Condition R

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Reinhart and Reuland (1993) partition the set of anaphors into two syntactic subclasses: SELF anaphors, which reflexivize predicates, and SE anaphors, which, like pronominals, do not. This partition is intended to capture the antilocality of the SE anaphors. I argue that the appropriate partitioning of anaphors is semantic and not syntactic. Reinhart and Reuland's SELF anaphors are ''near-reflexives,'' interpreted as a representation of their antecedents, whereas their SE anaphors are ''pure-reflexives,'' requiring identity with their antecedents. The antilocality effects with pure reflexives are due to Condition R, a principle requiring reflexivity to be lexically expressed. The Condition R approach correctly accounts for the meanings of the two kinds of anaphors, grouping the near reflexives with pronominals and names, and correctly dissociates semantic reflexivity from the calculation of syntactic binding domains.

Keywords: binding theory, reflexivity, near-reflexivity, Kannada, Dutch

It is by now standard to define anaphors as NPs that cannot refer independently. Reinhart and Reuland (1993) further divide anaphoric NPs into two classes: those that reflexivize the predicates they are arguments of and those that do not. Referentially, however, these two types of anaphor are taken to be identical. In this article I show that this conclusion is not warranted by illustrating differences in the ways certain anaphors depend on their antecedents for reference. Although it is true that all anaphors are referentially dependent, some anaphors require complete identity with their antecedents whereas others do not. Anaphors of the first class, which I call *pure-reflexives,* identify the same entity in the world as their antecedents do. Anaphors of the second class, which I call *near-reflexives,* do not require complete identity with their antecedents; the referent of a near-reflexive can be loosely related to the referent of its antecedent by certain kinds of similarity to be made more precise below.

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This distinction between pure- and near-reflexives has consequences for the theory of reflexive predicates and in conjunction with this theory enables us to explain the existence of so-called antilocal anaphors, which appear to resist binding by a coargument. I will show that the anaphors that Reinhart and Reuland claim to have the ability to reflexivize a predicate do not, in fact, ever occur as arguments of semantically reflexive predicates. The anaphors that resist binding by a coargument can occur on reflexive predicates, but only if that reflexivity is lexically expressed.

1 Predicate-Centered Binding Theory

The theory of reflexivity in generative grammar has traditionally been a theory of nominal types. NPs are identified as anaphors, pronominals, or R-expressions on the basis of the distributional properties of the elements that are coreferential with these NPs. Chomsky (1986) gives the following principles:

(1) a. An anaphor is bound in a local domain.
    b. A pronominal is free in a local domain.
    c. An R-expression is free (in the domain of the head of its chain).

The binding theory is thus a theory of the syntactic properties of referential dependence, specifying whether an NP requires an antecedent and the domain in which that antecedent must (or must not) be found.[1]

Reinhart and Reuland (1993) (henceforth, R&R) have argued against this strictly nominal approach to binding, claiming instead that reflexivity is a property of predicates. On this view the role of reflexive pronouns in language is not to express coreference but to reflexivize predicates. The distribution of anaphors and pronominals is determined not by reference, a property of NPs, but by reflexivity, a property of predicates. From this predicate-centered perspective, an anaphor is still defined as an NP that is referentially deficient in the relevant respect, but the anaphors are broken into two types, those that reflexivize the predicates they are arguments of and those that do not.

The division into reflexivizing and nonreflexivizing anaphors is intended to capture the apparent antilocality of the nonreflexivizing ones. There are certain referentially dependent NPs that require a long-distance antecedent and not a local one. For example, the Dutch anaphor *zich* must be bound, but not by a coargument. The behavior of *zich* contrasts with that of *zichzelf,* which must be bound by a coargument.

(2) a. *Max haat zich.
        Max hates self
        'Max hates himself.'
    b. Max haat zichzelf.
        Max hates selfself
        'Max hates himself.'

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[1] The precise definition of *local domain* is irrelevant here.

c. Max hoorde mij over zich praten.
Max heard   me about self talk
'Max heard me talk about him.'
d. *Max hoorde mij over zichzelf praten.
Max heard   me about selfself talk
'Max heard me talk about him.'

While both *zich* and *zichzelf* are anaphors in the sense that they require a c-commanding antecedent, only *zichzelf* can reflexivize a predicate and so only *zichzelf* can be bound by a coargument. Technically, this is implemented through the following binding conditions:

(3) *Condition A*
A reflexive-marked (syntactic) predicate is reflexive.
Condition B
A reflexive (semantic) predicate is reflexive-marked.

These conditions depend on the following definitions:

(4) a. A predicate is *reflexive* iff two of its arguments are coindexed.[2]
b. A predicate is *reflexive-marked* iff
  i. it is lexically reflexive, or
  ii. one of its arguments is a SELF anaphor.

(5) A SELF anaphor is a morphologically complex anaphor.

Returning now to the examples in (2), (2a) is ungrammatical as a violation of Condition B. The predicate is reflexive (it has two coindexed arguments) but not reflexive-marked (it is not lexically reflexive and neither of its arguments is a SELF anaphor). Both conditions are satisfied in (2b); here the predicate is both reflexive and reflexive-marked (since one of its arguments is a SELF anaphor). Turning to the long-distance cases, (2c) trivially satisfies both conditions since it contains no reflexive predicates and no reflexive-marked predicates, while (2d) violates Condition A because the embedded predicate is reflexive-marked (via the SELF anaphor) but not reflexive.

