

REFLEXIVES AND ELLIPSIS\*

This paper concerns the question whether reflexives can have strict readings in VP-ellipsis. It is argued that the possibility for strict interpretation is determined by a syntactic factor: subordination of the elided clause relative to the antecedent clause facilitates strict interpretation, whereas coordination disfavors it. This contrast is shown to be predictable by theories of syntactic reconstruction which assume that a surface reflexive corresponds to a bound variable at the point of ellipsis reconstruction, and where the binder has scope over a subordinated ellipsis but not over a coordinated ellipsis. One possibility is that the binder is the reflexive itself, moved at LF. A further factor, namely the possibility of speakers reinterpreting the ellipsis as a deep anaphor, accounts for why strict readings are in fact weakly acceptable in coordinated ellipsis. Previous accounts of ellipsis and reflexives are evaluated in light of the new data.

1. INTRODUCTION

The strict/sloppy ambiguity has traditionally received most attention within the realm of pronouns; furthermore, the focus of previous research in this area has been on conditions for sloppy identity (Reinhart 1983). Reflexives have usually been considered to exhibit sloppy readings only, on the assumption that they function obligatorily as bound variables. However, this article will show that the bound variable approach can predict strict readings to be possible in certain syntactic configurations.

To illustrate the general phenomenon, the elided second conjunct in (1a) can either have the paraphrase in (1b), under which the pronoun is said to have the strict reading, or the paraphrase in (1c), the sloppy reading:

- (1) a. John likes his car, and Bill does too.
- b. “. . . and Bill likes John’s car too.”
- c. “. . . and Bill likes his own car too.”

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I will make the following general assumptions about ellipsis: VP-ellipsis is represented at S-structure by an empty category (Zagona 1988, Lobeck 1987, 1992). At LF, this empty category is replaced by a full-fledged syntactic VP, the identity of which is usually a function of another non-elided VP in the context. The syntactically reconstructed VP is then interpreted just like a non-elided VP. For example, sentence (2a) has the S-structure (2b) and the LF (2c):

- (2) a. John likes apples, and Bill does too.  
 b. S-str.: John likes apples, and Bill does [<sub>VP</sub> *e*] too.  
 c. LF: John likes apples, and Bill does [<sub>VP</sub> *like apples*] too.

Following Kitagawa (1991) and Fiengo and May (1994), the strict/sloppy ambiguity arises because a pronoun can either be reconstructed with its original index or with a changed index. Thus (3a) has the two LF-reconstructions in (3b,c):

- (3) a. S-str: John likes his<sub>*j*</sub> car, and Bill does [<sub>VP</sub> *e*] too.  
 b. LF: John likes his<sub>*j*</sub> car, and Bill does [<sub>VP</sub> *like his<sub>*j*</sub> car*] too.  
 c. LF: John likes his<sub>*j*</sub> car, and Bill does [<sub>VP</sub> *like his<sub>*b*</sub> car*] too.

The index *j* indicates that the pronoun refers to *John* – the strict reading, and the index *b* that it refers to *Bill* – the sloppy reading. The index change is constrained by certain parallelism conditions on the patterns of coindexing in the antecedent and reconstructed expression (see Kitagawa 1991 and in particular Fiengo and May 1994 for further details).

Whereas it is uncontroversial that reflexives may have sloppy readings, there has been no agreement in the earlier literature on the status of the strict reading. Williams (1977) and Partee and Bach (1984) claimed that only the sloppy reading was possible. This position was further developed by Bouchard (1984) and Lebeaux (1985), who, making a distinction between locally and nonlocally bound reflexives, claimed that only the latter allow strict readings. Kitagawa (1991) essentially adopted Williams' position, while allowing for exceptions under certain conditions. Sag (1976), on the other hand, argued that reflexives could in principle always be either strict or sloppy. Dalrymple (1991), taking yet another position, proposed that it is a property of individual verbs whether they allow a strict reflexive or not.

This article argues that none of these positions is entirely correct, since the research behind them did not observe a crucial contrast between coordinated and subordinated ellipsis; the relevant data and generalizations are

discussed in section 2.<sup>1</sup> Section 3 shows that any theory which treats reflexives as bound variables at the point of ellipsis reconstruction can be made to predict this contrast, but also that the distinction between subordination and coordination provides additional evidence that the Binding Theory constrains the reconstructed representation. Section 4 discusses a further factor, that when combined with the reconstruction theory, arguably correctly reflects the empirical situation. Section 5 discusses other analyses of reflexives and ellipsis in light of the subordination effect.

## 2. THE SUBORDINATION EFFECT

When reflexives in coordinated ellipsis are compared with reflexives in subordinated ellipsis, an interesting generalization emerges. In the pair below, the sloppy reading was preferred in (4a) by most speakers interviewed by this researcher (although the strict reading was possible for some as a secondary reading). At the same time, most of these speakers found that the strict reading was "easier to get," or more natural, in (4b):<sup>2</sup>

- (4) a. John defended himself well, and Bill did too.  
 b. John defended himself better than Bill did.

What could be the source of this difference? One hypothesis is that the difference correlates with the syntactic positioning of the elided clause relative to the antecedent clause, as expressed in (5):

- (5) Syntactic coordination disfavors strict reflexive interpretation; subordination facilitates it.

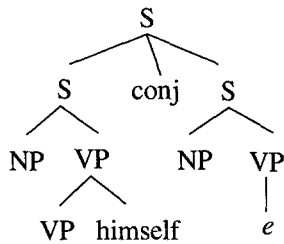
Specifically, the hypothesis is that the general coordination structure in (6a) should correlate with a sloppy-only interpretation, and the general subordination structure in (6b), where the elided clause is adjoined to the VP,<sup>3</sup> should correlate with "perfect ambiguity" between the strict and the sloppy interpretation:

<sup>1</sup> In their recent book, Fiengo and May (1994) also observe that subordination facilitates strict interpretation of reflexives, and develop an analysis based on their theory of alpha- and beta-occurrences of indices, in combination with a theory of "vehicle change." The current paper was written before I had access to the final version of their analysis of reflexives and ellipsis, so a comparison will have to await a future occasion.

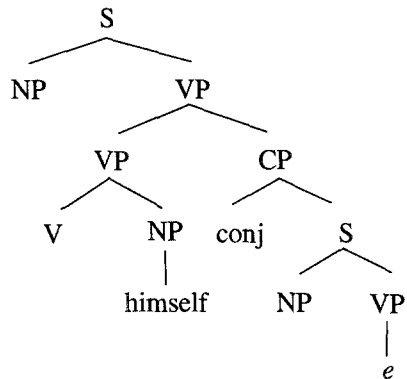
<sup>2</sup> The sloppy reading is of course also available in (4b). In the following, the availability of the sloppy reading will be taken for granted, with the discussion focusing on the strict reading.

<sup>3</sup> That the elided clause is adjoined to VP is shown by such cases as *Bill left before Mary did*, and *Peter did too*, and *Bill defended himself better than Mary did*, and *Peter did too*, where the ellipsis *Peter did too* is interpreted as containing the adjunct clause. In other words, since this is VP-ellipsis, the adjunct clause must be contained in the antecedent VP.

(6) a. Sloppy-only:



b. Both sloppy and strict:



This hypothesis was tested by asking speakers to judge the relative acceptability of the strict reading in pairs that differed only as in (6).

