

To appear in *Thought, Reference and Experience: Themes from the Philosophy of Gareth Evans*. Ed. J. L. Bermudez. Oxford: Oxford University Press.

## Abandoning Coreference

Ken Safir, Rutgers University

It seems that when the term "coreference" is used, whether in linguistics or in philosophy, there is often presumed to be a consensus about what it is, or at least about what it is in the context where the term is introduced. I don't think the term deserves to have much use at all, insofar as it disguises more interesting linguistic and pragmatic relations between nominal forms in natural language. My preoccupation with these relations issues in part from some of the central concerns and distinctions introduced in Evans (1980), an essay that has had wide and, in some cases, a very deep influence on how a variety of reference issues have been addressed in modern linguistics. As a linguist, my interest is in the way in which natural language shapes what we know and from that perspective, I want to understand how natural language sets boundary conditions on how linguistic forms can be used to achieve readings that pick out the same entity more than once.

From this perspective, it is perhaps useful to distinguish two notions of coreference at the outset, one with a fairly limited use, and one that has a use that I believe turns out to be misleading. The first notion of "coreference" simply means that two terms pick out the same individual. If John says "I like Ralph" and Jill says "I like Sam" and Alice knows that Ralph and Sam are one and the same, then the terms 'Ralph' and 'Sam' corefer for Alice because they pick out the same entity in discourse, though neither John nor Jill has any intention that they should. Insofar as this meets the description of a situation where two terms pick out the same individual, this is a fairly uninteresting case of *coreference*.

What I am told philosophers more typically mean by "coreference" I will consistently call *intended coreference*. Intended coreference occurs when there is an intention to use two or more terms to refer to a single entity. It is my position that linguists shouldn't have much to say about intended coreference first because I don't think that any form of intended reference is a matter for

linguists at all, and second because the identity relation that can hold between two linguistic forms is flexible in a way that most notions of coreference do not, or cannot, address. For this reason, I will usually refer to identity relations by a presentationally neutral term, *coconstrual*, by which I mean some sort of identity relation or other between nominals. Once the issues are clarified by separating speaker intentions from coconstrual, the variety of coconstrual relations, some of which are crucially distinguished by Evans, then provide evidence against the utility of every usage of (*intended*) coreference that I am familiar with.

### **1.0 What Appears to be at Stake**

So much of Evans' perspective on matters of reference is tied to what he took to be linguistic consequences of intentions to refer that it might seem odd that I would use a piece of his work to establish the view that intended reference is irrelevant to linguistics. Evans, however, writes as a linguist as much as a philosopher in "Pronouns", and as a linguist, I intend to take him to task even as I take from him my main line of argument.<sup>1</sup>

Evans (1980), which is specifically intended for a linguistics audience, is presented, at least in part,<sup>2</sup> as a reasoned objection to a sea change in linguistic theory, one introduced by Lasnik (1976), by which the goal of explaining patterns of coconstrual, particularly pronouns coconstrued with their antecedents, shifted from rules that license coconstruals to rules that block them. Except for forms like *himself* and *each other*, terms that must be bound in specific syntactic configurations, Lasnik treats all other coconstrual as unenforced, a pragmatic matter, based on what the speaker would know of the context of the conversation, world knowledge, previous discourse, and the like. Evans was protesting against this change by arguing that some linguistic coconstruals of pronouns with their antecedents are enforced by rules of grammar.

Evans also argues that the form of blocked coconstrual that Lasnik posits, namely noncoreference, is the wrong characterization of the failed coconstrual at issue. Evans observes that intended coreference is perfectly possible for many syntactic contexts where Lasnik's principle would predict noncoreference, once appropriate contexts are invoked. Rather Evans establishes that what is most typically blocked by linguistic rules is dependent reference (or as I

will eventually prefer to call them, *dependent identity* readings), although, as we shall see, this is not the whole story.

Once we have a clear idea of what theories of coreference are supposed to apply to, we can then undermine the term *intended coreference* itself. I argue that if intended coreference involves picking out the same referent, the same extension in the world of discourse, as some previous mention, then it does not describe the class of coconstruals that existing theories of (intended) coreference address, or that they should address. To make this case I will argue (in section 5) that there exist dependent identity readings which are not coreference readings.

In what follows, I will try to make my case against the usefulness of both *intended reference*, and hence *intended coreference*, with minimal appeal to technical notions in linguistics, and I think that this is largely possible. However, I do rely, as Evans did, on the assumption that my readers can sustain a certain peculiar appetite for anaphora puzzles.

### 1.1 Enforced Coreference vs. Pragmatic Coreference

As the matter is put in Evans (1980), the issue is what linguistically competent average folk can or must know about the relationship between a term that designates or describes what a pronoun refers to and the pronoun itself. In earlier versions of generative grammar, particularly before the mid-70's, it was assumed that pronouns and reflexives were introduced by rule, replacing tokens identical in form to their antecedents and *thereby* identical in referential value with their antecedents (Lees and Klima (1963) and Langacker (1969)). Thus (1a) would be transformed into (1b) based on the identity of form and referential value assumed to hold between the first mention of *Alice* and the second (where coconstrual is marked by italics).

1a)\**Alice* thinks that *Alice* is smart.

b) *Alice* thinks that *she* is smart.

The reason (1a) could not be used to mean (1b) was that the rule of pronominalization in this syntactic configuration (where the first *Alice* c-commands the second one - I define c-command later) is obligatory, such that (1a) would always be transformed into (1b), as long as we are talking about the same Alice. Similar transformations would insure that more locally anteceded

forms would be transformed into reflexives.

2a)\**Marcus loves Marcus.*

b) *Marcus loves himself.*

In order for a pronoun or a reflexive to be coreferent (using the term of the time) with its antecedent, the pronoun would have to be introduced by the rules of pronominalization or reflexivization respectively.

Part of the problem of looking at pronominalization in this way, however, is that all of the relationships in (3a-c) allow (intended) coreference where the use of a name in place of the pronoun is also possible.

3a) *He/Freddy* is a terrible liar. It's amazing! *He/Freddy* will say anything!

b) Even *his/Freddy's* mother thinks *Freddy/he* is lying.

c) When it finally came out that *Freddy/he* had lied to all of *his* wives, *Freddy's/his* current wife decided to turn states evidence.

In other words, pronominalization is optional in all of the examples in (3) and in all of the combinations, although pronominalization is not optional in (1b). It is even possible for the pronoun to precede the name, unless the aforementioned c-command holds, as it would, for these examples, only with respect to the position of *his* before *wives* in (3c) (which could not be replaced by *Freddy's* because *Freddy/he* c-commands *his*). This difference represented a weakness in enforced coreference theories, in that pronouns seem to allow (intended) coreference optionally wherever pronominalization was not treated as obligatory.<sup>3</sup>

Another problem with introducing pronouns by rule, first pointed out by Postal (1971),<sup>4</sup> is that some pronouns don't have linguistic antecedents. If we are perfect strangers and we witness a car accident (e.g., driver's car hits parked car), I can turn to you and begin a conversation as in (4).

4) I'm glad I'm not *his* insurance agent!

To introduce this pronoun by linguistic rule would require positing an abstract unpronounced linguistic antecedent "the guy who caused the accident" or such like and then introducing *his* as a

pronominalization of the longer unpronounced description by virtue of identity with the unpronounced one. Alternatively, some pronouns have to be introduced into sentences *independently* of the pronominalization rule.

Lasnik (1976) seizes on the problem with cases like (4) to point out that if pronouns have to be introduced in some cases with independently determined reference, what is to prevent all pronouns from being introduced in this way, where coreference arises *by accident*, such that *she* in (5) just happens to pick out the same referent as that picked out by *Alice*?

5)\**She* thinks that *Alice* is smart.

Under unexceptional intonation and discourse conditions for examples like (5) (we shall return to exceptional ones), *she* and *Alice* cannot be coconstrued, and, so Lasnik reasons, something must insure that *Alice* and *she* are prevented from coreferring. Thus Lasnik proposes a *noncoreference* rule, which I simplify as in (6) (which was later installed as Principle C in Chomsky's (1981) Binding Theory).

6) Lasnik's Noncoreference Principle: A name cannot be c-commanded by a coreferent NP.

Lasnik's Principle insures that *Alice* and *she* cannot corefer in (5) regardless of how these tokens are introduced into the sentence structure. A few clarifications with respect to (6) are in order, however. By "a name" what is meant here is any referring expression such as proper name, a demonstrative or a definite description, where pronouns are not taken to be names in this sense. C-command is a particular sort of relation between parts of the hierarchical architecture of sentences. This architecture is usually represented with brackets or tree diagrams, where the existence of each node must be justified as part of the linguistic knowledge of adult native speakers. C-command can be simplified for our purposes as follows:

7) A c-commands B if B is a sister to A or B is dominated by a sister of A.

When two syntactic pieces (phrases) are joined into a larger one, then the two phrases joined are sisters and the new larger phrase they form is said to dominate its two parts. Thus in the schematic sort of structure provided in (8), everything is gathered into a single unit, the



right notion of 'local domain' can be stated) the pronoun is marked as disjoint in reference with *Alice* in (11b) and with *Brianna's* in (11a).

However, if only *her* were to be coconstrued with *she*, as in (12), nothing would block coreference (i.e., Lasnik's noncoreference rule in (6) would not block it and Chomsky's noncoreference rule for pronouns in (10) would not block it because the c-commanded pronoun is sufficiently far from its antecedent).

12) [<sub>S1</sub> [<sub>NP</sub>She] [believes [<sub>S2</sub> [<sub>NP</sub>Tom] [loves [<sub>NP</sub> [<sub>NP</sub>Brianna's] [picture of [<sub>NP</sub>her] ] ] ] ] ] ]

Thus it is possible, though not required, for *she* and *her* to be intended coreferent, but no rule is required to insure that coconstrual is enforced, rather coconstrual of *she* and *her* is something that is made possible by the grammar, and the rest of the task of assigning values to *she* and *her*, be they the same or different, is a matter for the context of the utterance (pragmatics), not for any rule of grammar. Moreover, all of the other cases where optional replacement of names with pronouns permits coconstrual, as in (3), require no special rule at all, since optional use of a pronoun in place of a name is now just the general sort of accident, unless (6) applies to block it.

