

PARAMETRIZING THE THEORY OF BINDING : THE IMPLICATION OF *CAKI* IN KOREAN*

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In Section 1, we examine the two competing theories of binding, i.e., Chomsky's (1981) and Bouchard's (1984). Sections 2 and 3 will demonstrate that the so-called "subject-antecedent condition" on anaphor binding in Korean cannot be maintained. Some conceivable solutions to the problem are attempted in Section 4. Both Bouchard's and Chomsky's frameworks will be tested in order to find a plausible solution. It is suggested that, even though Chomsky's framework seems to fit the Korean case better than Bouchard's as far as our assumptions in this study are concerned, the binding theory of Chomsky (1981) be parametrized across languages. It seems that the empirical coverage of our proposal is much broader than that of previous analyses. In Section 5, the major results emerging from the present study are summarized.

1. Theoretical Overview

1.1 Chomsky's Framework

In Chomsky's (1981 : 188) GB theory, the anaphora phenomenon seems to have been described in the following binding theory :

* This is an abridged version of a chapter of Park (1985), in which more detailed discussion can be found. It must perhaps be noted that the first draft of this paper was completed in the spring of 1984. Hence, the content of this paper may well be thought of as somewhat anachronistic. More recent approaches to binding theory can be found in Aoun (1985) and Chomsky (1985), among others. The former is still bound by Chomsky (1981), just as the present study is, although some modifications are proposed in it. The latter introduces such new notions as "Complete Functional Complex (CFC)" and "B(inding)T(heory)-Compatibility." But Chomsky (1985) does not seem to be entirely free of blemish (Cf. Bouchard's class lectures. Spring, 1985). Another possible approach to the characterization of Long-Distance anaphors may be called "logophoricity approach." For this approach, the reader is referred to Clements (1975), Von Breman (1984), Kameyama (1984), and Bresnan, Halvorsen, & Maling (forthcoming). A question with this approach is, however: how is the "logophoric domain" for a given element to be defined in any precise terms? Yang (1986) seems to be an attempt to answer this question. Notice that since the notion "logophoricity" appears to be more or less amorphous, it still remains to be quite mysterious how this concept could be incorporated in GB theory, which employs such strict configurational notions as c-command, government, etc.

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- (1) Binding Theory (= Binding Principles, Binding Conditions)
- (A) An anaphor is bound in its governing category.
 - (B) A pronominal is free in its governing category.
 - (C) An R-expression is free.

In the present discussion, however, Principles (B) and (C) will be excluded since our immediate concern here is the anaphoric behavior of the reflexive-like element *caki* 'self' in Korean, which is assumed to be an anaphor. As for the formulation of Principle (A), our main concern, one can raise the following three fundamental questions:

- (2) (i) What constitutes an anaphor?
 (ii) What is meant by 'bound'?
 (iii) How is the 'governing category' to be characterized?

According to Chomsky (1981 & 1982) and others (e.g., Huang 1982), an anaphor is defined as a category that has no capacity for "inherent reference" and thus includes reflexives, reciprocals (the lexical anaphors) by definition and, by assumption, NP-traces or traces of local movement as involved in passives, etc.¹

As for the second question in (2), Chomsky (1981 : 184) presents us with the following definition :

- (3) A is X-bound by B iff A and B are coindexed, B c-commands A, and B is in an X-position.

(3) defines "bound" with "X" replaced by "A" or " \bar{A} ". Accordingly, we can distinguish the two notions "A-binding" and " \bar{A} -binding," the former holding when the binder is in an A-position and thus has an A-GF and the latter when it is an \bar{A} -position with an \bar{A} -GF. A-positions in which A-GFs are defined correspond to what are often called "argument positions." \bar{A} -positions are non-A-positions with \bar{A} -GFs. The A-GFs are subject, and complements to heads of constructions: object, clausal complement, etc. \bar{A} -GFs are adjuncts in constructions formed by Move-Alpha: for example, the GF of the WH-phrase in COMP, or of an extraposed item, or of an NP adjoined to a VP by inversion in pro-drop languages (Chomsky 1981). A-binding is often called "antecedent-binding" and \bar{A} -binding, "operator-binding." Antecedent-binding relates anaphors and proximate pronominals to their antecedents, controllers in the

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¹ NP-traces are irrelevant to our immediate concern as far as Korean is concerned, since there seems to be no particular reason to claim that Korean has syntactic NP-movement (Cf. Hale 1982, Saito 1982, Huang 1982, etc.).

case of PRO. Operator-binding relates variables to the operators that bind them. Notice that the theory of binding is a theory of A-binding, however. Thus, "bound" in the binding theory means "A-bound," i.e., c-commanded by and coindexed with an element in A-position.

We now turn to the third question, which has attracted many linguists' attention over the past decade.² In his *Lectures on Government and Binding*, Chomsky advances two different characterizations of the governing category (alias 'opaque domain'), in which anaphors must be bound, while pronominals must be free.

(4) a. Chomsky (1981: 188)

A is a governing category for B iff A is the minimal category containing B and a governor of B, where A=NP or S.

b. Chomsky (1981: 211)

A is a governing category for B iff A is the minimal category containing B, a governor of B, and a SUBJECT accessible to B.

Chomsky, however, chooses (4b) over (4a) for his binding theory because the latter, i.e., (4a), gives no answer to the following question: why are NP and S the two governing categories? (4b), on the other hand, is free from this problematic feature at the conceptual level. It follows that A is a governing category only if it has a SUBJECT, which is technically defined as the "most prominent nominal element" in a given domain.³

(5) The SUBJECT of a constituent is

- a. the subject, when the constituent is an NP, infinitive, or a small clause;
- b. the feature complex AGR when the constituent contains such a feature complex.

Thus S is always a potential governing category, and NP is also a potential governing category when it has a subject. The intuitive idea behind the governing category is that an anaphor or pronominal searches for the "closest" SUBJECT to which it can be linked, where linking involves coreference for an anaphor and disjoint reference for a pronominal.

² The characterization of the domain for anaphor binding has been attempted under various names: Clause-mate Condition, Tensed-S Condition, Specified Subject Condition, Nominative Island Condition, Proposition Island Condition, Opacity Condition, Governing Category, Binding Category, etc. The domains these various characterizations define are of course different from one another. The evolution of binding theory in recent linguistic literature can virtually be characterized as successive revision of the identification of the domain in which anaphors are bound.

³ For some problems with the SUBJECT, see Baker (1983) and Bouchard (1984 & 1985), among others. However, we will assume for the discussion in this paper that the notion is relevant for the characterization of the governing category.

For the definition of the governing category, Chomsky also introduces, in addition to the notion SUBJECT, another new notion, namely, that of "accessibility," which is defined as follows :

- (6) A is accessible to B iff B is in the c-command domain of A and assignment to B of the index of A would not violate the following i-within-i condition :

*[_G...D...], where G and D bear the same index.

Given the definition of governing category in (4b), one must notice that the domain for anaphor binding and that for disjoint reference are uniformly defined. This means that the basic thesis of Chomsky's binding theory is that anaphors and pronominals are in complementary distribution.