An important aspect of the judgment task was to control for interfering factors. It is a characteristic of ellipsis that its interpretation is easily influenced by nonsyntactic factors, ranging from morphological feature conflict and lexical choice to pragmatic and contextual factors. Therefore, as is standard procedure in experimental sciences when investigating the potential effect of a certain factor (here: syntactic positioning), other potentially interfering factors are either held constant or removed from the experimental situation. To see the importance of proper contextual control, consider (7):

- (7) In the 1992 elections, Clinton voted for himself, and of course, Hillary did too.

Only the strict reading is compatible with the pragmatics of (7). This has the effect of “unfairly” biasing (7) towards a strict reading in a judgment task, since speakers will be unwilling to assume a reading incompatible with the pragmatics of the utterance. In line with this observation, a condition imposed on the test sentences was that they be judged in a *neutral context*, defined as a context that does not a priori favor a strict over a sloppy reading, or vice versa. A neutral context for the verb *vote* could be the following: “Both John and Bill were candidates for the election of student representatives. It was not known whether either of them was really interested in the position. As it turned out, . . .” In this context, then, the task would be to judge which of the two sentences in (8) below most easily admits a strict reading:

- (8) a. John voted for himself, and Bill did too.  
 b. John voted for himself because Bill did.

The effect of the neutral context is to hold the pragmatics constant for both sentences, and only vary the syntactic factor. The result was that in this neutral context, many speakers felt that the sloppy reading was more strongly preferred in cases like (8a) than in the contextually skewed (7). Furthermore, (8b) was judged as more naturally admitting a strict reading (as well as the sloppy reading), thus confirming the above hypothesis.

Another factor controlled for were morphosyntactic agreement mismatches. This is also illustrated by (7), where the gender of the reflexive in the antecedent clause does not match that of the subject in the elided clause. Kitagawa (1991) found that conflicts in gender, number, and person would, to varying degrees, make a strict reflexive acceptable to speakers who would otherwise reject it. Sag (1976, 86) made a similar observation for pronouns: whereas (9a) is ambiguous for all speakers, (9b) is strict only for some speakers.

- (9) a. John scratched his arm, and Bill did too.  
 b. John scratched his arm, and Mary did too.

The moral to be drawn from this is that just as morphosyntactic non-agreement may filter out a sloppy reading that is otherwise predicted to be possible (cf. (9b)), so may the same factor conversely make a reading seem acceptable which is otherwise predicted to be impossible (cf. the strict reading caused by gender mismatch in (7)). Other external factors controlled for were contrastive stress or focus on the reflexive, which seems to neutralize the effect of condition A of the Binding Theory (see Reinhart and Reuland 1993, 672) and nonlocal binding, which seems to give reflexives characteristics of pronouns (cf. Bouchard 1984 and Lebeaux 1985).<sup>4</sup>

Some examples of subordination constructions that were compared with their corresponding *and*-coordination structures are given below.<sup>5</sup> The result was that in general, with controls in force, most speakers tended to find it easier to get the strict reading in the subordination cases than in the coordination cases.

<sup>4</sup> For example, Sag (1976, 101) used (i) as evidence for the view that reflexives may always be strict. But (i) is a case of nonlocal (i.e., non-coargument) binding: the reflexive is the subject of an ACC-ing gerund:

- (i) Betsy couldn't imagine [herself dating Bernie], but Sandy could.

<sup>5</sup> Hestvik (1992) contains a more extensive overview of the relevant subordination constructions.

(10) *Temporal Adjuncts*

- a. John revealed himself to the public before Bill did.
- b. John introduced himself after Bill did.
- c. John hasn't criticized himself since Bill did.
- d. John will criticize himself until Bill does.
- e. John usually criticizes himself when Bill does.

(11) *Causal and Conditional Adjuncts*

- a. John laughed at himself because Bill did.
- b. John will hit himself just in case Bill will.
- c. John won't hit himself unless Bill does.
- d. John talked about himself so that Bill didn't have to.

(12) *Antecedent-Contained Deletion*

- a. John introduced himself to everyone that Bill did.
- b. John discussed himself with everyone that Bill did.
- c. John described himself to everyone that Bill did.

The cases above were only compared with coordination with *and*. Other coordinators that give rise to structures like (6a) are *or*, *but*, *however*, and *whereas*, all of which seem to induce strong sloppy-only interpretations:<sup>6</sup>

- (13) a. John introduced himself, or Bill did.
- b. Did John introduce himself, or did Bill?
- c. John will criticize himself tomorrow; Bill, however, already did.
- d. John likes himself, but does Bill?
- e. John loves himself, whereas Bill doesn't.

Another important aspect of the data is that the judgments are contrastive. In general, the strict readings were not perceived as absolutely impossible in coordination structures. The analysis developed below is aimed at accounting for this observation as well.

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<sup>6</sup> However, *but* in combination with negation seems to allow strict readings more easily:

- (i) John doesn't like himself, but Bill does.
- (ii) John likes himself, but Bill doesn't.

This suggests that the combination of negation and *but* has a contrastive function that may be syntactically reflected by subordination. Note that *and* also has a "consequence" reading, as in *Mary hit him, and John cried*, which may result in syntactic subordination, leading to the expectation that the strict reading would be facilitated by this interpretation. I leave this issue for future exploration.

## 3. ANALYSIS

3.1. *Analysis I: LF-Movement of Reflexives*

The subordination effect poses a direct problem for the syntactic reconstruction approach. Consider the analysis in Kitagawa (1991) of a structure like (14) below. Kitagawa points out that since the reconstructed representation is syntactic, it is subject to syntactic wellformedness conditions, such as the Binding Theory. In particular, condition A of the Binding Theory will only allow the reconstruction option with index change, as in (14b). The “strict” reconstruction in (14c), without index change, violates condition A, and is consequently ruled out:<sup>7</sup>

- (14) a. John defended himself<sub>j</sub>, and Bill did too.  
 b. John defended himself<sub>j</sub>, and Bill did [<sub>VP</sub> defend himself<sub>b</sub>] too.  
 c. \*John defended himself<sub>j</sub>, and Bill did [<sub>VP</sub> defend himself<sub>j</sub>] too.

However, the same should apply to, e.g., (15a), reconstructed as in (15c):

- (15) a. John defended himself<sub>j</sub> better than Bill did.  
 b. John defended himself<sub>j</sub> better than Bill [<sub>VP</sub> defend himself<sub>b</sub>].  
 c. \*John defended himself<sub>j</sub> better than Bill [<sub>VP</sub> defend himself<sub>j</sub>].

But this incorrectly predicts that the strict reading should be equally bad in both (14c) and (15c).

How can this contrast be explained, without abandoning the result that syntactic principles such as the Binding Theory constrain the reconstructed representations? Before offering a solution, let me point out that there is another subordination effect that has long been noted in the literature. Sag (1976) and Williams (1977) discovered that whereas the universal quantifier in sentences like (16a) cannot have wide scope, this is possible in (16b):

- (16) a. Someone spoke to everyone, and then Bill did.  
 b. Someone spoke to everyone before Bill did.