Evans (1980) objects to two features of Lasnik's system: He objects to the notion that intended coreference is not enforced by linguistic rule (setting aside the reflexive cases, which everyone assumes are somehow linguistically enforced). He characterizes Lasnik's theory (and that of Chomsky (1976a,b)) as a "pragmatic theory of coreference" in that coconstruals between pronouns and other nominals are left to non-linguistic factors. Evans also objects to the notion that what is linguistically regulated is (intended) coreference rather than (intended) dependent reference. These concerns converge in his first objection, which targets the relation between coconstrual in (13a) and coconstrual in (13b).

13a) *Everyone* loves *his* mother.

b) *John* loves *his* mother.

In Lasnik's theory, Evans points out, it is a coincidence that the form *his* effects both of these coconstruals, because the relation between *John* and *his* in (13b) is potentially accidental coreference (pragmatically determined) while the coconstrual between *everyone* and *his* in (13a)

is bound reference, as it must be if it is a coconstrual because *everyone* is not referential.

Evans begins by arguing that the relation between *John* and *his* is not coreference, but asymmetric dependent reference, such that *his* asymmetrically depends on *John*. This asymmetric dependence is what also holds in (13a), where the antecedent is a quantifier. Failure of bound reference is what he argues is responsible for the obviation that Lasnik describes (or mis-describes, if Evans is right) as a noncoreference effect.

At the risk of setting some heads spinning with too much to take in too soon, I foreshadow what is to come. I agree with Evans that the right theory of linguistic coconstrual is one that primarily addresses dependencies and that both (13a) and (13b) are instances of dependency, but I agree with Lasnik (and disagree with Evans) that blocked coconstrual principles are broadly sufficient to predict the relevant coconstrual patterns permitted by linguistic competence, i.e., there are no linguistic rules requiring unique coconstrual of pronouns with their antecedents (although I shall set aside some candidate relations). In the cases where some form of coconstrual is blocked, I agree with Evans that noncoreference is not what is grammatically required. However, I agree with Lasnik that some cases of blocked dependency are not *only* failures of dependency; Rather the result of (the descendants of) the noncoreference rules is *expected noncovaluation*, an expectation that, unlike the failure of dependent identity, can be overcome by a strong context. Thus coconstrual is always possible between two nominals, but it is not a linguistic matter to determine what coconstruals others intend. What linguistically competent individuals can be said to know is what varieties of covaluation and dependency are possible or unexpected if coconstrual is posited to hold.

## **1.2 Dependent Reference vs. Coreference**

The set of distinctions Evans makes between dependent reference and intended coreference may be his most profound contribution to the linguistic literature on anaphora. The distinctions he highlights had mostly been treated as one between quantifier bound anaphora and accidental coreference, but Evans' analysis of (13b) as involving a kind of bound anaphora that is parallel to that in (13a) had very important effects. There are two ways in which the bound



anaphora effect for cases like (13b) is typically brought out in the literature.

One sort of illustrative example is based on the two interpretations of sentences like (14), one of which allows the inference in (14a) and the other of which allows the inference in (14b).

14) *Each female monkey* thinks that only *she* loves *her* mother.

a) Each female monkey thinks the other monkeys don't love their respective mothers.

b) If Mavis is a female monkey then Mavis' mother is not loved by any monkey other than Mavis.

One way of expressing this fact (there some elaborations in the literature) is to say that (14a) is a reading where *her* depends directly on *only she*. The reading in (14b) is one where *her* is directly dependent on *each female monkey*, rather than on *only she*, and *she* of *only she* is also directly dependent on *each female monkey*. However, it is clear that we do not want to say that either reading is one of coreference, since *each female monkey* is not referential (for discussion of such cases, see in particular, Heim (1993), Reinhart (1999), Safir (2004b:22-23, 48)).<sup>5</sup> In any event, what is at stake here is the pattern of dependency; what are *she* and *his* bound variables of?

Lasnik (1976) and later Reinhart (1983b:150-156) note that bound readings can be preserved in ellipsis, for example.

15a) *Every monkey* loves *its* mother and every elephant does too.

b) *Marcus* loves *his* mother and Milton does too.

The elided portion of the second conjunct must meet a parallelism requirement with respect to the first conjunct, and in (15a) this requires, if *every monkey* and *its* are coconstrued in the first conjunct, that the interpretation of the second conjunct is that *every elephant* loves *its* mother. A similar reading, called a *sloppy reading*, is possible for (15b), whereby *Milton* loves *his* mother. What appears to be copied in the latter case, as Sag (1976) and Williams (1977) writing on ellipsis also point out, is that a parallel pattern of dependency can be preserved in (15b) just as it is in (15a).

Although Evans did not employ examples like (14) or (15) to make his point, examples

like (14) show that patterns of dependency must be distinguished if we are to understand the patterns of coconstrual, and examples like (15) show that the patterns of dependency that hold of quantifiers may also hold of the relationship between a name and a pronoun coconstrued with it. Examples like (16) show that the relationships established for (14) may be recapitulated with proper name antecedents.

16) *Angela* thinks that *only she* loves *her* mother.

To extend Evans' point, it would be very odd to describe the reading where no one loves Angela's mother but Angela as one that involves accidental coreference between *Angela* and *her*, whereas the inference permitted for (14b) was necessarily handled by establishing a direct dependency between *every female monkey* and *her*.

## 2.0 How Evans cuts the pie

Evans (1980: 352) does not dispute the fact that some coconstruals arise outside of sentence grammar by extralinguistic factors.

Let us agree that to understand a pronoun as referring to an object mentioned in a previous conversation is to interpret the pronoun in a way which is not specifically secured by any rule of the language - it is simply a manifestation of one speaker's general capacity to *make sense of* the acts (including the linguistic acts) of others...when the previous reference is within the same sentence as the pronoun (and subject to further conditions) the coreferential interpretation of the pronoun is secured, as one interpretation of the sentence, by a linguistic rule.

The linguistic rule in question is based on Fregean substitution. The bound relationship established by *every man loves his mother* arises for Evans by virtue of its relation to a sentence like *Marcus loves his mother* where the pronoun is substituted for, hence the interpretation that Marcus loves his (Marcus') mother.<sup>6</sup> This is the rule that applies in sentence grammar wherever it can. The bound reading of *every man loves his mother* is built from a generalization of the same rule that applies to singular nominals like *Marcus*.<sup>7</sup>

However, the rule establishing dependent reference cannot always apply. Evans (1980:358) introduces a rule that blocks dependent reference in certain circumstances, and though he puts it in positive language, the blocking rule plays a role similar to Lasnik's prohibition (which became Chomsky's Principle C).

- 17) A term can be referentially dependent on an NP iff it does not precede and c-command that NP.

I have restated Evans' principle, dropping out the precedence requirement (not crucial here) as the Independence Principle in Safir (2004a,b) (see also Higginbotham (1983)).

- 18) The Independence Principle: If X c-commands Y, then X cannot depend on Y.

The Independence Principle will block the readings that Lasnik is trying to exclude, since in (9), repeated below, the rule establishing dependent reference cannot apply - the potentially dependent term, *she*, cannot depend on *Brianna's*.

- 9)\*[<sub>S1</sub> [<sub>NP</sub>*She*] [believes [<sub>S2</sub> [<sub>NP</sub>Tom] [loves [<sub>NP</sub> [<sub>NP</sub>*Brianna's*] [picture of [<sub>NP</sub>*her*] ] ] ] ] ] ] ]

By contrast, coconstrual is possible between *she* and *her* in (19) because *her* is not blocked from depending on *she*.<sup>8</sup>

- 19) [<sub>S1</sub> [<sub>NP</sub>*She*] [believes [<sub>S2</sub> [<sub>NP</sub>Tom] [loves [<sub>NP</sub> [<sub>NP</sub>*Brianna's*] [picture of [<sub>NP</sub>*her*] ] ] ] ] ] ] ]

Evans also claims to resolve the transitivity of noncoreference problem (raised in Wasow (1972)) that Lasnik solves with his noncoreference rule. The issue arises where term A and term B are blocked from establishing coconstrual directly, but might plausibly establish coconstrual by using term C as a bridge. Thus failure to form coconstrual relations is not enough, Lasnik argues, to characterize what is blocked; Rather a rule of noncoreference applying to A and B must insure that no coreference is achieved by transitivity with C when coconstrual between A and B fails to be established. Consider Lasnik's example, which I reproduce in (20a).

- 20a)\*The woman *he* loved told *him* that *John* was a jerk.

b) The woman *he* loved told us that *John* was a jerk.

c) The woman *he* loved told *him* that we were all jerks.

The fact is that the pairwise coconstruals in (20b) and (20c) are both possible, so without positing

any direct coconstrual relation between *him* and *John*, what prevents *him* to be coconstrued with *he* and *he* to be coconstrued with *John* in (20a)? Since Lasnik's noncoreference rule prohibits coreference where *him* c-commands *John* such that *him* and *John* bear different indices. It does not matter what else *John* is coreferent with as long as *John* cannot be coreferent with *him*. This blocks the (20a) interpretation.

Evans handles this case by arguing that the interpretation whereby *him* is dependent on *he* in (20a) is one where *he* has independent reference, but Evans simply does not consider it possible for *he* to depend on *John*. It is not at all obvious why this should be impossible, given (20b), unless Evans assumes that the rule that establishes bound anaphora by substitution applies to every pronoun at once (which appears to be what he does assume). Alternatively, he might claim that if X depends on Y and Y depends on Z then X depends on Z, violating the Independence Principle by transitivity of dependence for cases like (20a).

### 2.1 Evans' arguments against a rule of noncoreference

Now recall that Lasnik's theory predicts noncoreference between two terms if one term is a name and it is c-commanded by the other. Noncoreference, in the strongest sense that Lasnik endorses, says that whatever the reference one of the terms is determined to be, the other term does not overlap it in any way.<sup>9</sup> Thus all of the examples in (22) are predicted to result in noncoreference between the italicized terms.