The intuition behind R&R's proposal is that there is a one-to-one correspondence between a particular formal property (reflexive-marked) and a particular semantic property (reflexive). The definition of *reflexive-marked,* however, is a disjunction; there are two ways for a predicate to be reflexive-marked. These two modes of reflexive marking are required to explain the contrast in (6).

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[2] More precisely, R&R explain that *reflexive* should be read as ''i-reflexive,'' that is, as reflexive with respect to a particular indexing. In the examples in (2) I assume coindexation between the anaphor and the matrix subject.

(6) a. *Max haat zich.
          Max hates self
          'Max hates himself.'
     b.   Max wast   zich.
          Max washes self
          'Max washes himself.'

Here we see that the restriction against coargument binding of *zich* depends on the predicate. Since the syntactic relation between the anaphor and its antecedent in (6a) is identical to the one in (6b) but the binding possibilities for the two cases diverge, we can conclude that it is the predicate that determines the availability of coargument binding for the anaphor *zich*.[3] Under the predicate-centered binding theory outlined above, the effect is achieved by marking some predicates as inherently reflexive and, thus, inherently reflexive-marked. While (6b) appears to violate Condition B since the predicate is reflexive but not reflexive-marked, in fact the condition is satisfied because the predicate is lexically reflexive and so does not need overt reflexive-marking by a SELF anaphor.

Elsewhere (Lidz 1995) I have extended the definition of reflexive-marked predicate to include morphological reflexivity, that is, to include those languages that require a particular morpheme to appear on reflexive predicates. In Kannada the anaphor *tannu* cannot be bound by a coargument in the absence of the verbal reflexive morpheme *-koḷ* (*-koṇḍ* in past tense).[4]

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[3] Pierre Pica (personal communication) takes issue with this characterization of the distinction between (6a) and (6b), claiming that in (6b) *zich* is a clitic and that like all reflexive clitics it must be locally bound. According to Pica, it is the variable status of *zich* as a clitic or a full NP that gives rise to the distinction. There are two arguments against this view. First, if it is true that clitics are obligatorily locally bound, then we still need an explanation for why the clitic *zich* is possible in (6b) but not (6a). Since the predicate is the only element that varies, then Pica's explanation reduces to properties of the predicate, as above. Second, it is not true that all clitics must be locally bound. Even when *zich* is long-distance bound, it behaves like a clitic in resisting topicalization and in blocking movement of the PP containing it (Everaert 1986).

(i) *Voor zich liet Jan Piet werken.
      for   self let Jan Piet work
      'For self, Jan let Piet work.' (self = Jan)

(ii) a. Zij liet mij een huis   voor zich bouwen.
          she let me a   house for self build
          'She let me build a house for her.'
     b. *Zij liet mij voor zich een huis   bouwen.
          she let me for self a   house build
          'She let me build a house for her.'

Nonclitic pronominals do not show the contrast in (ii).

(iii) a. Zij liet mij een huis   voor haar bouwen.
          she let me a   house for her build
          'She let me build a house for her.'
      b. Zij liet mij voor haar een huis   bouwen.
          she let me for her a   house build
          'She let me build a house for her.'

[4] Kannada data come from ongoing informant work begun in 1994.

(7) a. *Hari tann-annu hoḍe-d-a.
    Hari self-ACC   hit-PST-3SM
    'Hari hit himself.'

   b. Hari tann-annu hoḍe-du-koṇḍ-a.
    Hari self-ACC   hit-PP-REFL.PST-3SM
    'Hari hit himself.'

Under this approach (7a) is ungrammatical because the predicate is reflexive but not reflexive-marked, in violation of Condition B. In (7b), however, the verbal reflexive serves to morphologically reflexive-mark the predicate and so both binding conditions are met. Thus, we see that reflexive marking can be achieved via a SELF anaphor or lexically, with some languages marking the lexically reflexive predicates morphologically.[5]

Kannada also exhibits a morphologically complex anaphor that can occur in the absence of the verbal reflexive, in accord with R&R's predictions.[6]

(8) Hari tann-annu-taane hoḍe-d-a.
    Hari self-ACC-self   hit-PST-3SM
    'Hari hit himself.'

Here, the reflexive predicate is reflexive-marked by the complex anaphor.

2 Against Reflexive-Marked Predicates as a Natural Class

R&R's approach makes an interesting prediction with respect to the meaning of reflexive-marked predicates. As noted above, reflexive marking can be realized lexically (sometimes through a verbal affix) or syntactically (through a SELF anaphor). The binding conditions themselves, however, make no reference to the manner of reflexive marking. The binding conditions require only that reflexive marking, no matter how it is realized, correspond to semantic reflexivity. As a consequence, the theory predicts that reflexive-marked predicates are semantically uniform. Since the binding conditions apply at LF and make reference only to reflexive marking and not to the manner of reflexive marking, it follows that all reflexive predicates have the same interpretation at LF. Semantically, reflexive-marked predicates should form a natural class.

