Overcoming Empirical Challenges for an Extended Approach to Condition C

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Various empirical phenomena have been regarded as problematic for accounts of Condition C, including the behavior of epithets, focus constructions, and sentences where a bound R-expression can be used for the purpose of disambiguation. I argue that these problematic data can be accounted for within the competition-based framework proposed by Safir (2004), with slight modifications, including the adoption of an explicit focus semantics and of Dubinsky and Hamilton's (1998) analysis of epithets as antilogophoric pronouns. In particular, I argue that several phenomena claimed to be pragmatic by Schlenker (2005) can be accounted for syntactically.

Keywords: binding, Condition C, focus, epithets

1 Introduction

Binding Condition C,[1] as originally formulated in Chomsky 1981, states that R(eferential)-expressions must be free. That is, in contrast to pronouns and anaphors, R-expressions must not be A-bound by any element, where binding is defined as in (1).

(1) A binds B if and only if
  a. A c-commands B, and
  b. A and B are coindexed.

Condition C rules out all of the ungrammatical sentences in (2); in each case, there is an R-expression, *John*, which is bound by a coreferential nominal, either a pronoun or another R-expression.

(2) a. **He* likes *John*.
  b. **John* likes *John*.
  c. **He*/**John* thinks that Sally knows that you like *John*.

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[1] I refer to it as ''Condition C'' rather than ''Principle C'' (and similarly with A and B) because I do not take it to be a principle of the grammar.

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Notice that here, and throughout, I depart from the traditional convention of denoting coreference with coindexation, instead using italics to represent coreference, following Safir (2004). This is partially for convenience, but also because the ontological status of indices in the syntax has been questioned, particularly within Minimalist approaches to binding (e.g., Reuland 2011). The elimination of indices from narrow syntax goes back at least to Chomsky 2000, where it is noted that the Inclusiveness Condition disallows the introduction of indices in the course of syntactic derivations. I dispense with indices, to avoid giving the impression that indices are present in the theory I adopt, but it should also be noted that italics are used strictly notationally, and also do not correspond to any objects in the narrow syntax.

While the traditional formulation of Condition C from Chomsky 1981 accounts for the basic data, it still leaves much room for improvement. First, the traditional formulation of binding theory merely stipulates the three binding conditions. Ideally, a theory of binding would provide an explanatory account of the binding conditions, and perhaps also reduce the three conditions to a single principle or set of principles. Second, the traditional formulation of Condition C leaves many facts unaccounted for—either facts that appear to be incompatible with Condition C, or facts similar to those in (2) that the traditional formulation does not account for.

Of course, these issues are not limited to Condition C, but characterize binding theory in general. However, in this article I limit myself to discussion of Condition C, in part because an analysis of all three binding conditions is beyond the scope of the article, but also because research on Condition C has been relatively scarce, compared with research on Conditions A and B.

I deal with the following apparent exceptions to Condition C, each of which has been analyzed as involving an R-expression c-commanded by its antecedent. First are epithets, as in (3a) from Schlenker 2005:386, which behave like exceptions to Condition C on the assumption that they are R-expressions. Second, standard Condition C violations can be rescued if either the R-expression or its antecedent is focused, as in (3b–c). Finally, bound R-expressions are allowed if they perform a disambiguating function, as in (3d), from Schlenker 2005:387.

(3) a. *John* is so careless that *the idiot* will get killed in an accident one of these days.
b. Only *JOHN* likes *John*.
c. *John* only likes *JOHN*.
d. *A linguist working on binding theory* was so devoid of any moral sense that *he* forced a physicist working on particles to hire *the linguist*'s girlfriend in his lab.

Section 2 gives a brief overview of approaches to Condition C that have been taken since Chomsky 1981 and introduces the specific theoretical framework that I will be exploring in more detail: a competition-based syntactic theory proposed by Safir (2004). It also introduces a number of empirical issues that are given a pragmatic treatment by Schlenker (2005), but are not considered in detail by Safir. In the following sections, I discuss those empirical issues and show that most of the relevant data can be accounted for within the syntactic approach I adopt, without the need to resort to pragmatic principles. Section 3 discusses epithets, which have often been treated as exceptions to Condition C and whose behavior Safir's proposed theory does not account for. I show that a modification of Safir's approach successfully closes this gap. Section 4 discusses

focus constructions, which have also been treated as exceptions to Condition C. Although Safir does not consider focus constructions in detail, I show that their properties can be explained in Safir's framework by incorporating certain assumptions. Section 5 discusses constraints on backward anaphora in discourse, one of the phenomena accounted for in Schlenker's pragmatic theory. I show that discourse-level effects, although superficially similar to Condition C effects, are a separate phenomenon, which should not be dealt with as part of binding theory. Finally, section 6 discusses cases where bound R-expressions are allowed because they perform a disambiguating function. I show that these cases can be dealt with in a principled way in Safir's framework. Section 7 concludes.

2 Previous Approaches

In section 1, I briefly discussed the traditional formulation of binding theory and its empirical and conceptual issues. In this section, I discuss some of the successors to the traditional formulation, and their own empirical and conceptual issues.

One of the first theories to take an approach substantially different from the traditional formulation of Condition C is Grodzinsky and Reinhart's (1993). The core of their proposal is the so-called Rule I, which is stated in (4).

(4) NP A cannot corefer with NP B if replacing A with X, X a variable A-bound by B, yields an indistinguishable interpretation.

Furthermore, an NP is a variable if and only if it is empty and A-bound or it is A-bound and lacks lexical content.

In (2a), for example, *John* cannot corefer with *he* because it can be replaced with *himself* without affecting the interpretation. *Himself* counts as a variable under the definition given above, since it is A-bound by *he* and lacks lexical content (as stipulated by Grodzinsky and Reinhart). The same argument applies to (2b–c).

The basic intuition behind Rule I is that bound variable anaphora is preferred over simple coreference (i.e., coreference without a bound variable reading), all else being equal. Thus, simple coreference is only permitted if it is semantically distinguishable from bound variable anaphora. More generally, this can be thought of as a prohibition against what Lasnik (1976) calls ''accidental coreference'' (similar notions are discussed in Partee 1978, Evans 1980, and Reinhart 1983). The idea is that we can distinguish two types of coreference: coreference resulting from bound anaphora, and accidental coreference, in which two nominals are independently assigned the same reference. In (2a), for instance, *he* and *John* accidentally corefer, assuming that *he* gets its reference from an assignment function, if *John* also gets its reference independently, rather than being a bound variable. Condition C, then, follows from the assumption that bound anaphora is preferred over accidental coreference. Note that the c-command requirement of Condition C also follows: accidental coreference is allowed in cases where there is no c-command relationship between two nominals, because coreference resulting from bound anaphora is impossible. For example, accidental coreference is allowed intersententially, where an R-expression and a pronoun are used in separate sentences with the same reference.

The accidental coreference approach has the advantage of not needing to stipulate Condition C as a primitive of the theory. However, it should be mentioned that Grodzinsky and Reinhart still have to stipulate versions of Conditions A and B as primitives of the theory, since Rule I says nothing about the competition between different types of variables (pronouns and anaphors), nor the distinction between referential pronouns and pronominal variables.

Approaches to Condition C based on accidental coreference can be thought of as part of a broader class of competition-based theories. Rule I, for example, rules out bound R-expressions not because they are inherently ill-formed, but because there is a better alternative—namely, a bound variable. This is the central intuition behind competition-based theories: bound R-expressions are allowed in principle, but they are ungrammatical because they are not the best possible way of expressing a given meaning, according to some metric.

Competition-based approaches are particularly attractive for Conditions A and B, because they predict the sort of complementarity that is found between pronouns and anaphors. The traditional formulation of binding theory states that anaphors must be locally bound (Condition A), while pronouns must be locally free (Condition B), which predicts a complementary distribution for the two types of nominals. Again, however, the complementarity is merely stipulated, since Conditions A and B are stated separately as primitives. On the other hand, a competition-based account might say, for example, that anaphors are preferred over pronouns, and pronouns are therefore only used when anaphors are unavailable, thus deriving the complementarity that we observe. Of course, the notion of availability must be specified in such an approach; if the availability of anaphors is unrestricted, then pronouns would be predicted to never be possible. Typically, this takes the form of restricting the availability of anaphors outside of a local domain by assuming some form of Condition A.

However, competition-based approaches to complementarity are often resisted because they predict strict complementarity; in other words, there should be no contexts where both pronouns and anaphors are allowed, nor contexts where neither is allowed. But such contexts do appear to exist. Lasnik (1989) points out that neither a pronoun nor an anaphor is allowed in (5).

(5) a. *We like me.
    b. *We like myself.

However, proponents of competition-based approaches argue that (5a–b) can be ruled out for independent reasons, so derived complementarity can be preserved.[2] These approaches include those of Levinson (1987, 1991), Burzio (1989, 1991, 1996), and Safir (2004). Hellan (1988) also takes a similar approach in his analysis of Norwegian, but he deals only with Conditions A and B. Levinson takes a pragmatic approach, which I will not discuss here, though Safir (2004) discusses it in detail and provides empirical arguments against it.