22a) *Oscar/he* realizes that *Oscar* is incompetent.

b) *Oscar* must love *Oscar's* mother

c) *Bill* thinks *Bill* is terrific.

Absent any context, our intuitions tell us that the c-commanding names or pronouns are not normally coconstrued with the names they c-command, but Evans shows that the right sort of context can render all of these examples acceptable.

23) Everyone has finally realized that *Oscar* is incompetent. *Even Oscar* has finally realized that *Oscar* is incompetent.

24) Look fathead. If everyone loves *Oscar's* mother, then certainly *Oscar* must

love *Oscar's* mother.

25) I know what John and *Bill* have in common. John thinks that *Bill* is terrific and *Bill* thinks that *Bill* is terrific.

The success of coconstrual in these cases indicates that noncoreference is not what the application of Lasnik's principle insures. Evans considers the relative acceptability of the coconstruals in (23-25) as evidence that dependent readings may be blocked, but not intended coreferent ones.

To summarize, Evans contends that where dependent identity coconstrual is blocked, intended coreference is still possible by non-linguistic means. There is no rule of noncoreference, and indeed the noncoreference effect Lasnik speaks of is illusory.

### **3.0 What's wrong with Evans' picture**

I have three major objections to Evans' attempt to derive all the patterns of coconstrual with only (a) a linguistic rule that enforces a dependency relation with the force of coconstrual and (b) a principle which blocks formation of dependency. First, no linguistic rule enforcing dependent readings is needed because the possibility of dependent readings can be left as a default, once we understand what is at stake for the examples where Evans argues a rule is necessary. Secondly, not every failure of dependency produces the same sort of result. Failures of dependency that induce an *expectation of noncovaluation* must be distinguished from those that do not. Lastly, the distinction Evans draws between dependency and scope is underappreciated; This latter distinction permits a cross-sentential treatment of the distribution of dependency relations that is more general, while it also extends the force of my second objection.

In 3.1 I begin by addressing the second objection, examining the cases normally characterized in the linguistic literature as falling under Principle B (Chomsky's noncoreference rule) and Principle C (Lasnik's noncoreference rule) of Chomsky's 1981 Binding Theory. As a matter of presentation, I assume in this section my first objection is valid and that there is no rule of enforced coconstrual, although I will argue for this indirectly, since in the lines of argument I develop there is never any need for such a rule. In 3.2 I turn to the third objection, the difference

between scope and dependency, which also provides partial justification for the first objection. I reserve one of the main arguments against an enforced coconstrual rule for section 4.

### 3.1 Failure of dependency and the expectation of noncovaluation

Although I think Evans is correct to argue that coconstrual can succeed in (23-25), he sidesteps an important question about such cases that Lasnik's theory was meant to address. There is a reason that *He thinks that Bill is terrific* is taken by most speakers to involve two different individuals in the absence of a special context.<sup>10</sup> In other words, the nature of the contexts that are required to permit coconstrual in (23-25) share a certain flavor that 'failure of dependency' does not capture on its own. Evans might respond that (23-25) are instances of intended coreference which are simply not achieved by linguistic rule. However, if (23-25) can count as intended coreferent *by non-linguistic means*, it seems that it is also necessary to say that there is a preference for establishing coconstrual by means of dependent readings (in Evans's theory, by means of his rule) *where possible*.<sup>11</sup>

But this begs the question of what exactly it is about these contexts that renders them successful in permitting intended coreferent readings. Notice that (23-25) permit the c-commander to be covalued with the c-commanded name just in case the c-commander is introduced as an *instantiation* of individuals who have a certain property, a property that presupposes the identity of the individual involved is already familiar. Notice that the contexts provided in (23-24) already establish that Oscar is necessarily included in the set of people who love Oscar's mother or who think Oscar is incompetent. Now why should this make a difference for covaluation?

The use of *even* in (23) suggests that it is *unexpected* that the generalization in question should also hold of Oscar. *Even* is a word that adjusts expectations, such that amongst all the individuals who might be likely to have some property, *even X* picks one who is not very likely to have that property and asserts that X has that property nonetheless. This explains why the statement in (25) is ironic - it is an assertion that Bill shares a property that John does, but that Bill sharing that property is not what one would expect because it gives Bill's immodesty the air of

an objective assessment, as if Bill were examining someone else and came to the conclusion that that person was terrific. The example loses this force if *Bill* is replaced by a pronoun as in (26), since the default interpretation in that case is one where *he* depends on c-commanding *Bill* for its identity value, rather than matching *Bill* in the first conjunct.<sup>12</sup>

26) I know what John and *Bill* have in common. John thinks that *Bill* is terrific and *Bill* thinks that *he* is terrific.

A similar example, first noted by Higginbotham (1985:570) and discussed by Fiengo and May (1994:10) and Safir (2004a:28), involves a discourse as follows.

27a) A: John is getting up to go.

b) B: That's not John.

c) A: Well, *he's* putting on *John's* coat.

The success of covaluation in (27c) arises because A assumes he knows who John is and that B is a fathead because he does not see that John is who they are looking at. The irony of A's statement in (27c) arises from the view that the individual putting on John's coat would have to be John, and that would go *against B's expectation* that John and the guy putting on his coat are not one and the same.

The point I am making here is that Evans has set out what it is for dependent reference to fail, but he has not set out why it is that failure of dependent reference results in an expectation of noncoreference. Put another way, Evans points out that intended coreference *can* succeed with a rich enough contexts, but he does not explain why a special context is *required*. So now let us provisionally restate the effect of the failure of dependence.

28) If X cannot depend on Y then covaluation of X and Y is unexpected.

As Evans argued, (intended) coreference (or covaluation, the term I prefer and justify in section 5), is not what is blocked when dependency fails, rather what is required when dependency fails, I believe, is that something must adjust our expectations in order for covaluation to be acceptable.

There are other cases where the expectation of noncovaluation is overcome. For

example, in copular sentences like (29) the subject *Heracles* c-commands the rest of the sentence, including *Hercules*, and so *Heracles* and *Hercules* should not be allowed to corefer (a conclusion Lasnik recognized and embraced in his fn.6, p.108 in the 1989 reprinted article).<sup>13</sup> Evans notes that Lasnik's commitment to the assertion that (29) is ungrammatical as a glaring example of what is wrong with his approach.

29) *Heracles* is *Hercules*.

Given (28), all that is claimed for these cases is that *Hercules* cannot be identity dependent on *Heracles* for its antecedent, and therefore noncovaluation is expected. However, copular sentences precisely address the expectation of noncovaluation, since they assert that two terms not known to be covalued do indeed have the same value. Dependent reference is inappropriate in such cases, as can be seen for examples like (30).

30) *Heracles* is himself (today).

The use of a reflexive is very awkward as an identity statement because its presuppositions clash - the reflexive establishes dependent identity whereas the copular asserts independent covaluation. Such sentences are not ungrammatical, but they are only fully acceptable with idiomatic readings, concerning, for example, *Heracles*' mental or physical disposition.

So one way of summing up what I have said so far in this subsection is that the effect Lasnik was speaking of is real, but Evans is correct to say that the effect in question is not one of grammatically enforced noncoreference. Rather the effect of these cases where dependent identity readings are blocked is the creation of an expectation of noncovaluation.

I turn now to a more subtle point concerning contexts where dependent identity fails, but no expectation of noncovaluation results. These should be the general case, given Evans' theory, but the contrast between these cases and the ones where expected noncovaluation does result serve to show that Evans' theory is insufficiently nuanced.

For example, there are some instances where Evans permits a relation of dependency to be formed, but there is evidence against the existence of the dependency in question. In some of these cases, where dependency cannot hold in spite of Evans' prediction, we fail to see the



emergence of an expectation of noncovaluation.

Although there is some controversy about it, it appears that dependency is correctly licensed by Evans' account between *the president* and *his* in (31), because verb phrase ellipsis permits (with a bit of manipulation, surely) a bound (sloppy) reading (see (15b)), one where the governor's wife is not expected to make light of his (the governor's) infidelities. There is also a more favored *strict reading*, by which the governor's wife will not make light of the president's infidelities.

31) Although we were hopeful that *the president's* ambitious wife might make light of *his* infidelities, the **governor's** marriage is more traditional, so none of us expected **his** wife would.

However, where a pronoun embedded in the subject is coconstrued with a name that follows as in the first conjunct of (32), only a strict reading is possible, one where the governor's wife makes light of the president's infidelities.

32) Although we were hopeful that *his* ambitious wife might make light of *the president's* infidelities, **the governor's** marriage is more traditional, so none of us expected **his** wife would.

There are two points to be made here. First, the relative success of the sloppy reading in (31), as opposed to (32), where the sloppy reading is impossible, shows that dependent identity must succeed where *the president* does not c-command the pronoun in the first conjunct, or else the sloppy reading would not be parallel to it. In other words, *c-command is not crucial for dependent identity to hold* (consistent with Evans' theory, but not with some others - see below). Second, if dependent coconstrual fails in the elided phrase of (32), then dependent coconstrual did not hold for the first conjunct in (32). Yet the first conjunct in (32) does not induce a noncovaluation effect between *his* and *the president* - they can easily be coconstrued, even though there is no dependency relation between them and no instantiation context need be invoked. *Thus failure of dependency does not have to result in expected noncovaluation.*

The latter asymmetry in coconstrual between names embedded in subjects and

pronouns that they do not c-command, on the one hand, and between pronouns embedded in subjects and names they do not c-command, on the other, is partially unexpected in Evans' story (depending on some ancillary assumptions), because dependent identity should be permitted in both cases. I have argued (in Safir 2004b) that this asymmetry is related to another one well-known to linguists.

33a) *Everyone's* mother loves *him* (but no one's lawyer does).

b)\* *His* mother loves *everyone* (but *his* lawyer doesn't).

The bound reading of the pronoun is supported in (33a) and the acceptability of the sloppy reading under ellipsis confirms this success, but the quantifier-bound reading in (33b) is unacceptable quite apart from the ellipsis in the conjunct that follows it. This is what is known to linguists as the *weak crossover effect* (WCO), which is also illustrated in (34).