The standard explanation for this difference is that if the creation of wide scope by Quantifier Raising (QR; May 1985) of the universal quantifier

<sup>7</sup> Condition A of the Binding Theory expresses the requirement that a reflexive must find a c-commanding antecedent in its minimal syntactic domain, which, roughly, is the minimal clause that contains it. In (14c), the strict antecedent is outside the minimal clause. For further discussion about what constitutes a binding domain, see Hestvik (1991).

in (16a) is followed by reconstruction, this results in an unbound trace in the copied VP, since quantifiers normally don't have scope over a conjoined clause (Williams 1977, Sag 1976; see also Chierchia and McConnell-Ginet 1990). Expressed in terms of syntactic reconstruction, this is illustrated in (17a), where the illicit trace is boldfaced.<sup>8</sup> In (16b), on the other hand, VP-copying after wide-scope QR will result in binding of the copied trace, since the raised quantifier *c*-commands the elliptical clause and therefore also the trace in the reconstructed VP, as shown in (17b):

- (17) a. \*[Everyone<sub>i</sub> [<sub>S</sub> someone [<sub>VP</sub> spoke to t<sub>i</sub>]]], and then Bill did  
           [<sub>VP</sub> *speak to t<sub>i</sub>*].  
       b. [<sub>S</sub> Everyone<sub>i</sub> [<sub>VP</sub> someone [<sub>VP</sub> spoke to t<sub>i</sub>] before Bill [<sub>VP</sub> *spoke*  
           to t<sub>i</sub>]]].

A prohibition against unbound traces in syntactic representations is implicitly assumed in all theories containing such categories, often called the Proper Binding Condition (Fiengo 1977). It can be considered part of the Empty Category Principle (ECP), which states that traces must be locally or nonlocally bound by an antecedent (as in Rizzi's (1990) antecedent government and "binding" respectively).<sup>9</sup> Thus, the trace in (17b) satisfies the ECP via binding,<sup>10</sup> and the sentence has an interpretation corresponding to the formula in (18):

- (18)  $\forall y \exists x (x \text{ spoke to } y \text{ before Bill spoke to } y)$

This leads to the expectation that if reflexives also move out of the VP at LF, the consequences for trace binding in coordinated vs. subordinated reconstruction should be the same. Indeed, Lebeaux (1983), Pica (1987), Katada (1991), Chomsky (1986, 1993), and numerous others have argued

<sup>8</sup> Given this, the standard account is that only the narrow scope reading in (16a) is compatible with the Empty Category Principle (ECP) after reconstruction – derived by copying the VP with the quantifier adjoined to it:

- (i) a. [Someone [<sub>VP</sub> everyone<sub>i</sub> [<sub>VP</sub> hit t<sub>i</sub>]]], and then Bill did [<sub>VP</sub> *e*].  
       b. [Someone [<sub>VP</sub> everyone<sub>i</sub> [<sub>VP</sub> hit t<sub>i</sub>]]], and then Bill did [<sub>VP</sub> *everyone<sub>i</sub>* [<sub>VP</sub> hit t<sub>i</sub>]].

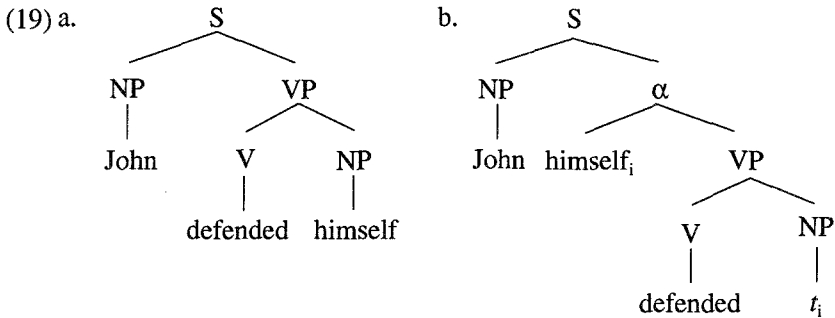
Actually, nothing prevents both quantifiers from adjoining to IP via QR *after* reconstruction. Fiengo and May (1994) argue that this is ruled out by parallelism constraints.

<sup>9</sup> X binds Y iff X *c*-commands Y and X and Y have the same referential index (Rizzi, 1990, 87).

<sup>10</sup> Since the satisfaction of the ECP via binding takes place at LF, Subadjacency does not play any role.



that it is a special property of reflexives that they move at LF. Under this view, a simple clause such as (19a) has the LF in (19b):<sup>11</sup>



How can this mechanism be used to solve the problem caused by strict reflexives for syntactic reconstruction? The key lies in how reconstruction interacts with the semantic interpretation of structures with antecedent-trace relations.

To show this, I will assume for concreteness that the semantic interpretation of syntactic structures like (19b) is mediated by translation into Discourse Representation Structures (DRSs). DRSs are constituted of pairs (U, C), where U is a set of discourse referents (the universe) and C a set of conditions on these discourse referents. A DRS is built up by applying algorithmic DRS-construction rules to syntactic input trees, which are gradually broken down into discourse referents and conditions. The resulting representation is then truth-conditionally interpreted (see Kamp and Reyle 1993 for the formal details).

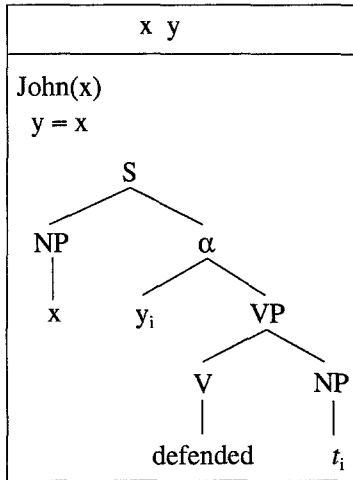
In Discourse Representation Theory (DRT), expressions like *John*, pronouns, and reflexives introduce discourse referents into the universe. Condition A can be viewed as a principle that requires that the discourse referent introduced by the reflexive and the discourse referent introduced by an NP that c-commands it in its binding domain be related by an *equation* condition. To illustrate, when (19b) is submitted to the DRS construction algorithm, it initially yields the DRS (20a), where the effect of condition A is the introduction of the equation  $y = x$  into C.<sup>12</sup> Furthermore, since

<sup>11</sup> I abstract away from details such as the exact landing site of this movement, though this is often taken to be INFL; see, e.g., Chomsky (1993). I also finesse other inessential syntactic details in the ensuing exposition, such as the structures implied by the VP-internal subject hypothesis and functional categories.

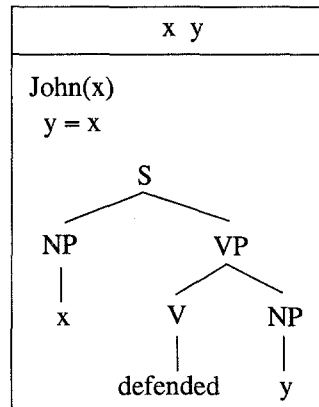
<sup>12</sup> Note that a DRS contains syntactic trees (cf. Kamp and Reyle 1993, 62) which is why syntactic conditions like the principles of the Binding Theory can apply at this level. Condition A is thus truly an interface condition, as it relates syntactic representation and elements of DRSs.

the function of trace binding is that the moved element is interpreted in its trace position, the DRS (20a) is equivalent to (20b):

(20) a.



b.



