

Chapter 1

Introduction

One of the most important discoveries in modern linguistics has been that abstract structural properties of utterances place subtle restrictions on how speakers can use a given form or description to pick out entities in a discourse. In the last thirty years, these restrictions on acceptable interpretations for sentences have been mined for clues to the exact nature of the structural properties in question, and the vein shows no signs of giving out. This book is an attempt to streamline and rearrange our commitment to syntactically determined principles of interpretation while revealing new empirical generalizations that we are led to discover by looking at things in the way I propose.

The influence of the theory developed here will be demonstrated to range across a wide class of empirical phenomena, including the distribution of crossover effects, bound variable ellipsis, functional answers to questions, resumptive pronoun constructions, (anti)reconstruction effects, and proxy readings. All of these effects are primarily interpretive, which is to say that in almost every case, the linguistic constructions in question are grammatical under some interpretation, but certain coconstrual interpretations between nominals in these structures are excluded by the principle under investigation.

I approach the interpretive issues with some theoretical commitments that should be made clear at the outset. First, I assume that all natural languages are a reflection of a linguistic capacity innate to human beings, often referred to as Universal Grammar (UG). The structures that are revealed by research into natural language grammars are thus structures that are generated by UG, and in constructing theories of how these structures are generated, the linguist is positing principles that are to be understood as psychologically real. This ensures that there is a fact of the matter and that the intuitions of adult native speakers, among other sorts

of evidence, may be brought to bear as evidence to support or refute a theory the linguist proposes. Linguistic data, like any other sort, must be interpreted and controlled as they must be in any science; and as in any science, data can mislead or later be reinterpreted in light of better understanding. Many of the data discussed in this book have been interpreted and reinterpreted, and so part of the argumentation is based on defending one interpretation of the data against another.

I will take it as uncontroversial that a sentence can be computed to express a meaning independent of any particular context, which determines what it can be used to say (I set aside extralinguistic codes; for example, *The eagle has landed* means ‘I have received the money’). To a large extent, the interpretation of a sentence is guided by lexical selection and the syntactic representation that serves as a guide to semantic constituency. In other words, the meaning of a syntactic phrase is computed from composition of its immediate daughters. To most linguists, these assumptions are familiar and standard. What I explore here is the way a particular syntactic restriction limits the range of dependent identity interpretations a sentence can have, and hence the range of possible entailments it can have on the basis of these anaphoric interpretations. I lightly touch on how one or another of these possible anaphoric interpretations may be favored by manipulating a discourse, but mainly I focus on interpretive restrictions that cannot be repaired by discourse accommodation.

1.1 The Proposal and the Plan

My main proposal, one with historical antecedents I will mention later, is that dependent identity interpretations are restricted by a c-command prohibition and not by a c-command licensing condition. This goes against the grain of most work (in particular, the very influential work of Reinhart (1983a,b) and Grodzinsky and Reinhart (1993), for example, and slight extensions of it by linguists such as Hornstein (1995)) that assumes that a c-commanding antecedent is needed to license a dependent identity interpretation. Apart from the role that c-command plays in licensing syntactic anaphors, I argue that dependent readings are otherwise generally available where they are not excluded by a c-command prohibition. In other words, c-command does not license dependencies, but instead plays a role in ruling them out. I also assume that scope, perhaps determined by c-command at LF, plays a licensing role, but quantifier-bound interpretations are only a subset of dependency rela-

tions. This means I will be focusing on (a) cases where a dependent identity reading is not induced by a quantified antecedent, but relations between antecedent and dependent form are still c-command sensitive (and not on account of the binding theory or its descendants; see chapter 2); (b) cases where scopal licensing conditions are met, but bound interpretation still fails (as in the case of crossover in chapter 3); and (c) cases where surface forms appear not to c-command their antecedents, but sometimes behave as though they do (as in the discussion of reconstruction and antireconstruction in chapter 4).