34a) *Who* loves *his* mother?

b)\* *Who* does *his* mother love?

Wasow (1972) extends Postal's (1971) notion of 'crossover' to this case in that the direct object in (34b) appears to the left of the subject at the front of the sentence. Linguists theorize that *who* in (34b) has moved from the object position after *love*, where objects normally appear, across the subject to sentence initial position, and this involves 'crossing over' the subject (and the pronoun it contains). Linguists hypothesize further, or at least many have, that the unacceptability of (33b) has the same source, if some sort of phonetically unpronounced movement places *everyone's* in a scopal position to the left of the pronoun in (33b). The origin of the term 'crossover' depends on that history, but the phenomenon does not. Many characterize WCO effects by one of the following two generalizations.

35a) A bound pronoun must be c-commanded by its antecedent.

b) A bound pronoun cannot be embedded in a nominal that c-commands its antecedent.

For both of these definitions, assume "the antecedent" is the variable in the thematic position where the question word originates (before it moves to the front of the sentence) or where the

universal quantifier is pronounced (before it moves silently to its scopal position). The first of these generalizations, which is supported by Reinhart (1983a,b) and Grodzinsky and Reinhart (1993), cannot explain the success of bound anaphora in cases like (31) and (33a) and others discussed in Safir (2004a:34-37) and at greater length in Safir (2004b), since these are cases where the antecedent does not c-command (it is embedded in the subject). By contrast, the generalization in (35b) works for all of the cases we have looked at so far. Moreover, (35b) looks a lot like Evans' principle, which I have slightly revised and called the Independence Principle. If we assume the extended notion of dependence in (36), the resemblance of the WCO effect to the Independence Principle becomes a consequence of that principle, repeated below.

36) **Extended Dependence:** A nominal  $\alpha$  depends on  $\beta$  if  $\alpha$  embeds  $\gamma$  and  $\gamma$  depends on  $\beta$ .

18) **The Independence Principle:** If X c-commands Y, then X cannot depend on Y.

Extended Dependence seems a very natural notion, semantically, perhaps an inescapable one, and it then extends the force of the Independence Principle in interesting ways, not the least of which being that it derives the existence of crossover effects.

Now let us return to simple cases like (37a-c). While dependence of *her* on *Laura* is permitted in (37a), *her mother* c-commands *Laura* in (37b), so *her* cannot depend on *Laura*. In fact (37b) is the case we showed cannot support sloppy readings under ellipsis (in (32)).

37a) *Laura's mother loves her.*

b) *Her mother loves Laura.*

c)\**She loves Laura.*

However, *her* can be coconstrued with *Laura* fairly successfully (especially with a bit of stress on *loves*) (a point also made for the first conjunct of (32)). The success of coconstrual in (37b) contrasts sharply with (37c), which is very difficult to accept without an instantiation context. If both (37a) and (37b) are cases where the pronouns fail to depend on *Laura*, then the contrast between these cases establishes that failure of dependency is not always enough to trigger the expectation of noncovaluation.

This brings us to cases like (38), which Evans does not address.

38)\**Laura* loves *her*.

Since *her* in (38) does not c-command its subject antecedent, dependence of *her* on *Laura* must be ruled out by some other principle, such as Chomsky's (1976a) noncoreference rule that became Principle B of his (1981) binding theory, simplified in (39).

### 39) **Binding Theory**

Principle A: An anaphor must be c-commanded by its antecedent within

Domain D.

Principle B: A pronoun must not be c-commanded by its antecedent within

Domain D

Principle C: A name must not be c-commanded by its antecedent.

Let us assume that Principle A is necessary and not at issue here<sup>14</sup> and focus now on Principle C, which Evans's version of the Independence Principle is supposed to encompass, and Principle B, which he does not (attempt to) account for. It appears that the cases Principles B and C are supposed to cover are the ones that induce an expectation of noncovaluation that a strong context can overcome. Moreover, Principles B and C rule out dependent reference in contexts where other dependent forms could occur, such as reflexives, in the case of Principle B, and pronouns, in the case of Principle C.

40a) *He* believes that *he*/\**Oscar* is incompetent.

b) *He* loves *himself*/\**him*.

The complementarity of names vs. pronouns and pronouns vs. reflexives has long been noted in the linguistic literature, but for a variety of empirical and theory-internal reasons, theories that attempted to capitalize on complementarity as a guiding principle did not gain wide currency until recently. I have chronicled the history of such theories in Safir (2004a), where both the empirical claim about complementarity and a competitive theory of anaphora that derives it are defended at length.

The theory I propose relies on (41), which, though couched here as a principle, actually

is developed in the reference cited as an algorithm which applies to syntactic representations to block dependent identity readings.<sup>15</sup>

**41) Form-to-Interpretation Principle (FTIP)**

If x c-commands y and z is not the most dependent form available in position y with respect to x, then y cannot be directly identity dependent on x.

**42) Most Dependent Scale:** syntactic anaphor>>pronoun>>name

The FTIP would apply to (40b) to exclude *him* as identity dependent on *he* because *himself* is a more dependent form that could occur in that position (*himself* must satisfy Principle A and can do so in that position). The FTIP thus determines that a pronoun cannot support the dependent reading in that position because there is a reflexive that could do so. In the case of (40a), a reflexive is not possible in the position of the dependent form because Principle A would not permit it, but *he* is available and could appear in that position. Since *he* is a more dependent form than *Oscar*, *Oscar* cannot support the dependent reading in (40a).

There are several important points about the FTIP that are relevant to our discussion. First, the FTIP collapses Principles B and C into one principle, and since Evans did not address Principle B, which a more complete theory of the sort he proposed would have required, the FTIP is not "extra," and it is certainly an improvement over having separate principles, as in the Binding Theory.

Second, as is befitting a unifying principle, FTIP captures the fact that both Principles B and Principle C effects are instances where an expectation of noncovaluation is produced in addition to the failure of dependency. To capture this fact, I add a principle inducing obviation, one that refers to the output of FTIP, but not to syntactic structure at all.

**43) Pragmatic Obviation.** If FTIP determines that y cannot be identity dependent on x, then x and y are not expected to share a value.

The difference in the effects produced by FTIP, on the one hand, and Pragmatic obviation, on the other, is evident from the following ellipsis paradigm.

**44a) *Almost everyone* thinks Oscar and Arthur are incompetent**

Even *Oscar* thinks *Oscar* is incompetent, and maybe even Arthur does.

- b) You may not think we are looking at *John* and *Mary*, but if not, why did *he* put on *John's* coat, and then why did *Mary*?

No bound reading is possible for (44a) such that Arthur thinks Arthur is incompetent, rather a strict reading is required, under which Arthur thinks Oscar is incompetent. Similarly, *he* and *John* can be covalued in (44b), but (44b) only permits a strict reading, where *Mary* subsequently puts on the coat that *John* has put on, rather than a reading where *Mary* puts on *Mary's* coat.

The last point may not seem like such an advance. Isn't it the case that Evans' theory employing the Independence Principle already insures noncovaluation for cases where dependent-identity readings are blocked? The answer to this, quite simply, is "no", not since we extended the notion of dependency with (36). Examples like (37b) are instances where the Independence Principle blocks dependency, but there isn't an any expectation of noncovaluation. We have already seen this for a version of (3c), repeated here as (45).

- 45) The irrefutable evidence that *he* had lied to all of *his* previous wives convinced *Freddy's* current wife to file for divorce.

In other words, the interpretive effect of the Independence Principle is that dependent identity interpretations are blocked, not that the expectation of noncovaluation is induced. This is just as well, because if all blocked dependency were to have this effect, then our theory would face an internal contradiction for cases like (46).

- 46) *He* loves *his* mother.

In (46), *he* cannot depend on *his* because *he* c-commands *his*, yet we paid no attention to such cases because *his* can depend on *he*. This is not injurious to assumptions about dependent identity, indeed it is the right result, but if noncovaluation is tied to failure of dependent identity, then the failure of dependency of *he* on *his* should mean noncovaluation is expected, even as dependency of *his* on *he* is permitted. This is one reason why I limit the force of Pragmatic Obviation to the output of FTIP, not to the output of the Independence Principle.

The upshot of this section is that dependent identity readings can be blocked by either

the Independence Principle or the FTIP, but the latter principle is not considered by Evans. The need for a distinction between these principles is established by a difference that Evans misses, namely, that only FTIP-blocked dependent readings result in the expectation of noncovaluation, induced in this system by Pragmatic Obviation.

### 3.2 Cross-sentential dependency

The Independence Principle in itself says nothing about the possibility of cross-sentential dependencies. If such dependencies exist, then neither the FTIP nor the Independence Principle would not ever apply to block them, since these principles can only apply where c-command holds and c-command is inherently a sentence internal matter. If we do not assume that dependencies are legislated by rule, as Evans does, then dependent identity readings are predicted to be possible cross-sententially wherever they are not blocked by linguistic or pragmatic phenomena.

As long as dependent readings are assumed to be limited to cases where a pronoun has a quantificational antecedent, it is reasonable to assume that the distribution of dependent identity readings would be at least in part a function of quantifier scope (see, for example, Koopman and Sportiche (1981:150) and Safir (1984:626)).

47) **The Scope Principle:** If  $x$  is a variable bound by a quantifier  $Q$ , then  $x$  is in the scope of  $Q$ .

Most likely, the Scope Principle is either an axiom or a natural consequence of any serious semantic theory that includes quantifiers and variables and I shall simply assume it. With respect to the matters at hand, it has been assumed in most syntactic theories that scope is bound by sentence grammar. If so, it follows that dependent identity readings arising from quantifier binding are all limited to sentence grammar.

However, when Evans argued that examples like *John loves his mother* and *Everyone loves his mother* could have the same sort of dependent-identity reading, he made it possible to consider whether dependent identity readings could be sustained over discourses as long as scope is not involved. Recall now that Evans assumed that cross-sentential interpretations

should be pragmatically established, but this is consistent with what I say here, since I am assuming *all* dependent identity readings (apart from most syntactic anaphor readings) are coconstruals established pragmatically. In the case that a pronoun is coconstrued with a quantifier, the interpretive component will assign the only reading such a coconstrual will permit (i.e., a bound reading, not a coreferential one), but the assignment of coconstrual itself is not enforced by the grammar. After all, *his* in *Everyone loves his mother* does not have to be coconstrued with the quantifier if it refers to someone else familiar in the discourse.