This prediction is not borne out, however. The one-to-one mapping between the semantic property of being reflexive and the formal property of being reflexive-marked breaks down when

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[5] In this article I will assume that the Kannada verbal reflexive is the expression of a particular lexical structure required with lexically reflexive predicates (Lidz 1996). That is, semantically reflexive predicates are only a subset of the predicates that are morphologically marked with the so-called verbal reflexive. The fact that some nonreflexive verbs require reflexive marking in Kannada (and nearly all other languages with verbal reflexives) provides an additional argument against R&R's approach, but is not entirely material here. The point of this article is only that R&R's theory of reflexive predicates is inadequate as a theory of reflexive predicates. The morphological consequences of this theory are a separate, though no less important, issue (but see Lidz 1996 for an elaboration of the morphological problems presented by this theory).

[6] There are many speakers of Kannada for whom the morphologically complex anaphor is not allowed in the absence of the verbal reflexive. I will put aside the variation for the purposes of this article, though detailed examination of the differences is ultimately required.

we examine the semantic properties of these two types of reflexive-marked predicate more closely. Predicates that are reflexive-marked by SELF anaphors have different semantic properties than predicates that are lexically reflexive-marked.

Consider first the Madame Tussaud context first discussed in Jackendoff 1992. Imagine that Ringo Starr goes into Madame Tussaud's wax museum, which contains a statue depicting him. Upon seeing the statue, Ringo is appalled because the museum has chosen to portray him with a beard, though he himself prefers a cleaner-cut image. So, he pulls out his razor and begins to shave the statue that portrays him. In this situation it is felicitous in Dutch to say (9b) but not (9a).

(9) a. Ringo scheert zich.
　　　　Ringo shaves self
　　　　'Ringo shaves himself.'
　　b. Ringo scheert zichzelf.
　　　　Ringo shaves selfself
　　　　'Ringo shaves himself.'

Conversely, imagine that the statue depicts Ringo without a beard but he currently does have a beard. He realizes that he was much cuter without the beard and begins to shave his own face. In this situation it is possible to say either (9a) or (9b). The fact that an additional reading is available in the sentence containing the SELF anaphor is not predicted by R&R's theory.

The same facts are found in Kannada. When the verb is lexically reflexive-marked (via the verbal reflexive), the statue interpretation is blocked. When the morphologically complex anaphor is present, however, this interpretation is available.

(10) a. Hari tann-annu nooḍ-i-koṇḍ-a.
　　　　 Hari self-ACC　see-PP-REFL.PST-3SM
　　　　 'Hari saw himself (= Hari, *statue).'
　　 b. Hari tann-annu-taane nooḍ-id-a.
　　　　 Hari self-ACC-self　　see-PST-3SM
　　　　 'Hari saw himself (= Hari or statue).'

A second place where R&R's theory makes the wrong prediction is in comparative deletion constructions. Here again, all reflexive-marked predicates are predicted to behave alike, but they do not. The lexically reflexive-marked predicate allows only a sloppy interpretation, while the syntactically reflexive-marked predicate allows either a strict or a sloppy reading (Sells, Zaenen, and Zec 1987).[7]

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[7] A reviewer notes that Everaert (1986:253–254, fn. 6) claims that *zichzelf* allows only sloppy readings, giving (i) as an example.

(i) Jan wast　　zichzelf en　Piet ook.
　　 Jan washes himself　and　Piet too

However, this is a case of VP-ellipsis, not of comparative deletion. It is not clear why the interpretations of missing VPs in comparative constructions and coordinate constructions differ, but they do. Hence, the putative counterexample is not really a counterexample. See footnote 20; also see Hestvik 1990, 1992.

(11) a. Zij verdedigde zich beter dan Peter.
         she defended   self better than Peter
         'She defended herself better than Peter defended himself.'
         *'She defended herself better than Peter defended her.'
     b. Zij verdedigde zichzelf beter dan Peter.
         she defended   selfself better than Peter
         'She defended herself better than Peter defended himself.'
         'She defended herself better than Peter defended her.'

Similarly, for those speakers who allow comparative deletion in Kannada,[8] when the verbal reflexive is present, only the sloppy reading is available. When the complex anaphor is present in the absence of the verbal reflexive, both readings are available.

(12) a. Rashmi Siita-ginta cheenage tann-annu rakshisi-koḷḷ-utt-aaḷe.
         Rashmi Sita-COMP better   self-ACC   defend-REFL-NPST-3SF
         'Rashmi defends herself better than Sita defends herself.'
         *'Rashmi defends herself better than Sita defends her.'
     b. Rashmi Siita-ginta cheenage tann-annu-taane rakshis-utt-aaḷe.
         Rashmi Sita-COMP better   self-ACC-self   defend-NPST-3SF
         'Rashmi defends herself better than Sita defends herself.'
         'Rashmi defends herself better than Sita defends her.'

Given that R&R's theory wrongly predicts the semantic equivalence of the two types of reflexive-marked sentence, we need to find a way to capture their generalization that the antilocality of anaphors like *zich* and *tannu* is due to properties of the predicate without making the same wrong prediction. In order to do this, we must first characterize the difference between the interpretations allowed in the syntactically reflexive-marked sentences and those allowed in the lexically reflexive-marked sentences.

3 Near-Reflexives

The Madame Tussaud examples illustrate that SELF anaphors allow an interpretation in which the anaphor is referentially dependent on its antecedent but not necessarily identical with it. The anaphor can pick out an entity from the domain of discourse that is related and similar to its antecedent. I will call such anaphors *near-reflexives.*

The difference between near-reflexive predicates (i.e., predicates that have a near-reflexive as an argument) and semantically reflexive predicates is shown in (13).