The c-command prohibition I propose is one I adapt from Higginbotham (1983, 402) (see also Evans 1980, 355). It can be fairly simply stated (though provisionally) as in (1), which is to be compared with what I take to be the core assumption of the c-command licensing approach stated in (2). I will henceforth refer to (1) as the *Independence Principle* and (2) as the *C-command Licensing Principle*.¹

(1) *Independence Principle (INP)*

If x depends on y , then x cannot c-command y .

(2) *C-command Licensing Principle (CLP)*

If x depends on y , then y must c-command x .

Let us suppose that c-command is defined as it most commonly is (e.g., roughly as in Reinhart 1976).

(3) *C-command*

A c-commands B if the first branching node dominating A also dominates B and A does not dominate B.²

The difference between these two approaches can immediately be observed with respect to the contrast in (5) (which is a contrast of type (b) mentioned above).³

(4) a. Someone loves everyone's mother.

b. $\exists y \forall x$ (y loves x 's mother)

c. $\forall x \exists y$ (y loves x 's mother)

(5) a. *Everyone's* mother loves *him*.

b. **He* loves *everyone's* mother.

c. Every x , x 's mother loves x

d. Every x , x loves x 's mother

Any theory must assume that *everyone* can have wide scope over the subject *someone* insofar as (4c) is a possible interpretation for (4a).

However, if we attempt to construe the pronouns in (5a) and (5b) to be bound variables of the universal quantifier in each case (as in (5c) and (5d), respectively), only (5a) is acceptable (where coconstrual in (5a,b) is marked by italics). For this contrast, the CLP makes the wrong prediction, namely, that both (5a) and (5b) should be excluded—in neither case does the quantifier c-command the pronoun. However, the INP correctly distinguishes between (5a) and (5b). In (5a), *him* does not c-command the surface position of *everyone*, and *him* can be in the scope of *everyone*. In (5b), by contrast, where the quantifier can also have wide scope, the pronoun *he* c-commands the quantifier on which it depends, a relationship the INP correctly prohibits under the dependent reading.

This argument based on the bound variable phenomena in (5), long known in the literature (and more recently characterized as cases of “almost c-command” by Hornstein (1995, 108–110)), is oversimplified for the purposes of presentation (e.g., if we assume LF movement of quantifiers, the nature of c-commanding antecedents must be reconsidered thoroughly) and in some respects, it is not the most interesting one, but it illustrates how one might distinguish the INP and the CLP on the basis of empirical contrasts.

Closely related to the contrast between the INP and the CLP is the nature of how coconstruals are represented. The term *coconstrual* is one I use when I want to be neutral about the nature of the relationship between forms that results in the identity of the referential value assigned to the nominal argument positions those forms represent. Starting in section 1.2, I argue that the only form of coconstrual influenced by the structures of formal syntax is dependent identity and that dependent identity is an asymmetric relation, such that if A depends on B, then B does not depend on A. These claims resonate throughout my presentation, and I return to them in the concluding chapter. Although it is not likely that the dependency relation itself requires representations relevant to syntax, the distribution of such relations is sensitive to c-command and is crucial for determining what sort of dependent identity readings a sentence can have.

It is not possible to discuss the nature of syntax-influenced coconstrual without reviewing the nature of morphologically specific anaphora and the effects related to it, which is my way of referring to the binding theory principles developed in Chomsky 1981 (henceforth, *LGB*). These effects are presented first with respect to the nature of the noncoreference effects they induce (section 1.2), though I later reinterpret the *LGB* binding theory in terms of a competitive theory of anaphora (section 1.4).

In chapter 2, I further distinguish my approach from others that examine the role of *c*-command in determining the class of possible co-construals. Some of these are more like the INP (e.g., Higginbotham 1983; Fiengo and May 1994; Williams 1997), and others are more committed to the CLP (associated with Reinhart 1976, 1983a,b, as extended to almost *c*-command as a licensing factor in Hornstein 1995, 108). I argue in chapter 2 that freeing dependent identity interpretations from sentence-bound restrictions not only accounts for bound readings where *c*-command does not hold, but also permits a simpler account of the absence of third party readings in ellipsis contexts (readings that are neither strict nor sloppy), while providing an account of the restrictions on proxy readings (identity readings between arguments interpreted as noncoextensive). Rule H (Fox 1999, 2000) is presented and defended in chapter 2 as well, although I take it up again in chapter 5.