Burzio (1989, 1991, 1996) takes a syntactic approach, building on the intuition that Condition B effects can be derived by assuming that anaphors are obligatory when they are available (where

[2] For example, Safir rules out (5a–b) with a principle restricting the distributivity of coargument dependencies. See section 3.3.1 of Safir 2004 for a detailed discussion.

their availability is restricted by Condition A), and Condition C effects can be similarly derived by assuming that pronouns are obligatory when they are available. Burzio characterizes the different classes of nominals in terms of referential specification: anaphors are maximally underspecified, while R-expressions are maximally specified. He then proposes a principle called Referential Economy (Burzio 1991:94), given in (6).

(6) A bound NP must be maximally underspecified referentially.

Note that Burzio must still assume a form of Condition A. Once Condition A is assumed, Condition B and Condition C follow from (6). Pronouns will never be locally bound, because a more underspecified form (an anaphor) is available in the same position. R-expressions will never be bound at all, because either a pronoun or an anaphor will be available in the same position, depending on whether or not the antecedent is local.

Safir's (2004) approach is very similar in spirit to Burzio's, though the details differ. It is also the approach I will consider in the most detail, since it is the framework I will be using in this article. The centerpiece of Safir's theory, and the equivalent of Burzio's Referential Economy, is a principle he calls the *Form to Interpretation Principle* (FTIP), given here (Safir 2004:74).

(7) *Form to Interpretation Principle (FTIP)*
If
a. X c-commands Y [where X and Y are nodes on a tree structure],
b. z is the lexical form or string that fills Y,
c. w is a single form more dependent than z, and
d. both w and z could support the same identity dependent interpretation if Y were exhaustively dependent on X,
then (the referential value for) Y cannot be interpreted as identity dependent on X.

Some definitions are in order.

(i) *Referential value* can be thought of in terms of indices; A and B have the same referential value if they have the same referent, or if they would be coindexed in a theory that uses indices.

(ii) A is *identity-dependent* on B if A and B have the same referential value, and the value of A is dependent on the value of B. For our purposes, we can say that A is identity-dependent on B if A and B have the same referential value and B binds A, but see Safir 2004 for a more nuanced discussion.[3] For example, in (8a–b) the pronoun and the anaphor, respectively, are identity-dependent on an R-expression, assuming that they are bound by the R-expression. Notice that, if *him* is accidentally coreferential with *John* in (8a) because they are assigned their reference independently, then *him* is not identity-dependent on *John*. Safir's system allows accidental coreference, a point I will return to below.

[3] The proper semantic treatment of identity dependency in this framework is unclear, because it is complicated by phenomena like proxy and guise readings. For this reason, I do not give a definition for identity dependency in terms of standard semantic formalisms, although one would be necessary in order to make predictions about more complicated cases, such as those involving quantifiers. See chapter 4 of Safir 2004 for discussion of the complications in the notion of identity dependency.

(8) a. *John* thinks that Sally likes *him*.
b. *John* likes *himself*.

Another important point to note is that I consider the identity-dependent interpretation to be the same, for the purposes of (7d), only if the interpretation of the entire sentence is the same; that is, it is not enough for the interpretation of the nominal to be the same. In most cases, this distinction doesn't matter, since the FTIP only considers the effect of changing the nominal, while keeping the rest of the sentence constant. However, in the discussion of focus constructions in section 4, we will see a case where the distinction matters.

(iii) A is *exhaustively dependent* on B if A is a string, the entirety of which is directly dependent on B. In (9), for example, *his doctor* is dependent on *every patient*, but not exhaustively dependent, since *every patient* binds *his*, but not *doctor*. Nonetheless, *his doctor* is nonexhaustively dependent on *every patient* because it includes *his*.

(9) *Every patient* loves *his* doctor.

(iv) Finally, the use of the term *more dependent* in (7) implies that there is a scale of dependency, such that some elements are inherently more dependent than others (similar to the scale of referential specification in Burzio's theory). Safir gives the dependency scale for English as in (10).

(10) pronoun-SELF ≫ pronoun ≫ R-expression
(Safir 2004:76)

Intuitively, this scale is derived from the fact that anaphors necessarily get their meaning from another nominal and R-expressions necessarily get their meaning independently, while pronouns optionally get their meaning from another nominal and may also get their meaning independently (from the extralinguistic context). However, the dependency scale is different for different languages, and in general it is derived from the generalization in (11).

(11) Between any two anaphors, the more referentially specified one is more dependent, whereas among nonanaphors, the more referentially specified one is less dependent.

A form is more referentially specified if the possibilities for its reference are more restricted on the basis of its lexically specified content.[4]

[4] Safir (2004:87) motivates (11) as follows:

> Elements that can be independent are more easily identified the more specific they are, hence potentially independent elements are less dependent on context, the more content they have (speakers have more information to exploit as they look for an antecedent). By contrast, elements that can't be independent and have more specific readings tend to occur in a subset of the environments a more general term can appear in, other things being equal.

Notice that (11) does not adjudicate between pronouns and anaphors; pronouns are simply always less dependent than anaphors (regardless of their referential specification), because pronouns are potentially independent while anaphors are not. Thus, for example, the German anaphor *sich* is more dependent than the pronoun *ihn*, even though *ihn* is lexically marked for gender and number while *sich* is not.

Presumably, some form of (11) is encoded as a principle of Universal Grammar. Crosslinguistic variation in the dependency scale would then arise from differences in lexical inventories, where the referential properties of nominals are encoded by features. The crosslinguistic implications of this approach are beyond the scope of the current article, but should be formalized in detail.

However, one crosslinguistic point is worth mentioning here. Lasnik (1989) argues that in languages like Thai and Vietnamese, Condition C violations are induced when the binder is a pronoun, but not when the binder is another R-expression. But the FTIP predicts that the identity of the binder should not matter, so Lasnik's data are incompatible with Safir's approach. Nonetheless, Lasnik's data have been questioned. Narahara (1995) collected data from Thai and Vietnamese informants showing that R-expressions binding R-expressions do induce Condition C violations, and Larson (2006) did the same for Thai. These authors show convincingly that the data are more complicated than previously thought, so Thai and Vietnamese are not necessarily incompatible with Safir's approach.

Just like Burzio (1989, 1991, 1996), Safir must assume some form of Condition A. He formalizes Condition A as a principle he calls *Local Antecedent Licensing*, given in (12). (I will continue to refer to it as Condition A.)

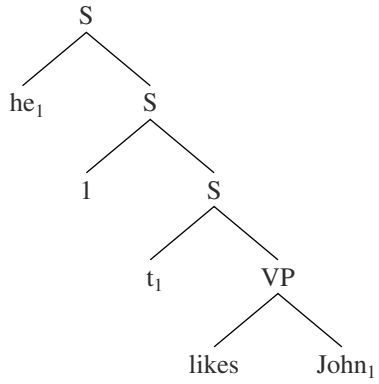
(12) a. *Local Antecedent Licensing (LAL)*
An anaphor must be c-anteceded in domain D.
b. *C-antecedent*
X is a c-antecedent of Y if X c-commands Y and either Y is dependent on X, or X is dependent on Z and Y is dependent on Z.
c. *Domain D*
The domain for X is the minimal maximal extended projection containing X and a sister to X.
(paraphrased from Safir 2004:77)

By *extended projection*, Safir means a projection dominating a lexical head: V, N, A, C, or P. Specifically, following Grimshaw (1991), an extended projection consists of a lexical head and its projection, as well as all the functional projections directly above the lexical projection. Dependency is defined the same as identity dependency in (7). The details of LAL will not become important until later; for now, the important point is that Condition A is assumed to be grammatically specified.

Now we have enough background to see how Safir derives Conditions B and C. It is accomplished in essentially the same way as in Burzio's theory. Anaphors are used whenever they are available, and their availability is restricted by Condition A. Therefore, pronouns can never be c-anteceded in domain D (i.e., they can never be locally bound). R-expressions can never be c-anteceded at all, since they can always be replaced with a more dependent form (either an anaphor or a pronominal) without affecting the interpretation.

For concreteness, consider how the FTIP applies to (2a) in a Heim and Kratzer (1998)–type semantics.

(13) *Simplified LF for (2a)*



The DP node containing *he* c-commands the DP node containing *John* at LF. Assume that *he* binds *John*. Then *John* receives an index identical to that of *he* (say, 1). An assignment function *g* maps the index 1 onto the individual denoted by *John*, so *he* and *John* receive the same referent by *g*. So, *John* is identity-dependent on *he*. The same would be true if *John* were to be replaced by *himself*. Since *himself* is more dependent than *John* by (10), the structure in which *he* binds *John* is illicit.

