An HPSG account of Anaphor binding in Korean[*]

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Introduction

Binding phenomena are amongst those empirical areas that have received distinctly diverging accounts in different frameworks. In GB (Chomsky 1981, 1986), for example, the binding theory is configurationally determined in terms of structural notions such as c-command and government. In HPSG (Pollard and Sag 1994), on the other hand, the key idea is to replace the configurational notion of c-command by a different relation called *obliqueness-command* or *o-command* , which is based not on tree configurations but rather on the relative obliqueness of grammatical functions. Furthermore, in a yet different approach, in Reinhart and Reuland (1993), anaphor-centred binding theory is replaced by a *predicate* -centred binding theory. While other standard binding conditions explain when anaphora is possible, Reinhart and Reuland hold that binding theory is a fact about reflexive predicates and not about anaphora at all.

In this paper, we shall offer an account for anaphor binding in Korean in terms of the HPSG framework. HPSG binding theory not only provides a more adequate account for languages with a relatively free word order such as Korean, but also overcomes the problematic areas such as nominative and genitive anaphors, long-distance anaphors without too much effort of stipulating principles on binding theory. This paper comprises three sections. The first section introduces the data of the Korean anaphor '*Caki'* , and places it in the general context of long-distance anaphors. In the second section, we will provide the fundamental definitions of binding theory in HPSG.[1] In the third section, we identify a few shortcomings of the theory as revealed

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[1] HPSG has received a recent modification by excluding subjects from the COMP list (P&S 94). This modification is further followed by the addition of the attribute ARG-S (argument structure) (Sag 1995) which also undertake the role of SUBCAT in accounting for binding theory. The analysis in this paper, however, is based on HPSG 2 where ARG-S is not yet introduced. See Manning and Sag (1995) and Manning (1997) for the discussion of ARG-S in binding theory.

in its application to the Korean data and we propose an alteration in order to account for these phenomena.

1. The basic data.[2]

In Korean, *caki* is considered to be a reflexive pronoun since it exhibits similar properties to those of a reflexive pronoun in languages such as English (Sohn 1994) as illustrated in (1):

(1) a. John$_i$-i **caki**$_i$-lul ttali-ess-ta. (Korean)
John-NOM self-ACC hit-PAST-DC
' John$_i$ hit self$_i$.'

cf. John$_i$-i ku$_{*i}$-lul ttali-ess-ta.
John-ACC he-ACC hit-PAST-DC
'John$_i$ hit him$_{*i}$.'

b. John$_i$ hit **himself**$_i$. (English)
cf. John$_i$ hit him$_{*i}$.

Caki has a Ø-feature of being a third person singular[3], and agrees with antecedent in person and number accordingly.

(2) *Na$_i$-nun **caki**$_i$-lul ttali-ess-ta.
I -NOM self-ACC hit-PAST-DC
' I$_i$ hit self$_i$.'

Although *caki* seems to show a similar behaviour to that of the English reflexive pronoun, its behaviour diverges from its English counterpart in various respects. Consider the following example:

(3) a. Bill$_i$-i [John$_j$-i **caki**$_{i/j}$-lul ttali-ess-ta-ko] malhe-ess-ta. (Korean)
Bill-NOM John-NOM self -ACC hit-PAST-DC-COMPL said-PAST-DC
'Bill$_i$ said that John$_j$ hit self$_{i/j}$.'

b. Bill$_i$ said that John$_j$ hit **himself**$_{*i/j}$.' (English)

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[2] Abbreviations: NOM = Nominative Marker, ACC = Accusative Marker, PAST = Past Tense Marker, PRS = Present Tense Marker, COMPL = Complementizer, DC = Declarative Marker.
[3] Caki is non-specified for gender.