A major result of my approach, to be explored in chapter 3, is that all crossover effects (weak, strong, weakest), empirical patterns of bound anaphora that have been explored by linguists for over thirty years since Postal's (1971) seminal work, follow, without any stipulation specific to crossover, from the proper formulation of the INP as presented in chapter 2. In chapter 4, I explore this result, and the ancillary hypotheses that support it (including my reformulation of the binding theory and Rule H), with respect to some well-known and not so well-known reconstruction asymmetries that yield detailed support for my approach and for the copy theory of the Minimalist Program. In chapter 5, I examine the principles I have proposed in the context of a wider perspective on the architecture of UG with respect to the relation among formal syntax, interpretation, and pragmatics. In so doing, I compare my theory of these relations with alternative accounts of coconstrual, particularly the coconstrual-as-movement theory proposed by Kayne (2002), which I argue is conceptually inferior to the proposals made here.

Chapters 2 and 3 are thoroughly Anglocentric and even chapter 4 is largely so. This is partly a presentational convenience in that English is the language that has been studied in the most detail and the facts are most familiar to me and to my readers. However, since the principles I propose are universal and unparameterized, the structure of my arguments for English should serve as an adequate model for arguments based on the facts in other languages. Insofar as my arguments for English cannot be transparently extended to languages that permit scrambling, I have included an analysis of scrambling in Hindi in the appendix as a

model for the line of argument I must take to extend my theory, without any revision, to scrambling languages. In other words, however languages may differ in their input to the principles that I propose (e.g., in the range of movements they allow, in the distribution of resumptive pronouns they allow, or in the variety of dependent forms their lexicons contain), the principles that regulate dependencies act on whatever their inputs may be in the same way for any grammar.

1.2 Dependent Identity and (Non)coreference

Although the difference between dependent identity and coreferent readings are fairly well known to those familiar with the anaphora literature, not everyone agrees on the consequences of this distinction for syntactic representation. When the referential value of a linguistic expression *x* can only be determined as a function of the interpretive content of the linguistic expression *y*, then *x* depends on *y*. When I speak of *coreference* or *covaluation*, I mean that the value of *x* and the value of *y* are the same—which typically means that they pick out the same referent in discourse or else that they covary. *Covariation* is typically part of the dependent identity reading with respect to a quantified antecedent. In chapter 2, I will introduce *codependent covariation*, where two nominals *A* and *B* independently depend on *C*, but *A* does not depend on *B* and *B* does not depend on *A*. As remarked at the outset, when I want to be neutral or noncommittal about the nature of an identity relation between *x* and *y*, I will say that *x* and *y* are *coconstrued*.

The contrast in truth-conditions for (6) evidenced by the implications in (6a,b) has often been used to illustrate differences between dependent reference and independent coreference.

- (6) Of all the women, only Mara believes Sean loves her.
- a. None of the other women believe that they are loved by Sean.
 - b. None of the other women believe that Sean loves Mara.

The reading that permits the implication in (6a) is the *dependent* or *bound* (covariant) reading, the one where the pronoun covaries with the choice of women believers who might antecede it. The reading that permits the implication in (6b) is the *strict* or *independent* reading, where the reference of the pronoun remains Mara even if the choice of believer varies. As Lasnik (1976) and Reinhart (1983a,b) have pointed out, a similar distinction is also observed in ellipsis contexts.⁴

- (7) Mara believes Sean loves her and Sheila does too.
- a. Sheila believes that Sean loves her = Sheila.
 - b. Sheila believes that Sean loves Mara.

The “sloppy” reading, as it is known in the literature, is illustrated by the “filled-in ellipsis” in (7a) and corresponds to the dependent/bound reading (like the interpretation of (6) with the implication in (6a)). The “strict” reading, illustrated in (7b), is taken to be an independent reading (which corresponds to the reading of (6) with the implication in (6b)).

Since the late 1970s, the distinction between dependent identity and coreference has played a role in what it means to claim that coreference (or covaluation) is blocked between two nominals. For example, consider Principles B and C of the binding theory, first presented in *LGB*.