Syntactic movement can thus be viewed as corresponding to lambda abstraction, and the conversion of (20a) to (20b) as lambda conversion. The truth conditions for (20) are then that there is some individual  $x$  that is John, some individual  $y$  such that  $y = x$ , and  $x$  and  $y$  stand in the *defend*-relation. Note that the LF-movement of the reflexive has no semantic consequences in the derivation of (20), and indeed, the original arguments for this movement were purely syntactic. But when this LF-movement interacts with ellipsis reconstruction, it does have semantic consequences, to which we now turn.

Since reconstruction takes place at LF, it applies before DRS construction. Consider first a derivation involving the coordinated ellipsis in (14a), repeated below in (21). There are two options: reflexive raising either precedes or follows reconstruction. If it precedes reconstruction as in (21b), VP-copying will result in an unbound trace, which violates the ECP, as shown in (21c):

- (21) a. John defended himself well, and Bill did too.  
 b. [John [ $\alpha$  himself $_i$  [ $_{VP}$  defended  $t_i$  well]]], and Bill did [ $_{VP}$   $e$ ] too.  
 c. \*[John [ $\alpha$  himself $_i$  [ $_{VP}$  defended  $t_i$  well]]], and Bill [ $_{VP}$  *defended*  $t_i$  well] too.

The only option, therefore, is to do VP-copying followed by reflexive raising, as in (22):

- (22) a. John [<sub>VP</sub> defended himself well], and Bill [<sub>VP</sub> *defended himself well*] too.  
 b. John [<sub>α</sub> himself<sub>i</sub> [<sub>VP</sub> defended t<sub>i</sub> well]], and Bill [<sub>α</sub> *himself<sub>i</sub>* [<sub>VP</sub> *defended t<sub>i</sub> well*]].

But now, by condition A, the discourse referent introduced by the (raised) reflexive in the reconstructed clause can only be equated with the discourse referent introduced by the subject of its own clause. Consequently, only the sloppy reading is derivable, essentially as in Kitagawa (1991).

Turning to the subordinated ellipsis in (15a), the sloppy reading is derived as above, with VP-copying preceding reflexive raising. The reflexive in each clause is interpreted as coreferent with its local subject, as illustrated below:

- (23) a. John [<sub>VP</sub> [<sub>VP</sub> defended himself] better than Bill did [<sub>VP</sub> *e*]].  
 b. John [<sub>VP</sub> [<sub>VP</sub> defended himself] better than Bill [<sub>VP</sub> defended himself]].  
 c. John [<sub>α</sub> himself<sub>i</sub> [<sub>VP</sub> [<sub>VP</sub> defended t<sub>i</sub>] better than Bill [<sub>α</sub> *himself<sub>i</sub>* [<sub>VP</sub> *defended t<sub>i</sub>*]]]].

But the alternative, VP-copying preceded by reflexive raising, is now also available. Given (24a), reflexive movement results in (24b), and VP-copying in (24c):

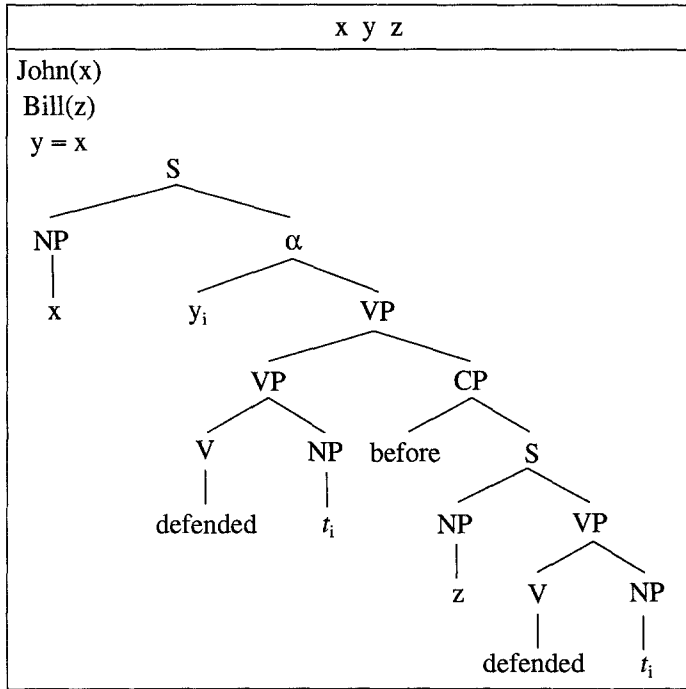
- (24) a. John defended himself better than Bill did.  
 b. John [<sub>α</sub> himself<sub>i</sub> [<sub>VP</sub> [<sub>VP</sub> defended t<sub>i</sub>] better than Bill did [<sub>VP</sub> *e*]].  
 c. John [<sub>α</sub> himself<sub>i</sub> [<sub>VP</sub> [<sub>VP</sub> defended t<sub>i</sub>] better than Bill did [<sub>VP</sub> *defended t<sub>i</sub>*]]]].

In contrast to (21c), here the copied trace is c-commanded and coindexed by the raised reflexive, and hence bound, satisfying the ECP.<sup>13</sup> Note furthermore that the only occurrence of a reflexive in (24c) is the element in the  $\alpha$ -adjoined position, and only this token element is subject to condition A. The movement of the reflexive can thus be seen as “saving” it from being copied by reconstruction and suffering a Binding Theory violation in the reconstructed clause (under the intended strict interpretation).

Furthermore, in accordance with the semantics outlined above, only the moved reflexive introduces a distinct discourse referent, not the traces it binds. As before, condition A has the effect that the discourse referent introduced by the reflexive is equated with the discourse referent introduced by the matrix subject, which results in the following DRS:

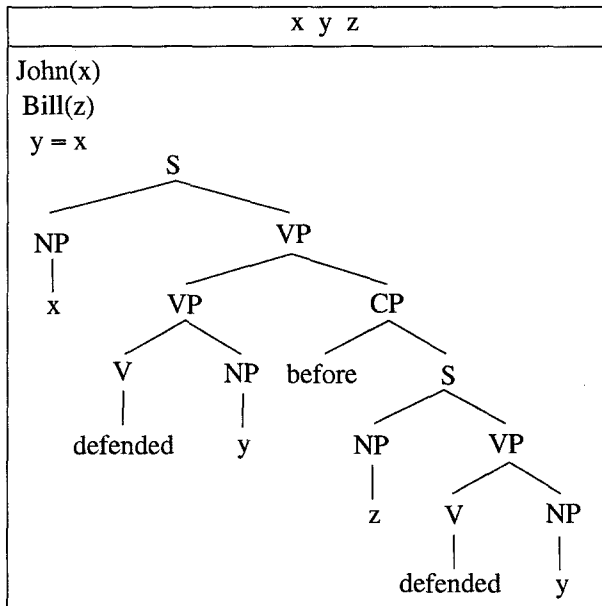
<sup>13</sup> This assumption is incompatible with attempts at deriving the locality constraints on the movement of the reflexive by requiring that the trace itself be subject to condition A, as in Chomsky (1986, 175).

(25)



Finally, since moved elements are interpreted in the position of the trace they bind, and since y now binds two traces, this DRS is equivalent to (26):

(26)



The truth conditions for this DRS can be given informally as in (27):

- (27) There is an  $x = \text{John}$ , a  $z = \text{Bill}$ , and a  $y$  such that  $y = x$  and  $x$  defended  $y$  before  $z$  defended  $y$ .