Strictly speaking, however, we have not ruled out Condition C violations. The FTIP disallows R-expressions from being identity-dependent on nominals that c-command them, but it does not prevent them from being accidentally coreferential, since, as mentioned above, the definition of identity dependency does not include accidental coreference. Safir assumes that pronouns and R-expressions can be freely assigned referents so that nothing prevents an R-expression and a c-commanding pronoun, for example, from being independently assigned the same reference. Thus, Safir introduces a second principle, which he calls *Pragmatic Obviation* (Safir 2004:50).

(14) *Pragmatic Obviation*
If FTIP does not permit y to be interpreted as dependent on x, then x and y form an obviative pair.

By *obviative pair*, Safir means that *x* and *y* cannot have the same reference.[5] In combination with the FTIP, then, Pragmatic Obviation ensures that Condition C violations are ruled out. Accidental coreference is no longer permitted in cases where the FTIP rules out an identity-dependent interpretation. Safir calls it Pragmatic Obviation because he argues that it can be overruled by pragmatic considerations in certain situations. The sensitivity of Condition C to pragmatic considerations will be discussed in some detail in sections 4–6.

Let us see how the FTIP and Pragmatic Obviation account for the basic data in (2). In (2a–c), the c-commanded R-expression *John* can be replaced by another nominal without affecting the

[5] This ignores cases of partially overlapping reference, which are not crucial for our purposes. See Safir 2004:sec. 2.5 for a discussion of these cases.

interpretation: in (2a–b), it can be replaced by an anaphor, while in (2c), it can be replaced by a pronoun, since Condition A disallows an anaphor in that position. In each case, the c-commanded nominal can be identity-dependent on the subject. Since both pronouns and anaphors are higher on the dependency scale than R-expressions, the FTIP disallows the c-commanded R-expression from being identity-dependent on the subject. In each case, Pragmatic Obviation then mandates that the two nominals form an obviative pair, so accidental coreference is disallowed and there is no way for the nominals to corefer.

There are several reasons for choosing to adopt Safir's theory over other competition-based approaches. First, it involves a syntactic principle (the FTIP) that is clearly separated from a pragmatic principle (Pragmatic Obviation), thus maintaining modularity while also remaining flexible enough to account for the sensitivity of binding to c-command as well as its sensitivity to pragmatic phenomena. I will give an empirical argument in favor of the separation of syntax and pragmatics at the end of section 4. Second, it is more highly articulated and worked out than most theories of binding, so it makes clear predictions about many phenomena. For an extensive discussion of Safir's theory in comparison to other theories, see Safir 2004.

For these reasons and others, I adopt Safir's theory as a framework, although most of the arguments I make could, in principle, be adapted to other competition-based approaches, particularly Burzio's.

Before moving on to discuss the data, I would like to introduce one more relevant approach, that of Schlenker (2005). Schlenker's theory can also be thought of as a competition-based approach, although unlike other competition-based approaches, it only seeks to derive Condition C, rather than assuming one of the binding conditions and deriving the other two. However, it is similar to Safir's theory, in that it builds on the intuition that the sentences in (2) are ungrammatical because *John* could be replaced with either *him* or *himself* without affecting the interpretation.

The pragmatic principle that Schlenker proposes, called *Minimize Restrictors!*, is given in (15).

(15) *Minimize Restrictors!*
A definite description *the A B* [where the order of *A* vs. *B* is irrelevant] is deviant if *A* is redundant, i.e. if:
(i) *the B* is grammatical and has the same denotation as *the A B* (= Referential Irrelevance), and
(ii) *A* does not serve another purpose (= Pragmatic Irrelevance).
(Schlenker 2005:391)

To illustrate how the principle works in general, Schlenker uses the definite descriptions in (16).

(16) a. #the short American president
b. the stupid American president

(16a) is deviant, assuming that there is only one American president salient in the discourse. By (15), this is because *the American president* has the same denotation as (16a), and in a typical context, drawing attention to the fact that the American president is short serves no pragmatic

purpose (although it is possible to imagine contexts in which it would). On the other hand, (16b) is acceptable even though it has the same denotation as *the American president*, because the inclusion of *stupid* serves a pragmatic purpose: namely, it contributes information about the speaker's attitude toward the American president.

Schlenker argues that this principle can also explain Condition C effects. By (15), (2a–c) are deviant because *John* could be replaced by either *him* or *himself*, both of which have the same denotation as *John*, and because the use of a full R-expression serves no pragmatic purpose. Note that this analysis crucially assumes that pronouns and anaphors are short definite descriptions (i.e., definite descriptions that contain less referential content than R-expressions). Schlenker defends the treatment of pronouns as short definite descriptions on the basis of paycheck sentences and donkey sentences (in which pronouns are often analyzed as definite descriptions), and the analysis of pronouns in general as definite descriptions has many precedents in the semantic literature (see, e.g., Cooper 1979, Heim 1990, Elbourne 2005).

Most importantly for our purposes, Schlenker claims that Minimize Restrictors! can explain several facts not accounted for by the traditional formulation of Condition C, or by other competition-based theories. First, an R-expression can be bound if it serves a disambiguating purpose that could not be served by a pronoun, as in (3d), repeated here.

(3) d. *A linguist working on binding theory* was so devoid of any moral sense that *he* forced a physicist working on particles to hire *the linguist*'s girlfriend in his lab.

Here, although *the linguist* has the same denotation as the pronoun *he*, it is allowed because it serves the pragmatic function of disambiguation; the pronoun would be ambiguous as to whether it referred to the linguist or the physicist.

Second, as is well-known, epithets appear to be immune to Condition C, as in (3a), repeated here.

(3) a. *John* is so careless that *the idiot* will get killed in an accident one of these days.

Under this account, (3a) is straightforwardly parallel to (16b): although *the idiot* has the same denotation as *he*, it serves the pragmatic function of giving information about the speaker's attitude toward John.

Finally, Minimize Restrictors! can explain Condition C–like effects at the discourse level, as in (17).

(17) #*He* entered. *John* sat down.

Since it is a purely pragmatic principle, Minimize Restrictors! does not make direct reference to c-command, so it applies intersententially just as it applies within sentences.[6]

[6] Schlenker indirectly derives c-command effects by adopting a particular assignment function, which rules in sentences like (ia) while ruling out sentences like (ib).

(i) a. *Peter*'s friend likes *Peter*.
b. **Peter* likes *Peter*.

For details of the formalization, see Schlenker 2005.

Thus, Schlenker claims that his analysis accounts for the canonical data as well as the data in (3d), (3a), and (17), which are not dealt with by other theories. Indeed, Safir does not discuss the disambiguation cases or discourse-level effects, and he only briefly discusses epithets. However, I will argue that these data can be incorporated into Safir's framework fairly straightforwardly. As mentioned earlier, an attractive feature of Safir's theory is its division of labor: the FTIP is a syntactic principle, while Pragmatic Obviation is a pragmatic one (or rather, one that is sensitive to pragmatics). Thus, there are two ways to incorporate new data into the framework, broadly speaking. First, the predictions of the FTIP can be changed—for example, by arguing that an independent principle of the grammar restricts the availability of a certain form in a given position. Second, it can be argued that Pragmatic Obviation can be overruled by pragmatic factors. In the following sections, I will argue that Schlenker's data can be incorporated into Safir's theory, restricting myself to the former approach when possible and only arguing for overrides of Pragmatic Obviation when necessary. In some cases, my analysis will build on Schlenker's general approach, although I will not be adopting the Minimize Restrictors! principle. Under my account, the basic data in (2) will be accounted for in the same way as in Safir's unmodified theory.

Note that Schlenker must assume both Condition A and Condition B. Assuming Condition A alone would predict (18a) to be grammatical, since *him* is less restricted than *himself*, so it cannot be ruled out by Minimize Restrictors!. Assuming Condition B alone would predict (18b) to be grammatical, although the reasoning is less straightforward. Since (18d) is ambiguous, the use of a more restricted definite description should be allowed if it disambiguates. If Condition A is not operative, then the use of *himself* does not disambiguate, because (18c) is not ruled out. So an even more restricted definite description—namely, an R-expression—is necessary for disambiguation. However, in the absence of a focus reading, (18c) is ungrammatical.

(18) a. **John* likes *him*.
b. **John* thinks Bill likes *John*.
c. **John* thinks Bill likes *himself*.
d. *John* thinks Bill likes *him*.

It might be argued that Schlenker's approach is preferable to Safir's, because it is simpler (it relies only on a single principle, which is independently motivated) and accounts for a wide variety of data with only a few additional assumptions. This is a reasonable argument if Condition C is being considered in a vacuum, but if we are considering binding theory as a whole, I would argue that Safir's approach is actually simpler. As just discussed, Minimize Restrictors! accounts only for Condition C effects, so Schlenker has to take Conditions A and B to be primitives of his theory. On the other hand, the FTIP and Pragmatic Obviation account for Condition B effects and Condition C effects, taking only Condition A to be a primitive of the theory. Since, as I will show in the following sections, Schlenker's data turn out not to be problematic for Safir's approach, I will not be adopting Schlenker's approach. However, Schlenker's approach is also a promising one, given that it takes advantage of an independently needed principle; if the pragmatic approach could be extended in a similar manner to cover binding phenomena in general, and not just Condition C, it might be preferable to a syntactic approach.