- (8) *Binding theory*
- a. *Principle A*
An anaphor must be bound in domain D.
 - b. *Principle B*
A pronoun must be free in domain D.
 - c. *Principle C*
A name must be free.

- (9) *Binding*
 x binds y if x c-commands y and x and y are coindexed. If x is not bound, it is free.

The exact nature of the locality restriction imposed by domain D was variously defined, though the different proposals fall largely outside the concerns of this book (but see Safir 2004, sec. 5.1, for a discussion of the locality of A-movement). In fact, the issues surrounding the binding theory, which I will reformulate in section 1.4 (in accordance with Safir 2004), play a secondary role altogether in the task I have set for myself. My main line of argument most directly addresses the distribution of bound (dependent identity) readings of pronouns that are not necessarily morphological anaphors (i.e., forms subject to Principle A). However, where the empirical effects that the binding theory is designed to account for obscure the more general pattern of dependent identity, I explore the relevance of binding theory effects and my theory of them in slightly more detail.

With respect to the interpretive effects the binding theory addresses, if we say that coreference is blocked by Principle C, then we should expect

that copular sentences should not permit identity statements, since the copular subject c-commands the object of *be*.

- (10) a. We only saw Oscar once and that guy has his back to us, but *he* is definitely *Oscar*.
 b. We only saw Oscar once and that guy has his back to us, but *he* is definitely *him*.
 c. *We only saw Oscar once and that guy has his back to us, but *he* is definitely *himself*.

In (10a), it would appear that Principle C is violated, and in (10b), Principle B, yet in each case coconstrual is possible. What seems to have gone wrong is that the c-commanded name or pronoun in these cases is possible because the relation involved is one of coreference, not dependent identity. The copular cases assert a coreference relation between two independently established referents (the Oscar we know and the guy we see). In fact, as the weirdness of (10c) attests, using a true dependent, *himself*, does not permit the intended reading at all for these equative copular contexts. If Principles B and C only regulate dependent identity, not coreference, then independent coreference asserted by equative *be* is unproblematic. Alternatively, if Principle C blocks coreference, then we must assume that where there is a conflict between Principle C and equative *be*, the latter trumps Principle C to allow coreference. The second position seems far more awkward.

Yet if Principles B and C only block dependent reference, why don't they allow covaluation even where dependent reference is blocked? After all, coconstrual between *he* and *Oscar* in (11a) appears to be blocked when the sentence is taken in isolation. Moreover, independent identities established in the discourse and then equated do not appear to allow *he* and *Oscar* to take their reference from different sources that just *happen* to be covalued (sometimes called accidental coreference).

- (11) a. **He* is unaware that *Oscar* is incompetent.
 b. *We only saw Oscar once and that guy has his back to us, but *he* is *Oscar* and *he* is unaware that *Oscar* is incompetent.

Moreover, (11b) is no improvement over (11a), since adding the context provided in (10) still does not allow the last *Oscar* to corefer with the last *he*. This indicates that if dependent reference is what is blocked, this blockage must have a consequence for the failure of coreference, or else Principles B and C will fail miserably.

The line I will take here, justified at greater length in Safir 2004 (where the intellectual lineage of this reasoning is traced to Evans 1980, Higginbotham 1983, and Reinhart 1983a,b, among others), is that the binding theory only blocks dependency, and a pragmatic strategy or principle of obviation separate from the binding theory itself blocks coreference. In other words, where dependent reference is blocked by Principles B and C, coreference is unexpected unless it is emphasized or asserted (as it is in equative contexts).

Consider first (12), an example of a sort discussed by Higginbotham (1980a, 234–235; 1985, 570).

- (12) You may not think that that guy is John, but he put on John's coat.