In (3a) where *caki* is within an embedded clause, it may be bound by either the matrix subject or the embedded subject, which results in an ambiguous interpretation. In (3b), however, *himself* can be bound by the lower subject only. This distinct behaviour of *caki* from its English counterpart seems to indicate that *caki* may find its antecedent in a somewhat wider domain than the English reflexives. This particular behaviour of *caki* has been widely studied and is referred to as long-distance binding (LDB) . In LDB-related research (Kuno 1973, McCawley 1976), it is assumed that Kuno's (1976) subjecthood condition is a central principle governing the distribution of LDAs (Long-Distance Anaphors). The subjecthood condition states that a long distance anaphor allows a subject antecedent, but not a non subject antecedent. The distribution of *Caki*, however, overtly contradicts this condition. As it can be seen from the following example, the subject of the matrix clause is by no means the only potential binder for Caki.

(4) John$_i$-i Mary$_j$-loputeo [ne-ga caki$_{i/j}$-lul tteli-ess-ta-ko] tul-ess-ta.
John-NOM Mary- from I-NOM self -ACC hit-PAST-DC-COMPL hear-PAST-DC
' John$_i$ heard from Mary$_j$ that I hit self$_{i/j}$.'

In (4), *Caki* may be bound either by the matrix subject or by an non-subject nominal, here, the complement of the preposition *loputeo* (from) in an adjoined position. Interestingly, though, *caki* cannot be bound by a non-subject nominal in an A-position, e.g. a matrix object, which is shown in (5).

(5) John$_i$-i Mary$_j$-ekey [ne-ga caki$_i$-lul tteli-ess-ta-ko] malhe-ess-ta.
John-NOM Mary-to I-NOM self-ACC hit-PAST-DC-COMPL say-PAST-DC
'John$_i$ told Mary$_j$ that I hit self$_i$'

So far, we have briefly looked at some basic data of Korean reflexive anaphors, which we will focus on in this paper. As we move on to HPSG binding theory in the next section, we will revisit the data of Korean anaphora more extensively.

2. HPSG binding theory

We turn now to some basic definitions of binding theory in HPSG. Since HPSG has been extensively modified since it was first introduced in Pollard and Sag (1994), it is now customary to call the first version (Pollard and Sag 1987) HPSG 1, the second version (Pollard and Sag 1994: Ch. 1-8) HPSG 2 and the third version (Pollard and Sag 1994: Ch. 9) HPSG 3. The version of HPSG binding theory we will look at in this section is HPSG 2 binding theory.

2.1. Nonconfigurational binding theory: O-Command

The relevant definitions are O-command (6), Local O-command (7) and O-binding (8).

(6) Local O-Command

Let Y and Z be referential *synsem* objects with distinct LOCAL values, Y referential. Then Y locally o-commands Z just in case either:

i. Y is less oblique than Z; or
ii. Y locally o-commands some X that subcategorizes for Z.

Local o-command is a special case of a more general relation called simply o-command, whose definition states as below:

(7) O-Command

Let Y and Z be *synsem* objects with distinct LOCAL values, Y referential. Then Y *o-commands* Z just in case either:

i. Y is less oblique that Z; or
ii. Y o-commands some X that subcategorizes for Z; or
iii. Y o-commands some X that is a projection of Z (i.e. the HEAD values of X and Z are token-identical).

Now, our analog of Chomsky's A-binding is the notion of o-binding, defined as in (8):

(8) Definition of *O-binding*

Y (*locally) o-binds* Z just in case Y and Z are coindexed and Y (locally) o- commands Z. If Z is not (*locally*) *o-bound*, then it is said to be (*locally) o-free*.; where o-binders (o-commanders must be referential).

HPSG binding theory is now stated in its entirety as follows:

(9) HPSG 2 Binding Theory

Principle A. A locally o-commanded anaphor must be locally o-bound.
Principle B. A personal pronoun must be locally o-free.
Principle C. A nonpronoun must be o-free.

Let us illustrate by a simple example the way in which HPSG Binding Principles, Principle A in this case, operate.