This corresponds to the strict reading. Note that there is no strict reflexive in any literal sense, unlike the case of (3b), where there is a strict pronoun in the syntactic reconstruction of *John likes his car, and Bill does too*. Rather, the strict reading is mediated by syntactic trace binding. If anything, the trace is “strict.”

This analysis thus predicts that strict reflexive interpretation should be impossible in coordinated ellipsis but possible in subordinated ellipsis (as long as the elided clause is adjoined below the landing site of the reflexive movement). I now turn to a slightly different alternative account.

### 3.2. Analysis II: Nonquantificational QR

In the above account, the subordination effect is a consequence of the reflexive moving to a position that has scope over the subordinated clause, thereby binding a copied trace, or syntactic variable, in the reconstructed VP. However, this prediction can be made by any theory that treats a reflexive as a bound variable at the point where ellipsis reconstruction takes place, as long as the variable binder has scope over the adjoined clause.

As will be shown in this section, Reinhart’s approach to syntactic variable binding and ellipsis (Reinhart 1983; see also Grodzinsky and Reinhart 1993) also predicts that strict reflexives can occur in subordinated ellipsis, although this has not been previously noticed. However, her story stipulates that the reflexive turns into a variable at LF, whereas in the above account, this is an automatic consequence of the movement of the reflexive. But Reinhart’s approach can easily be modified to avoid this stipulation.

To show this, I will use the formalization of Reinhart’s theory in Heim (1993), coupled with a copying theory of reconstruction. The relevant assumptions of that theory are as follows: QR is optional and free to apply to any type of NP (cf. Rooth 1985, Reinhart 1991). QR replaces an indexed NP  $\alpha_i$  by a coindexed trace; it adjoins  $\alpha$ , now without the index, to a dominating node, and prefixes the sister constituent of  $\alpha$  with a lambda operator indexed  $i$ . For example, QR derives (28b) from (28a):

- (28) a. [<sub>IP</sub> Everyone<sub>i</sub> left].  
 b. [<sub>IP</sub> Everyone  $\lambda_i$  [<sub>IP</sub>  $t_i$  left]].

Following Heim (1993, 4), a variable is defined at LF as in (29i–iii), and is accompanied by principle (30):

- (29) An index is a *variable* only if it is
- (i) on a  $\lambda$ , or
  - (ii) on a trace and bound by  $\lambda$ , or
  - (iii) on a pronominal or anaphor and A-bound.
- (30) All indices must qualify as variables.

A pronoun is either unindexed, in which case it functions as a referential constant (like an unindexed name), or indexed, in which case it functions as a variable. The relevant clause of Binding Theory is given as in (31):

- (31) Condition A: A reflexive is A-bound in its binding domain.

Given this, it follows that a reflexive must always be assigned an index, in order for it to be able to meet condition A. Since it must have an index, it will always end up being a variable at LF. Further it is stipulated that the variable definition has an effect on the *categorial* representation of an element: a pronoun or reflexive with an index is rewritten as an empty category. This exempts it from condition A or B at LF (and requires that the Binding Theory be an S-structure condition). (32) is an illustration:

- (32) a. John<sub>i</sub> likes himself<sub>i</sub>. → QR  
 b. [<sub>IP</sub> John  $\lambda_i$  [<sub>IP</sub>  $t_i$  likes himself<sub>i</sub>]]. → variable translation  
 c. [<sub>IP</sub> John  $\lambda_i$  [<sub>IP</sub>  $t_i$  likes  $t_i$ ]].

Consider now how this interacts with ellipsis reconstruction, first with a case of coordination. Suppose QR and variable translation apply before reconstruction of the missing VP:

- (33) a. John<sub>i</sub> defended himself<sub>i</sub> and Bill did too.  
 b. John  $\lambda_i$  [<sub>IP</sub>  $t_i$  [<sub>VP</sub> defended  $t_i$ ]], and Bill did too.

If the VP in the first clause is now copied into the second conjunct, the resulting representation in (34) will, as usual, contain an illicit unbound trace:

- (34) \*John  $\lambda_i$  [<sub>IP</sub>  $t_i$  [<sub>VP</sub> defended  $t_i$ ]], and Bill [<sub>VP</sub> *defended*  $t_i$ ].

A wellformed derivation will only result if VP-copying takes place before QR of the subject, and by letting both subjects carry the same index (this has no consequences for reference, since the subjects will QR anyway, and the indices are not referential):

- (35) a. [John<sub>i</sub> [<sub>VP</sub> defended himself<sub>i</sub>]], and Bill<sub>i</sub> did too.  
 b. [John<sub>i</sub> [<sub>VP</sub> defended himself<sub>i</sub>]], and [<sub>IP</sub> Bill<sub>i</sub> [<sub>VP</sub> *defended himself<sub>i</sub>*]] too.  
 c. John  $\lambda_i$  [<sub>IP</sub>  $t_i$  [<sub>VP</sub> defended  $t_i$ ]], and Bill  $\lambda_i$  [<sub>IP</sub>  $t_i$  [<sub>VP</sub> *defended  $t_i$* ]].

After lambda conversion, (35c) results in a formula that represents the sloppy reading.

However, in subordination, the alternative of copying the VP after QR does not lead to an illicit free variable:

- (36) a. [John<sub>i</sub> [<sub>VP</sub> [<sub>VP</sub> defended himself<sub>i</sub>] before Bill did]].  
 b. John  $\lambda_i$  [<sub>IP</sub>  $t_i$  [<sub>VP</sub> [<sub>VP</sub> defended  $t_i$ ] before Bill did]].  
 c. John  $\lambda_i$  [<sub>IP</sub>  $t_i$  [<sub>VP</sub> [<sub>VP</sub> defended  $t_i$ ] before Bill [<sub>VP</sub> *defended  $t_i$* ]]].

Since the subordinated clause is adjoined to the VP, the lambda operator has scope over the reconstructed VP and can bind the copied variable. (36c) is therefore wellformed, and lambda conversion straightforwardly yields the strict reading.<sup>14</sup>

The drawback with this approach is that it must stipulate that a reflexive with an index on it is rewritten as an empty category at LF (see also Kratzer 1991). Otherwise, condition A would be violated when the VP is copied in, e.g., (36c) above. However, this stipulation can easily be circumvented by QRing the reflexive instead of the subject, say, to a VP-adjoined position. This will have no consequences in the coordinate case; it is still the case that only the sloppy reading will be derivable, since the entire VP with the QRed reflexive must be copied, for the familiar reasons:

- (37) a. John [<sub>VP</sub> defended himself], and Bill did too.  
 b. John [<sub>VP</sub> himself  $\lambda_i$  [<sub>VP</sub> defended  $t_i$ ]], and Bill did too.  
 c. John [<sub>VP</sub> himself  $\lambda_i$  [<sub>VP</sub> defended  $t_i$ ]], and Bill [<sub>VP</sub> *himself*  $\lambda_i$  [<sub>VP</sub> *defended  $t_i$* ]].

Various options exist for prohibiting the movement of the reflexive to a position that has scope over the entire conjunct: the Coordinate Structure Constraint, or the general property of QR that it is clause bound.

<sup>14</sup> There are actually two distinct derivations of a strict reading with a pronoun in subordinated ellipsis: one via variable binding by a lambda operator at the S-level, and one via referential or deictic use of the pronoun. In coordination, variable binding only leads to sloppy reading.