(13) a. λx [P (x, x)]   (semantic/pure-reflexive)
     b. λx [P (x, f(x))]   (near-reflexive)

(13a) indicates that the two arguments of the predicate P are identical (or that there is one entity that realizes both roles of the predicate). In (13b) the second argument is a function taking the

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[8] Most Kannada speakers require the verb phrase to be repeated in comparative constructions.

first argument as input and returning an entity that is representationally related to that argument (cf. Reuland 1995).[9] The representations of these predicates are formally distinct, although in most cases they are extensionally equivalent. That is, the near-reflexive function does not prohibit the antecedent and the anaphor from being the same entity in the world, although in the semantic representation they are distinguished.[10] On the other hand, in a pure-reflexive sentence the anaphor and its antecedent must be identical, both in the world and in the semantic representation.

Since lexically and morphologically reflexive predicates do not allow a nonidentity interpretation, it follows that they are semantically reflexive, that is, that they have the representation (13a). Predicates that are reflexive-marked via a morphologically complex anaphor do permit the nonidentity interpretation and therefore implicate the semantic representation (13b).

It is important to note that the interpretation of reflexive and near-reflexive predicates depends on the lexical content of the reflexive pronouns themselves. The anaphors that occur in pure-reflexive sentences are pure variables and do not contribute anything to interpretation other than that the argument they represent is identical to some syntactically determined antecedent. The anaphors that occur in near-reflexive sentences, on the other hand, do contribute something to interpretation. They introduce the near-reflexive function discussed above, which establishes a mapping from the syntactic antecedent to things that are able to be construed as representations of that antecedent. This point can be illustrated with examples in which the anaphor is not a coargument of its antecedent. Even here, the near-reflexive interpretation is only allowed with those anaphors that license the near-reflexive interpretation with coarguments.

Consider the case of a famous person going into the wax museum and looking into a mirror. If the speaker describing this situation says (14a), then we get the interpretation that the person saw her own reflection in the mirror. But, if the speaker says (14b), we get either the interpretation that the person saw her own reflection or the interpretation that the person saw a reflection of her statue (Reuland 1995).

(14) a. Ze zag zich in een griezelige hoek   staan.
        she saw self in a   creepy   corner stand
        'She saw herself (= reflection, *statue) standing in a creepy corner.'
     b. Ze zag zichzelf in een griezelige hoek   staan.
        she saw selfself in a   creepy   corner stand
        'She saw herself (= reflection or statue) standing in a creepy corner.'

The anaphor in these sentences is not an argument of the same predicate as its antecedent. The anaphor is an argument of the embedded verb, while the antecedent is an argument of the matrix verb. Thus, we see that individual anaphors are lexically specified with respect to whether they introduce the near-reflexive function or not.

Similarly, when *zich* is the object of a preposition, it does not allow near-reflexive readings.

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[9] For the time being I leave open the exact content of the near-reflexive function, though most likely it is something like ''representation of (x).'' See Jackendoff 1978, 1992, and Fauconnier 1985 for illuminating discussion.

[10] Another way of saying this is that sometimes the near-reflexive function can be the identity function.

(15) Reagan zag de man op zich schieten.
       Reagan saw the man at self shoot
       'Reagan saw the man shoot at him.'

Here we can imagine a carnival shooting gallery in which contestants shoot at statues representing
former U.S. presidents. The sentence in (15) cannot be used in a situation in which Reagan saw
a man shoot at a statue portraying him. Rather, this sentence requires that Reagan see the man
shoot at Reagan himself. This fact supports the conclusion that certain anaphors are lexically
specified for the near-reflexive function and others are not.

4 Condition R

We have two facts to explain at this point. First, we must explain why the coargument restriction
on anaphors like *zich* and *tannu* is obviated in the presence of lexical/morphological reflexivity.
Second, we must explain why lexical reflexivity is always semantic reflexivity (i.e., that lexically/
morphologically reflexive predicates never allow the near-reflexive interpretation). Given these
observations, the following principle suggests itself:

(16) *Condition R*
       $\lambda x \ [P \ (x, \ x)] \quad \leftrightarrow \quad (\theta 1 \ = \ \theta 2)$
       semantics θ-grid

The left side of this formula depicts the semantic representation of reflexivity. The right side
depicts the θ-grid of a lexically reflexive predicate.[11] The condition states that if a predicate is
semantically reflexive, then it must be lexically reflexive. Similarly, if a predicate is lexically
reflexive, then it must be semantically reflexive.

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[11] The θ-grid in (16) indicates that the two thematic roles of the predicate are coindexed and not that the two positions
have become one. That is, I am not making any claims about argument absorption in this representation. The use of a
verbal reflexive in nonreflexive contexts in which argument absorption has taken place (see (i) and (ii) from Kannada)
is not directly relevant to this article, though ultimately quite important.

   (i) Naanu baagil-annu much-id-e.
       I-NOM door-ACC   close-PST-1S
       'I closed the door.'

   (ii) Baagilu   muchi-koṇḍ-itu.
        door-NOM close-REFL.PST-3SN
        'The door closed.'