(10) John$_i$ knows Bill$_j$ likes himself$_{*i/j}$.

Here the embedded verb *likes* will have a SUBCAT list which we can present as follows:

(11) [SUBCAT <NP:*npro*$_i$, NP:*ana*$_i$ >]

Given Principle A, (10) is grammatical only if the anaphor *himself* is bound by the locally o-commanding nominal *Bill* , but not by the o-commanding nominal *John*..

2.2 Nonsyntactic Factors and Exempt Anaphors

One thing one should note about HPSG 2 binding principle A is that the principle applies only when an anaphor has a less oblique referential nominal as a coargument, that is, only when the anaphor is locally o-commanded. If an anaphor does not co-occur with a less oblique referential coargument, the anaphor should not be governed by principle A. Consider the following example:

(11) a. [The children]$_i$ thought that [[each other's]$_i$ pictures] were on sale.
b. [SUBCAT ,DetP: *ana*$_i$>]

The SUBCAT list in (11b) is that of the example (11a). As it can be seen in (18b), the anaphor *each other* is the only argument of its head *picture*. Standing on its own without any less oblique coargument, the anaphor should be exempt from principle A. Another case of the exempt anaphor is when an anaphor serves as the subject of nonfinite or finite clauses. A subject anaphor, being the least oblique argument of a clause, cannot be o-commanded by any other coargument, thus, not locally o-commanded. Therefore they are also exempt from the requirement of being o-bound. For this category of exempt anaphors, there has been a proposal that the determination of the antecedent must be made by other nonsyntactic factors (P&S 94). Among various accounts of these nonsyntactic factors on exempt anaphors (for example, Direct-discourse analysis (Kuno 1972), Empathy (Kuno and Kabauraki 1977), Logophoricity (Sells 1987), Point of view (Kuroda 1973, Banfield 1982), Deictic perspective (Iida 1996), Syntactically active discourse operators (Kural and Tsoulas 1997)), here we briefly discuss two approaches *point of view* and *deictic perspective*. The *Point of view* approach has long been recognised to be relevant to the acceptability of picture noun reflexives such as (11a). This approach says that a reflexive takes as its antecedent an NP whose referent is the individual whose viewpoint or perspective is somehow represented in a given text. That is, in (11a) the speaker has taken on the children's perspective, or viewpoint. This perspective is moreover maintained throughout the two-sentence text as shown below (example taken from P&S 1994:270):

(12) John$_i$ was going to get even with Mary. That picture of himself$_i$ in the paper would really annoy her, as would the other stunts he had planned.

However, this approach does not seem to fit in well with LDB in Korean which provides counterexamples to the proposal that LDAs cannot take an antecedent in discourse level. Consider the following example:

(13) Na$_i$-nun Mary$_j$-ekey [caki*i/*j/*k-ga neo-lul choah-an-da]-ko malha-ess-ta.
I-NOM Mary-DAT self -NOM you-ACC like-PRS-DC-COMPL like-PAST-DC
'I$_i$ told Mary$_j$ that self*i/*j/*k likes you.'

According to P&S (1996), the subject reflexive, *caki,* is considered to be an exempt anaphor. Therefore, discourse factors such as *point of view* should apply in order to determine its antecedent. When *I* and *Mary* are unavailable as antecedents, a referent in discourse in a given context could, in principle, play a role of a viewpoint taker and be the antecedent. However, such account contracts (12) where *caki* cannot take a discourse antecedent. Therefore, *view point* as a discourse factor fails to account for LDB in Korean.