As Freidin and Harbert (1983) and Huang (1982 & 1983) observe, however, the binding theory in (1), with the notion governing category defined as in (4b), cannot handle the entire anaphora phenomenon in an elegant manner. In other words, there seems to be a certain asymmetry between the domain in which an anaphor must be bound and the domain in which a pronoun must be free, though the two domains overlap to a large extent. In an effort to make the binding theory have a wider empirical coverage than Chomsky's original one, Huang (1983) proposes the following modified version of the definition of governing category :

- (7) A is a governing category for B iff A is the minimal category containing B, a governor of B, and a SUBJECT that, if B an anaphor, is accessible to B.

The formulation in (7) differs from (4b) only in that it takes the accessibility of a SUBJECT to be irrelevant as far as pronouns are concerned. Note that in Huang's formulation of governing category, the domain for anaphor binding and that for disjoint reference are not uniformly defined so that Chomsky's complementary-distribution hypothesis is somewhat weakened in Huang (1983). In the following structure, for example, [_A they saw [_BNP's picture]], if NP is a pronominal (e.g., *each other*), A is the governing category for it ; if NP is a pronominal (e.g., *their*), on the other hand, B rather than A is the governing category for the pronominal. Since our main concern here is only the binding properties of the reflexive-like element *caki* in Korean, the two different formulations of the notion governing category, i.e., (4b) and (7), can practically be viewed as making the same predictions so far as anaphors are concerned.⁴ However, it will shortly be shown that neither Chomsky's nor Huang's binding theory can elegantly handle the binding phenomena, especially that of so-called Long Distance anaphors, in such languages as Korean, Japanese, Malayalam, etc.

⁴ (4b) and (7), of course, make different predictions when it comes to pronominals.

1.2 Bouchard's Framework

In a recent work, Bouchard (1984), on the other hand, advances a different theory of binding from the one reviewed above. According to Bouchard, there are three levels at which we can talk about anaphors. These are summarized in the following :

- (8) i . Morphological anaphors : reflexives and reciprocals
- ii . Syntactic anaphors : elements, be they overt or empty, that bear a specific relation to their antecedent, this relation being obligatory, one -to-one, local and structurally conditioned (for example, *c*-command)
- iii . Semantic anaphors : elements whose antecedent must be linguistic, not demonstrative

Refuting the morphological approach taken by Chomsky, Bouchard claims that of these three types of anaphors, only syntactic anaphors should fall under condition A of the binding theory (or any similar statement on anaphors) since the binding theory deals with the syntactic properties of anaphors.

A syntactic anaphor is functionally defined by the notion of Binding as given in (9), whether the anaphor is lexical or not (Bouchard 1985):⁵

- (9) a. Binding
A Binds B iff A governs B and A assigns its R-index to B.
- b. Government
In the structure [_G...B...A...B...], A governs B iff
 - (i) A is an immediate constituent of G, and
 - (ii) where P is a maximal projection, if P dominates B, then P dominates A.
 - (iii) where P is a maximal projection, if P dominates B, then P dominates A.
 (where maximal projections are NP, PP, AP, and S'[V^{max}])

The intuitive idea behind (9a) is that Binding involves such strict locality notions as government. Bouchard further assumes that names and QPs get an index at D-Structure, but other nominal elements like morphological pronouns or reflexives and empty categories must get an index at some point in the derivation in order to be interpretable. Thus, a syntactic anaphor has no index at D-Structure. It gets indexed, at some level of representation other than D-Structure, by its antecedent in a certain local domain, which is formulated as follows :

- (10) Binding Category (Bouchard 1982 : 129)

⁵ Bouchard (1982) claims that any syntactic principles that specifically refer to empty categories only (or to lexical categories only, for that matter) are inadequate. But this claim appears to have no bearing on our immediate interest in this article.

A is the Binding category for B iff A contains a Binder for B.

Accordingly, the functional definition of an anaphor can be achieved by the following (Bouchard 1982: 126):

(11) A is an anaphor iff A is Bound.

Since an anaphor always gets its R-index from an antecedent which Binds it by definition, then an anaphor will always be Bound in its Binding category: so condition A of the binding theory is derivable as a theorem, which can presumably be formulated as follows:⁶

(12) An anaphor is Bound in its Binding category.

According to this theory, therefore, *himself* in (13a) is not an anaphor, whereas that in (13b) is.

- (13) a. John_i heard stories [_{PP} about himself_i]
 b. John_i shaved himself_i

In (13a), the PP, a maximal projection, blocks government of *himself* by *John*, and so *himself* cannot be Bound in the sense of (9). According to Bouchard's theory, therefore, *himself* is only a "false anaphor," hence it is functionally defined as a pronominal as far as syntactic typology is concerned.

2. The Subject-Antecedent Condition: A Misconception

In a note to Chapter 3 of *Lectures on Government and Binding* (299), it is noted that "in Japanese, Korean and many other languages, the element translated as reflexives in English does not observe the binding theory sketched above [i.e., (1)], but rather can be linked to any subject that c-commands it." Presumably, this observation of Chomsky's is not from his own first-hand research but relies on studies by other linguists. As a matter of fact, it has been repeatedly claimed by most Korean linguists (e.g., C. Lee 1973, Yang 1975, H.-B. Lee 1976, W.-C. Kim 1976, Fiengo and Kim 1980, Yang 1982, etc.) that the Korean reflexive-like element *caki* 'self' adheres to the "subject-antecedent condition," which specifies that *caki* takes only a subject NP as its antecedent. This condition, coupled with another which says that the domain of "reflexivization" is not confined to the simplex sentence, has provided a crucial diagnostic frame for many important works on Korean at least in the past ten years.

In his recent article, Yang (1982) presents us with the following *caki* Coreference Rule, which incorporates the above-mentioned subject-antecedent condi-

⁶ Bouchard does not actually present us with the binding condition (12). Rather, (12) is formulated under presumption by the present author.

tion in it:⁷

(14) *Caki* Coreference Rule (Yang 1982: 282)

A reflexive pronoun is bound by any subject that k-commands it or by a discourse referent.

For the formulation of his *caki* Coreference Rule, Yang uses the following examples:

- (15) a. John_i-i Mary_j-eke [Bill_k-i Judy₁-eke *caki*_{i/j/k/1}-l+i
 -NM -DM -NM -DM self -AM
 sokaeha-əss-ta-ko] malha-əss-ta
 introduce-PT-DE-COMP say-PT-DE
 'John_i said to Mary_j that Bill_k introduced self_{i/j/k/1} to Judy₁'
 b. John_i-i [_{NP}Bill_j-iy *caki*_{i/j} -etaehan thaeto]-l+i silhəhanta
 -NM -GM self -about attitude -AM dislike
 'John_i dislikes Bill's_j attitude about self_{i/j}'

- (16) Speaker A: John_i-i salam -l ponae -əss-ni?
 -NM man -AM send-PT -QE
 'Did John_i send a man?'

Speaker B: Ani, *caki*_i-ka cikcəp o-əss-ta
 no self -NM in-person come-TP-DE
 'NO, self_i came in person'

(N.B. NM=Nominative Marker, AM=Accusative Marker, DM=Dative Marker, GM=Genitive Marker, PT=Past Tense, DE=Declarative Ending, QE=Question Ending, COMP=Complementizer)

A curious point to note in Yang's proposal is that for some reason, which is not immediately clear to me, he does not use the notion of governing category in formulating his rule in (14). He claims that "all rules for control and binding in Korean do not seem to make crucial use of the notion of 'the governing category' and that they all make use of the notion of k-command in one way or another."⁸

⁷ There is another recent article which also incorporates the subject-antecedent condition in it. Koster (1982) proposes the following for anaphor binding in Korean (and Japanese):

- (i) A potential antecedent cannot be free (i.e., without an anaphor) in its minimal governing category.
- (ii) A potential antecedent is not accessible in the domain of the subject of its minimal governing category.
- (iii) An NP_i is a potential antecedent if the minimal S(NP) containing it contains a free anaphor (*caki*) (i.e., an anaphor not bound by an NP other than NP_i).