This analysis provides an argument against Reinhart and Reuland's (1993) theory that an argument reflexive "reflexivizes" the predicate that contains it. If the predicate is reflexive, copying it will always yield a sloppy reading, whether in coordinated or in subordinated ellipsis. Reinhart and Reuland's theory therefore cannot predict a subordination effect.

Alternatively, movement to a position higher than the subject in the left-most conjunct would result in the reflexive not being bound by its antecedent.

Condition A can then be thought of as applying after QR, seeking to interpret the raised reflexive as coreferent with the local subject. With some additional assumptions, the binding results in the reflexive being semantically translated into the same value as the subject, and (37c) can be interpreted as representing the sloppy reading.

Turning to subordination, the desired result follows immediately. After QR of the reflexive, the lower segment of the VP can be directly copied into the ellipsis site, yielding (38c), which can be taken to represent a strict reading:

- (38) a. [John [<sub>VP</sub> [<sub>VP</sub> defended himself] before Bill did]]].  
 b. [John [<sub>VP</sub> himself  $\lambda_i$  [<sub>VP</sub> [<sub>VP</sub> defended  $t_i$ ] before [<sub>IP</sub> Bill did]]]].  
 c. [John [<sub>VP</sub> himself  $\lambda_i$  [<sub>VP</sub> [<sub>VP</sub> defended  $t_i$ ] before [<sub>IP</sub> Bill [<sub>VP</sub> defended  $t_i$ ]]]]].

Note that this account is essentially equivalent to the one proposed in section 3.1.<sup>15</sup> It differs, however, in that the movement of the reflexive has nothing to do with it being a reflexive. Thus, it is not dependent on a special theory of reflexive movement at LF, which may or may not be an advantage, depending on how strong the independent evidence is for such a theory.

#### 4. A FURTHER FACTOR: DEEP ANAPHORA INTERPRETATION

Given the class of theories outlined so far, a strict reading in coordinated ellipsis should be equivalent to a violation of condition A or the ECP. This prediction, however, is too strong: although there are speakers who reject strict reflexives in coordination altogether, many speakers find them only relatively deviant, compared with the sloppy reading.

<sup>15</sup> Mats Rooth (pers. comm.) points out that (i) also has a strict reading, where the adjunct clause is interpreted as temporally modifying the tense of the higher clause:

- (i) John wanted [PRO to defend himself] before Bill did.

Paraphrased, this means that John's wanting to defend himself occurred before Bill's wanting to defend John. This raises a problem for both analyses of reflexive movement proposed here, since presumably the reflexive only moves to a position dominated by the embedded PRO subject, and not higher up to a position having scope over the adjunct clause. However, the reading given by the above paraphrase of (i) can be predicted by the Reinhart account, where only the subject *John* undergoes QR, and where the reflexive (and PRO) are translated into variables *in situ*.



From the current theoretical viewpoint, this can be characterized as a weakening of the effect of condition A under reconstruction. To illustrate, compare the differences in judgments of overt condition A violations with reconstructed condition A violations (e.g., (39a) under the strict reading):

- (39) a. ?John<sub>i</sub> likes himself<sub>i</sub> and Bill<sub>j</sub> does too.  
 b. \*John<sub>i</sub> likes himself<sub>i</sub>, and Bill<sub>j</sub> likes himself<sub>i</sub> too.

In fact, the same difference holds between overt and covert condition B violations:<sup>16</sup>

- (40) a. ?Bill<sub>i</sub> likes him<sub>j</sub>, and John<sub>j</sub> does too.  
 b. \*John<sub>i</sub> likes him<sub>i</sub>.

This suggests that the effect of binding theory is in general weakened under ellipsis. In this section, it is argued that there exists a further independent factor which interacts with reconstruction and explains the weakening effect. When the predictions of the reconstruction analysis above are filtered through the effects of this independent factor, the result is the empirical situation described here: strict reflexives in coordinated structures are marginally acceptable, but strict readings in subordinated structures are significantly better.

#### 4.1. *Deep and Surface Anaphora*

Hankamer and Sag (1976) argued that ellipsis constructions divide into two types: deep anaphora and surface anaphora. Roughly, their proposal was that surface anaphora requires a syntactic antecedent, whereas deep anaphora are reconstructed with reference to purely semantic information. Accordingly, the theoretical objects involved in reconstruction differ for the two ellipsis types. VP-ellipsis is a surface anaphor, according to Hankamer and Sag.

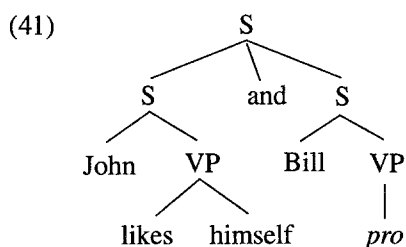
I would like to suggest the following refinement of this view: although a VP-ellipsis is always syntactically reconstructed, it is possible to reinterpret it “off-line” as a deep anaphor, using a secondary interpretation strategy.<sup>17</sup> This “deep anaphora strategy” thus provides a way to bypass

<sup>16</sup> Hans Kamp, pers. comm.

<sup>17</sup> The idea that an alternative “deep anaphora strategy” can neutralize the effects of syntactic reconstruction was suggested to me by Mats Rooth.

the prohibition against strict reflexives in coordination, as will be shown below. The prediction is that the immediate and preferred reading should be sloppy, but that speakers, typically upon conscious reflection, will accept a strict reading as a secondary interpretation. In subordinated ellipsis, on the other hand, the strict reading should be on a par with the sloppy reading – that is, immediate and “on-line.”

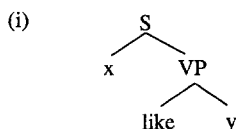
To illustrate, consider again a case like *John likes himself, and Bill does too*. Syntactic reconstruction and subsequent DRS construction and semantic interpretation yield only a sloppy reading. But the deep anaphora strategy allows the speaker, in off-line processing, to reinterpret the empty category in the VP-ellipsis as a deep anaphor. For concreteness, take this to mean that the empty category is reanalyzed as an empty version of a deep anaphor like *so* or *the same thing*, as in *Bill did the same thing*. It is simply denoted *pro* here:

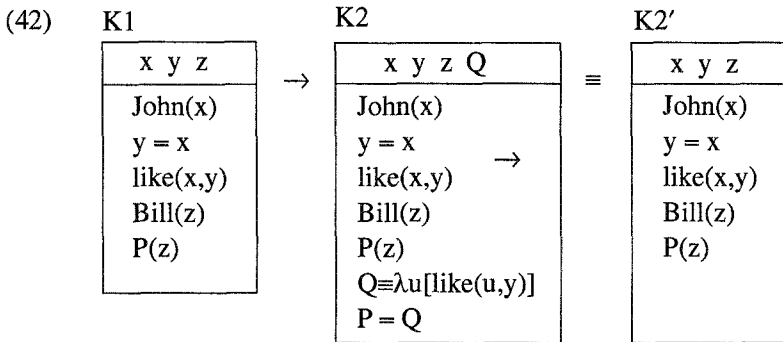


This anaphor is not syntactically reconstructed at LF, but is simply assigned an interpretation through the anaphoric relation it bears to some other semantic object in the discourse representation, as are other pronouns.