3 Epithets

Recall that the problem presented by epithets is that they can be bound under certain circumstances, which violates Condition C under the intuitively natural assumption that epithets are R-expressions. Safir, for instance, adopts that assumption, and the treatment of epithets as R-expressions goes back to Lasnik 1976, where examples similar to (19) are given as evidence that epithets cannot be bound.

(19) **Annie* claimed that *the rascal* didn't know anything about the prank.

Assuming that epithets are R-expressions makes the prediction that they should never be able to be bound, all else being equal. But, as we will see shortly, there are cases in which epithets can be bound. Instead of treating epithets as R-expressions, then, we should attribute the ungrammaticality of (19) to something other than Condition C. This is the approach taken by Dubinsky and Hamilton (1998). These authors argue that epithets are antilogophoric pronouns—that is, pronouns that ''must not be anteceded by an individual from whose perspective the attributive content of the epithet is evaluated'' (p. 689). If we take this definition literally, we would actually expect (19) to be grammatical under the reading where the speaker considers Annie to be a rascal, contrary to what is the expected interpretation, given that Annie does not consider herself to be a rascal (which, indeed, is the more pragmatically plausible reading). Instead, we should interpret the antilogophoricity condition as in (20).

(20) *Antilogophoricity condition on epithets*
An epithet in the sentential complement of an attitude verb cannot corefer with the subject of that verb.[7]

This is in line with the behavior of logophoric pronouns in languages like Ewe, in which a logophoric pronoun is used only if the pronoun is in the sentential complement of an attitude verb and it corefers with the subject of that verb (see Clements 1975). On this account, (19) is ungrammatical not because *the rascal* is bound at all, but because it is bound by the subject of an attitude verb, such that the sentential complement that contains the epithet is asserted from the perspective of that antecedent.

A reviewer points out that a sentence like (21) can support the Chinese *ziji*, which is standardly treated as a logophor, but it nonetheless does not display the antilogophoricity effect that (19) does.

(21) *John*'s letter makes *the bastard* out to be a hero.

This example shows that there is crosslinguistic variation in what counts as a logophor; for the purposes of English epithets, *the bastard* is not logophoric to *John*. This is why the antilogophoric-

[7] A reviewer points out that objects of attitude verbs also appear to induce antilogophoricity effects.

(i) #I said to *Annie* that *the rascal* should go home.

This example is not perfect, though it is still much better than the cases where the epithet corefers with the subject of an attitude verb, such as (19). Nonetheless, it may be the case that, at least for some speakers, the antilogophoricity condition should make reference to both subjects and objects of attitude verbs. In that case, Corazza's (2005) idea about *de re* versus *de se* reports, described in the main text, could explain why subjects induce stronger violations than objects.

ity condition is formulated as in (20). *John* is not the subject of the attitude verb in (21)—rather, *John's letter* is—so (21) is correctly predicted to be grammatical.

The antilogophoricity condition becomes clearest on the basis of examples like the following ((22a–b, d–e) are from Dubinsky and Hamilton 1998:688):

(22) a. *It was said by *John* that *the idiot* lost a thousand dollars on the slots.
b. It was said of *John* that *the idiot* lost a thousand dollars on the slots.
c. *It was said by/of *John* that *John* lost a thousand dollars on the slots.
d. **John* told us of a man who was trying to give *the idiot* directions.
e. *John* ran over a man who was trying to give *the idiot* directions.
f. **John* ran over a man who was trying to give *John* directions.

In particular, (22b) and (22e) show that epithets can be bound, meaning they are at least in some cases not subject to canonical Condition C. (22f) shows that the epithet in (22d–e) is indeed c-commanded by *John*, since an R-expression in the same position triggers a Condition C violation. This suggests that the ungrammaticality of (19) is due not to a Condition C violation, but to a violation of the antilogophoricity condition.

Corazza (2005) argues that the antilogophoricity condition is a result of the fact that epithets typically contribute to the expression of a *de re* ascription, but in a sentence like (22a), the epithet is embedded in what is typically a *de se* report. According to Corazza, epithets are typically *de re* because they represent the viewpoint of the speaker, rather than the viewpoint of anyone else; for example, (22e) does not imply that John considers himself to be an idiot, only that the speaker considers John to be an idiot. On the other hand, if *the idiot* were to be replaced by a nonepithetic pronoun, *him*, in (22d), the most natural interpretation would be the *de se* reading. Corazza argues that it is this conflict that leads to the antilogophoricity condition.

Since Safir treats epithets as R-expressions, it follows that they are lower on the dependency scale than pronouns. Under Safir's account, (19) is ungrammatical because *the rascal* can be replaced with a pronoun, *she*, in accordance with the FTIP. However, (22d) and (22e) are incorrectly predicted to be similarly ungrammatical. In fact, Safir mentions in a footnote (p. 247n5) that his treatment of epithets will have to be revised in light of Dubinsky and Hamilton's data, but he does not undertake such a revision.

In order to account for all of the relevant data within Safir's framework, we need not modify the essentials of the theory at all; we only need to adopt Dubinsky and Hamilton's analysis of epithets as antilogophoric pronouns. Under this analysis, epithets are more dependent than R-expressions and as dependent as other types of pronouns. Thus, (22b) is grammatical because *the idiot* is the most dependent form available in its position, since an anaphor in that position would not be locally bound. (19) and (22a) are allowed by the FTIP for the same reason, but are ruled out by the antilogophoricity condition.

Instead of treating epithets as pronouns, another logical possibility is to take a Schlenkerian approach and posit that the use of epithets can overrule Pragmatic Obviation, because they have the pragmatic function of providing information about the speaker's attitude toward whoever is being discussed. On this approach, (22b) is grammatical because the pragmatic information provided by the epithet exempts it from Pragmatic Obviation, meaning that *John* and *the idiot* are allowed to corefer even though *the idiot* cannot be bound by *John* by the application of the FTIP.

(19) and (22a) are similarly exempt from Pragmatic Obviation, but they are ruled out by the antilogophoricity condition if Dubinsky and Hamilton's analysis is adopted (and indeed, Schlenker himself adopts their analysis).

The Schlenkerian extension of Safir's approach runs into an empirical difficulty, though. (23a) (= (3a)) is an example given by Schlenker (2005:386), which is correctly ruled in by the Schlenkerian modification of Safir's approach. But consider (23b), which sharply contrasts with (23a) in terms of grammaticality.

(23) a. *John* is so careless that *the idiot* will get killed in an accident one of these days.
b. **John* is so careless that *he* will kill *the idiot* in an accident one of these days.

(23b) is not a problem for Schlenker's own analysis, since Schlenker says nothing about Condition B, and presumably he considers something like the traditional formulation of Condition B to be operative, which would rule out (23b). In Safir's analysis, though, Condition B is reduced to the FTIP. If epithets are exempt from Pragmatic Obviation, then there should be no conditions on the distribution of epithets, aside from the antilogophoricity condition. In particular, *the idiot* should be allowed to accidentally corefer with *he* in (23b), even though it is not allowed to be identity-dependent on *he* by the FTIP. Therefore, (23b) is a problem for the Schlenkerian extension of Safir's analysis.

Supplementing Safir's analysis with Dubinsky and Hamilton's, then, is clearly preferable to supplementing it with Schlenker's: this move accounts for the ungrammaticality of (23b), and it avoids positing an exception to Pragmatic Obviation. It is also the simpler approach overall: it requires only adopting Dubinsky and Hamilton's analysis, whereas the latter approach requires adopting Dubinsky and Hamilton's antilogophoricity condition as well as assuming that epithets are exempt from Pragmatic Obviation. Note also that there is independent evidence for treating epithets as pronouns: see, for example, Aoun, Choueiri, and Hornstein 2001, which treats epithets as pronouns on the basis of their ability to act as resumptive elements in Lebanese Arabic.

There is an empirical complication with this approach, though. Safir argues that epithets behave like R-expressions with respect to variable binding, on the basis of the following data (Safir 2004:48):

(24) a. *Every bastard*'s mother thinks *the bastard* is crazy.
b. **Every bastard* raised *the bastard*'s hand.

If *the bastard* is a pronoun, then both (24a) and (24b) should be grammatical. On the other hand, treating *the bastard* as an R-expression gets the facts right: (24a) is grammatical because there is no c-command relation between *every bastard* and *the bastard*, while (24b) is ungrammatical by the FTIP.