Whether other uses of the verbal reflexive involve the thematic representation in (16) is an independent question. Not
all of the verbs traditionally identified as inherently reflexive (such as the verb in the French sentence (iii)) necessarily
implicate the representation in (16).

   (iii) Jean se   trompe.
         Jean REFL mistakes
         'Jean is mistaken.'

In other words, it is possible that examples like (iii), just like (ii), are neither lexically nor semantically reflexive, despite
their morphological appearance, and so are irrelevant to the principles governing the distribution of reflexive predicates.
For R&R's account, however, examples like (ii) (and (iii), if the verb is not semantically reflexive, which seems likely)
are fatal since they instantiate cases of morphologically reflexive-marked predicates that are monadic and therefore
obviously not reflexive. See Lidz 1996 for extensive discussion of nonreflexive uses of reflexive morphemes.

Next, let us see how Condition R gives us the desired results. Consider the following examples from Kannada (17) and Dutch (18):

(17) a. *Hari tann-annu nooḍi-d-a.
         Hari self-ACC   see-PST-3SM
         'Hari saw himself.'

     b.   Hari tann-annu nooḍi-du-koṇḍ-a.
          Hari self-ACC   see-PP-REFL.PST-3SM
          'Hari saw himself (= reflection, *statue).'

     c.   Hari tann-annu-taane nooḍi-d-a.
          Hari self-ACC-self   see-PST-3SM
          'Hari saw himself (= reflection or statue).'

(18) a. *Max haat zich.
         Max hates self
         'Max hates himself.'

     b.   Max scheert zich.
          Max shaves self
          'Max shaves himself.'

     c.   Max scheert zichzelf.
          Max shaves selfself
          'Max shaves himself.'

The (a) examples in (17)–(18) are ruled out as violations of the left-to-right implication of Condition R; the sentences are semantically reflexive (since neither *tannu* nor *zich* introduces the near-reflexive function) but not lexically reflexive. The (b) examples are both semantically and lexically reflexive. The near-reflexive interpretation is ruled out because the predicates are lexically reflexive and so must be semantically reflexive, by the right-to-left implication of Condition R. Finally, in the (c) examples the anaphor introduces the near-reflexive function and so the sentence is not semantically reflexive. The predicate is not lexically reflexive either and so Condition R is not operative.[12]

This proposal differs from R&R's proposal in the following way. For R&R only the anaphors that allow a coargument antecedent (their SELF anaphors) impose an identity requirement on the arguments of a predicate. The anaphors that disallow a coargument antecedent (their SE anaphors) do not reflexivize a predicate and so do not force identity between arguments. In their theory the SE anaphors are classified with pronominals in not reflexivizing a predicate. In contrast, my proposal is that only pure-reflexives impose an identity requirement between arguments. It is this

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[12] This account assumes, with R&R's, that verbs like 'shave' and 'wash' have two lexical entries, a reflexive one and a nonreflexive one.

Note also that Condition R has nothing to say about sentences in which the anaphor is not a coargument of its antecedent, as in (14)–(15). Such cases support the claim that near-reflexivity is primarily a property of anaphors, and derivatively a property of predicates, since even here, *zichzelf* allows a statue reading and *zich* does not. These data also imply that an anaphor like *zich* does not count as an argument in the semantics even when it is long-distance bound.

identity requirement that, in combination with Condition R, blocks the pure-reflexive from taking a coargument antecedent. Pronominals and near-reflexives are the class of dependent expressions that do not involve semantic reflexivity.

A second difference between R&R's proposal and mine concerns the availability of long-distance binding. For R&R no anaphor that allows a coargument antecedent (in the absence of lexical reflexivity) should also allow a long-distance antecedent when it occurs in argument position. By the same token, R&R's account predicts that no anaphor that allows a long-distance antecedent when it occurs in argument position will also allow a coargument antecedent. The prediction is due to the fact that allowing a coargument antecedent indicates that an anaphor bears the reflexivizing function (i.e., is a SELF anaphor). If the anaphor reflexivizes the predicate, then only a coargument antecedent will be permitted. In contrast, my proposal does not predict the absence of anaphors that allow both a coargument antecedent and a long-distance antecedent.

The crosslinguistic facts are clear in this case. Many languages have anaphors that allow both coargument and long-distance antecedents. Consider, for example, Chinese (Cole, Hermon, and Sung 1990).

(19) a. Lisi$_i$ piping   ziji$_i$.
        Lisi criticize self
        'Lisi criticized himself.'
     b. Zhangsan$_i$ renwei Lisi$_j$ piping   ziji$_{i/j}$.
        Zhangsan think   Lisi criticize self
        'Zhangsan thinks Lisi criticized him/himself.'

If it is true that the Chinese anaphor *ziji* is a SELF anaphor, as (19a) would lead us to conclude, then it should also reflexivize the embedded predicate in (19b). Hence, the availability of the matrix subject as antecedent is surprising. Similarly, the long-distance reading of (19b) would lead us to believe that *ziji* is not a SELF anaphor, given that it occurs in argument position and does not reflexivize the lower predicate. Hence, (19a) and the local reading of (19b) are surprising.

To account for these facts, R&R would be forced to say that the Chinese anaphor is ambiguous between a SE reflexive and a SELF reflexive, despite appearances.[13] On the account proposed here, however, the availability of long-distance binding of an argument is decoupled from the principles licensing coargument binding. This account predicts only that (19a) has near-reflexive properties. Nothing in the theory prevents a near-reflexive from also being a long-distance reflexive. The prediction is borne out (Lidz 2000).