On the other hand, Iida (1996:180-181) proposes that as far as *zibun* (LDA in Japanese) is concerned, it is assumed that *zibun* takes a sentence "internal" antecedent which has perspective, where by "internal" antecedent means an element which participates, bearing some role, in the described situation. In other words, *zibun* takes the subject as its antecedent since the subject's perspective is in principle always available; *zibun* can also take the nonsubject antecedent when the speaker identifies herself with the nonsubject. This account seems to be more applicable to LDB in

Korean in the sense that it narrows the scope of antecedent further to sentence internal antecedent, thus explains the ungrammaticality of *caki* being bound by a discourse antecedent. However, as we saw in section 1 where *caki* can be bound by a nominal in adjoined position but not by a nominal in A-position among the nonsubject antecedents, Iida's proposal does not say anything clearly about the irregularity of antecedency among nonsubject nominals. Perhaps, we can assume that among nonsubject antecedent candidates, only the ones whose roles are a reporter, but not a reportee, can bind *caki* . If this assumption is true, then it seems to explain both examples (4) and (5) in section 1, repeated here as (14) and (15).

(14) $John_i$-i $Mary_j$-loputeo [ne-ga $caki_{i/j}$-lul tteli-ess-ta-ko] tul-ess-ta.
John-NOM Mary- from I-NOM self -ACC hit-PAST-DC-COMPL hear-PAST-DC
' $John_i$ heard from $Mary_j$ that I hit $self_{i/j}$.'

(15) $John_i$-i $Mary_j$-ekey [ne-ga $caki_i$-lul tteli-ess-ta-ko] malhe-ess-ta.
John-NOM Mary-to I-NOM self-ACC hit-PAST-DC-COMPL say-PAST-DC
'$John_i$ told $Mary_j$ that I hit $self_i$'

In both examples above, *John* acts as an default perspectival antecedent of *caki* . Furthermore, *Mary* in (14), as a reporter, can bind *caki* , whereas *Mary* in (15) as a reportee, is not allowed to bind *caki* as a perspective antecedent. Iida's proposal in this sense seems to make a correct prediction. More critically, however, it is not entirely clear on what grounds antecedent candidates should be restricted as sentence "internal" antecedents. Even if the data exhibits that sentence external antecedents are not allowed, then it would have to be some concrete sentence grammar principle that should provide an explanation for such phenomena and not discourse factors such as *perspective* . In other words, this approach seems to be descriptively adequate, but theoretically unwarranted. It is in this respect that we will propose syntactic conditions on LDB in Korean independently from discourse factors.

3. Syntactic constraints on LDB in Korean

In this section, we revisit the data of Korean anaphor we briefly looked at in section 1 on the basis of the HPSG 2 binding theory. Here we state HPSG 2 Principle A repeated as in (16):

(16) HPSG 2 Principle A

A locally o-commanded anaphor must be locally o-bound.

HPSG 2 Principle A seems to correctly predict the grammaticality of the example (20):

(17) a. John$_i$-i caki$_i$-lul ttali-ess-ta.
John-NOM self-ACC hit-PAST-DC
' John$_i$ hit self$_i$.'

b. < NP:npro$_i$, NP:ana$_i$ >

The anaphor *caki* is locally o-bound by being coindexed with the antecedent *John* which locally o-commands *caki* . However, when *caki* occurs in an embedded clause, it does not seem to follow principle A. Consider the following example:

(18) a. Bill$_i$-i [John$_j$-i caki$_{i/j}$-lul ttali-ess-ta-ko] malhe-ess-ta.
Bill -NOM John-NOM self -ACC hit-PAST-DC-COMPL said-PAST-DC
'Bill$_i$ said that John$_j$ hit self$_{i/j}$.'

Even though *caki* is correctly locally o-bound by the lower subject *John* , it could also be coindexed by the higher subject *Bill* , which is not a local o-commander of *caki*. Although this is an obvious violation of the principle A, the example is still grammatical. This seems also to be the case however deeply embedded *caki* may be as in (19):

(19) a. John$_i$-un [Mary$_j$-ka [caki$_{i/j}$-ka sulpu-ta-go] malha-nkes]-ul kiek-han-ta.
John-NOM Mary-NOM self-NOM sad-DC-COMPL say -COMPL -ACC remember-PRS-DC
' John$_i$ remembers that Mary$_j$ said that self$_{i/j}$ is a genius.'