The problem is even more general than that. Unlike English possessive pronouns, a possessive epithet cannot be locally bound at all.[8]

[8] Ezra Keshet (pers. comm.) points out an example of a possessive epithet that appears to be locally bound (see (i)), but the possessive epithet seems to be possible here only because it is in a parenthetical phrase.

(i) *John*, and *the bastard*'s dumb friends, are all failing algebra.

(25) a. **He* raised *the bastard*'s hand.
b. **Jacob* raised *the bastard*'s hand.
c. **The bastard* raised *the bastard*'s hand.

The antilogophoricity condition cannot rule out (24b) or (25a–c), because in each case the binder and the bindee are in the same clause. The relevant generalization seems to be that possessive epithets are antisubject-oriented: they cannot be coreferential with the subject of the same clause. Unlike Safir, I will assume that possessive epithets are antisubject-oriented pronouns, rather than R-expressions. Compare the behavior of possessive pronouns in Russian (data from Avrutin and Wexler 1992:266).

(26) a. **Raisa* pomnit *eë* dom.
Raisa remembers her house
'Raisa remembers her house.'
b. **Raisa* pokazala Ol'ge *eë* dom.
Raisa showed to.Olga her house
'Raisa showed Olga her house.'

((26b) is grammatical under the reading where Raisa showed Olga Olga's house.) In order to account for the data in (24) and (25), then, we do not need to assume that epithets are sometimes R-expressions; instead, we can assume that English distinguishes between two types of possessive pronouns: standard possessive pronouns, and possessive epithets, which behave like Russian possessive pronouns by having an antisubject orientation. Note that the English equivalent of (26b), replacing the standard possessive pronoun with a possessive epithet, behaves similarly: (27a) is much worse than (27b).

(27) a. **Raisa* showed Olga *the idiot*'s house.
b. ?Raisa showed *Olga the idiot*'s house.

By incorporating this assumption into Safir's approach, it is possible to explain the data in (25) while still maintaining the analysis of the data regarding nonpossessive epithets.[9]

What exactly distinguishes standard possessive pronouns and possessive epithets, syntactically? One possible approach is to adopt the account proposed by Hestvik (1992), which draws on the theory of LF movement of reflexives first presented in Lebeaux 1983. Hestvik argues that

[9] A reviewer suggests that the claim that possessive epithets are antisubject-oriented is insufficient to explain the contrast between (i) and (ii).

(i) *Mary warned *Bill* about *the bastard*'s arm.

(ii) Mary warned *Bill* about *his* arm.

I judge (i) to be grammatical, but the speakers I surveyed showed variation. Interestingly, I judge (iii) to be grammatical, and the speakers I surveyed either found both (i) and (iii) to be grammatical, or found them both to be ungrammatical.

(iii) ?Mary warned *Bill* that Annie hated *the bastard*.

For speakers who find (i) and (iii) ungrammatical, it is clear that the ungrammaticality of (iii) cannot have to do with the FTIP, since *the bastard* is not in competition with an anaphor. Perhaps those speakers have a stronger version of the antilogophoricity condition, where an epithet in the complement of an attitude verb cannot corefer with either the subject or the indirect object of the attitude verb.

pronouns, as well as reflexives, move at LF. However, heads move to Infl, while XPs move to the Spec position of their governor. (Adapting this proposal to a Minimalist framework, we can say that heads move to T, while XPs move to the Spec position of their binding domain, under the definition of binding domain adopted by Safir, repeated below.) In addition, the X-bar status of pronouns in different languages is parameterized. In English, pronouns (including standard possessive pronouns) are XPs, while in Russian, they are heads. In Russian, then, possessive pronouns move to T at LF, while English possessive pronouns remain in situ (assuming they are base-generated in Spec,NP). As discussed below, I will assume that there are in fact two types of possessive pronouns in English (normal possessive pronouns and possessive epithets) and that the antisubject orientation of possessive epithets as in (25) is explained by LF movement to T, as in Russian.

Now, recall the definition of the binding domain used by Safir in characterizing Condition A, or LAL: the domain for *x* is the minimal maximal extended projection containing *x* and a sister to *x*. In the LF for a Russian sentence such as (26a), the possessive pronoun will be in T, and its binding domain will therefore be CP. Thus, an anaphor is available in the same position, since the NP in Spec,TP would bind it (i.e., Condition A would be satisfied). By the FTIP, then, (26a) is ungrammatical.

Now consider the English equivalent to (26a).

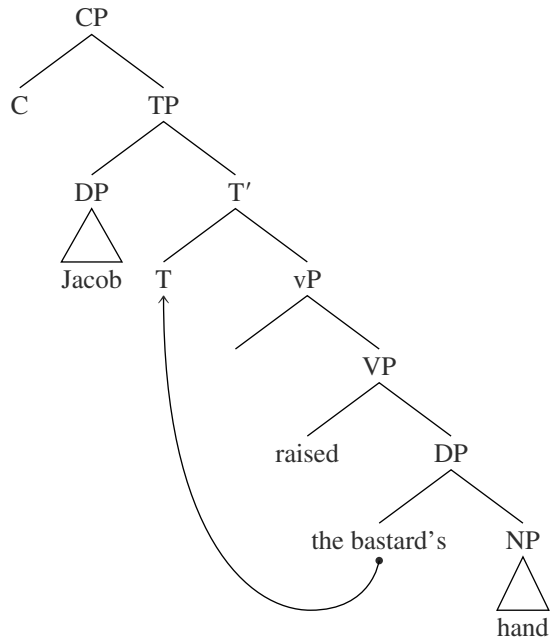
(28) *Raisa* remembers [$_{DP}$ *her* house].

Here, *her* remains in situ. Its binding domain is the DP *her house*, so if it were to be replaced with an anaphor, Condition A would be unsatisfied, since there is no binder within the DP. Therefore, (28) is grammatical according to the FTIP.

If we assume that possessive epithets are heads in English,[10] unlike other possessive pronouns, then they will move to T at LF, leading to the same antisubject orientation displayed by Russian possessive pronouns, thus accounting for the data in (24) and (25). In the tree structure for (25b) in (29), for example, *the bastard's* moves to T, so its binding domain is the TP. An anaphor is available in T, since it would be bound by *Jacob*, so (25b) is ruled out by the FTIP.

[10] The assumption that possessive epithets are heads is counterintuitive, since they are clearly syntactically complex. However, the idea of syntactically complex heads is not unprecedented—incorporation structures and lexically derived compounds are both complex structures that are often taken to be heads in English. We might assume that the components of a possessive epithet structure have undergone a Morphological Merger–type process, creating a complex head. The details of this approach would need to be developed in further work.

(29) *Tree structure for (25b)*



Thus, we can explain the behavior of epithets within Safir's framework by treating epithets as antilogophoric pronouns (for which there is independent evidence) and by assuming that possessive epithets are antisubject-oriented.[11]

4 Focus

As has frequently been observed, focused NPs seem to be exceptions to Condition C, both as binders and as bindees. In (30a–c), the R-expression *John* is bound by a focused R-expression. (I denote focused constituents using capital letters.)

(30) a. Only *JOHN* likes *John*.
b. Even *JOHN* hates *John*.
c. (Nobody thinks *John* is polite.) *JOHN* thinks *John* is polite.

[11] An alternative possibility is to derive antisubject orientation through competition. If we assume that possessives like *his* are ambiguous between pronouns and anaphors—that is, *himself's* gets spelled out as *his*—then (25b) is ruled out by the FTIP, since a possessive anaphor, *his*, is available in the same position with the same interpretation. The anaphoric reading of *his* would not rule out the pronominal reading of *his*, since they have different interpretations. Note that this analysis requires maintaining Lebeaux's (1983) proposal regarding LF movement of reflexives to T, since if the reflexive remained in situ in these cases, its binding domain would be the DP, and it would be unavailable by Condition A. After movement to T, its binding domain would be the CP, ensuring that it is bound by the subject. I leave for future research detailed consideration of which analysis of antisubject orientation is correct.

In (31a–c), the focused R-expression *John* is bound by an unfocused R-expression.

(31) a. *John* only likes *JOHN*.
b. *John* even likes *JOHN*.
c. (*John* doesn't like anybody.) *John* likes *JOHN*.

Safir argues that the sentences in (30) and (31) are grammatical because Pragmatic Obviation is overruled. Specifically, he argues that Pragmatic Obviation can be overruled when what is typically unexpected is taken to be expected. For instance, in (30b), the focus operator *even* indicates that John would normally be among the least likely individuals to hate John; nonetheless, (30b) asserts that John in fact does hate himself.

If (30) and (31) are grammatical because Pragmatic Obviation has been overruled, we would expect them to be ruled out by the FTIP; in other words, we would expect that replacing the bound R-expression with an anaphor or pronoun would result in the same interpretation. As discussed in section 4.1, however, that is not the case at least for (30a). Therefore, I deal with focus cases in a different way than Safir. I argue that the cases in (30) can be accounted for without stipulating that Pragmatic Obviation is overruled, and in fact that the data in (30) actually follow straightforwardly from Safir's account with minimal additional assumptions. My approach to the cases in (31), on the other hand, incorporates Schlenker's insights into Safir's account, and relies on the overruling of Pragmatic Obviation.