Imagine that Mao Tse-tung went into a wax museum that displayed a statue portraying him and became enraged at seeing it. Here, we can say (20) to mean that Mao committed either suicide (shooting himself) or vandalism (shooting the statue).

(20) Mao Tse-tung ba ziji qiangbi le.
     Mao Tse-tung BA self shoot   ASP
     'Mao Tse-tung shot himself (= statue or Mao).'

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[13] See the discussion of German *sich* in Reinhart and Reuland 1995.

We saw above that in Dutch and Kannada, semantically reflexive sentences involving comparative deletion allow only a sloppy interpretation whereas near-reflexive sentences allow both strict and sloppy interpretations. If *ziji* is a near-reflexive, then it follows that it should allow both strict and sloppy interpretations. This prediction is also borne out.

(21) Zhangsan bi   Lisi wei ziji bianhu de hao.
      Zhangsan than Lisi for self defend DE well
      'Zhangsan defended himself better than Lisi defended himself.'
      'Zhangsan defended himself better than Lisi defended him.'

Summarizing to this point: We have seen that R&R's theory of reflexive predication makes two wrong predictions that the Condition R theory does not make. First, R&R's theory predicts that the two kinds of reflexive marking (lexical and via a SELF anaphor) are semantically alike. Second, it predicts that no SELF anaphor allows long-distance binding if it occurs in argument position. Both predictions have been shown to be false.

The Condition R theory, on the other hand, explains the interpretive differences between the two types of reflexive marking by making reference to the semantic content of the different kinds of anaphors. Moreover, this theory does not exclude the existence of anaphors like Chinese *ziji,* which allow both coargument and long-distance antecedents when they occur in argument position.

Condition R is a statement relating a lexical property of predicates to a semantic interpretation. As such, it is not part of the syntactic component of the grammar. It is clear, however, that a syntactic theory of anaphora is still required. Condition R explains neither the distribution of near-reflexive anaphors nor the distribution of pure-reflexive anaphors outside the coargument domain. The supposition is that some component of syntax does the work traditionally assigned to the binding theory. Basically, two options are available. We could follow R&R in claiming that outside of conditions on the distribution of reflexive predicates, there is no syntactic binding theory and that the theory of chains explains the residue of facts not covered by reflexivity conditions. Or we could return to the classical binding theory developed in Chomsky 1981, 1986, as the syntactic mechanism of binding, independent of the rules governing the distribution of reflexive predicates.[14] I will leave the choice open here (but see Lidz 2000 for discussion).

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[14] It is important to note that in principle, the same options were available to R&R as well. They could easily have developed a theory of reflexive predicates to work in conjunction with the binding theory. However, in developing their theory of reflexive predicates, they instead chose to use that theory as a replacement for a syntactic binding theory, picking up the residue of cases with the Chain Condition. Thus, they offer a theory of reflexive predicates and a syntactic theory of what remains. Similarly, in rejecting R&R's theory of reflexive predicates and replacing it with Condition R, I have the option of rejecting the binding theory and following R&R in using chain theory (or something else) to pick up the residue. Alternatively, I can reject both parts of R&R's theory and keep the theory of reflexive predicates totally distinct from a syntactic theory of binding. Thus, the appropriate comparisons are (a) ''reflexivity'' + Chain Condition, (b) ''reflexivity'' + the binding theory, (c) Condition R + the Chain Condition, (d) Condition R + the binding theory. The full set of comparisons is beyond the scope of this article.

5 Strict Readings and Near-Reflexivity

In the previous sections we have seen that there is a correlation between the statue (near-reflexive) reading and the strict reading in comparative deletion. Why do these two readings go together, and why does the strict reading diagnose near-reflexivity?

The important observation is that in the syntax the near-reflexive anaphors behave like anaphors, but in the semantics they behave like pronominals. Pronominals, like near-reflexive anaphors, license statue (near-reflexive) readings and allow strict identity under deletion.

(22) a. While Paul was happy with the statue portraying him, Ringo thought that he looked kind of goofy.
　　 b. Ringo thought that he looked goofy and Paul did too.

In (22a) we can interpret the pronominal *he* as referring to the statue portraying Ringo.[15] In (22b) the missing VP allows either the interpretation that Paul thought that Paul looked goofy (sloppy) or the interpretation that Paul thought that Ringo looked goofy (strict).

Similarly, names allow statue interpretations.[16]

(23) Ringo looked goofy.

Here, the name is easily interpreted as referring to the statue of Ringo. So, the question is, what property distinguishes NPs that allow these readings (near-reflexive anaphors, pronominals, names) from those that do not (pure-reflexive anaphors)?

I propose that the difference has to do with whether the NP is an argument in the semantics independent of its antecedent. In other words, a near-reflexive anaphor, like a pronominal and a name, ''counts'' as an independent semantic argument, but a pure-reflexive anaphor does not. The pure-reflexive anaphor must be interpreted as a variable. As a variable, such an anaphor may not bear an index, but rather inherits the index of its antecedent.[17] A near-reflexive anaphor, because it is a semantic argument, may bear its own index independent of its antecedent.