Recall, however, Evans' first objection to Lasnik's theory: A pronoun should be treated as dependent on its sentence-internal non-quantified antecedent rather than representing a coincidence of independently referential terms. To insure that this is the case, I introduce another simple structure-independent principle.<sup>16</sup>

48) **Preferred Covaluation:** Covaluation arises from dependent identity unless dependency is blocked.

Thus the coconstrued interpretation of *Marcus loves his mother* is now required to arise in the same way as *Everyone loves his mother*, not by a rule, Fregean or otherwise, that enforces coconstrual, but by an interpretive condition that requires a coconstrual, regardless of how it arises, to have a particular semantic form (parallel to what I said about quantifier-bound readings). This is sufficient to eliminate the need for a rule that *enforces* coreference or coconstrual, insofar as coconstrual is always possible unless some version of it is blocked.

On the other hand, if the Independence Principle blocks a term A from depending on a term B, then A can still be covalued with B without any expectation of noncovaluation, unless the FTIP applies. If a pronoun is used without a linguistic antecedent (as in (4), for example), then Preferred Covaluation obviously has no relationship to apply to. If dependent identity is blocked by FTIP, then Pragmatic Obviation insures an expectation of noncovaluation. The way it is stated in (47), Preferred Covaluation is itself asyntactic, and one way of thinking of it is as a preference to rely on previous mention, if possible, to establish an identity for a term.

The interaction of Preferred Covaluation and the assumption that dependencies can be



intersentential provide a natural account for the contrast between the paragraphs in (49a,b) (drawn from Safir (2004b:53)).

49a) His back was to us when we came in. He swivelled in his chair to face us.

The penetrating eyes of Count Marzipan were trained upon us.

b) Count Marzipan was brooding. His back was to us when we came in. He swivelled in his chair to face us, his penetrating eyes trained upon us.

Since no quantification is involved that requires sentence internal dependency and none of the pronouns c-command *Count Marzipan*, the pronouns are permitted to be dependent on *Count Marzipan* in both (49a) and (49b). In Safir (2004b:53) I put it this way:

Clearly (49a) and (49b) have a different status. Without any context, examples like (49a) are the stuff of mystery stories, where a pronoun is introduced that we have no referent for and we must wait for a plausible candidate to appear that supplies a value for the pronoun. The effect that disfavors backwards coreference (and hence backwards dependence) in these cases appears to be nothing more than Preferred Covaluation, which forces us to defer the assignment of a dependent reading until we have an appropriate antecedent. Where the antecedent is finally introduced in a position that permits a dependent reading, the tension created by Preferred Covaluation is resolved...

If we do not assume Preferred Covaluation, then we must have some other account of the preference for previous mention to establish an antecedent in simple sentences. The point I am making here is that once Preferred Covaluation is assumed, (49a,b) and the sentence internal cases fall under the same generalization.

It was one thing to show that it is *possible* to think of cross-sentential coconstruals as dependent-identity readings that do not rely on the scope of a quantifier (as in (49a,b)), but it is another to show that cross-sentential coconstrual ever *must* be thought of this way. To support the stronger claim, we must revisit the readings permitted by the VP-ellipsis construction.

As mentioned earlier with respect to (31) and (32), the interpretation of elided verb phrases (VPs) can produce an ambiguity between strict and sloppy readings, as illustrated in

(15b) repeated below as (50a).

50a) *Marcus* loves *his* mother and Milton does too.

b) ...and **Milton** loves **his** mother too.

c) ...and Milton loves *his* mother too.

Earlier, we focused on the sloppy reading of (50a) represented in (50b), but there is, of course, a strict reading whereby Milton loves Marcus's mother, as illustrated in (50c). However, if *Marcus* and *his* are assumed to be coconstrued, then the reading for the second conjunct can *only* be strict or sloppy - it cannot be a *third party reading*. That is to say, the second conjunct cannot be interpreted to mean that Milton loves a mother who is neither his own or Marcus'. It is typically said of such cases that the interpretation of the elided portion of the second conjunct must satisfy a parallelism requirement with respect to some closely similar antecedent VP, i.e., *loves his mother* in this case. Part of that requirement is that the pronoun that is part of the ellipsis must either be part of a copied dependency, or else get its value directly from the pronoun in the first conjunct. This is as close as we get to a linguistically required coconstrual rule, incidentally, and even in this case, there is more than one possible value that can be assigned.

Now that the basic phenomenon is clear, we can address the issue of how the strict reading arises. It is typically said in most accounts of ellipsis, that the sloppy reading recapitulates the dependency relation in the antecedent VP, but that the strict reading copies a reading from the first conjunct that is "merely coreferent", not dependent, between *Marcus* and *his* (see for example Grodzinsky and Reinhart (1993)) This seems wrong on two counts. The first is that Preferred Covaluation (a version of which Grodzinsky and Reinhart assume) tells us that if the first conjunct allows dependent identity to express coconstrual, then it is dependent reference that must be employed - there should be no ambiguity in the first conjunct. This requirement goes to the heart of Evans' critique of Lasnik's theory. A retreat from this position would be to say what is copied in the VP ellipsis construction is the *reference* or *value* for *Marcus* in the first conjunct. However, reference is the wrong notion, as section 5.0 will show, and Preferred Covaluation tells us that coconstrual must arise by dependency if possible.

In other words, the strict reading should be thought of as an identity dependent reading connecting the pronoun in the antecedent directly to the elided but interpreted pronoun. This is possible on my account, for which dependency relations can extend across sentences. Thus both strict and sloppy readings can arise from dependent-identity relations without hypothesizing an ambiguous interpretation for the coconstrual in the antecedent sentence, or introducing rules of coconstrual that rely on any other relation but dependent identity.

#### **4.0 The Irrelevance of Speaker Intentions and Enforced Coreference**

Up to this point, I have not introduced any linguistic rule that refers to structure in order to restrict covaluation, unless the covaluation in question is one of dependent identity. Coconstrual, apart from the use of inherently dependent terms (as in the case of reflexives that respect Principle A) and the requirements of parallelism, is never required as a matter of linguistic form. If coconstrual is posited to hold between two nominals, however, the interpretation of the coconstrual relation is mandated by linguistic principles such as the FTIP, the Independence Principle, Pragmatic Obviation and Preferred Covaluation. In the case of quantifier-bound pronouns, semantic necessity requires that the coconstrual take on a certain interpretive force (and then the Scope Principle must be satisfied). Where principles appeal to linguistic structures, as the FTIP, the Independence Principle, and the Scope Principle, properties of syntactic form must be respected and influence the interpretation of coconstruals accordingly. However, coconstrual is never fully blocked. In the cases where Pragmatic Obviation applies, coconstrual is possible if it overcomes expectations on noncovaluation, but whether or not covaluation holds is not determined by the grammar. In this respect I am arguing for a theory of coconstrual that Evans would have regarded as pragmatic.

Evans (1980:353) believes he has an argument against such a pragmatic theory based on the existence of *E-type* readings for pronouns. He presents the following two sentences, which are of a type originally pointed out by Geach (1962).

51) John owns *some donkeys* and feeds *them* at night

52) Every villager owns *some donkeys* and feeds *them* at night

Evans points out that *them* in (52) couldn't possibly refer to any particular set of donkeys (different owners own different donkeys), but that it is not a bound variable either (i.e., it is not the case that there is some set of donkeys such that everyone owns them and feeds them at night). The relevant reading is the E-type reading, which he is arguing could not arise by any pragmatic assignment of a value for *them* that happened to correspond to *some donkeys*. Evans proposes a "Fregean" substitution rule as the linguistic rule that must be appealed to achieve an E-type interpretation for (52) such that substituting any particular villager for *every villager* will yield sentences like (51). What is more important for our concerns is what he makes of this state of affairs (I have adjusted the example numbers to match mine):

...the Fregean treatment presupposes that there is an interpretation of the pronoun in (52) on which its reference is determined by linguistic rule, and not by "considerations relating to situation, communicative intention, and the like" [Evans is quoting Chomsky 1976b, K.S] ... the intention of the person who utters the quantified sentences is germane to the interpretation of that utterance, for we must know whether or not he uttered the pronoun as governed by the hypothesized rule rather than with the intention of referring to some salient group of donkeys.

The reference to "some salient group of donkeys" is, for our purposes, no different than an interpretation of *them* that has nothing to do with donkeys, supposing, in the case of (52), that only people with donkeys can get to the refugee camp to feed the refugees, where *them* = the refugees. The contention is that the speaker's intention to communicate the E-type reading must be known by his addressees if the addressee is to correctly interpret the pronoun (insuring that each *x* who satisfies a singular sentence like (51) feeds all the donkeys he owns).

While it is true that the addressee must have a linguistic rule or algorithm, whatever that linguistic device is, that insures that the E-type reading will be restricted in the proper way, there is no need for the addressee to know what the speaker intends in order to know what an E-type reading of (52) would be if the speaker happened to intend that meaning. The point I am making is that anyone listening to (52) need only know, as a matter of linguistic form, that one possible

interpretation among others is the E-type interpretation. Thus Chomsky's (1976b) appeal to "considerations relating to situation, communicative intention, and the like" which apply to choose among the possible readings here, but no linguistic rule need appeal to the speaker's intentions in any way. This is exactly parallel to the line I have taken for quantifier bound interpretations - if a pronoun is coconstrued with a quantifier, then it must be interpreted as a bound variable and satisfy the Scope Principle, but no linguistic rule *requires* an otherwise independent pronoun to be a bound variable.<sup>17</sup> In short, whatever account of the E-type reading one appeals to,<sup>18</sup> it appears that this distinction between what linguistic form permits and what speakers intend can be maintained.