Koster's proposal is interesting in that the opacity conditions are defined on the domain of the potential antecedent, but not on the domain of the anaphor. Nonetheless, Koster's proposal does not seem to be on the right track so long as the ill-motivated subject-antecedent condition is built into the binding condition.

⁸ It is not immediately obvious, either, why Yang has recourse to the notion of k-command rather than to that of c-command.

The notion of k-command here is drawn from Lasnik (1976 : 15).

- (17) A k-commands [=k-commands] B if the minimal cyclic node dominating A also dominates B [where S' and NP are cyclic nodes].

Another important point to note is that the term "bound" used in the rule in (14) is different from the one whose definition is given in (3). It is also different from Bouchard's (1982, 1984, and 1985) notion of Binding in (9). It seems that "bound" in (14) simply means "coindexed." This is particularly clear since the latter half of Rule (14) can be rendered as follows :

- (18) A reflexive pronoun is bound by a discourse referent.

Since Yang (1982) does not provide us with any detailed procedures as to how a given reflexive can be bound by a discourse referent, we presume that a given reflexive is simply coindexed with a discourse referent.

Given examples like those in (15) and (16), therefore, it appears that Yang's rule is more or less effective, assuming that the term "subject" is used in its usual sense. It is very often the case, however, that analyses that seem plausible on the basis of limited evidence turn out to be inadequate when further data are gathered.

3. Problems with the Subject-Antecedent Hypothesis

As is clear from the discussion in the preceding section, the most crucial point in Yang's (and others' also) theory of anaphoric binding appears to be the belief that only subjects can be antecedents. It seems, however, that this belief needs a closer examination. Observe the following :

- (19) a. John_i-in Mary_j-lil caki_{i/j}-iy pang-esə nol-ke hayəssta
 -TM -AM self -GM room-in play did
 'John_i made Mary_j play in self's_{i/j} room'
 b. John_i-in Mary_j-eke caki_{i/j}-iy cipilo ka-la-ko myənglyəngghayəssta
 -TM -to/DM self -GM house-to go-IE-COMP ordered
 'John_i ordered Mary_j to go to self's_{i/j} house'
 c. John_i-in Mary_j-eke caki_{i/j}-lil salangha-ninya-ko muləssta
 -TM -to/DM self -AM love -QE -COMP asked
 'John_i asked Mary_j if e loves self_{i/j}'
- (20) a. John_i-in Tom_j-il caki_{i/j}-iy cipilo ponaessta
 -TM -AM self -GM house-to sent
 'John_i sent Tom_j to self's_{i/j} house'
 b. John_i-in caki_i-iy hyəngnim-i manness-ko (Bill-in nae-ka...)
 -TM self -GM elder brother-NMmet (-TM I-NM...)
 'As for John_i, self's_i brother met e [=John], and (as for Bill, I...)'

- c. *caki*_i-ka Mary_i-l_il ttaeli_sssta-n_in sasil-i John_i-i_l koelophi_sssta
 self -NM -AM hit fact-NM -AM worried
 'The fact that self_i hit Mary worried John_i'

As can be seen in the above, non-subjects are also eligible for the antecedent of *caki*. Of the six examples above, cases in (19) seem to be apparent (i.e., not real) counterexamples to the generalization that only subjects can be antecedents since one can argue that *caki* in these cases are linked not to the matrix object but to the lower clause subject; which may well be assumed to be empty (like such base-generated empty categories as PROs and pros).

Examples in (20), on the other hand, throw a serious doubt upon the tenability of the subject condition on anaphor binding in Korean because we simply cannot conceive of any plausible constituent structure for the cases in (20), which might otherwise be comparable to that for the cases in (19). This observation strongly suggests that the subject-antecedent hypothesis needs modification.

Let us examine at this juncture a couple of examples that have long been exploited by such linguists as H.-B. Lee (1976). Examples like the following have often been taken as crucial evidence for the establishment of the subject-antecedent condition on anaphor binding in Korean :

- (21) a. John_i-i Tom_j-i_l *caki*_{i/j}-i_y cip-es_ə mannassta
 -NM -AM self -GM house-in/at met
 'John_i met Tom_j at self's_{i/j} house'
 b. John_i-i Tom_j-i_l *caki*_{i/j}-i_y cip-es_ə chacanae_sssta
 -NM -AM self -GM house-in/at found out
 'John_i found out Tom_j in self's_{i/j} house'

Even I myself would agree, on first reading, that *caki* in (21) refers almost only to the subject in each case. My observation, however, is that the unnaturalness arising from linking *caki* to the direct object *Tom* is not caused by syntactic factors, but by pragmatic factors of some sort since the following are fully accepted by any native speakers of Korean, where the subject *John* is replaced with *na* 'I'.

- (22) a. nae-ka Tom_j-i_l *caki*_i-i_y cip-es_ə mannassta
 I-NM -AM self-GM house-in/at met
 'I met Tom_j at self's_i house'
 b. nae-ka Tom_j-i_l *caki*_i-i_y cip-es_ə chacanae_sssta
 I-NM -AM self -GM house-in/at found out
 'I found out Tom_j in self's_i house'

One can see no structural difference between (21) and (22). Nevertheless, it is entirely possible in the latter to link *caki* to the object NP *Tom* anaphorically, even though it seems somewhat awkward to do so in the former.

An analogous case can be found in English also. Let us examine the following:

(23) John talked to Tom about himself.

Many linguists (e.g., Jackendoff 1972, Kuno 1972, etc.) seem to view (23) as ambiguous in the sense that the reflexive can have two distinct antecedents, i. e., *John* and *Tom*. Surprisingly enough, however, most native speakers of English (non-syntacticians) that I had consulted flatly denied the ambiguity in (23). That is, *himself* refers only to *John*.

More surprisingly, more interestingly for that matter, is that when these speakers were presented with the following sentence, all of them unwaveringly accepted it as grammatical:

(24) I talked to Tom_i about himself_i.

Here again, one can see no structural difference between (23) and (24). Nevertheless, unlike in (23), *himself* is fully allowed to take *Tom* as its antecedent.

The conclusion that can be drawn from the above observation is, then, that the difference between linguists and non-linguists with respect to the possibility of linking *himself* to *Tom* in (23) is not syntactically induced but pragmatically induced.⁹ Given this conclusion, the examples in (21) can no longer be used as crucial evidence for the subject-antecedent hypothesis in the theory of anaphor binding in Korean.

In the following, more counterexamples to the subject-antecedent condition are presented:

- (25) a. John_i-in Tom_j-il caki_{i/j}(-iy) əməni(-iy) aph-esə chingchanhayəssta
 -TM -AM self (-GM) mother(-GM) front-at praised
 'John_i praised Tom_j in the presence of self's_{i/j} mother'
 b. John_i-in Tom_j-eke caki_{i/j}(-iy) hyəngnim(-iy) sosik-il iyakihaessta
 -TM -to/DM self (-GM) brother(-GM) news -AM told
 'John_i told Tom_j self's_{i/j} brother's news'

4. Toward a Solution

It now seems fairly clear that the subject priority with respect to the anaphoric linking of *caki* is not a syntactic constraint but a pragmatic (or

⁹ In this respect, we propose the following constraint:

(i) Functional Constraint on the Interpretation of Reflexives

A reflexive is most likely to take as its antecedent the most accessible c-commanding NP in its minimal functional domain.