(42) below illustrates a DRS derivation from (41). Initially, the sentence results in K1. The *pro*-VP introduces an empty condition P, which is predicated of the discourse referent introduced by the remnant subject *Bill*. Furthermore, P is anaphoric, and the anaphoricity is resolved by equating P with a property constructed by abstracting over the first argument in the condition *likes(x,y)*, which yields the VP-meaning of the first sentence.<sup>18</sup> This leads to K2, which in turn is equivalent to K2':

<sup>18</sup> Technically, the condition *likes(x,y)* is just an abbreviation for the unreducible syntactic representation (i), which is interpreted as a two-place predicate in the evaluation of the DRS (cf. Kamp and Reyle 1993, 62).





K2' represents a strict reading, which is derivable precisely because the operation that resolves the anaphoricity of P is not constrained by condition A, since the syntactic category "reflexive pronoun" is not involved at all in the representation.

To summarize: the sloppy reading is first derived by initial syntactic reconstruction. This accounts for the preference for the sloppy reading. Subsequent reanalysis of the VP-ellipsis as a deep anaphor "lets in" a strict reading as a secondary interpretation. The secondary strategy thus increases the acceptability level of the strict reading, giving the total appearance that the strict reading is less ungrammatical than overt condition A violations. The explanation for the weakening of principle B goes along the same lines.

#### 4.2. Additional Evidence

Additional evidence for this scenario comes from the interaction of elided reflexives and *wh*-relations. Chao (1987) argued that VP-ellipsis can in principle be either syntactically or semantically reconstructed, but that syntactic reconstruction is sometimes forced by syntactic considerations. For example, the ellipsis in (43a), if not syntactically reconstructed at LF (but analyzed as in (43b) in current terms), would violate a general syntactic prohibition against vacuous syntactic operators. The syntactic reconstruction in (43c) is therefore required to provide the *wh*-phrase with a coindexed trace:

- (43) a. John knows who<sub>i</sub> Bill criticized t<sub>i</sub> and Mary knows who<sub>j</sub> Sue did.  
 b. John knows who<sub>i</sub> Bill criticized t<sub>i</sub> and Mary knows who<sub>j</sub> Sue did [<sub>VP</sub> *pro*].  
 c. John knows who<sub>i</sub> Bill criticized t<sub>i</sub> and Mary knows who<sub>j</sub> Sue [*criticized* t<sub>i</sub>].

Chao points out that this predicts that a violation of the *Wh*-Island Constraint in an ellipsis cannot be ameliorated by reconstructing it as a deep anaphor (cf. also Haik 1987). Consider (44):

- (44) a. \*John knows who Bill criticized, but who did Mary wonder why Sue did?  
 b. John knows who Bill criticized, but who<sub>j</sub> did Mary wonder why Sue [*criticized t<sub>j</sub>*].

(44a) contains a *who* without its trace. This necessitates LF-reconstruction, but this in turn produces a *wh*-island violation in (44b). Reconstructing the ellipsis as a deep anaphor, on the other hand, would lead to a violation of the constraint against vacuous syntactic operators, leaving the structure illformed in both cases. Thus, the present case differs from the case discussed above for reflexives, where the deep anaphora strategy successfully ameliorates a syntactic violation.

This yields an interesting prediction in the current account. When an ellipsis combines a reflexive with *wh*-extraction, as in *Who did John reveal himself to, and who did Peter?*, the *wh*-relation blocks the deep anaphora strategy from applying, as above. But because of this, the strict reading of the reflexive is therefore also not derivable via the deep anaphora strategy, since this strategy is now independently blocked. In other words, a contrast as indicated is predicted between (45a) and (45b):

- (45) a. ?John defended himself against the spying accusations, and Bill did too.  
 b. \*I know what John defended himself against, and what Bill did.

In (45a), there is no *wh*-phrase, so the deep anaphora strategy can apply to yield a weak strict reading (denoted with '?'). In (45b), the “dangling” *wh*-phrase blocks the deep anaphora strategy from applying, in accordance with Chao’s analysis. Consequently, that strategy cannot be used to give a weak strict reading, and the example is predicted to be strongly sloppy. The judgments are in accord with this prediction. A further prediction is that if *wh*-movement is combined with reflexive binding in subordinated ellipsis, the strict reading should be perfect in comparison to (45a). Indeed, (46) seems perfect in comparison to (45a):

- (46) √I know what John defended himself against before Bill did.

In (46), subordination allows a strict reading without the help of the deep anaphora strategy. Some further examples of this three-way contrast are given in (47)–(50):

- (47) a. ?Bill gave himself a book for his birthday, and Peter did too.  
 b. \*I know what Bill gave himself for his birthday, and I know what Peter did.  
 c. √I know what Bill gave himself for his birthday before Peter did.
- (48) a. ?Bill called himself a liar, and Peter did too.  
 b. \*What did Bill call himself, and what did Peter?  
 c. √What did Bill call himself before Peter did?
- (49) a. ?Bill wrote about himself in the New York Times, and Peter did too.  
 b. \*Where did Bill write about himself, and where did Peter?  
 c. √I know where Bill wrote about himself before Peter did.
- (50) a. ?Bill revealed a secret about himself, and Peter did too.  
 b. \*I know what Bill revealed about himself, and what Peter did.  
 c. √I know what Bill revealed about himself before Peter did.

The net result of the combination of the reconstruction analysis with the deep anaphora strategy is that the acceptability predictions of the reconstruction theory are blunted: strict reflexives in coordination should not be strictly impossible, but there should be a significant contrast between their acceptability in subordination and coordination structures, which seems to be an accurate picture of the empirical situation. Furthermore, since this is a processing account, it provides a handle for characterizing why judgments on strict reflexives in coordinated ellipsis vary somewhat across speakers (cf. Kitagawa 1991).

## 5. OTHER ANALYSES

Finally, this last section discusses previous accounts of ellipsis and reflexives, and evaluates them in light of the subordination effect.

### 5.1. *Williams (1977)*

The Reinhart/Heim theory differs minimally from Williams (1977), in that Williams assumes that the lambda operator does not have scope outside the VP. Williams explicitly states that the lambda operator binds a variable which is in a different position than the surface subject, namely in the position of the “logical subject” of the VP (on the obvious relation of this claim to the VP-internal subject hypothesis, see Kitagawa 1991). Because of this, Williams’ Derived VP Rule will only lead to sloppy interpretation

of reflexives, irrespective of subordination vs. coordination. To illustrate, a derivation would go as follows:

- (51) a. [John [<sub>VP</sub> defended himself] before Bill did [<sub>VP</sub> ΔΔ]]  
           ↓ *Derived VP Rule and f-Subscripting*  
 b. [John [<sub>VP</sub> λx(x defended himself)] before Bill did [<sub>VP</sub> Δ<sub>f</sub>Δ<sub>f</sub>]]  
           ↓ *Reflexivization*  
 c. [John [<sub>VP</sub> λx(x defended x)] before Bill did [<sub>VP</sub> Δ<sub>f</sub>Δ<sub>f</sub>]]  
           ↓ *VP Rule*  
 d. [John [<sub>VP</sub> λx(x defended x)] before Bill did [<sub>VP</sub> λx(x **defend** x)]]

(51d) represents a sloppy reading. It is perhaps trivial to modify Williams' Derived VP Rule so that it attaches the lambda operator to the adjoined-to VP, or to whichever higher constituent dominates both the VP and the subordinated clause, but as it stands, the rule predicts only sloppy readings in subordinated ellipsis.