Perhaps one more example, this one involving Pragmatic Obviation, may be of use in establishing the disconnect between what linguistic form makes possible and what a speaker may intend. It is not hard to concoct a situation wherein speaker intention *could not* be relevant to the set of anaphoric interpretations a given sentence is permitted to have for someone unaware of the speaker's intentions. Imagine that I am at the beach, sitting behind a rock. Albert, whom I know nothing of, strolls along alone on his morning walk, but I don't see him. I suddenly hear him musing "That man is hiding behind John's rock!" Now I can take this to mean that Albert sees someone behind a rock he takes to be the one that John owns or that somehow has something to do with John. Since Albert is alone, registering his observation, his remark is not addressed to anyone - that is to say he is not intending to communicate a message to someone who does not know what he intends by what he says. Now suppose in saying this, Albert is identifying the person behind the rock as John, since that rock is the place where he was told that John was likely to be found - in other words, hiding behind John's rock is how one is to identify John (as in the coat example (27c)). I know none of this. I don't even know if I am the person that Albert sees behind the rock he associates with John. In short I know nothing about Albert's intentions, but I do know on the basis of what he says and my linguistic competence that I should not expect *John* and *that man* to be covalued. If I knew all that Albert did, I would have a completely different expectation, but that is not a matter of linguistic form.<sup>19</sup>

From this perspective, if someone intends to use anaphora in a sentence to communicate a message, then at minimum that would-be communicator must respect the restrictions on what a listener can linguistically take a sentence to mean. Short of using linguistically marked bound anaphora (e.g., reflexives), it is incumbent on the communicator to provide enough context, or bring enough of the context to bear, to help the listener light on the meaning the communicator intends. Linguistically, the intended coconstrual is not assured without that context.<sup>20</sup>

One final clarification is in order, however, if it has not been clear already. When I speak of *coconstrual interpretations* that are or are not possible, I am not presuming that formal restrictions on coconstrual interpretations are providing a complete interpretation of the sentence that could be used to determine, in a given context, whether the utterance containing a possible coconstrual is true or not. A complete interpretation of a sentence, including extralinguistic factors, such as assignment of values to all of the pronouns, will have to respect the restrictions formal grammar imposes, but formal grammar is not responsible for assigning these values. This does not change the logic of my critique of Evans' account of E-type interpretations, however. Formal grammar does not require speaker intentions to compute whether such a reading is possible or not. Assignments of value to the pronouns will be necessary to determine which of the possible interpretations permitted by formal grammar corresponds to the one the speaker meant in a given context, but one does not need to know what a speaker means to apply the part of 'the rule' that gives a particular interpretation.

## **5.0 The Expanded World of Identity Readings**

It may strike some as odd that I have avoided expressing the coconstruals I speak of as instances of *coreference*, sticking mostly to descriptions of coconstrual that I characterize as covaluation or dependent identity. The reason for this apparent circumlocution is that most coconstruals do not necessarily involve coreference, and some of the cases of bound readings or obviation I have discussed cannot be said to involve coreference or noncoreference at all.

First of all, I set aside some cases that might come directly to mind, namely, those where

the antecedent is itself a mythical entity. Thus *Pegasus turned his head* may not be said to be coreference if *Pegasus* does not refer, but I am not interested in such cases, which do not involve any mismatch between the value for *Pegasus* and the value assigned to *his* on the coconstrued reading. The cases I have in mind all involve a kind of mismatch between terms that still holds under coconstrual.

For example, the readings in (53) all involve what I call *proxy*<sup>21</sup> readings, whereby the dependent is some sort of representative token of the identity of its antecedent. A sample of the range of proxy relations includes likeness in (53a,b), where *he* refers and *she* refer to the wax statues of Fidel and Marlene (53a) or people wearing the costumes representing Fidel and Marlene in (53b); author/work (53c), where *he* refers to Grisham's writings, and player/vehicle (53d,e) (all discussed in more detail and with references in Safir (2004a:112-114)):

- 53a) As they strolled through the wax museum, *Fidel* could not help thinking that *he* would have looked better in a uniform and **Marlene** could not help thinking that **she** would have looked better without one.
- b) The masquerade ball was a bit disconcerting. It seemed to *Marlene* that everywhere *she* looked, either *her* nose was too long and *her* chin too weak.
- c) *Grisham* claims that *he* is even more suspenseful in Swahili.
- d) After *her* last shot, *Alice's* ball was close to the gate, or it was until the Red Queen knocked *her* into the bushes.
- e) *Patton* realized that *he* would be vulnerable to a flanking movement.

Most speakers permit (53e) to be true even if Patton is directing his army (*he*) from a thousand miles away. As Jackendoff (1992), who was the first to note the wax museum cases, points out, proxy cases show that coconstrual is not necessarily about coextension or any normal sense of coreference.

Now we can test to see if proxy readings are a variety of coconstrual that shares the same properties as those that Lasnik's noncoreference principle (Chomsky's Principle C) applies to.

54)\**He* thinks *Yeats* reads better in English than Swahili.

Whether or not (54a) describes Yeats' own opinion of his reading abilities, or it describes a proxy situation, such that Yeats is expressing an opinion about how his work is experienced in English and Swahili, we have an expectation that *he* and *Yeats* are not covalued - the FTIP prefers a pronoun, blocks a dependent interpretation, and then Pragmatic Obviation requires an expectation on noncovaluation. To say that *he* and *Yeats* are not coreferent under the proxy interpretation would tell us nothing since under that interpretation they are not coreferent to begin with. Indeed under Lasnik's noncoreference principle, coconstrual between *he* and *Yeats* should not be odd at all. Moreover, it appears that the relevant covaluation can be ameliorated in the same way that Evans argued Lasnik's cases could.

55a) Everyone thinks *Yeats* reads better in Swahili.

b) Even *Yeats* thinks *Yeats* reads better in Swahili.

In this instance, the subordinated *Yeats* in (55b) seems to depend on the previous mention of *Yeats* in discourse, thus permitting the proxy interpretation. However, it does not seem likely that any notion of coreference worth the name could be rehabilitated to account for these usages.

One might try to argue that proxy interpretations are merely elliptical expressions or stand-ins such that the proxy *Yeats* stands for *Yeats' poetry* and the proxy *his* stands for *his/poetry*, in which case Chomsky's Principle C would distinguish the cases in the usual way. However, if the syntax is simply sensitive to the expanded interpretation of the stand-in, why are animate singular pronouns used? *Yeats says it reads better in Swahili* does not give us an anaphoric reading where *it* refers to *Yeats' poetry*, nor would *Yeats says they read better in Swahili* referring to *his poems*. Using real ellipsis we can show that the use of inanimate pronouns or pronouns that don't match in number cannot support bound readings.

56a) *Yeats* says he reads better in Spanish and so does Lord Dunsany.

b) *Yeats* says it reads better in Spanish and so does Lord Dunsany.

c) *Yeats* says they read better in Spanish and so does Lord Dunsany.

A sloppy reading is possible for (56a), such that Lord Dunsany says Lord Dunsany's poems read



better in Spanish, but sloppy readings are not possible for (56b,c). The view that proxy pronouns are substitutions for descriptions containing dependent pronouns would not lead us to choose animate number-matching pronouns over inanimate non-number-matching ones. The view that these proxies are dependent identities offers a more tractable account: matching identities require matching pronouns.

Contrary to the position I take here, Jackendoff (1992, 1997:55, 73-74) proposes that rules of grammar must have access to whether or not a proxy reading is intended, an argument not unlike Evans' E-type pronoun argument, and one that can be answered the same way. If proxy readings are necessarily dependent readings, such that the proxy depends on its animate antecedent, as argued in Safir (2004a:112-114), then they should succeed wherever dependent-identity readings are not blocked (by FTIP or the Independence Principle), but where those principles reject dependency, as in (54), the reading fails. This accounts for the asymmetries of interpretation in (57a,b) ((56a) from Jackendoff (1997)).

57a) *Ringo fell on himself.*

b) In Michaelangelo's time, *David* indicated how handsome *he* was thought to be.

Imagine that Ringo is in the wax museum, stumbles, and falls down on the statue of him that was just about to be hoisted into place. As Jackendoff points out, this reading is strained, but it contrasts sharply with a reading that is not at all possible; (57a) cannot describe a situation whereby someone bumps into the statue of Ringo such that it falls on Ringo the person. If the inanimate proxy must depend on an animate antecedent, then the reading where the statue falls on Ringo is precluded by the Independence Principle, since the proxy would c-command its antecedent. A similar set of judgments hold of (57b), which could be a statement made by one David who is enamored of himself, but it cannot be a statement about how the statue of David indicated how handsome the biblical David was. Cases like (57a) and (57b) do not violate FTIP, since the reflexive and the pronoun are the most dependent forms available, respectively.

Thus it appears that there is no need to appeal to some level of conceptual relations between proxies and their antecedents or to speaker intentions to know if one term is permitted

to be identity dependent on another. A dependent interpretation is available if it is not blocked linguistically, and the patterns of proxy interpretation respect these limits. Moreover, in cases where proxy interpretation is blocked because dependency is blocked, the interpretive result is not noncoreference or even expected noncoreference, but rather one of expected noncovaluation.

Another sort of coconstrual relation that the term 'coreference' seems inadequate to characterize is what I call the *guise* relation, illustrated by the contrast in (58) (a version of a class of examples first discussed by Lakoff (1968)).

58a) A: If I were you / would hate *myself*.

B: I do.

b) A: If I were you, / would hate *me*.

B: I do.

Examples like (58a) support a bound interpretation, such that B's response means that B is a self-hater. While not every speaker is comfortable with the acceptability of A's remark in (58b), it is clear that B's response can only mean that B hates A, not that B is a self-hater. Thus, even though both *I* and *me* refer to the speaker, *I* is most easily taken to refer to A in the shoes (having the perspective) of speaker B, while *me* is presumably A in his own shoes. The reason that A's statement in (58b) is less than fully acceptable is that it violates FTIP (*myself* is a more dependent form that could appear in the same syntactic position), and the failure of dependency does not permit a bound reading for the ellipsis in (58b). However, Pragmatic Obviation, which indicates that *I* and *me* should be expected not to be covalued, can be overcome by the fact that the first person requires that every first-person mention by the same speaker must refer to that speaker. In other words, Pragmatic Obviation between *I* and *me* is partially neutralized by the indexicality of person.<sup>22</sup>

The key point about these guise examples, however, is that a dependent identity reading, the self-hater reading, cannot be unblocked by the indexicality of first person, and yet there is an interpretation of (58b) for which coconstrual can still be said to succeed. The coconstrual that

succeeds is a coreferent one in some sense, since the speaker is coextensive with the speaker, but one faces tortured questions about what coextension means when the consciousness of one individual is housed in the perspective of another. These distinctions are not confined to reflexives.