In this case, the individual in question, who is identifiable by both parties as salient in discourse (whether he is John or not), is posited by the speaker as having met a criterion for being identified as John. Moreover, the criterion in question (“puts on John's coat”) is also in the common ground. If the listener does not accept the relevant presuppositions, he or she might ask the speaker how one can be certain that the coat in question is John's or why one should be certain that the person who puts on John's coat should be John. What is important for our discussion is that the referential values for *he* and for *John* are established separately, and the listener must draw his or her own logical conclusion (see also Fiengo and May 1994, 10) based on whether or not an appropriate criterion has been met—namely, whoever puts on John's coat must be John.

Crucial to this argument is (a) that coreference, not dependent identity, is involved, but also (b) that coreference for (12) is formally determined to be contrary to expectation. The statement in (12) is ironic because the speaker has stated the criterion of identity for *John* as if accepting the addressee's assumption that *he* does not refer to John. The example would be quite transformed if putting on a coat (any coat) was to be our indication that the secret spy we are meeting is John, in which case one of us might turn to the other and say, “He put on his coat, so he must be John.” This reading, which could be a dependent one for *his*, is avoided by using *John's* in place of *his* in (12). Similar reasoning applies to Evans's (1980, 357) example given in (13).

- (13) Everyone has finally realized that Oscar is incompetent. Even *he* has finally realized that *Oscar* is incompetent.

Insofar as words like *even* adjust our expectations, such that *he*, namely, Oscar, is the least likely individual to realize that Oscar is incompetent, the Principle C effect is neutralized here. Independent coreference arises from the frozen criterion for set membership, “realized Oscar is incompetent,” and the assertion that Oscar is also in that set.

Although the expectation of noncoreference induced by whatever derives Principles B and C can be overcome by a strong context (called a context of instantiation in Safir 2004, or a context of structured meanings in Heim 1993) or assertion, the ban on dependent identity interpretation cannot be pragmatically overcome. Consider examples like (14a).

- (14) a. Even Alfred says that Alfred is crazy.
 b. Even Alfred says that he is crazy.

The use of *even Alfred* indicates that Alfred, though one would not expect him to be in this set, is also one of the individuals who has the property of considering Alfred crazy (where the instances of *Alfred* are coconstrued) and so a coreferent interpretation is possible. Compare (14b), which, in addition to a coreferent interpretation, permits a dependent (bound) interpretation whereby Alfred is one of the *x*'s who consider *x* crazy. The accommodation that permits a coreferent reading in (14a), however, does not license a sloppy reading in ellipsis contexts like (15b), even given the context in (15a).

- (15) a. Almost every doctor is willing to say that Alfred and Maurice are crazy.
 b. Even Alfred says that Alfred is crazy, and more surprising still, even Maurice does.
 c. Even Alfred says that he is crazy, and more surprising still, even Maurice does.

While (15c) permits a reading where each of the men thinks about himself that he is crazy, (15b) can only mean that even Maurice thinks that Alfred is crazy, not that Maurice thinks that Maurice is crazy. The fact that the first conjunct in (15b) permits coreference (however clumsily), but blocks the sloppy dependent reading, follows from the force of Principle C as, on the one hand, an absolute prohibition on dependent identity interpretation and, on the other, merely the source of an expectation of noncoreference that can be accommodated.

By contrast, the INP, which also blocks dependencies, does not carry with it any presumption that coreference is unexpected. In (16), *he*

c-commands *him*, so *he* cannot depend on *him*, but this does not create an expectation one way or the other about whether *he* and *him* should be coreferent or not. (Of course, *him* could depend on *he*, but that is not at issue here.)

(16) *He* said Sylvia saw *him*.

This difference goes part of the way toward distinguishing the force of the INP from that of Principles B and C, though in this case the difference appears theory internal, since an account based on the CLP would not predict anything different for these cases (i.e., *he* cannot depend on *him* because *him* does not *c*-command *he*). However, in section 2.4 I will revisit the INP's prediction that *he* cannot depend on *him* in such cases, showing that it has interesting empirical consequences.

1.3 The Formal Representation of Dependent Identity

If syntax directly restricts only dependent identity, not coreference, then some syntactic representation of dependency may be necessary, but there must not be any syntactic representation of coreference. Traditionally, indices have been used to represent the coreference or covaluation relation, but we must now ask whether this notation is appropriate to the dependency relation. Since dependency is an asymmetric relation (if *x* depends on *y*, then *y* does not depend on *x*) while coreference is a fully symmetric one, we would expect any notation of dependency to indicate the asymmetry.