Seen from these data, HPSG 2 Binding Principle A seems to be too strong for Korean anaphor. Therefore, we can make this standard principle able to cover the long distance anaphor binding in a such way that not only can a local o-commander bind *caki* , but also a o-commander (not local) can bind *caki* as well. This modification states as follows:

Standard Principle A:

A locally o-commanded anaphor must be locally o-bound.

$$\Downarrow$$

(20) Principle A for LDAs:

An o-commanded anaphor must be o-bound.

This Principle allows *caki* to be bound by any nominal objects which is in any higher clause, and it should legitimate (18) and (19). However, one may argue that *caki* in (19) is in a subject position, which means that it should not be affected by the principle A (syntactic factor), but should rely on some non-syntactic factor such as approaches we saw in section 2.2. However, if we attribute *caki* in a subject position to some non-syntactic factor, then we have to classify *caki* into two subclasses: subject *caki* and non-subject *caki* . This entails that we need another non-syntactic factor in addition to the Principle A for Korean anaphor binding. However, since all the data without such subclasses seem to be uniformly ruled by just one modified syntactic principle A, it would be redundant to add another non-syntactic constraint at this stage. Furthermore, Principle A for LDAs applies equally well to genitive anaphors in Korean which have been categorized as exempt anaphors as well. Consider the following:

(21) John$_i$-un Mary$_j$-loputeo [caki$_{i/j}$-uy uysa-ga papu-ta-ko] turu-ess-ta.
John-NOM Mary -from self-GEN doctor-NOM busy-DC-COMPL hear-PAST-DC
'John$_i$ heard from Mary$_j$ that self$_{i/j}$'s doctor is busy.'

In (21), the genitive anaphor *caki* has two candidates for its antecedents: the subject and the non-subject nominal in the higher clause, both of which are the o-commanding nominals, and this shows that the genitive anaphor can be subject to Principle A for LDAs and should not be treated as an exempt anaphor which depends on non-syntactic factors.[4]

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[4] However, in the example like 'John$_i$ know that Mary$_j$ is [self$_i$'s doctor]$_j$' in Korean, the genitive anaphor can be bound by a local o-commanding nominal, *Mary*. This data may be well explained by the condition such as the i-within-i principle in GB. However, the current HPSG framework seems to remain unsatisfactory in the explanation of such data.

Even though the principle for Korean anaphor binding nicely accounts for the data we have dealt with so far, it also faces some counterexample. Let us have a look the following two example[5]:

(22) a. John$_i$-un Bill$_j$-ekey [caki$_{i/*j}$-ga ka-ess-ta-ko] malha-ess-ta.
John-NOM Bill-DAT self-NOM go-PAST-DC-COMPL say-PAST-DC
'John$_i$ told Bill$_j$ that self$_{i/*j}$ has to go.'

b. John$_i$-un Bill$_j$-loputeo [caki$_{i/j}$-ga ka-ess-ta-ko] turu-ess-ta.
John -NOM Bill-from self-NOM has to go -COMPL hear-PAST-DC
' John$_i$ heard from Bill$_j$ that self$_{i/j}$ has to go.'

In (22), two problems seem to surface. One problem is that in (22a), according to the principle A for Korean anaphor binding, both *John* and *Bill* should be able to o-bind *caki* since both o-command *caki* in the complement clause. However, as the indexing shows, only *John* but not *Bill* can be an antecedent. The second problem is that in (22b), apart from *John* (the subject), the adjunct *Bill-loputeo* (from Bill) serves as a legitimate antecedent. Since adjuncts are considered to be the most oblique elements, it is not possible for them to o-command the object complement clause in (22b), which is a less oblique element.