59) If I were any one of you, I would ask the president to give me a pardon.

The bound reading of *me* in (59) is one that might be appropriate in a situation where the president's aides are all guilty of a crime and the speaker (the president's chief of staff) is advising them that they will each need a pardon. The unbound reading in (59) might be salient if the speaker were making a veiled threat; if the president is not prevailed upon to give the speaker a pardon, then the speaker might have a lot to say about the guilt of everyone else in the room. The bound readings in (58a) and (59) require that the identity of the bound form is completely dependent on the interpretation of its antecedent, while the readings that are not bound do not seem to rely crucially on the identity of their antecedent at all.<sup>23</sup> It appears that the identical guise reading requires a dependent-identity relation, and if a dependent-identity reading is not blocked, then the identical guise reading is possible.<sup>24</sup>

There are other interesting cases where coconstrual is not complete even under bound interpretation, but these two are enough to show asymmetries between two terms that must be regarded as covalued.<sup>25</sup> Thus it turns out that there are coconstrual relations between terms that must be at least covalued, even if there is no dependent identity relation between them (as in the unbound reading for first person guises) and there are coconstrual relations which must be dependent identity relations, but where extensional coreference is not possible (proxies bound by animate antecedents).

A variety of weighty semantic questions open up about what the identities covalued by linguistic form consist in such that we can say two identities are the same by one notion of coconstrual and not by another. Indeed for the unbound guise cases, it is not even clear what it means to say that two distinct guises are somehow covalued. My contribution to this question is largely empirical (developed in more detail in Safir (2004a)), but I take these questions to be both

open and very interesting.

## **6.0 Conclusion: Abandoning Coreference**

In order to linguistically evaluate what a sentence is *permitted* to mean (not what it actually means), we do not have to know what a speaker intends to say. Grammar permits us to determine a range of meanings a given coconstrual can have and compute which meanings it cannot have - the rest is not a matter for the grammar at all. In saying so, I am certainly not advocating that it is of no consequence for *anybody* to examine notions of what people intend to accomplish by uttering what they do - doubtless a complete picture of communicative situations requires such a project. I am explicitly arguing that the full interpretation of a sentence is something greater than the result of formal grammar. In other words, I am insisting, as Lasnik and Chomsky do, on a line between formal grammar and the uses to which the products of formal grammar are put.

From this perspective there is no place for the words 'intended coreference' or 'intended reference' in linguistic theory. Once Evans facilitated the distinction between dependent identity and covaluation and once the varieties of identity that can be coconstrued in these ways are distinguished, not even the simple term 'coreference' is viable any longer. Instead we are left with various coconstrual relations between nominals supporting identities. One such relation between nominals, dependent identity, can be blocked by linguistic form, while another, covaluation, can be rendered unexpected, but neither of these linguistically significant coconstrual relations crucially requires extensional equivalence for the referents those nominals may be employed to pick out. It is swimming upstream to legislate against a term so commonplace as 'coreference', so it will likely go on being used in an informal way to describe coconstrual - but no thoughtful use of the term 'coreference' is any longer appropriate in discussions of linguistic form.

## **References**

- Chomsky, Noam. 1971. *Problems of Knowledge and Freedom*. New York: Random House.
- Chomsky, Noam. 1976a. Conditions on rules of grammar. *Linguistic Analysis* 2:303-351.
- Chomsky, Noam. 1976b. *Knowledge of Language*. New York: Pantheon.

- Chomsky, Noam. 1981. *Lectures on government and binding*. Dordrecht: Foris.
- Elbourne, Paul. 2001. E-type anaphora as NP-deletion. *Natural Language Semantics* 9: 241-288.
- Evans, Gareth. 1980. Pronouns. *Linguistic Inquiry* 11: 337-362.
- Fiengo, Robert and Robert May. 1994. *Indices and identity*. Cambridge: MIT Press.
- Fox, Danny. 1998. Locality in variable binding. In *Is the best good enough?*, Pilar Barbosa, Danny Fox, Paul Hagstrom, Martha McGinnis, and David Pesetsky 129-155. Cambridge: MIT Press.
- Grodzinsky, Yosef and Tanya Reinhart. 1993. The innateness of binding and coreference. *Linguistic Inquiry* 24:69-102.
- Heim, Irene. 1993. Anaphora and semantic interpretation: A reinterpretation of Reinhart's approach. Sfs-Report-07-93. University of Tübingen.
- Higginbotham, James. 1983. Logical form, binding and nominals. *Linguistic Inquiry* 14:395-420.
- Higginbotham, James. 1985. On semantics. *Linguistic Inquiry* 16:547-593.
- Hornstein, Norbert. 2001. *Move! A minimalist theory of construal*. Oxford, UK and Malden, USA: Blackwell.
- Jackendoff, Ray. 1992. Madame Tussaud meets the binding theory. *Natural Language and Linguistic Theory* 10:1-31.
- Jackendoff, Ray. 1997. *The Architecture of the Language Faculty*. Cambridge: MIT Press.
- Kayne, Richard S. 2002. Pronouns and their antecedents. In *Derivation and explanation in the minimalist program*. Eds. Samuel David Epstein and T. Daniel Seely, 133-166. Oxford, U.K. and Malden, USA: Blackwell.
- Koopman, Hilda and Dominique Sportiche. 1981. Variables and the Bijection Principle. *The Linguistic Review* 2:139-160.
- Lakoff, George. 1968. Counterparts, or the problem of reference in transformation grammar. Ms., Harvard University. Distributed by the Indiana University Linguistics Club.
- Lakoff, George. 1996. Sorry, I'm not myself today: The metaphor system for conceptualizing the self. In *Spaces, worlds, and grammar*, eds. Gilles Fauconnier and Eve Sweetser, 91-123.

- Chicago: U. of Chicago Press.
- Langacker, R. 1969. On pronominalization and the chain of command. In *Modern studies in English*, eds. W. Reibel and S. Schane, 160-186. Englewood Cliffs, New Jersey: Prentice Hall.
- Lasnik, Howard. 1976. Remarks on coreference. *Linguistic Analysis* 2: 1-22. (Reprinted in Lasnik, 1989, 90-109).
- Lasnik, Howard. 1989. *Essays on Anaphora*. Dordrecht: Kluwer.
- Lees, R. B. and Edward S. Klima. 1963. Rules for English Pronominalization. *Language* 39:17-28.
- Levinson, Stephen. 1987. Pragmatics and the grammar of anaphora: a partial pragmatic reduction of binding and control phenomena. *Journal of Linguistics* 23:379-434.
- Levinson, Stephen. 1991. Pragmatic Reduction of the Binding Conditions Revisited. *Journal of Linguistics* 27:107-162.
- Lewis, David. 1979. Attitudes *de dicto* and *de se*. *Philosophical Review* 88:513-543.
- Postal, Paul. 1971. *Crossover Phenomena*. New York: Holt, Rinehart and Winston.
- Reinhart, Tanya. 1983a. Coreference and bound anaphora: A restatement of the anaphora questions. *Linguistics and Philosophy* 6:47-88.
- Reinhart, Tanya. 1983b. *Anaphora and semantic interpretation*. Chicago: University of Chicago Press.
- Reinhart, Tanya. 1999. Strategies of anaphora resolution. OTS working paper, Utrecht Institute of Linguistics.
- Reuland, Eric. 2001. Primitives of binding. *Linguistic Inquiry* 32:439-492.
- Safir, Ken. 1984. Multiple variable binding. *Linguistic Inquiry* 15:603-638.
- Safir, Ken. 2003. Anaphors, movement and coconstrual. In *Grammar in Focus - Grammatik i Fokus Vol. II, Festschrift for Christer Platzack*, 18 November, 2003. Eds. Lars-Olaf Delsing, Cecilia Falk, Gunlög Josefsson and Halldór Sigurðsson, 283-293. Lund: Department of Scandinavian Languages, Lund University.

- Safir, Ken. 2004a. *The Syntax of Anaphora*. Oxford and New York: Oxford University Press.
- Safir, Ken. 2004b. *The Syntax of (In)dependence*. Cambridge: MIT University Press.
- Safir, Ken. To appear a. On person as a model for logophoricity. In *Proceedings of the Fourth World Congress of African Linguistics*. Ed., Akin Akinlabi.
- Safir, Ken. To appear b. Person, pronouns and operators. *Italian Journal of Linguistics*.
- Sag, Ivan. 1976. *Deletion and Logical Form*. Doctoral dissertation, MIT.
- Schlenker, Phillippe. 2000. *Propositional Attitudes and Indexicality: A cross-categorical approach*. Revised doctoral dissertation, MIT.
- Wasow, Thomas. 1979. *Anaphora in Generative Grammar*. Ghent: E. Story-Scientia.
- Williams, Edwin. 1977. Discourse and logical form. *Linguistic Inquiry* 8:103-139.

**Notes\***My thanks to José Luis Bermudez for giving me the opportunity to comment on the work of a philosopher I have long admired (but never met). Thanks also to both José Luis Bermudez and Stephen Neale for some very useful comments that helped me figure out how to present what I had in mind to say. The usual disclaimers apply.

1. In Evans (1977) reprinted in Evans (1985:115), he explicitly states: "I am interested in the quantifiers and pronouns that occur in the English natural language (and many others, I bet). I am not interested in the quantifiers and devices of back references which exist in logically possible languages which we might speak but do not." Few linguists would describe their interest in natural language, as opposed to artificial languages, differently.

2. Of course this is not the main point of Evans' article, which is to defend a particular view of the semantics of pronouns based on a Fregean approach to interpretation.