4.1 Focused Binders

My account of focused binders relies on the idea that sentences like those in (30) are not in true competition with any other sentences for the purposes of binding theory, since replacing the c-commanded R-expression with an anaphor or pronoun would not yield the same interpretation. The basic observation behind this approach is due to Reinhart (see, e.g., Heim 1993, Reinhart 2006). Reinhart's intuition is that, in cases like (30), the focused bindee is not in true competition with an anaphor for the purposes of Rule I; the same intuition can be applied to Safir's theory, where the FTIP takes the place of Rule I.[12]

To see how this works, consider (30a). Semantically, the basic purpose of focus is to construct a set of propositions with which the proposition containing the focus is to be contrasted. In (30a), ''*John* likes *John*'' is being contrasted with ''Mary likes John,'' ''Andrew likes John,'' ''Amelia likes John,'' and so forth. Rooth (1992) formalizes this as what he calls the *focus semantic value*, which in the case of (30a) consists of the set of propositions of the form ''*x* likes John.''[13] The

[12] Heim (2007) proposes an alternative analysis: in focus constructions like (30a–c), the higher DP does not actually c-command the lower DP, since it is a sister to *F*, the focus. This approach seems tenable within Reinhart's (2006) framework, although it is unclear how it applies to the FTIP. That is, depending on the interpretation of the FTIP, the lower DP may still be exhaustively dependent on the focus phrase that c-commands it.

[13] Rooth (1992) takes the focus semantic value to include the ordinary semantic value. I differ from him on this particular, so I do not take ''*John* likes *John*'' to be a member of the focus semantic value.

meaning of (30a), then, consists of not only the basic proposition that ''*John* likes *John*'' (what Rooth calls the *ordinary semantic value*), but also the focus semantic value.

Now consider what happens when the c-commanded R-expression in (30a) is replaced with a pronoun or an anaphor. In fact, we only need to consider the anaphor case, since if a pronoun is available in that position with a dependent interpretation, then an anaphor will also be available, and the FTIP will rule out the pronoun. If we replace the R-expression with an anaphor, we get (32).

(32) Only *JOHN* likes *himself*.

The ordinary semantic value of (32) is equivalent to that of (30a), but the two cases differ in their focus semantic value. The focus semantic value of (30a) is the set of propositions of the form ''*x* likes John,'' while the focus semantic value of (32) is the set of propositions of the form ''*x* likes himself.'' Therefore, replacing the R-expression with an anaphor does not result in the same interpretation, and the FTIP does not rule out (30a).[14]

4.2 Focused Bindees

Of course, the account just presented cannot explain the grammaticality of the examples in (31), where the c-commanded R-expression is focused. In these cases, the R-expression can be replaced with an anaphor without affecting the interpretation, even when the focus semantic value is taken into account. Here, we need to appeal to Pragmatic Obviation, since the availability of the anaphor is not in question. I propose that this is a case where Pragmatic Obviation can be overruled, because a sentence like (31a) is structurally parallel to a discourse antecedent in a way that it would not be if the R-expression were replaced with an anaphor.

First, note that (31a) is only felicitous when it contains a discourse antecedent that is a member of the focus semantic value, like the one in (33a). The same is true if the sentence were to contain a focused anaphor instead of an R-expression, as in (33b).

(33) a. *John* doesn't like Mary or Andrew. In fact, *John* only likes *JOHN*.
b. *John* doesn't like Mary or Andrew. In fact, *John* only likes *HIMSELF*.

(33a–b) are felicitous because in each case, the focus semantic value for the second sentence in the discourse is the set of propositions of the form ''John likes *x*,'' and the preceding discourse

[14] There is an empirical complication with this analysis involving certain focus operators, such as *even*, at least for some speakers. Some speakers accept both (ia) and (ib). Crucially, the use of the R-expression *John* or the anaphor *himself* can follow the utterance ''Nobody likes *John*,'' indicating that the focus semantic value is the same in both cases. The current analysis therefore predicts that (ia) should be ruled out by the FTIP.

(i) a. Nobody likes *John*. Not even *JOHN* likes *John*.
b. Nobody likes *John*. Not even *JOHN* likes *himself*.

I leave this problem open. The current analysis can successfully account for those speakers who do not accept (ib), but will have to be supplemented for those speakers who do accept it.

contains two atomic propositions that belong to that set (‘‘John likes Mary’’ and ‘‘John likes Andrew’’). This is the well-known parallelism condition on focus. Notice that the parallelism condition is quite weak. The antecedent need not be directly present, as noted by Rooth (1992) and Fox (1999). For example, Rooth notes that (34) is grammatical, though there is no antecedent of the form ‘‘*x* insulted *y*’’ directly present in the discourse. Rather, ‘‘he called her a Republican’’ entails ‘‘he insulted her,’’ given certain political leanings.

(34) He called her a Republican, and then SHE insulted HIM.

(33a), however, satisfies a stricter parallelism requirement that is not satisfied by (33b). In (33a), the focused sentence itself is structurally parallel to the members of the focus semantic value: it is of the form ‘‘John likes *x*,’’ where *x* is an individual represented by an R-expression. Note that for every member of the focus semantic value, the individual denoted by *x* is representable by an R-expression (‘‘John likes Mary,’’ ‘‘John likes Andrew,’’ etc.). On the other hand, (33b) is of the form ‘‘John likes *x*,’’ where *x* is an individual represented by an anaphor. None of the members of the focus semantic value include individuals that can be represented by anaphors; ‘‘John likes himself’’ is not a member of the focus semantic value, since *himself* by definition cannot refer to Mary, Andrew, or any individual other than John. (33a) exhibits a parallelism that (33b) does not, in that its object is an R-expression, and the object in each member of the focus semantic value can be expressed as an R-expression. (33b) lacks this parallelism, because its object is an anaphor, and none of the members of the focus semantic value have objects that can be expressed as anaphors. I call this stricter form of parallelism *syntactic parallelism*, in contrast to the semantic parallelism that is required of focus constructions. Notice that the semantics of (33a) and (33b) are the same: in both cases, the focus semantic value is ‘‘John likes *x*’’ and the ordinary semantic value is ‘‘*John* likes *John*’’; the difference arises because of the class of nominal used in the syntactic representation of the ordinary semantic value. (33b) is grammatical because it satisfies the FTIP, but (33a) is also grammatical if we assume that Pragmatic Obviation can be overruled for focus constructions that exhibit syntactic parallelism in addition to semantic parallelism. This is a Schlenkerian approach to the problem: broadly speaking, (33a) is grammatical because it accomplishes something that (33b) does not. The assumption is a reasonable one to make, given that focus constructions are known to be sensitive to parallelism requirements. Notice that it is specifically focus constructions that allow syntactic parallelism to overrule Pragmatic Obviation. As we would expect, nonfocus constructions that exhibit syntactic parallelism still display Condition C effects; for instance, ‘‘*John* likes *John*’’ is not grammatical following the assertion ‘‘Mary likes Anne,’’ even though it is syntactically parallel to ‘‘Mary likes Anne’’ in a way that ‘‘John likes himself’’ is not.

This account can help explain the acceptability contrast between (35a) and (35b). As already noted, the standard parallelism condition on focus is quite weak, and the parallel antecedent need not be explicitly present in the discourse. On the basis of that alone, we would expect (35a) and (35b) to have the same status.

(35) a. ?*John* doesn't like most people. In fact, *John* only likes *JOHN*.
b. *John* doesn't like Mary or Andrew. In fact, *John* only likes *JOHN*.

However, (35a) seems worse than (35b). The syntactic parallelism condition could explain that fact. Intuitively, the difference between (35a) and (35b) is that the discourse antecedent in (35b) explicitly uses R-expressions, which is not the case in (35a). The acceptability contrast thus follows naturally from the syntactic parallelism condition.

To summarize, the grammaticality of bound R-expressions in focus constructions can be attributed to two factors. When the focused NP is the c-commanding NP, as in (30a–c), the FTIP is satisfied because replacing the c-commanded R-expression with an anaphor would not result in the same interpretation, taking into account the focus semantic value. When the focused NP is the c-commanded NP, the FTIP is violated, but Pragmatic Obviation is overruled because the use of an R-expression results in a structural parallelism that is not present if an anaphor is used.[15]

The difference between (30) and (31) illustrates an argument in favor of the separation between syntax and pragmatics that is a feature of Safir's approach. In (30a), the bound R-expression is not in competition with an anaphor, since, as I have argued, replacing the R-expression with an anaphor does not retain the original interpretation. In contrast, (31a) has the same interpretation when the R-expression is replaced with an anaphor, and remains grammatical. A purely syntactic competition-based approach (such as the FTIP without Pragmatic Obviation) would predict that two forms in direct competition could never both be grammatical, contrary to fact. The inclusion of a pragmatic component allows us to account for such cases, and the separation of that component from the syntactic component allows us to separate cases like (30) from cases like (31). Of course, this does not argue against a purely pragmatic approach. In principle, a purely pragmatic approach that could successfully account for all the data would be preferable to a combined approach, on grounds of parsimony. However, such an approach has yet to be developed; see section 2 for discussion of the empirical drawbacks of Schlenker's account, and see Safir 2004 for criticisms of other pragmatic accounts, such as Levinson's.