These two problems seem to be distinct from each other. However, they have a common origin. When HPSG binding theory was much elaborated in Pollard and Sag (1992), they assumed the obliqueness hierarchy in (23) which states that the Subject is less oblique than the Primary Object, the Primary Object is less oblique the Secondary Object, and so on:

(23) Subject < Primary Object < Secondary Object < Obliques...

However, this hierarchy does not seem to be quite universal. There has been a proposal (Chung 1994) that the obliqueness hierarchy in Korean is such that a subject is less oblique than a complement, and that complements are all equally oblique, that is, primary object is equally oblique to secondary object. This hierarchy may be a parametric choice made by Korean. However, given that the hierarchy presented in

[5] Here, we only take the examples where *caki* is in subject position. However, note that the same phenomenon can be observed in examples where *caki* occurs in non-subject position.

Pollard and Sag (1992) is not universal, I propose here that the Obliqueness hierarchy, as parametrised for Korea is in fact different from that of Chung (1993). The relative order of subject and complements is same as the one proposed in Pollard and Sag (1992), but an adjunct is placed as the second least oblique element as illustrated in (24):

(24) Subject < Adjunct < Primary Object < Secondary Object

This parametric hierarchy where the adjunct is treated as a second least oblique element is not a completely new proposal. Larson (1988, 1990) argues that adjuncts should be less oblique since they cannot c-command any argument of the verbs. The subject must be the element highest up in the projection, since it c-commands the object and any adjunct, and the object must be the next element as it must not c-command the subject but it must c-command the adjunct. The adjunct must not c-command any argument, and the only position in which it cannot c-command then is the first V' projection, that is, the position closest to the verb. On these grounds, therefore, Larson argues that adjuncts (especially manner adjunct) are the elements that are the most obligatory within the VP in the sense that they are the closest to the verb, and also it can be treated as the verb's innermost complement. The evidence for this hierarchy can be found in a simple sentence as follows:

(25) John$_i$-un Bill$_j$-ekey caki$_{i/*j}$-etehaeseo malha-ess-ta.
John -NOM Bill -DAT self -about talk-PAST-DC
'John$_i$ talked to Bill$_j$ about self$_{i/*j}$.'

In (25) where both the secondary object and adjunct are available, *caki* in the adjunct position is only o-bound by the subject *John* , but not the secondary object *Bill* , which shows that the adjunct should precede the secondary object in the obliqueness hierarchy. This parametric hierarchy solves the problems raised by (22a) and (22b) at the same time. In (22a), the secondary object *Bill-ekey* (to Bill) as a least oblique element in the hierarchy cannot possibly serves as an antecedent of *caki*. Also, in (22b), the adjunct phrase *Bill-loputeo* (from Bill) stands as a legitimate o-binder of *caki* by being less oblique than the complement clause.

Conclusion.

In this paper, we have observed the distinctive behaviour of the reflexive anaphor *caki* in Korean, and examined some discourse condition provided for the account of LDB, such as *point of view and perspective*. The consideration of *caki*-binding in Korean leads us to conclude that the discourse conditions for LDB is not only inadequate to cover the long distance *caki*-binding in Korean, but also theoretically not well-founded. As a remedy, we attempted to analyse *caki*-binding in Korean in the framework of HPSG, by replacing the notion of local o-command by the notion of o-command and also by proposing a obliqueness hierarchy parametrised for Korean. However, the proposal in this paper does not remain without problems. The parametric obliqueness hierarchy in Korean we proposed faces some critical problems arising from examples such as (26):

(26) John_i-un $\quad$ Bill_j-etehaeseo $\quad$ $\text{caki}_{i/*j}$-ekey $\quad$ malha-ess-ta.
John -NOM $\quad$ Bill - about $\quad$ self - DAT $\quad$ talk-PAST-DC
'John_i talked to $\text{self}_{i/*j}$ about Bill_j.'