(ii) Functional Domain

A is a functional domain of B iff A includes all the grammatical functions (including the topic) of the predicate of B.

(iii) Noun Phrase Accessibility Hierarchy (Adapted from Keenan & Comrie 1977)

Topic > Subject > Object >...(' >' means 'is more accessible than')

functional) condition of some sort. In other words, the difference between the subject and the object in (21) concerning anaphoric linking is ascribed to the difference between preferred reading and suppressed reading. Therefore, both the subject and the object are equally eligible for the antecedent of *caki* as far as syntax is concerned. Now the question is: how can we formulate an alternative to Rule (14), which could hold for all the examples discussed above? Since the present study is conducted under the framework of the Government-Binding Theory expounded in Chomsky (1981), we will make efforts to solve the problem within this framework. First, an attempt to find a possible solution will be made under Bouchard's (1982 & 1984) assumption, and then we will look for another possible solution under Chomsky-Huang (Chomsky 1981, Huang 1982) framework.

4.1. Within Bouchard's Framework

Let us first try to see if we can find a plausible answer to the questions raised above, assuming Bouchard's Binding theory. The following are the relevant points to the discussion in the section (See also Section 1):

- (26) i. An anaphor is Bound in its Binding category(=(12))
- ii. A is an anaphor iff A is Bound(=(11))
- iii. A is the Binding category for B iff A contains a Binder for B(=(10))
- iv. A Binds B iff A governs B and A assigns its R-index to B(=(9))

Notice that in Bouchard's theory, as in Chomsky's, maximal projections are absolute barriers to government.¹⁰ The crucial difference between Bouchard's and Chomsky's theories, among others, is that the notion of government is directly built into the characterization of the notion "Binding" in the former, whereas in the latter, it is only indirectly incorporated. In other words, the strict locality condition 'government' plays a central role in Bouchard's Binding theory. This implies that any maximal projections can be Binding categories in this theory, while only S and NP can be governing categories in Chomsky's proposal.

As far as I can see, Bouchard's theory forces us to choose one of the following two assumptions if we are to account for the binding behavior of Long Distance anaphors in languages like Korean, Chinese, Japanese, Malayalam, etc. Let us first concentrate our attention on the Korean case:

- (27) i There are no maximal projections in Korean.
- ii There are no anaphors in Korean (i.e., *caki* is not an anaphor but a pronominal). [Or we might perhaps assume a slightly weaker version to the effect that *caki* in the object position of simplex sentences only is an anaphor, call it a ST(ri)ct anaphor, but a pronominal,

¹⁰ In Bouchard (1982), however, VP is not assumed to be a maximal projection.

otherwise, call it a L(ong) D(istance) anaphor.]

In what follows, we will see why we are obliged to choose one of these two assumptions in (27) if we are to handle the anaphoric behavior of *caki* within Bouchard's framework. Let us first observe the following :

- (28) a. John_i-in caki_{i/*j}-lil miwəhanta
 -TM self -AM hate
 'John_i hates self_i'
 b. caki_{i/*j}-lil John_i-in miwəhanta
 self -AM -TM hate
 '[scrambled version of (a)]'

There seem to be two important points, among others, to note concerning the anaphoric relation between *caki* and its antecedent in (28): (i) so-called scrambling does not appear to affect the interpretation of *caki*,¹¹ and (ii) the antecedent of *caki* must be present within the sentence. The former fact suggests that there is a certain hierarchy, be it structural or functional, in the sense that the antecedent of *caki* must belong to the same or higher hierarchy. The following confirms this observation :

- (29) *caki_i-nin/-ka John_i-il miwəhanta
 -TM -NM -AM hate
 'Self_i hates John_i'

Given (29) only, however, it looks as if the NIC were not irrelevant since *caki* appears to be disallowed in the subject position.

The second fact suggests that *caki* is an anaphor since it has no capacity for inherent reference. Notice that the following is also unacceptable :

- (30) *caki_j-ka John_i-il miwəhanta
 -NM -AM hate
 'Self_j hates John_i'

Observing the above facts, one might propose the following, assuming Bouchard's notion of Binding :

- (31) *caki* must be Bound in its Binding category.

What (31) means is that *caki* is Bound by its antecedent that governs it (with the assumption that VP is not a maximal projection). So (31) makes correct predictions with respect to the facts exposed by (28), (29), and (30). The problem with (31), however, is that it simply does not hold for cases where complex sentences are involved. Here, we find so-called Long Distance anaphors.

¹¹ This description is not entirely correct. There are some cases where scrambling does affect the interpretation of *caki*. It is shown in Park (1985) that this problem can be overcome if we assume that scrambling of an element (to the left-most position of a sentence) is involved with S'-adjunction (Cf. Saito 1982).

- (32) a. John_i-in [Tom_j-i cak_i/_i/_j-lil miwəhanta]-ko malhaessta
 -TM -NM self -AM hate -COMP said
 'John_i said that Tom_j hates self_i/_j'
 b. John_i-in [cak_i/_i/_{*j}-ka Tom_j-il miwəhanta]-ko malhaessta
 -TM self -NM -AM hate -COMP said
 'John_i said that self_i/_{*j} hates Tom_j'

(32) immediately reveals the fact that the opaque domain of *caki* is broader than that of English reflexives. It is also shown that *caki* can have more than one antecedent ambiguously. Furthermore, (32b) demonstrates that in Korean the NIC is in fact irrelevant as in languages like Chinese, Japanese, Malayalam, etc. The question is, now : how should we deal with (32) within the framework under consideration? A conceivable suggestion might be that S' is not a maximal projection in Korean. Notice, however, that the same could be said also of NP.

- (33) a. John_i-in_{[NP} Tom_j-iy cak_i/_i/_j-etaehan thaeto]-lil silhəhanta
 -TM -GM self -about attitude-AM dislike
 'John_i dislikes Tom_j's attitude toward self_i/_j'
 b. John_i-in_{[NP} cak_i/_i/_{*j}-iy Tom_j -etaehan thaeto]-lil silhəhanta
 -TM self -GM -about attitude-AM dislike
 'John_i dislikes self_i/_{*j}'s attitude toward Tom_j'

If we assume that S' and NP are not maximal projections, only the matrix sentence (i.e., the root sentence) would be the Binding category for the anaphor, and the matrix sentence must always be. The result is that (31) holds for the cases under consideration. One might further generalize this result to the effect that in languages like Chinese, Japanese, Malayalam, etc.,¹² S' and NP are not maximal projections so that the generalization can subsume the fact that the SSC and the NIC are irrelevant in these languages. Accordingly, some parameter of the following sort might be presented :

- (34) S' and NP are not maximal projections in K(orean)-type languages.

A rather puzzling question with (34) is, however : why do S' and NP not count as maximal projections in these languages? Note that (34) is tantamount to (27i) because once we assume that S' and NP are not maximal projections, then we have no particular reason to argue that AP and PP, in contrast with S' and NP,¹³ are maximal projections. This means that the parameter given in (34) could further be generalized to the following :

- (35) There are no maximal projections in K-type languages.