Given the difference in argumenthood between near- and pure-reflexives, we expect only sloppy readings with pure-reflexives (since they must be interpreted as variables) but both strict and sloppy readings with near-reflexives. That is, the predicate that is copied under ellipsis in a pure-reflexive sentence is semantically intransitive, but the predicate that is copied under ellipsis in a near-reflexive sentence may be transitive.

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[15] The reading is easier to get with contrastive stress on *he.*
[16] Names do not allow strict readings under deletion for obvious reasons.
[17] Another way of saying this is that pure-reflexive predicates are those to which a detransitivization operation has applied, turning a transitive predicate into an intransitive one in the semantics. This could be implemented by treating pure-reflexive anaphors as detransitivizers of type $\langle\langle e,\langle e,t\rangle\rangle,\langle e,t\rangle\rangle$ or by treating them as expletives, required for syntactic reasons (e.g., to fill a Case position) in sentences to which such a semantic detransitivization operation has applied. The details here are interesting, but beyond the scope of this article. See Sells, Zaenen, and Zec 1987 for a related proposal.

Consider first the derivation of the Dutch sentence in (24a) (= (11a)).

(24) a. Zij verdedigde zich beter dan Peter.
           she defended   self better than Peter
           'She defended herself better than Peter defended himself.'
           *'She defended herself better than Peter defended her.'
     b. Zij verdedigde zichzelf beter dan Peter.
           she defended   selfself better than Peter
           'She defended herself better than Peter defended himself.'
           'She defended herself better than Peter defended her.'

Let us start with the predicate in (25a). Converting the second argument into a bound variable gives the predicate in (25b).

(25) a. $\lambda y \, \lambda x$ [defend (x, y)]
     b. λx [defend (x, x)]

Copying this predicate and applying the subject arguments then gives the representations in (26).

(26) a. λx [defend (x, x)] (she) better than λx [defend (x, x)] (Peter)
     b. [defend (she, she)] better than [defend (Peter, Peter)]

In the case of (24b) the two readings arise just as they would for normal pronouns. The anaphor may be bound in the semantics by its antecedent or it may simply be coindexed with it (following the leading idea of Sag 1976).[18] In other words, a sentence like (27a) has the two possible semantic representations in (27b–c).

(27) a. John defended himself.
     b. λx [defend (x, f(x))] (John$_i$)
     c. λx [defend (x, f$_i$(x))] (John$_i$)

This option is not available for the pure-reflexive anaphors because these anaphors are not semantic arguments and so cannot bear indices. The representations in (27b–c) indicate that the anaphor can be freely assigned an index and is not necessarily treated as a variable. Syntactic binding principles force this index to be that of a c-commanding antecedent. That is, if we happened to give the anaphor an index different from that of its antecedent, the syntactic binding principles would be violated, although the semantic representation would be well formed. This is illustrated in (28).

(28) a. John defended himself.
     b. λx [defend (x, f$_j$(x))] (John$_i$)

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[18] Note that the bound reading must still involve the representation f(x), since even anaphors anteceded by quantifiers can be given the statue interpretation.

(i) Every Beatle saw himself in the museum.

This example can be interpreted as saying that John saw the statue of John, Paul saw the statue of Paul, and so on.

In (28b) the anaphor is given an index different from that of any possible local antecedent and so the sentence violates the syntactic Condition A, though the semantic formula is well formed.[19]

Returning now to the question of strict identity, it is easy to see how the two representations in (27) give rise to strict and sloppy interpretations. If the anaphor is bound (as in (27b)), the sloppy reading will result. If the anaphor is coindexed with its antecedent (as in (27c)), the strict reading will result. This is illustrated in (29), where (29a) represents the sloppy reading of (24b) and (29b) represents the strict reading of (24b).[20]

(29) a. λx [defend $(x, f(x))$] (she$_i$) better than λx [defend $(x, f(x))$] (Peter)
     b. λx [defend $(x, f_i(x))$] (she$_i$) better than λx [defend $(x, f_i(x))$] (Peter)

6 Levels of Representation and the Binding Theory

R&R argue that the classical binding theory fails where the reflexivity theory does not in cases involving coordinate NPs. The relevant cases are these:

(30) a. *The queen invited myself for tea.
     b. The queen invited (both) Max and myself for tea.

(31) a. The queen invited (both) Max and herself for tea.
     b. *The queen$_i$ invited (both) Max and her$_i$ for tea.

Classical binding theory treats (30a) and (30b) as equivalent. In both cases there is no local binder for the anaphor *myself* and so both sentences are expected to be ungrammatical. Under R&R's binding theory, however, the anaphor in (30b) is not an argument itself (because it is embedded inside an argument) and so it does not reflexive-mark any predicate. Thus, the anaphor is free to occur as a logophor.

This explanation is problematic by itself, as (31) shows, because in this environment the ''logophor'' with a clausemate antecedent is in complementary distribution with the pronominal. R&R overcome this problem by distinguishing between syntactic and semantic predicates. They claim that their Condition A applies only to syntactic predicates while their Condition B applies only to semantic predicates. In the semantics (31b) is rewritten as (32).

(32) λx [invite (x, Max) & invite (x, x)] (the queen)

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[19] It may be this kind of semantic formula (i.e., one with a free anaphor) that ultimately gives rise to logophoric interpretations. We can imagine that the theory of logophoricity is the theory of when a freely indexed anaphor is licit and so can turn to the discourse to find its antecedent. I leave the question for future research. See Reuland 1997 for relevant discussion.

