) (repeated below as (23)) also follows from the covert feature copy incorporating the proposed referential feature specification of NPs.

In (25), [REF_J] of the antecedent *John* is copied, and [E] comes to be represented as [PR, REF_J]. This derivation gives rise to an LF representation which is 'referentially' equivalent to the LF for (26).

- (26) ***ku_J**-nun **ku_J**-lul cham silhehanta ku ... ku
 3.S.M-TOP 3.S.M-ACC much hates PR **PR**
 'He_J hates him_J very much.' REF_J **REF_J** ⇒ ***BT(B)**

Clearly, (26) induces the violation of Condition B while (24) does not. The contrast between (23) and (25) therefore suggests that the [REF_J] copied onto [E] and amalgamated with [PR] indeed becomes referentially equivalent to *ku_J*.

One may consider that the Condition C violation can be avoided in (23) if we postulate a base-generated empty pronominal instead of [E], and let it corefer with its antecedent NP in the previous sentence (i.e. *John's aunt*). This approach, however, is insufficient since the amelioration of the Condition C violation as observed in (23) takes place even in (27).

- (27) [John-kwa Bill]_X-un [_{NP} *caki_X*-ka **Mary₁**-eykey sensahan panci]_Y-lul
 John-and Bill-TOP self-NOM Mary-DAT gave ring-ACC
 ceykakki usitayess-ciman, **kunye₁**-nun [E]_Y kkiko siphci anhassta
 each boasted-but she-TOP wear want not.DECL
 'Each of John and Bill boasted of the ring **he** gave to Mary as a gift,
 but she did not want to wear **them** (= the ring John gave and the ring
 Bill gave).'

Here, [E]_Y can be interpreted as collectively referring to the plural entity 'the ring John gave to Mary and the ring Bill gave to Mary', but this interpretation would have to be established by associating [E]_Y with the singular NP *caki_X-ka **Mary₁**-eykey sensahan panci* 'the ring self gave to Mary'. [E]_Y analyzed as *pro* therefore would be required to fulfill the impossible task of denoting a plural entity by coreferring with a singular entity NP_Y (just as in (8) above). We cannot consider, in other words, that [E] in (27) merely corefers with its antecedent. This in turn suggests that the interpretive contents of the antecedent NP must somehow be reconstructed at the ellipsis site in this case as well. The empty pronominal analysis of [E] therefore would send us back to the 'Condition C puzzle'. In our approach, on the other hand, we can capture the Condition C amelioration in (27) in the same way as in (23).¹¹

¹¹ The 'covert feature copy' applies in (27) after *caki* undergoes variable binding and the valued feature [REF_{<X>}] is derived. See Kitagawa (2003) for the motivation to copy 'bound and licensed variables' at LF, which are claimed to induce 'strict variables' to be interpreted on a par with demonstratives in various constructions.

Since we capture the contrast between (23) and (25) by turning, in effect, a name into a pronoun, one may also consider that an appeal to 'vehicle change' is appropriate. Vehicle change was originally devised by Fiengo and May (1994) as a general label of mysteriously permitted cases of PF-deletion under 'loosened identity conditions' in ellipsis constructions. S. Kim (1999: 272) reinterpreted it as an LF operation that allows the syntactic form of the antecedent NP to be altered freely (as long as its indexical type and value are not altered) when its contents are covertly reconstructed onto an ellipsis site. The vehicle change approach, however, proves to be overly permissive. Since there is no reason why it cannot permit a name to be altered into (or identified with) *caki* in the process of the LF reconstruction of [E] (or PF-derivation of [E]), it should be capable of turning the name *John* into *caki* even in the ellipsis site of (25). The Condition B violation therefore should be evaded in (25), which is contrary to the fact. This indicates that an appeal to (whichever version of) vehicle change in this problem is inadequate. Our approach appealing to the [PR] feature of [E], on the contrary, allows us to derive the 'vehicle change **effects**', and crucially only those effects that are permitted, without actually adopting the 'vehicle change **operation/permission**', a quite enigmatic and highly powerful device, to say the least.

5. Summary

We have proposed a novel analysis of the NP-Ellipsis in Korean (and Japanese) in which a computational process of feature copy selectively reconstructs some features of the antecedent NP onto a base-generated skeletal pro-form [E]. We have argued: (i) that this analysis can provide natural solutions to various puzzles involving NPE when we let it interact with the 'referential' feature system of NPs we postulated, and (ii) that it overcomes the obstacles some other alternative approaches encounter.

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