¹² For the discussion of the binding properties of the reflexive-like elements in these languages, the reader is referred to the following works : Huang (1982) for Chinese, Oshima (1979) for Japanese, and Mohanan (1981) for Malayalam, among others.

Suppose that Korean is one of the "one-bar" languages (Hale 1982 : 88) in the sense that PS rules are schematized along the hierarchical dimension of X-bar theory, while English is one of "two-bar" languages.¹³ One could further assume that one-bar constituents (e.g., N', P', etc.) are not maximal projections. But an important question with this assumption is: what is meant by "maximal projections"? As far as I can understand, the term 'maximal projection' seems to be defined roughly as follows : ¹⁴

- (36) A is the maximal projection for B iff A contains B (head, i.e., the category determiner of A), the complements of B (if there are any), and the specifiers of B (if there are any).

Given (36), the assumption in (35) can no longer be maintained since one-bar constituents in K-type languages can arguably be claimed to be maximal projections. In other words, the number of bars is irrelevant to the notion of maximal projection as far as syntactic typology is concerned.¹⁵ Therefore, N', for example, can be a maximal projection in some languages (e.g., Korean) although it cannot be a maximal projection in other languages (e.g., English). Consequently, we have no other choice but to discard the assumption that there

¹³ Hale (1982) maintains that there are two core linguistic types to be defined along the hierarchical dimension of X-bar theory, namely, two-bar languages and one-bar languages. That is, there are languages whose grammar utilize the endocentric PS rule schemata (i) and (ii):

- (i) $X'' \longrightarrow \dots X' \dots$
 (ii) $X' \longrightarrow \dots X \dots$

And there are languages whose sole core endocentric rule schema is (ii).

¹⁴ Strange to say, I have failed to find a formal definition of the notion "maximal projection" in any of the literature in which this term is frequently used. It seems that most linguists simply assume, with no formal characterization of the notion, that certain syntactic categories (e.g., S', NP, etc.) are maximal projections but others are not (e.g., S, N', etc.). The formulation in (36) is by no means intended to be a proposal, and is thus tentative. Nonetheless, (36) seems to be sufficient for our purposes here.

¹⁵ In their discussion of the PS rules of nonconfigurational languages, Culicover and Wilkins (1984), for example, assume that there are options for the generation of phrase structures other than the most restrictive instantiation of the X-bar theory, perhaps along the lines of (i), where $(N^{\max})^*$ indicates a sequence of NPs.

- (i) a. $S \longrightarrow (N^{\max})^* V (N^{\max})^*$
 b. $S \longrightarrow V (N^{\max})^*$
 c. $S \longrightarrow (N^{\max})^* V$

Expansion (ia) defines a language in which the order of arguments of a verb are completely free within S, (ib) defines a verb-initial language, and (ic) defines a verb-final language. The relevant point to our interest here is that from (i), one can draw an implication that the number of bars is irrelevant to the notion of maximal projection as far as a syntactic typology is concerned (although it is relevant within a given language). In other words, one-bar constituents (e.g., N', etc.) are a sort of "complete" constituents on their own in one-bar languages even though they are "incomplete" constituents in two-bar languages. See note 13 also.

are no maximal projections in K-type languages.

Another conceivable alternative could be to assume that there are no syntactic anaphors in Korean (See (27ii)).¹⁶ As we have observed above, the domain in which the antecedent of *caki* occurs is not limited to the minimal clause or NP where *caki* appears. To put it bluntly, *caki* is not necessarily Bound in the sense of (9a). This observation leads us to conclude that *caki* is not an anaphor but a pronominal. Or one might slightly modify this conclusion to the effect that *caki* in the object position of simplex sentences only is an anaphor, but *caki* in other positions is a pronominal.

This conclusion is rather surprising in that intuitively, there seems to be a clear difference between *caki* 'self' and *ki* 'he' (a pronoun). Notice that in contrast to *ki*, *caki* can never be used deictically, and that it lacks the capacity for inherent reference. Furthermore, the antecedent of *caki* must be present somewhere within the sentence though the domain need not be limited to the minimal clause in which *caki* occurs. In these respects, we will not accept the conclusion that *caki* is not an anaphor but a pronominal. Rather, we maintain our initial assumption that *caki* is an anaphor. This immediately suggests that it would be rather difficult to find a plausible solution within the framework that incorporates (26). Therefore, we will make an attempt to find a solution under a different framework.

4.2. Within Chomsky's Framework

It seems clear that the binding theory of Chomsky (1981) also faces difficulty accounting for cases like (32), where *caki* can be bound by the matrix subject that appears outside the governing category in the sense of (4b). As a first step toward a solution to this problem, I would like to propose the following definition of governing category :

- (37) A is a governing category for B iff A is a category containing B, a governor of B, and a SUBJECT accessible to B. (Or we might, along the lines of Huang 1982, define the relevant notion in the following manner : A is a governing category for B iff A is a category containing B, a governor of B, and a SUBJECT that, if B an anaphor, is accessible to B. As we have already noticed at the outset, this formulation makes no difference as far as anaphors are concerned.)

Compared with Chomsky's original formulation, the definition in (37) lacks the restrictive term "minimal." Seen in this way, English requires a stricter condition for the definition of the notion governing category than Korean. In English, therefore, only the "minimal" category (containing an element, a

¹⁶ Note that the reciprocal-like element *səlo* 'each other' in Korean is excluded from our consideration. Park (1985) shows that the binding properties of *səlo* are quite different from those of *caki*.

governor of that element, and a SUBJECT accessible to the element) is the governing category for an element. On the other hand, there is no minimality restriction in Korean. This means that any category can be a governing category if it contains an element, a governor of that element, and a SUBJECT accessible to that element. Consequently, there is no limit with respect to the number of governing categories in Korean. Along these lines, we now recast Principle A of the binding theory as follows:

- (38) An anaphor is bound in $\left\{ \begin{array}{l} \text{a. any} \\ \text{b. its minimal} \end{array} \right\}$ governing category.

Accordingly, option (38a) is for Korean, while option (38b) for English.

There is still another problem in applying the binding theory to Korean, even with its parametrized version in (38). The question is: why are the following ungrammatical?

- (39) a. *caki_i-ka John_i-il poassta
 -NM -AM saw
 'Self_i saw John_i'
 b. *caki_i-ka John_j-il poassta
 -NM -AM saw
 'Self_i saw John_j'

The ungrammaticality of (39a) could be accounted for by Principle C of the binding theory. But what about (39b)? Clearly, its unacceptability cannot be attributed to a violation of Principle C since *John_j* is unbound. Can Principle A help explicate the matter? It seems that the problem gets complicated when we try to handle (39b) by invoking Principle A of the binding theory.

It is a well-known assumption that languages like Korean and Japanese have no noticeable AGR of any kind in their syntax (Saito 1982, Park 1983, etc.). In these languages, there seems to be no subject-verb agreement (not to mention object-verb agreement) of the kind that might be good evidence that these languages have AGR. Therefore, we have no ground to assume that these languages have AGR. (For a possible candidate for the element AGR in Korean and Japanese, the reader is referred to Park (1985), where the status of so-called "honorific agreement" is discussed. Since the status of honorific agreement appears to be more or less questionable, however, I will continue to assume that there is no AGR in Korean.)