[20] Note that this kind of solution also predicts that strict readings will be possible in VP-ellipsis contexts not involving comparatives, which is not generally true.

(i) John defended himself and Bill did too. (sloppy only)

The difference between VP-ellipsis in coordinate structures and VP-ellipsis in comparatives is beside the point, however. I should note that in some cases strict readings are possible in coordinate VP-ellipsis contexts.

(ii) John defended himself and his wife did too. (strict/sloppy)

Thus, the unavailability of a strict reading in (i) may have an extragrammatical explanation. See Hestvik 1992 for discussion of strict and sloppy readings in different kinds of ellipsis contexts.

This semantic representation of (31b) contains a reflexive predicate (namely, *invite (x, x)*) that is not reflexive-marked in the syntax, in violation of Condition B. The explanation for the availability of the anaphor in (31a) remains the same (it is really a logophor), and the stipulation that Condition B applies to semantic predicates explains the ungrammaticality of the pronoun in this context.[21]

This explanation, while quite intriguing, also makes an erroneous prediction. If we had a predicate that could not be split into two predicates when it took a coordinate object, then the pronoun would be predicted to be grammatical.[22] Such predicates exist, namely, those that require a plural object.

(33) a. *The queen separated the king.
     b. *The queen separated herself.
     c. The queen separated the king and herself.
     d. *The queen separated the king and her.

(33a–b) are ungrammatical because the predicate must take a plural object. The semantic structure of (33c–d) cannot be (34), then, because neither of the conjuncts in (34) satisfies the requirements of the verb.

(34) λx [separate (x, the king) & separate (x, x)] (the queen)

Rather, the semantic structure of (33c–d) must be (35), with a plural object.

(35) λx [separate (x, the king & x)] (the queen)

This structure does not have any semantically reflexive predicates in it and so R&R predict that one of the conjuncts in the coordinate NP can be a pronominal. It cannot.[23]

We can therefore conclude that R&R's proposal fares no better than the traditional binding theory in dealing with coordinate NPs. Both theories make the wrong prediction in one case. The standard binding theory makes the wrong prediction in (30b), and R&R's reflexivity theory makes

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[21] On the assumption that the anaphors in (30b) and (31a) are really logophors, R&R also predict that a logophoric *himself* is possible in (i) (in the absence of a theory of logophors).

(i) *The queen invited Mary and himself to tea.

It is not. As usual in this domain, there is a trade-off to be made. A strictly syntactic account of the ungrammaticality of (i) and (31a) fails to explain (30b), while R&R's account of (30b) and (31a) leaves (i) unexplained. This is not to say that a theory of logophors could not account for (i), in principle, but it is not clear how much we want such a theory to account for. The question boils down to whether (30b) is the exceptional case or the general case. I leave this question open.

[22] Thanks to Filippo Beghelli for pointing out this prediction to me.

[23] An anonymous *LI* reviewer suggests that the requirement that *separate* take a plural object could be syntactic and not semantic. If that were so, then the current argument would not be valid. It is plain to see, however, that this requirement is semantic and not syntactic. NPs that are syntactically plural but semantically singular are not possible objects of *separate*.

(i) *John separated the shorts/the sunglasses.

Similarly, NPs that are syntactically singular but semantically plural are possible objects of *separate*.

(ii) John separated the herd/the troop.

the wrong prediction in (33d). Hence, these data do not favor either approach over the other and so do not help us decide between the two. This is not to say that the problem posed by logophoric uses of anaphors such as the one in (30b) is solved in the classical approach, only that it is no worse than the problem posed by verbs taking plural objects in R&R's approach.

7 Conclusions

In this article I have shown that there are two classes of anaphor: pure-reflexives and near-reflexives. A pure-reflexive anaphor requires complete identity with its antecedent while a near-reflexive anaphor can be related to its antecedent via the near-reflexive function. The distinction between pure- and near-reflexives is independent of the distinction between local and long-distance anaphors; there are long-distance anaphors that are pure-reflexives (Kannada *tannu*) and long-distance anaphors that are near-reflexives (Chinese *ziji*). This approach maintains R&R's recognition of two types of anaphor; however, it differs from that approach in the way the anaphors are partitioned. In R&R's approach only the anaphors that allow coargument antecedents make predicates reflexive. The current approach makes the opposite claim: only anaphors that disallow coargument antecedents occur on reflexive predicates.

This approach is superior to R&R's on several counts. First, R&R's approach erroneously predicts synonymy across reflexive-marked predicates; that is, the distinction between pure- and near-reflexives is predicted not to exist. Second, while their approach accounts for the unavailability of long-distance binding for certain SELF anaphors, it also erroneously predicts that no SELF anaphor can be long-distance bound when it occurs in argument position. Similarly, it predicts that no anaphor that allows long-distance binding in argument position also allows coargument binding. We have seen, however, that this prediction is too strong. What is true is that any anaphor that can be locally bound in the absence of lexical reflexivity introduces the near-reflexive function and thus averts Condition R. Thus, the partitioning of anaphors into pure- and near-reflexives is superior to the partitioning into SE and SELF anaphors. R&R's important observation that the behavior of antilocal anaphors is explained by properties of reflexive predicates and not by binding configurations is maintained in the current approach.

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