1.3.1 Indices and Asymmetry

No property of simplex indices, however, indicates that of two or more coindexed elements, one has primacy over the other in any way. Additional statements must be made about indices, or else another diacritic (or diacritics) must be added to them to allow them to represent dependencies. This has spawned at least three strategies:

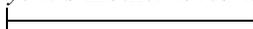
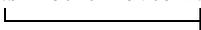
- (17) a. Abandon indices in favor of an asymmetric diacritic.
 b. Use indices only where a dependency relation holds augmented by *c*-command.
 c. Augment indices with an asymmetric diacritic.

The first strategy is developed by Higginbotham (1983, 1985), who introduces arrows that connect dependents with their antecedents. I

notate this relationship as in (18), where the anchor “┌” represents the antecedent on which the term marked with the hook “└” depends.

(18) *Everyone* loves *his* mother.


As I remarked at the outset, the dependency relation does not have to be licensed by c-command in my theory, so dependency on a non-c-commanding antecedent is possible (19a), as is backward dependency (19b), although I will reconsider the well-formedness of (19b) in section 2.5.

(19) a. *Everyone's* mother loves *him*.

 b. *His* mother loves *Bill*.


I reserve discussion of the dependency relations that are blocked by the INP for section 2.4.

As Higginbotham pointed out when he introduced these arrows, they are inherently relational: the arrows do not express inherent properties of the nominals they relate, but only how they relate to one another. Indices, by comparison, are not inherently relational unless they are stipulated to be so: a nominal x with index i picks out the individual i in discourse whether or not another nominal y is also indexed i .

The second strategy (17b) is developed by Grodzinsky and Reinhart (1993) (henceforth, G&R), building on a proposal by Reinhart (1983a, 71) wherein indices are generated freely but are “interpretable” only where they mark a relation of dependency on an antecedent that binds the dependent. The binding theory and the “translation rule” in (20) along with Rule I stated in (21) are the heart of their theory.

- (20) a. *Definition*
 A node α is *bound* by a node β iff α and β are coindexed and β c-commands α .
- b. *Conditions*
- A. An anaphor is bound in its governing category.
 - B. A pronoun is free in its governing category.
- c. An NP is a variable iff either
- i. it is empty and \bar{A} -bound, or
 - ii. it is A-bound and lacks lexical content.
- Other cases of NP coindexation are uninterpretable.

(21) *Rule I: Intrasentential Coreference*

NP A cannot corefer with NP B if replacing A with *x*, *x* a variable A-bound by B, yields an indistinguishable interpretation.

Notice that the use of indices is somewhat vestigial in this account except where they serve to introduce c-command via the definition of binding, since indices are not interpretable otherwise. The stipulation that binding is asymmetric dependency of A on B only if B c-commands A (as in (20a)) is an accretion on the indices—a statement that compensates for what they do not naturally express.

However, the c-command condition in (20a) along with the stipulation that “other cases of NP coindexation are uninterpretable” is essentially what I have been calling the CLP, and I will argue directly against it in the next chapter. There are significant negative consequences for G&R’s theory if the CLP is false, because the conditions under which bound readings are possible feed Rule I. Consider cases like (22) (hereafter, italics mark coconstrual).

- (22) a. *No one’s* mother thinks *he* is smart.
 b. *His/The boy’s* mother doesn’t think *he* is smart.
 c. *His* mother doesn’t think *the boy* is smart.

If a bound variable reading is available in (22a), where *no one* does not c-command the pronoun *he*, then a bound variable reading should be available for (22b) for the pronoun *he* anteceded by *his/the boy’s*. If so, *the boy* should not be able to corefer with *his* in (22c), since if coreference were intended, then (22b) would have to be used, because (22b) permits a bound reading. Unfortunately for Rule I, (22c) is perfectly acceptable.