Since AGR is not available in Korean, the only SUBJECT in (39) is the anaphor itself. But it is not accessible (to itself). This means that there is no governing category for the anaphor in (39b). How then can we rule out (39b) as ungrammatical? A simple way of overcoming this difficulty might be to adopt (40) as a principle of the theory of government (Chomsky 1981):

- (40) A root sentence is a governing category for a governed element.

But this move seems to run into another problem. Note that (40) requires an

element to have a governor if the root sentence is to be a governing category for that element. So, the problem is: what is the governor for the subject anaphor in (39b)?

According to Chomsky (1981 : 52), INFL governs the subject if it contains AGR, then assigning nominative Case by virtue of the feature [+INFL]. However, the question of whether it is AGR or [+Tense] that governs and assigns nominative Case does not seem to be easily determined, although most linguists, including Chomsky himself, assume that it is AGR that governs. This assumption appears to be based on the observation that in some languages like Portuguese, AGR may also appear with infinitives, and the subject is indeed nominative in this case. It seems reasonable here to assume that AGR rather than Tense governs the subject and assigns nominative Case. Generalizing this property of AGR to every human language, however, runs into difficulty when one considers a different type of language, one which includes Korean, Chinese, Japanese, etc. None of these languages have any noticeable system of verb-subject or verb-object agreement, as is quite well known. Such being the case, then, it seems to be meaningless to claim that AGR governs the subject in these languages.

We are thus faced with the paradox of having a theory that appears to be fairly well-motivated for some reasons but appears to be somewhat ill-motivated for others. Now, how can we resolve this paradox? One plausible solution could be the assumption that the governorship of the subject may be parametrized across languages. Let us now assume that INFL, may it contain [AGR] or [Tense], is the governor of the subject in languages like Korean. Notice that I am assuming neither AGR nor Tense is a governor for the subject in Korean. Instead, INFL itself is a governor in this language. This assumption may well be supported by the fact that in Korean, unlike in English, overt NPs are allowed to appear in the position of the subject of tenseless clauses. Once we adopt this assumption, binding condition A can account for the ungrammatical status of (39b), where the root sentence itself is now qualified as the governing category for the anaphor. In (39b), the anaphor in subject position has no c-commanding binder and is thus free in its governing category, a clear violation of the binding condition for anaphors. Hence the sentence is ruled out, as desired.

Let us now examine how our modified version of binding theory accounts for the Korean data discussed in earlier sections. It is immediately clear that the empirical coverage of our theory can subsume that of Yang (1982) and others as well. A more important point, however, is that our theory can bring under control those cases that cannot be accounted for by the subject-antecedent condition. There seems to be no need of additional explanation as to why *caki* is allowed to have the object NP as its antecedent in the examples of (22) and (25). (20a) also does not appear to require any particular explanation. But what about (20b) and (20c)?

Let us first examine (20b), which is repeated here with additional part of the sentence :

(41) John_i-in caki_i-iy hyøngnim-i e_i mannass-ko
 -TM self -GM brother -NM met -and

Tom_j-in nae-ka e_j mannasta
 -TM I -NM met

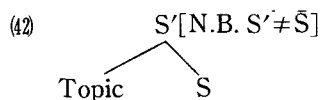
'As for John_i, self_i's brother met e, and as for Tom, I met e'

Our main interest in (41) is the first half of it (i.e.,(20b)),where the anaphor *caki* occurs. Note, however, that the object position of the verb *manna*-meet' is empty. At this point, let us adopt Huang's (1984) suggestion that for each variable bound to a topic, there are two possible ways to derive it ; it may be created by movement as a WH-trace, or it may start out as an EC at D-Structure and later get coindexed with the topic (and becomes variable). For our purposes here, it does not matter whether topics are created by movement or are base-generated (although the latter standpoint seems to be preferable to the former as far as Korean is concerned (Cf. Saito 1982)). Notice that in Huang's suggestion, it is tacitly assumed that the topic position is an \bar{A} -position. In dealing with (41), therefore, a very interesting question arises : why is *caki* bound by the topic, which is usually assumed to be a non-argument (in \bar{A} -position) ? Recall that the binding theory is a theory of A-binding (not \bar{A} -binding). Consequently, the binding theory seems to be faced with difficulty handling cases like (41).

At this point, let us raise the following question : what is meant by " \bar{A} -position," to begin with ? Obviously, this question gives rise to another question : what, then, is meant by " \bar{A} -position" ? According to Chomsky (1981: 47), A-positions are positions in which such GFs as subject-of-S and complements of \bar{X} ($X=N, V, A, P$) are assigned and are sometimes called "argument positions." In contrast to an A-position, an \bar{A} -position is that of an adjunct of one sort or another. It includes adjuncts formed by extraposition, NP in COMP, etc. Thus, \bar{A} -positions include all non-base-generated NP positions. Then, how about the position of topic in languages like Korean ? Is it an A-position or an \bar{A} -position ? Our answer to this question is that the topic position in Korean can be assumed to be an A-position.¹⁷

¹⁷ If, on the other hand, we assume that the topic position is an \bar{A} -position, then we have to admit some sort of \bar{A} -binding for anaphors. In this case, *caki* becomes a variable, not an anaphor, in the sense of Chomsky (1981 & 1982) since the binder is in a \bar{A} -position, though Chomsky's definitions are intended to determine the types of empty categories. Clearly, this consequence is quite puzzling. Should we incorporate this type of \bar{A} -binding, we would have to extend the binding theory even further to the effect that the theory can include not only A-binding but also \bar{A} -binding. A conceivable modification of the binding condition would be the following : An anaphor is X-bound in some governing category. Here, X can be replaced by either A or \bar{A} . In the text, however, the topic position in languages like Korean

As far as I can see, this assumption does not seem to be totally unreasonable for such "topic-prominent" languages as Korean, Japanese, etc. (Cf. Li & Thompson 1976). In Korean, for example, the topic position must be freely available at the base itself (Cf. Saito 1982). Accordingly, the canonical structure of a sentence in this language can be represented as follows:



The topic NP can be either overt or empty, in accordance with some sort of discourse principle. If the content of that NP can be recoverable from the discourse context, then that NP may become empty.

Once we assume that the topic position is an A-position, cases like (41) can be brought under the bailiwick of the binding theory. With this assumption, we can also account for the anaphoric relation between *caki* and *John* in (20c), which is repeated here as (43) for convenience:

- (43) *caki*₁-ka Mary₁-l₁ ttael₁ss₁ta-n₁n sasil₁-i John₁-i₁ koeloph₁ss₁ta
 self -NM -AM hit fact -NM -Am worried
 'The fact that self₁ hit Mary worried John₁'

Since we are assuming (42), we can now represent the structure of (43) in the following manner:

- (44) [_{NP} [_{S'} [_T e₁] *caki*₁-ka Mary₁-l₁ ttael₁ss₁ta-n₁n] sasil₁]-i John₁-i₁ koeloph₁ss₁ta

Strictly speaking, then, the direct antecedent of *caki* in (44) is now the empty topic, which in turn is controlled by *John*. Therefore, we can say that *caki* is bound by *e*.