One final note on focus is in order. Early approaches to Condition C attempted to connect the canonical Condition C effects with strong crossover phenomena, as in (36).

(36) **Who* does *she* think John likes *t*?

Strong crossover refers to the fact that (36) cannot be interpreted as asking for which person *x* does *x* think that John likes *x*. This is superficially similar to the Condition C effects, in that the ungrammaticality is due to the fact that an Ā-trace is c-commanded by a pronoun that is bound by the same *wh*-operator that binds the Ā-trace. Thus, if Ā-traces are classified as R-expressions,

[15] Interestingly, focus also seems to obviate the antilogophoricity condition on epithets.

(i) John thinks *Bill*'s a jerk, Mary thinks *Bill*'s a jerk—only *BILL* doesn't think *the idiot*'s a jerk.

Presumably, the explanation for the focus obviation of the antilogophoricity condition is along the same lines as the explanation for the focus obviation of Condition C.

strong crossover effects are derived straightforwardly from the traditional formulation of Condition C.

Two issues with this approach to strong crossover effects have been widely noted. First, it requires a disjunctive definition of R-expressions: nonpronominal, nonanaphoric NPs, and Ā-traces. Second, while focus improves canonical Condition C violations, it does not improve strong crossover violations, as can be seen in (37).

(37) **Who* does *SHE* think John likes *t*?

This suggests that Condition C and strong crossover are in fact different phenomena. This conclusion follows naturally from an approach like Safir's, since the FTIP simply does not apply to sentences like (36). It is not clear what it would mean for the Ā-trace in (36) to be replaced by a pronoun or anaphor; intuitively, the trace is not in competition with pronouns or anaphors in the way that an R-expression is. Under copy theory, the unification of Condition C and strong crossover requires classifying the lower copy of the moved *wh*-element as an R-expression. Again, it is not clear how the lower copy of the moved *wh*-element would be in competition with pronouns and anaphors. Moreover, classifying Ā-traces (or copies) together with R-expressions implies that they are as dependent as R-expressions, in terms of Safir's approach. However, Ā-traces or lower copies are arguably very high on the dependency scale, given that they are necessarily bound by an operator. In short, the approach that treats Condition C and strong crossover as facets of the same phenomenon is incompatible with Safir's approach. This can be seen as an argument in favor of Safir's approach, because the differential behavior of Condition C violations and strong crossover violations with focus follows straightforwardly from the difference between Ā-traces and R-expressions.

5 Discourse-Level Effects

Discourse-level Condition C effects are similar to strong crossover effects, in that they are superficially similar to canonical Condition C effects like those in (2), but whether or not the same mechanism is responsible for them is an open question. Recall (17), repeated here.

(17) #*He* entered. *John* sat down.

(17) is superficially similar to canonical Condition C effects, because it involves an R-expression preceded (though not c-commanded, of course) by a coreferring pronoun. This follows naturally from Schlenker's account. Since Schlenker's account does not directly incorporate c-command, it predicts that Condition C effects should be found intersententially as well as within single sentences.

There are good reasons to believe, however, that discourse-level effects like the one in (17) are formally unrelated to Condition C. First, consider (38), in which the R-expression is preceded by a coreferring R-expression, rather than a pronoun.

(38) #*John* entered. *John* sat down.

While (17) is infelicitous uttered out of the blue, it is possible to imagine circumstances in which (38) is felicitous uttered out of the blue. In particular, (38) improves significantly if it is uttered as part of a longer list of actions performed by John, which is not true of (17).[16]

(39) *John* walked in, *John* sat down, *John* had a drink, . . .

If (17) and (38) exhibit Condition C effects, we would expect their status to be the same regardless of whether the preceding nominal is an R-expression or a pronoun.

This is not a knockdown argument, however. For many people, canonical Condition C effects are worse when the R-expression is c-commanded by a coreferring pronoun than when it is c-commanded by a coreferring R-expression, so the difference between (17) and (38) could be a reflex of that difference. Also, the felicity of (38) as part of a list might be another instance of the general preference for structural parallelism in focus constructions, discussed in section 4.2. Notice that the most natural pronunciation of the list in (39) has pitch accent on the last syllable of each predicate, suggesting that each predicate is focused. The repetition of *John*, then, might be felicitous because it results in a form of syntactic parallelism.

More significantly, though, it is possible to construct discourses that have the relevant structural properties of (17) (an R-expression preceded by a coreferring pronoun), but are nonetheless felicitous. Consider (40).

(40) *Chomsky* claims that colorless green ideas sleep furiously. *He* provides evidence for his claim by citing several books about colorless green ideas. However, *Chomsky* notes that in captivity, colorless green ideas often sleep peacefully.

Here, the second occurrence of *Chomsky* is preceded by a coreferring pronoun. If the infelicity of (17) is due to a Condition C effect, then we would expect (40) to be infelicitous as well. However, (40) is perfectly felicitous, and exemplifies a type of discourse structure that is very common in academic writing, among other registers.[17]

The natural conclusion to draw is that (17) and (38) are infelicitous for independent, discourse-related reasons. As Schlenker notes, the availability of intersentential backward anaphora appears to be conditioned by various discourse factors. For example, he points out the contrast between (41a) and (41b).

[16] It also improves if a sentence with another subject intervenes, as in (i).

(i) *John* entered. Frank stopped talking. *John* sat down.

This may be because the second use of *John* performs a disambiguating function. A disambiguation-based account would predict that replacing *Frank* with *Mary* would rule out the second use of *John*, but my judgment of that example is unclear.

[17] As a reviewer mentions, this strategy does not ameliorate cases involving c-command, considering cases such as (i), reinforcing the fact that c-command is crucial for binding.

(i) *Chomsky* claims that colorless green ideas sleep furiously. *Chomsky*, in fact, provides evidence for *his* claim by citing several of *his* books about colorless green ideas.

(ii) **Chomsky* claims that colorless green ideas sleep furiously. *He*, in fact, provides evidence for *his* claim by citing several of *Chomsky*'s books about colorless green ideas.

(41) a. #*He* had brown hair. *John* had blue eyes.
b. *He* had brown hair. *John* was very handsome.

Schlenker claims that the relevant difference between (41a) and (41b) is that the two sentences in (41a) are narratively parallel—that is, there is no asymmetric discourse relation between them. On the other hand, there is an asymmetric relation between the two sentences in (41b), since the first sentence is being presented as an argument for the conclusion presented in the second sentence. He argues that in (41a), the context of evaluation for the two sentences must be the same, since they are narratively parallel. On the other hand, the context of evaluation can be ''reset'' between the two sentences in (41b), since they are not narratively parallel. If whatever conditions the availability of R-expressions in discourse is sensitive to the context of evaluation, then the difference between (41a) and (41b) can be explained.

Naturally, the factors that condition the closing of discourse sequences need to be specified (and these issues are discussed in the rich literature on discourse anaphora), but a detailed analysis is beyond the scope of this article. The key point is that it is a separate phenomenon from syntactic Condition C effects, and thus is not dealt with by the modified version of Safir's theory that I develop.

Whatever the details of the analysis, it is clear that the discourse availability of R-expressions is a complex phenomenon sensitive to various factors, which should be further investigated in future research. However, I believe it is also clear that it is a separate phenomenon from Condition C as a syntactic phenomenon.

6 Disambiguation

Recall Schlenker's observation that the use of full R-expressions instead of pronouns or anaphors is licensed when the R-expressions serve a disambiguating purpose that would not be served by the anaphor or pronoun. Hence, (3d), repeated here, is grammatical because replacing *the linguist* with *he* would result in ambiguity.

(3) d. *A linguist working on binding theory* was so devoid of any moral sense that *he* forced a physicist working on particles to hire *the linguist*'s girlfriend in his lab.

This is a clear case in which we have to invoke an override of Pragmatic Obviation. This is because (3d) would not be ungrammatical if *the linguist* were replaced with *he*—merely ambiguous. Both a pronoun and an R-expression are available in the same position, so the FTIP cannot account for the grammaticality of (3d).

We would like to be able to precisely characterize the situations in which Pragmatic Obviation can be overruled for the purpose of disambiguation. As a first approximation, then, we might say that Pragmatic Obviation can be overruled only when the R-expression in question cannot be replaced with a pronoun or anaphor without causing ambiguity. This hypothesis would be able to account for the data in (42).