According to our proposal, *caki* should be allowed to be bound by either *John* or *Bill*. However, as the indexing shows, the adjunct *Bill-etehaeseo* (about Bill) appears to be an illegitimate binder, which contradicts our prediction. I do not attempt to provide a solution to this problem in this paper. However, I would close the present paper by suggesting a direction for research whose explanation, I believe, would be fruitful in order to tackle these problems.

The origin of the problem lies in the assumption that different adjuncts (from John, about John, etc.) should receive the same analysis on the basis that they are all VP adjuncts, which would imply that they would be placed at the same level in the Obliqueness hierarchy, leaving no room for finer distinctions. With that in mind, another way to approach this problem is not via the syntactic obliqueness hierarchy, but via the thematic role hierarchy. This will assign different terms (e.g., agent, goal, source, etc.) to different adjuncts from which we can differentiate the adjuncts. The thematic role hierarchy has already been proposed as a plausible explanation of the binding phenomena (Manning 1996). Furthermore, in the recent version of HPSG 3 where ARG-S (argument structure) replaces SUBCAT list, another version of binding theory in accordance to such modification has been proposed in terms of thematic roles rather than syntactic obliqueness hierarchy (Manning 1996). Therefore, it would be from this end that LDB can be reinvestigated, which leaves an intriguing task for further research.

References

Banfield, A. (1982) *Unspeakable Sentences.* Boston: RKP.

Chomsky, N. (1981) *Lectures on Government and Binding.* Dordrecht: Foris.

Chomsky, N. (1986) *Knowledge of Language.* New York: Praeger.

Chung, C. (1993) Scrambling in Korean and its Effect on Anaphor Binding: An alternative to Movement Approaches. In *ESCOL* '93. 45-57.

Iida, M. (1996) *Context and Binding in Japanese.* Stanford: CSLI Publications.

Kuno, S. (1972) Pronominalization, Reflexivization, and Direct Discourse. *Linguistic Inquiry* 3: 161-195.

Kuno, S. (1973) *The Structure of the Japanese Language.* Cambridge, Massachusetts: MIT Press.

Kuno, S and E. Kaburaki (1977) Empathy and Syntax. *Linguistic Inquiry* 8, 627-672.

Kural, M. and G. Tsoulas (1997) Pronouns and the Syntax-Discourse Interface. Paper presented at the 20th GLOW Conference, Rabat, Morocco, Abstract in *GLOW Newsletter* Spring 1997

Kuroda, S. Y. (1973) Where Epistemology, Style and Grammar Meet: A case Study from Japanese. In S. Anderson and P. Kiparsky (eds.) *A Festschrift for Morris Halle.* New York: Halt, Rinehart and Winston. 377-391

Larson, R. K. (1988) On the Double Object Construction. In *Linguistic Inquiry.* Vol. 19 (3): 335-391.

Manning, C. D. (1996) Argument Structure as a locus for binding theory. University of Sidney.

Manning, C. and I. A. Sag (1995) Disassociations between Argument Structure and Grammatical Relations

McCawley, N. A. (1976) Reflexivization: A Transformational Approach. In M. Shibatani (ed.), *Syntax and Semantics 5: Japanese Generative Grammar.* New York: Academic Press.

Pollard, C. and I. A. Sag. (1987) *Information-Based Syntax and Semantics,* Vol. 1. CSLI Lectures Notes Series 13. Stanford, CSLI.

Pollard, C. and I. A. Sag (1992) Anaphors in English and the Scope of Binding Theory. *Linguistics Inquiry* 23: 261-303.

Pollard, C. and I. A. Sag. (1994) *Head-Driven Phrase Structure Grammar.* Chicago, IL: University of Chicago Press.

Reinhart, T. and E. Reuland (1993) Reflexivity. *Linguistic Inquiry* . 24(4): 657-720.

Sells, P. (1987) Backwards Anaphora and Discourse Structure: Some Considerations. CSLI Report No. 114. Standford: CSLI.