The last case that we are going to discuss here is so-called "discourse-bound" *caki*. Yang (1982) takes (16) as a paradigmatic piece of evidence for the formulation of his rule (14). The example is repeated here as (45) for ease of reference:

- (45) Speaker A: John₁-i salam₁-i₁ pon₁ae-₁ss₁-ni ?
 -NM man-AM send -PT-QE
 'Did John₁ send a man ?'

is assumed to be an A-position. Notice again that I am assuming base-generated NP positions are A-positions. As for \bar{A} -anaphors, see Aoun (1981). Aoun distinguishes two types of anaphoric systems: the A-anaphoric system whose members are A-anaphors and the \bar{A} -anaphoric system whose members are \bar{A} -anaphors. A-anaphors need an antecedent in an A-position, while \bar{A} -anaphors need an antecedent in an \bar{A} -position. In Aoun's binding theory, which is often called 'The Generalized Binding Theory,' Principle A is rewritten as follows, where X means A or \bar{A} : An X-anaphor must be X-bound in its governing category.

Speaker B: ani, caki_i-ka cikcəp o-əss-ta
 no self-NM in person come-PT-DE
 'No, self_i came in person'

I pointed out in Section 2 that the latter half of Rule (14) can be rendered as (18), repeated here as (46):

(46) A reflexive pronoun is bound by a discourse referent.

It is also pointed out that "bound" in (46) can simply be interpreted as follows:

(47) A reflexive pronoun is coindexed with a discourse referent.

(47), as it stands, has little explanatory force in that it gives no answer to the following question: how and why is a reflexive (i.e., *caki*) coindexed with a discourse referent? (47) looks more like a stipulation than a principle governing anaphor binding in Korean. Our point here is that we do not need such a "rule." Recall that *caki* lacks the capacity for inherent reference. Its referential content must therefore be recovered by its antecedent. This in turn implies that *caki* must have antecedent in a certain domain if it is to be used properly at all.

Seen in this way, therefore, the somewhat unnatural disjunction by "or" in Rule (14) has no ground to stand on. From our point of view, *caki* is not "bound by its discourse referent" *John*. Rather, our claim is that *caki* is linked to *John* by the medium of the empty topic in Speaker B's sentence. Notice that our assumption that the canonical structure of Korean in (42) leads us to represent the structure of Speaker B's sentence as follows:

(48) [[_Te]_i] cak_i-ka cikcəp o-əss-ta]

The point is that *caki* in (48) is not "bound" by *John* but by the empty topic *e*. This means that so-called "discourse-bound" *caki* can also be handled by our binding theory. So, we do not need the language-particular rule (14) any longer.

A few words with respect to *e_i-John_i* relation might be in order at this juncture. It seems that this linking of *e* to *John* must be dealt with by a pragmatic principle of some kind. An analogous case can be found in the following English example:

(49) Speaker A: Who did John_i criticize?

Speaker B: He_{i/#j} criticized Mary.

[N.B. #: syntactically allowable, but pragmatically bizarre]

The pronoun *he* in B's utterance refers almost obligatorily to *John* in A's utterance. If the pronoun refers to someone other than *John*, B's utterance sounds extremely odd and might well be regarded as unacceptable by a discourse grammar of some sort, which I will not pursue any further here. The point is that what is happening between *e* and *John* in the Korean case is the same as that between *he* and *John* in (49).

In the meanwhile, our binding theory predicts that *caki* cannot appear in the topic position, which is the highest (hierarchically) position in a sentence. As a matter of fact, this prediction is borne out. Let us compare the following with (45) :

- (50) Speaker A : John_i-i salam-il ponae-əss-ni ?
 -NM man -AM send-PT-QE
 ‘Did John_i send a man ? ’
 Speaker B : *ani, caki_i-nin cikcəp o-əss-ta
 no self-TM in person come-PT-DE
 ‘No, self_i came in person’

The only difference between (45) and (50) is that in the former, the subject marker-*ka* is attached to *caki* in B’s sentence, whereas in the latter the topic marker-*nin* is attached. Note that (45) is fully acceptable, while (50) is unacceptable. Why is this so? It seems that our theory can provide a reasonable answer to this question.

Notice that *caki* appears in the topic position in B’s sentence of (50), which is the highest position. Recall now that the so-called discourse-bound *caki* can only be linked to *John* through the medium of an empty topic. Since there is no empty topic available in Speaker B’s sentence, *caki* cannot be linked to *John* in Speaker A’s utterance. This means that *caki* is not bound by anything, a clear violation of Principle A of the binding theory. Hence, the unacceptability of Speaker B’s sentence.

As far as I can see, *caki* never occurs in the first topic position of a sentence. It seems that this generalization allows no exceptions. One might present the following as a possible counterexample to this generalization :

- (51) Speaker A : John_i-in əti-lo ka-ni ?
 -TM where-to go-QE
 ‘Where is John_i going ? ’
 Speaker B : caki_i-nin Chicago-lo ka-n tae [N.B. tae ≠ -ta]
 self-TM/CM -to go say [CM=Contrastive Marker]
 ‘e says that self_i is going to go to Chicago’

Notice that *caki* in B’s sentence above appears to be accompanied by the topic marker, which is in direct opposition to our claim that *caki* never occurs in the topic position of a sentence.

In order to provide a solution to this problem, let us note that B’s sentence is in fact a complex sentence, the structure of which is given below :

- (52) [e_i[caki_i-nin Chicago-lo ka-n]tae]

This immediately resolves the opposition to our claim that *caki* never occurs at the beginning of a sentence. (52) shows that *caki* is the subject of the lower clause and that the subject of the matrix clause, which occupies a higher

position than *caki*, is empty.

One might raise an additional question at this juncture: why is *caki* accompanied by the topic marker? In order to answer this question, we have to digress a bit from the main subject at this point. Even though the particle *nin* (or *in*) is generally viewed as topic marker in the tradition of Korean generative grammar, it has another function, namely as a contrastive marker. In the following conversation, *nin* in B's utterance is used as contrastive marker:

- (53) A : na-nin naenyən-e mikuk-ilo kanta
 I- TM next year-in America-to go
 'I am going to go to America next year'
 B : na-nin tokil-lo kanta
 I-CM Germany-to go
 'I am going to go to Germany'

B's utterance might well be regarded as a simple proposition that he is going to Germany if it were produced with no context. In the context of (53), however, what it really means is: "OK, you are going to go to America. But I don't give it a damn anyway. As far as I am concerned, however, I will go to Germany." The contrastive use of *nin* (or *in*) can also be found in the following even with no discourse context. In this case, the contrastive meaning of *nin* is clearly exposed:

- (54) John-*in* hakkyo-e kass-ina Mary-*nin* (hakkyo-e) kaci-anh-ass-ta
 -CM school-to went-but -CM (school-to) go-not-PT-DE
 'John went to school, but Mary didn't'

This contrastive marker *nin* can also be attached to objects:

- (55) na-nin pap-*in* mək-ciman ppang-*in* mək-cianhninta
 I-TM rice-CM eat-but bread-CM eat-not
 'I eat rice, but I do not eat bread'

Such being the case, the whole picture becomes fairly clear. *caki* in (52) is not really a topic but a contrasted item in the context of (51). Thus, what B's utterance actually means is: "John told me (Speaker B) that as far as he is concerned, he is going to go to Chicago, not caring where others go." Seen in this light, *caki* is a contrasted subject. It is not a real topic in the ordinary sense. Therefore it cannot appear at the beginning of the sentence. Hence, (52) can easily be accounted for in our framework: *caki* is bound by the matrix subject, which happens to be empty.