The existence of a bound reading in (22a) and the possibility of a coreferent one in (22c) is predicted by the INP theory. First, all of these (so far) are instances of permitted dependency, since *his* does not c-command *he* or *the boy*; and second, even if *his* can be dependent on *the boy*, there is no obviation where there is no c-commanding antecedent (a point further developed in section 1.4). In other words, the availability of a bound reading does not require an obviation relation between *his* and *the boy* in a theory without Rule I, since only obviation requires c-command. C-command can, of course, be built into Rule I (as it is in Reinhart 1999), but then there is no direct relation between the logical notion of binding, in which c-command has no place, and linguistic obviation.⁵ A further critique of Rule I is presented in Safir 2004, so I will not belabor the point here.

G&R's theory explicitly assumes that there is no role for indices in syntax beyond representing dependency. Indeed, Reinhart (1983a, 160) does not see indices as specifically necessary to represent the relations she posits. If the compensating statement, the one requiring interpretable indices to mark a relation between c-commander and c-commandee, is wrong, then it would appear that G&R, to maintain this view, must change the statement to whatever characterizes all the cases where dependency can be represented (and abandon or amend their account of Principle C effects). In either case, if the compensating statement is entirely responsible for the interpretable distribution of the indices, then there is no significant role for indices themselves.⁶

G&R (1993, 76–77n8) do allow for the possibility that covaluation can exist outside of binding in that “the system proposed here does not rule out the possibility of obligatory (unbound) coreference, but only rules out the possibility of its being enforced by the binding theory, or other syntactic conditions on coindexation.” However, it is not obvious that covaluation of this sort has any important role to play in their theory.⁷

Fiengo and May (1994) (henceforth, F&M) take the third alternative in (17c). They employ indices with two forms of diacritic, one for dependency and one for covaluation. When a form is coindexed with another form and the index bears a β diacritic, then the form with the β diacritic is dependent on its antecedent; but when a form bears an index with an α diacritic, it has merely a covalued interpretation with any form bearing the same index. Both forms of indices are part of linguistic representation, Fiengo and May argue; but unlike the Evans-Reinhart-Higginbotham line of reasoning, theirs assumes that the binding theory applies to both α and β indices.⁸

The system allows for two ways of notating coconstrual and three ways in which it can arise. The sentence in (23) can be indexed in any one of three ways. If there is coindexation, the coindexation can either be dependent (β) or covalued (α) or else there can be the absence of coindexation, in which case covaluation can be extralinguistic.

- (23) a. John_{i α} said he_{i α} was late
 b. John_{i β} said he_{i β} was late
 c. John_i said he_j was late

Coindexation means that there is a linguistic commitment to coreference, and the absence of coindexation means that there is an absence of commitment to coreference, where coreference is covaluation here. Thus, ab-

sence of dependency does not indicate noncoreference, but absence of coindexing indicates noncoreference as far as matters of linguistic form go. F&M assume that identity statements are instances where there is no coindexation, not simply the absence of dependency between the arguments, and thus if covaluation is possible, it is extralinguistic. Perhaps if we are slowly putting it together that the person John is describing, a person we know as “the mysterious stranger,” is in fact John, then we might utter (23c) in our process of deducing that John is the mysterious stranger (e.g., John said the mysterious stranger was late and John himself was late and no one else was late; so when John said, “*He was late,*” using *he* to refer to the mysterious stranger, he was in fact referring to himself). However, we are not linguistically committed to that covaluation.

At least one case suggesting that some covaluations must be linguistically marked is the existence of strict and sloppy readings permitted in ellipsis environments. While (24) could have a sloppy reading (i.e., a dependent one, as in (25a), or a strict one, as in (25b)), it is not at all possible for (24) to have the structurally parallel interpretation in (25c), in which *John* and *he* are coconstrued, but the elided pronoun (in brackets) refers to someone other than Bill or John.

(24) John said he was late before Bill did.

- (25) a. *John* said *he* was late before **Bill** [said **he** was late]
 b. *John* said *he* was late before **Bill** [said *he* was late]
 c. **John* said *he* was late before **Bill** [said he was late]

Only if there is a positive requirement that the value for the pronoun in the antecedent constituent of the elision must match the value of the pronoun in the elision can this fact be captured. Insofar as indices are part of the representation that must be copied, F&M’s system captures this fact. However, I do not believe one must resort to more than dependency arrows to explain the absence of (25c). I present my account of this fact in section 2.3.2.