3. Hornstein (2001) and Kayne (2002) have recently revived the idea that coconstrual should be achieved by syntactic movement operations, but they extend this to every case of coconstrual (even cross-sententially, according to Kayne). I refute this proposal in Safir (2003).

4: Discussion of this fact may be traced in the philosophical literature from Russell to Geach, Stephen Neale informs me (personal communication).

5: Reinhart (1999:7) in particular avoids the use of the term 'coreference' in favor of

'covaluation', a view I will expand upon here, but she regards dependent coconstrual and covaluation as mutually exclusive.

- i. Covaluation:  $\alpha$  and  $\beta$  are covalued iff neither A-binds the other and they are assigned the same value.

My account differs in that I take covaluation to hold where dependent identity does, but I also take covaluation to hold in many cases where dependent identity does not. In this respect my treatment is more like that of Fiengo and May (1994), but for a critique of their theory see Safir (2004b:14-18).

6. Although I often discuss 'an interpretation of a sentence' or 'coconstrual interpretations' in the course of my discussion, it is important to know that I do not mean an interpretation of a sentence in the way some philosophers and semanticists do, according to which all value assignments to pronouns have been made such that the proposition expressed by the sentence can be evaluated as true or false. The patterns of coconstrual I am speaking of concern interpretations of sentences that are permitted by formal grammar under certain assignments of value to nominal terms that would result in covaluations (whatever the value happens to be). The output of formal restrictions on coconstrual applying to a given sentence is not, then, a fully interpreted sentence, but a partially interpreted one. Although this point is not explicitly made in most linguistic discussions of anaphora, I believe it is widely assumed. I return to this issue at the end of 4.0.

7. Whether the dependency relation that arises between a singular term and a pronoun is or is not logically prior to that between a quantifier and a pronoun is not an issue that plays any role in my discussion. All that matters for my account is that the relations in question are dependent identity relations in both cases.

8. Although *her* can depend on *she* in (19), notice that the Independence Principle would not permit *she* to depend on *her* because *she* c-commands *her*. This conclusion would appear to be harmless here, but I shall return to it once the consequences of blocked dependent readings are more clear.



9. Although I reject both coreference and noncoreference as appropriate terms that characterize the effect Lasnik's principle is supposed to induce, one can argue on narrower grounds that disjoint reference is also not the appropriate relation. For arguments against disjoint reference, see Safir (2004a:45-48) and references cited there.

10. Evans allows that names might be intended coreferent when one c-commands the other, but he is silent about the status of cases like *If everyone considers Oscar incompetent then it can come as no surprise that even **he** considers **Oscar** incompetent*. These are less acceptable than the repeated name cases, but seem to permit of the same basic account.

11. This is a matter I will reintroduce as Preferred Covaluation in the next section, but interested readers should consult Safir (2004a:25-34) and Safir (2004b:chapter 2) for references and discussion of some problems with previous formulations.

12. A more technical discussion would discuss the role of Rule H, which is an additional condition on the pattern of dependencies introduced by Fox (1998). Rule H insures dependence of x on the first c-commanding y under coconstrual, unless y is specified in some way that prevents x from depending on it. The role of Rule H is expanded and further justified in Safir (2004b).

13. With respect to copular constructions, Lasnik allows that *intended* coreference may be at play instead of just coreference, presumably because he is taking the position that *the morning star* is intended by the utterer to have a distinct referent from *the evening star* for the purposes of making the point that they are the same. This does not seem plausible to me either, if this is what is intended.

14. Naturally it would be attractive to derive Principle A from deeper principles. Reuland (2001) makes an interesting, very technical proposal to this effect. I do not endorse his particular proposal, however, because, unlike Reuland, I do not think that A-movement and Domain D coincide. See Safir (2004a:148-156).

15. The competitive approach to anaphora embodied in the FTIP should not be understood in Gricean terms, as in the approaches of Reinhart (1983a) with respect to Principle

C effects, and Levinson (1987, 1991) with respect to Principle B effects. Reinhart relies on speaker intentions to refer, which I am arguing against as unnecessary and misleading, and Levinson does not distinguish dependent reference from coreference, and hence does not adequately distinguish pragmatic and syntactico-semantic effects. For discussion and argumentation against these proposals, see Safir (2004a:61-66).

16. The view that dependent anaphora is preferred to express covaluation is proposed by Reinhart (1983b:167) who puts it as follows: "When syntactically permitted, bound anaphora...is the most explicit way available in the language to express coreference...So when coreference is desired, this should be the preferred way to express it." The force of her proposal is quite different than it is in my account. She assumes that dependent readings are only possible under c-command, a view rejected here. Also, the notion that bound readings are more explicit is mistaken; *Even Oscar thinks Oscar is incompetent* is more explicit for the strictly covalued reading than *Even Oscar thinks he is incompetent*, since the use of a pronoun allows a bound reading as well as a strictly covalued one. See Safir (2004a:32-33). As pointed out in fn.4, Reinhart' (1999) usage of 'covaluation' is incompatible with bound anaphora, so she has to state this preference in a rather different way.

17. As mentioned with respect to Principle A, there are forms that must have antecedents and that may be inherently dependent, such as English *himself*. Linguists have explored these forms and their readings in some detail. See Safir (2004a) for extensive discussion and references.

18. None of this diminishes the importance of Evans' insights about E-type pronouns, which opened a new vein of discovery that has been exploited for the last 25 years in the linguistics literature. See, for example, Elbourne (2001) for a recent discussion with references. It is not necessary for what I have to say to commit myself to a particular analysis of E-type pronouns. The non-scope-based account of dependency offered here permit us to say that E-type pronouns are dependent on an antecedent that does not have scope over them, whether that antecedent is taken to be a definite description of some sort or something else.

19. This is, in effect, just an exemplification of Chomsky's (1971:19) remark (concerning views of Russell): "Though consideration of intended effects avoids some problems, it seems to me that no matter how fully elaborated, it will at best provide an analysis of successful communication, but not of meaning or of the use of language, which need not involve communication or even the attempt to communicate."

20. Compare the approach in the text with the language of intended coreference as employed by Reinhart (1983a:76, 1983b:167), who proposes i. and ii.

- i. *Speaker's strategy*: When a syntactic structure you are using allows bound-anaphora interpretation, then use it if you intend your expressions to corefer, unless you have some reasons to avoid bound-anaphora.
- ii. *Hearer's strategy*: If the speaker avoids the bound anaphora options provided by the structure he is using, then, unless he has reasons to avoid bound-anaphora, he didn't intend his expressions to corefer.

The hearer does not need to know what the intentions of the speaker are to know how a given coconstrual is permitted to be interpreted. I have reinterpreted the "unless he has reasons to avoid bound-anaphora" locution as a predisposition not to expect anaphora where the FTIP blocks a dependent interpretation. Reinhart's view that all bound readings that are blocked result in some sort of obviation is one I reject. Grodzinsky and Reinhart (1993) and Reinhart (1999) present more nuanced versions of this idea, but the reliance on the view that bound reading are always licensed by c-command, which I also reject here, underlies these proposals as well.

21. I do not use the term 'proxy' to mean "pronoun of laziness" as Evans occasionally does.

22. If we use third person examples and violate FTIP, it is much harder to recover any relevant meaning.

- i. If Bob were Bill, *he* would believe that *he* was smart.
- ii. If Bob were Bill, *he* would believe that \**Bob* was smart.
- iii. If Bob were Bill, *he* would hate *him*.

If Bob lacks the sort of confidence that Bill has in him, then i. could be used to say that Bob, if he could see himself through Bill's eyes, would see better how smart he, Bob, is. Alternatively, i. could have a bound reading: suppose that Bill is very self-confident, and then if Bob were just like Bill, then Bob would be self-confident about his intelligence too. However ii. disfavors both of these readings, since the dependent reading is blocked, and indexicality does not help to overcome the expectation of noncovaluation for the unbound reading (for most speakers). To my ear, similar blocked coconstruals hold for iii., though of course the bound coconstrual is permitted with *himself* in place of *him*, (speakers differ as to whether there is a strict coconstrual for iii. with *himself* - see the discussion of c-antecedency in Safir (2004a:107-111)) This suggests that the consciousness of Bob in Bill is enough to block the relevant covaluation when FTIP induces Pragmatic Obviation - a rather subtle distinction, to be sure, but something that the notion noncoreference does not begin to address.

23. Evans (1980:359) assumes that first and second person pronouns are like proper names in that they cannot be referentially dependent. Examples like (59) show that Evans was wrong about first person (and presumably second person) pronouns. By contrast, Schlenker (2000) assumes that all first person pronouns are bound by null operators. I argue against this proposal in Safir (to appear a, b).

24. This is not what Lakoff (1996:98) makes of this. He proposes a conceptual distinction between the "subject", which represents one's subjectivity, and the "self", which roughly corresponds to one's body/place and claims "the use of anaphoric pronouns is based on this split." However, this can't be about the shape of the anaphoric morpheme *myself*, since the same sort of reading is possible for a first person pronouns in (59). Moreover, it is only metaphorically about body/place, since most people share the intuition that (59) could be telepathed between aliens lacking corporeal form. What the right metaphor for guises is is interesting, but whatever it turns out to be, it appears that complete identity of guises is only possible where dependent readings are, and this possibility is all the syntax has to contribute.

25. Evans (1985:98-99) mentions pronouns bound by the subjects of attitude verbs as

inadequately treated by the term 'coreference.' As Lewis (1979) has pointed out, the agent of an attitude can stand in a special relation to self-reference, depending on whether he is aware that he is referring to himself. For example (i) could describe a moment in Oedipus' life after he has unknowingly married his mother, Jocasta.

i. *Oedipus* thought *his* mother was beautiful

The description *his mother* referring to Jocasta is not a use of the pronoun *his* that reports what Oedipus knew about himself in relation to his biological mother, but there is a *de se* usage for which (i) could describe Oedipus' opinion of his stepmother's appearance, that is, the person that he understands to be his only mother. This distinction is linguistically relevant, in that some languages employ a morphologically distinctive pronoun to indicate that the *de se* reading is required. For discussion of morphologically induced *de se*, see Safir (to appear a,b) and references cited there.