### 5.2. Dalrymple (1991)

Dalrymple (1991) argues that the availability of a strict reading of a reflexive is entirely dependent on the choice of lexical item. In particular, some verbs, when used with a reflexive object, transform themselves into obligatory reflexive predicates for the purposes of reconstruction – whereas other verbs do not – and hence allow both strict and sloppy readings. (52) illustrates the behavior of verbs that according to her take sloppy-only readings as a lexical property (= (18) in Dalrymple 1991):

- (52) a. John was talking to himself, and Bill was too.  
 b. John locks himself in the bathroom when bad news arrives, but Bill would never do so.  
 c. John prepared himself for the worst, and so did Bill.  
 d. John rewarded himself with a piece of cake, and Bill did too.  
 e. John seated himself at the head of the table before Bill could.  
 f. John always surrounds himself with admirers. Bill doesn't, although he could.

On the other hand, (53) illustrates verbs that allow the reflexive object to have either a strict or a sloppy interpretation(= (20) in Dalrymple 1991):

- (53) a. Bill defended himself against the accusation better than his lawyer did.  
 b. Bill described himself to Sue because I couldn't do it.  
 c. Bill didn't expect himself to win, but I did.  
 d. John voted for himself even though no one else did.

The analysis is roughly that the verbs in (52) are marked as reflexive at the level of ellipsis resolution, whereas those in (53) are not. Therefore, when the “ellipsis equation” of Dalrymple, Shieber, and Pereira (1991) is solved, the reflexive property of the verb must be maintained under reconstruction, forcing sloppy-only readings in (52). Since the predicates in (53) are not marked as reflexive at the point of ellipsis resolution, the reconstructed verb can take a strict argument. Dalrymple concludes that structure does not determine strict or sloppy readings.

However, closer inspection of the data in (52) and (53) suggests the opposite. In particular, note that five of the six examples in (52) are coordinated ellipses. On the other hand, three of the four examples in (53) are subordinated ellipses. So these cases rather behave according to the predictions of the current proposal, namely that subordination allows strict readings and coordination does not. But, in addition, note that all the cases in (53), including the single coordination case, exhibit person-conflict, and therefore favor strict readings, independently of structure, as discussed in section 2.

To show that verb choice and not structure determines strict/sloppy readings, the structure must be kept constant while the verbs are varied. When this is carried out, a different result than that reported by Dalrymple emerges. Take the verb *defend*. Dalrymple states that “*defend* does not intrinsically impose a requirement of coreference [. . .] between its subject and objects.” The prediction is that *defend* should always be able to get a strict reading, no matter what the structure is. But speakers I have consulted find that the strict reading is better in (54a) than in (54b).

- (54) a. John defended himself better than Bill did.  
 b. John defended himself, and Bill did too.

Consider next the verb phrase *lock oneself in the bathroom*, from (52b). This verb should not allow a strict reading no matter what the structure is, according to Dalrymple; but compare (52b) to (55):

- (55) John locked himself in the bathroom before Bill could.

Evidently a strict reading is possible here, suggesting that structure does play a role. Although it is true that some verbs favor a sloppy interpretation, once this lexical semantic effect is controlled for, structure determines strict/sloppy readings independently of verb choice.

Dalrymple also argues for a wider generalization, namely that the verbs that allow both strict and sloppy interpretations with reflexives also show no condition B or C effects under reconstruction. whereas verbs that take

only sloppy reflexives do show these effects. Dalrymple gives the following as an example of lack of condition C effect:

- (56) The lawyer defended Bill<sub>i</sub> against the accusations better than he<sub>i</sub> could have.

After syntactic reconstruction, this yields *The lawyer defended Bill<sub>i</sub> against the accusations better than he<sub>i</sub> could have defended Bill<sub>i</sub> against the accusations*. Dalrymple argues that since condition C is not effective after reconstruction – contrary to expectation – there is no syntactic reconstruction in general. This claim is relevant for the current proposal, which maintains that the Binding Theory does apply to the reconstructed representations.

Note first that (56) is only grammatical with stress on the pronoun. If unstressed, it is in fact ungrammatical, and condition C appears to be in force again. The elided case then patterns exactly like the unelided case (as was already pointed out by Kitagawa 1991, 514):

- (57) a. \*The lawyer defended Bill<sub>i</sub> better than he<sub>i</sub> COULD have.  
 b. √The lawyer defended Bill<sub>i</sub> better than HE<sub>i</sub> could have.  
 c. \*The lawyer defended Bill<sub>i</sub> better than he<sub>i</sub> COULD have defended Bill<sub>i</sub>.  
 d. √The lawyer defended Bill<sub>i</sub> better than HE<sub>i</sub> could have defended Bill<sub>i</sub>.

But this only illustrates what has been known since Evans (1980), namely that condition C can be ignored under certain discourse conditions, here signalled by stress. Kitagawa (1991), as well as Heim (1993), conjectures that the same is true of condition B; compare (58a,b) below (= (18), (19) in Kitagawa 1991):

- (58) a. Many people blamed him<sub>2</sub>, and BÍLL<sub>2</sub> did too.  
 b. Many people blamed him<sub>2</sub>, and BÍLL<sub>2</sub> blamed him<sub>2</sub> too.  
 (cf. \*Many people blamed him<sub>2</sub>, and Bill<sub>2</sub> did too.)

Examples with verbs that only take sloppy reflexives according to Dalrymple, and which according to her also do show condition B/C effects under reconstruction, can be engineered in the same way:

- (59) I wanted to lock Bill<sub>i</sub> in the bathroom before HE<sub>i</sub> did.

This shows that the data brought forth to show that the Binding Theory is sometimes not respected in ellipsis reconstruction actually supports the opposite claim, namely that Binding Theory operates in the same way in elliptical constructions as in their non-elided counterparts.



5.3. *Kitagawa (1991)*

Finally, Kitagawa (1991) approached the problem of strict reflexives by reconstructing reflexives as pronouns at LF. His account has since been developed in Fiengo and May (1994) under the term “vehicle change.” Kitagawa suggested that a feature [+anaphor] on the reflexive can be suppressed in the copying of the antecedent VP into the elided VP. This is illustrated below, where the LF of (60a) is comparable to the corresponding overt instance of a pronoun in (60b):

- (60) a. John<sub>i</sub> likes himself<sub>i</sub>, and Bill does too.  
 b. John<sub>i</sub> likes [<sub>±a</sub>]himself<sub>i</sub>, and Bill **likes** [<sub>-a</sub>]**him**<sub>i</sub> too.

Kitagawa’s proposal was designed to account for what he perceived as dialect variation: speakers who accept strict readings in coordination utilize the proposed mechanism. But this would fail to predict differences between coordination and subordination in an individual speaker.

## 6. CONCLUSION

It has been argued here that the possibility for strict readings in subordinated ellipsis provides evidence for a theory that treats reflexives as bound variables at the point of reconstruction. The bound variable, arising from a syntactic trace, can be derived by movement of the reflexive itself. Furthermore, the remaining contrast between coordination and subordination provides evidence that condition A still constrains the reconstructed representation of VP-ellipsis.

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