5. Summary

The major points in this study boil down to the following :

- (1) The subject-antecedent condition on anaphor binding in Korean does not hold ; quite a few counterexamples to this condition are supplied.
- (2) So-called “discourse-bound” reflexives are not really discourse-bound. They are bound by the topic, which is empty in this particular case.
- (3) Several alternatives to account for the binding properties of the reflexive-like element *caki* in Korean are hypothesized and examined.
- (4) If we assume Bouchard’s Binding theory to account for the binding properties of *caki*, we are forced to choose one and only one of the following assumptions for reasons discussed in Section 4.1. : (i) There are no maximal projections in Korean, or (ii) the Korean reflexive-like element *caki* is not an anaphor but a pronominal (perhaps a slightly different version of this assumption could be that *caki* in the object position of simplex sentences only is an anaphor, but *caki* is a pronominal elsewhere). Since both of these assumptions are too radical in light of the current developments of syntactic theory, we are more or less hesitant to adopt Bouchard’s framework in explicating the binding properties of *caki*.
- (5) Even if we assume Chomsky’s binding theory, on the other hand, the binding behavior of *caki* cannot still be fully captured in an elegant way. In this respect, it is proposed that the definition of the governing category and the relevant condition, i.e., Condition A of the binding theory, be modified to the following : (i) A is the governing category for B iff A is a category containing B, a governor of B, and a SUBJECT accessible to B. (ii) An anaphor is bound in {a. any b. its minimal} governing category. Note that Principle A of the binding theory is now parametrized. Compared with Chomsky’s original formulation, our definition of governing category lacks the restrictive term “minimal.” The parametrized Principle A of the binding theory shows that English requires a stricter condition on anaphor binding than Korean. In English, therefore, only the minimal governing category is the domain for anaphor binding. On the other hand, there is no minimality restriction in Korean.

It is shown in this paper that our revised theory of binding can account not only for the cases for which previous analyses make correct predictions but also for the cases for which previous analyses cannot make correct predictions. It is also shown that even the so-called discourse-bound reflexives can be handled within our framework as proposed in this article.

REFERENCES

- Aoun, Y. (1981) *The Formal Nature of Anaphoric Relations*, Doctoral dissertation, MIT, Cambridge, Massachusetts.
- _____ (1985) *A Grammar of Anaphora*, MIT Press, Cambridge, Massachusetts.
- Baker, C. (1983) 'A Revised Theory of Binding for Definite Pronouns, Reflexives, and Reciprocals,' ms., The University of Texas at Austin, Austin, Texas.
- Bouchard, D. (1982) *On the Content of Empty Categories*, Doctoral dissertation, MIT, Cambridge, Massachusetts.
- _____ (1984) *Idem.*, Foris Publications, Dordrecht (Revised version of Bouchard 1982).
- _____ (1985) 'On the Binding Theory and the Notion of Accessible SUBJECT,' *Linguistic Inquiry* 16.1.
- Von Stechow (1984) [The present author's copy of this article has been lost. The reader might find this article in *Linguistic Analysis* 13 (or 14?), which unfortunately is not available to me for the present].
- Bresnan, J., P-K. Halvorsen, & J. Maling (forthcoming) *The Syntax of Bound Anaphora*, ms., Stanford University & Xerox PARC.
- Chomsky, N. (1981) *Lectures on Government and Binding*, Foris Publications, Dordrecht.
- _____ (1982) *Some Concepts and Consequences of the Theory of Government and Binding*, MIT Press, Cambridge, Massachusetts.
- _____ (1985) *Knowledge of Language: Its Nature, Origin and Use*, Praeger, New York, New York.
- Clements, G. N. (1975) 'The Logophoric Pronoun in Ewe: Its Role in Discourse,' *Journal of West African Linguistics* X.2.
- Culicover, P. and W. Wilkins (1984) *Locality in Syntactic Theory*, Academic Press, New York, New York.
- Fiengo, R. and H. Kim (1980) 'Binding and Control in Korean: Structural Restrictions on Anaphora in a Non-configurational Language,' *Journal of Linguistic Research* 1.4.
- Freidin, R. and W. Harbert (1983) 'On the Fine Structure of the Binding Theory: Principle A,' *NELS* 13.
- Hale, K. (1982) 'Preliminary Remarks on Configurationality,' *NELS* 12.
- Huang, J. (1982) *Logical Relations in Chinese and the Theory of Grammar*, Doctoral dissertation, MIT, Cambridge, Massachusetts.
- _____ (1983) 'A Note on the Binding Theory,' *Linguistic Inquiry* 14.3.
- _____ (1984) 'On the Distribution and Reference of Empty Pronouns,' *Linguistic Inquiry* 15.4.
- Jackendoff, R. (1972) *Semantic Interpretation in Generative Grammar*, MIT Press, Cambridge, Massachusetts.
- _____ (1977) *X Syntax: A Study of Phrase Structure*, MIT Press, Cambridge,

- Massachusetts.
- Kameyama, M. (1984) 'Subjective/Logophoric Bound Anaphor *Zibun*,' *CLS* 20.
- Keenan, E. and B. Comrie (1977) 'Noun Phrase Accessibility and Universal Grammar,' *Linguistic Inquiry* 8.1.
- Koopman, H. and D. Sportiche (1982) 'Variables and the Bijection Principle,' *The Linguistic Review* 2.2.
- Kim, W.-C. (1976) *The Theory of Anaphora in Korean Syntax*, Doctoral dissertation, MIT, Cambridge, Massachusetts.
- Koster, J. (1982) 'Counter-Opacity in Korean and Japanese,' *Tilburg Papers in Language and Literature*, Tilburg University.
- Kuno, S. (1972) 'Pronominalization, Reflexivization, and Direct Discourse,' *Linguistic Inquiry* 3.2.
- Lasnik, H. (1976) 'Remarks on Coreference,' *Linguistic Analysis* 2.1.
- Lee, C. (1973) *Abstract Syntax and Korean with Reference to English*, Doctoral dissertation, Indiana University, Bloomington, Indiana.
- Lee, H.-B. (1976) 'Notes on Pronouns, Reflexives, and Pronominalization,' *Language Research* 12.2.
- Li, C. and S. Thompson (1976) 'Subject and Topic: A New Typology,' in C. Li, ed., *Subject and Topic*, Academic Press, New York, New York.
- Mohanan, K. P. (1981) *Grammatical Relations and Anaphora in Malayalam*, MA thesis, MIT, Cambridge, Massachusetts.
- Oshima, S. (1979) 'Conditions on Rules: Anaphora in Japanese,' in G. Bedell et al., eds., *Explorations in Linguistics: Essays in Honor of Kazuko Inoue*, Kenkyusha, Tokyo.
- Park, S.-H. (1983) 'Pro-NPs in Korean: With Special Reference to the Empty Element,' MA paper, The University of Texas at Austin, Austin, Texas.
- _____ (1985) *Pronominal and Anaphoric Elements in Korean*, Doctoral dissertation, The University of Texas at Austin, Austin, Texas.
- Saito, M. (1982) 'Case Marking in Japanese: A Preliminary Study,' ms., MIT, Cambridge, Massachusetts.
- Yang, D.-W. (1975) *Topicalization and Relativization in Korean*, Pan-Korea Book Corporation, Seoul.
- _____ (1982) 'Control and Binding in Korean,' *Linguistic Journal of Korea* 7.2.
- _____ (1986) 'Logophoricity in Binding Theory,' Paper Presented at SICOL, August, 1986.

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