(42) a. **Freud* was talking to Adler. *Freud* said that *Freud*'s theory was correct.
b. *Freud* was talking to Adler. *Freud* said that *his* theory was correct.
c. *Freud* was talking to Adler. *Freud* said that *his own* theory was correct.

(42a) is ungrammatical because disambiguation can be achieved without the use of an R-expression, as in (42c). While *his* in (42b) can refer to either Freud or Adler, *his own* can only refer to Freud.

We must ask, however, what the nature of *his own* is—is it a pronoun or an anaphor? Williams (1987) points out that it displays properties of both. It is not subject to Condition B: in (43), *Marla* is allowed to corefer with *her own*, even though it would not be allowed to corefer with a pronoun in the same position.

(43) *Marla* took *her own* picture.

On the other hand, (44) shows that *her own* need not be bound.

(44) *Her own* father disowned *her*.

Williams suggests that there are two properties of anaphors, which can be disassociated. First, anaphors must be bound, and second, they are not subject to Condition B. *Own*-possessives display the latter property, but not the former.

Things are not quite so simple, though. (43) also shows that there are cases in which *own*-possessives must be locally bound, since *her own* cannot refer to anyone other than Marla in (43). The key difference between (43) and (44) is that *her own* has a potential antecedent in the same sentence in (43), but not in (44). In other words, *own*-possessives must be bound in the same sentence if there is a potential antecedent, but they can be unbound if there is no potential antecedent in the same sentence. Note that the binding domain for *own*-possessives is different from the binding domain for anaphors. In (42c), *his own* can only be bound by *Freud*, which is in the same sentence as *his own*, but not in the minimal maximal projection containing *his own* and a sister to *his own*, which in this case would be the NP *his own theory*. The locality requirement for *own*-possessives, then, must be looser than the locality requirement for anaphors. Specifically, I suggest that *own*-possessives, when bound, must be bound by an antecedent in the same sentence; in other words, their binding domain is the root node CP.[18]

Now, let us return to our hypothesis that Pragmatic Obviation can be overruled only when the R-expression in question cannot be replaced with a pronoun or anaphor without causing ambiguity. In light of the preceding discussion, it needs to be modified slightly: Pragmatic Obviation can be overruled only when the R-expression in question cannot be replaced with a pronoun, anaphor, or *own*-possessive without causing ambiguity. Thus, (42a) is ungrammatical because *Freud* can be replaced with *his own* without causing ambiguity.

[18] There may be a more fine-grained distinction in the binding domain for *own*-possessives. Consider (i) and (ii).

(i) *Freud* was talking to *Adler* about how his own theory was correct.

(ii) *Freud* was talking to *Adler*, although *Freud* said that his own theory was correct.

In (i) *his own* can refer to either Freud or Adler, but in (ii) it can only refer to Freud. But in both cases, the two potential antecedents are in the same sentence. It may be the case that the binding domain must be further specified; for example, the fact that the lower clause in (i) is in an adjunct of the matrix verb, but the lower clause in (ii) is not, may be relevant. I leave precise characterization of the binding domain of *own*-possessives to further research. What is crucial here is that the availability of *own*-possessives can explain the unavailability of R-expressions for disambiguation: replacing *his own* with *Freud's* is better in (i) than in (ii), because (i) is ambiguous and (ii) is not.

Because of the locality requirement on *own*-possessives, they will only be ambiguous if there are either zero or more than one potential antecedents in the same sentence. The case where there are zero potential antecedents is not relevant for our purposes, since replacing the *own*-possessive with an R-expression would never cause a Condition C violation. Therefore, the only cases where Pragmatic Obviation is overruled for the purpose of disambiguation are those with more than one potential antecedent in the same sentence, such as (3d). Some other examples are given in (45).

(45) a. *Freud* talked to Adler about *Freud*'s theories.
b. Freud talked to *Adler* about *Adler*'s theories.
c. A linguist working on binding theory was so devoid of any moral sense that he forced *a physicist working on particles* to hire *the physicist*'s girlfriend in his lab.

Notice that if *the physicist's* were to be replaced with *his own* in (45c), the *own*-possessive could refer either to the linguist or to the physicist, lending support to the idea that *own*-possessives must be anteceded in the same sentence, but not necessarily in the same clause. The grammaticality of (45a–c) is thus explained by the fact that the use of R-expressions is necessary for disambiguation—the use of *his own* is not sufficient, since in each case there are two potential antecedents in the same sentence.

The introduction of a new class of nominals, *own*-possessives, raises an interesting question: are they included on the dependency scale that is incorporated into the FTIP? If so, they cannot be more dependent than pronouns. If they were, a simple sentence like (46) would be predicted to be ungrammatical, since *her* could be replaced with *her own* without affecting the interpretation.

(46) *Marla* visited *her* mother.

On the other hand, they are clearly not less dependent than pronouns, since pronouns are never required to be bound, whereas *own*-possessives are sometimes required to be bound. They must, then, be as dependent as pronouns. This makes sense, given the intuitive motivation for the dependency scale. Pronouns are between anaphors and R-expressions on the dependency scale because they can be either bound or unbound, and *own*-possessives too can be either bound or unbound.

Safir himself does not include *own*-possessives on the dependency scale; he treats *own* as what he calls an adjunct anaphor. According to Safir, adjunct anaphors do not participate in FTIP competitions, and they serve the function of disambiguation or emphasis. For example, in (43) and (44), *own* is adjoined to *her*. In (43), it serves a disambiguating function, since *her* alone could also be disjoint from *Marla*. In (44), it serves an emphatic function. However, I depart from Safir by including *own*-possessives on the dependency scale. There are two reasons for this. First, if *own*-possessives are included on the dependency scale, the conditions under which Pragmatic Obviation can be overruled for the purpose of disambiguation can be reformulated as follows:

(47) Pragmatic Obviation can be overruled for the purpose of disambiguation if disambiguation cannot be achieved by replacing the R-expression with a more dependent nominal.

Second, including *own*-possessives on the dependency scale allows us to account for the ungrammaticality of (48a).

(48) a. **Marla* took *Marla*'s picture.
b. **Marla* took *her* picture.

If the dependency scale only included R-expressions, pronouns, and anaphors, then (48a) would be predicted to be grammatical, since the R-expression cannot be replaced with a pronoun without affecting the interpretation (see (48b))[19] and an anaphor is not available in that position, by Condition A.[20] The R-expression can, however, be replaced by an *own*-possessive without affecting the interpretation. If *own*-possessives are included on the dependency scale, then (48a) can be ruled out by the FTIP.

Therefore, the revised dependency scale for English is as shown in (49).

(49) pronoun-SELF ≫ pronoun, *own*-possessive ≫ R-expression

Note, of course, that both possessive and nonpossessive epithets fall under ''pronoun'' in (49) in my revised approach. Note also that (49) correctly predicts that pronouns and *own*-possessives are generally available in the same position, since they are on the same level on the dependency scale. The unavailability of the pronoun in (48b) is presumably due to idiomatic properties of *take one's picture*; as pointed out by a reviewer, both forms are available in similar nonidiomatic constructions like *Marla took her (own) picture from the table and studied it closely.*

In summary, introducing a new class of nominals, *own*-possessives, allows us to precisely characterize the environments in which Pragmatic Obviation can be overruled for the purpose of disambiguation, and it also refines the empirical predictions of the FTIP for data such as (48a).

7 Conclusion

In this article, I have argued that the competition-based framework proposed by Safir (2004) can incorporate data that have generally resisted incorporation into complete theories of binding—in particular, data that pose problems for Chomsky's (1981) formulation of Condition C, as well as subsequent formulations. In some cases, I have argued that the data are not problematic because they are the result of phenomena that are unrelated to binding (strong crossover, constraints on backward anaphora in discourse). In other cases, I have argued that the data can be explained by the FTIP, given certain assumptions about independent properties of the grammar (epithets, some focus constructions). In yet other cases, I have argued that the data can be explained as the result of a pragmatic override of Pragmatic Obviation, in a principled way (disambiguation cases, some focus constructions).

These results give hope that a complete theory of binding, which can account for both the core cases and more peripheral cases with equal success, is possible. However, the crosslinguistic

[19] For some speakers, (48b) is grammatical. For those speakers, the ungrammaticality of (48a) can be accounted for either with or without including *own*-possessives on the dependency scale, since the R-expression can be replaced by a pronoun under the FTIP.

[20] This is one reason why I do not adopt a reasonable alternative analysis of *own*-possessives: namely, that possessives like *her* are ambiguous between a pronoun and an anaphor and adding *own* resolves the ambiguity in favor of an anaphor. The binding domain for a possessive is the DP that it heads, so it cannot be an anaphor, by LAL. But see footnote 11 for a proposal along those lines.

validity of the analyses I have proposed has yet to be tested. While Safir (2004) discusses crosslinguistic issues in some detail, future research will have to show if the extensions to Safir's framework proposed here can successfully account for non-English data.

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