Of the three coconstrual relations that F&M’s theory permits, only two seem necessary. F&M’s β indices appear to express the dependency relation expressed here with arrows. The lack of commitment to coreference does not require indices in either theory, but it does seem necessary, as it is what characterizes (what I take to be) the independent covaluation reading for the copula, as in *That guy is John* in (12) (see note 13 of chapter 2). However, there is apparently no evidence that requires an

α -indexing account and, furthermore, there is evidence that such an account predicts relations that do not exist.

For example, F&M's account predicts that some anaphors should be bound by coreferent antecedents with which they are independently covalued; in other words, they are covalued with antecedents on which they do not depend. This is because F&M assume the *LGB* binding theory, hence the indexing inherent to binding; further, they assume that the binding theory applies to any coindexation, and so it will apply to both α and β indices coindexed with c-commanding antecedents. Thus, if a form is anaphoric, whether it bears an α or β occurrence of an index, it is subject to Principle A; that is, if a pronoun is marked with a SELF form, then its binding requirement can be satisfied by either α or β coindexation with its binder.

The reason that F&M treat both sorts of indices as subject to the binding theory is that they are committed to saying that in every instance where the binding theory applies to block dependency, not only dependency is ruled out but covaluation as well. For their account, the connection between the failure of dependency and the failure of coreference is a formal restriction on syntactic binding, not a pragmatic inference of any sort that could arise from an otherwise possible dependent interpretation that blocks an independent coreferent one. Thus, the connection between failure of dependency (β coindexation) and failure of covaluation (α coindexation) in the same contexts is stipulated as a property of the failure of coindexation, but the stipulation removes the need for any additional rule of noncoreference.

Treating both kinds of indices the same way for Principles B and C also requires treating them the same way for Principle A. If, however, there are no anaphors bound solely by α indices, then F&M's account of binding-theory-induced noncoreference for Principles B and C is more ad hoc than they contend. To put it as a question, when does Principle A have to be stated on anything other than dependencies? The cases that could distinguish between an anaphor uniquely bound by an α index and one bound by a β index require the following scenario: dependency must be independently blocked and coreference must be linguistically enforced. F&M suggest that the strict reading for the elided portion in (26) may be an instance where an anaphoric form is not dependent, but must bear an α index.

- (26) Who slashed the samurai? *The samurai* must have slashed *himself*.
Clearly the shogun couldn't have.

The last sentence does not involve a self-slashing, so the interpretation appears to be strict—that is, the shogun couldn't have slashed the samurai. The α index on the object of the elided verb (i.e., [*slashed x*]) is supposed to be what enforces identity of x with *himself*, which is bound by *the samurai*. On F&M's reasoning, the x of *slashed x* is elided *himself* bound by an α index on *himself* in the second sentence.

However, the assumption that an α -indexed reflexive is involved for the second sentence in (26) is undercut by F&M's assumption that in elision contexts, it is not necessary to reconstruct the SELF portion of English pronoun-SELF forms (for further discussion of this process with respect to vehicle change, see section 2.1). Without the SELF portion reconstructed in the elided portion, the reconstructed pronoun (i.e., '... the shogun couldn't have [*slashed him*]') does not fall under Principle A; rather, it falls under Principle B, which does not rule it out (see F&M 1994, 213n17). The availability of this analysis within F&M's theory undermines their claim that the ellipsis in this context must preserve α indices on a SELF form as opposed to a pronoun. F&M's claim that there are reflexives that are uniquely α -index bound then reduces, in this case, to the assertion that *himself*, emphatically stressed (F&M 1994, 208n14), is an α -indexed form (as in the object in *The samurai must have slashed himself*). I see no compelling reason beyond those internal to their theory to suppose that α -indexed SELF forms exist.

In any case, the elision in (26) does not take *slashed himself* as its antecedent; if it did, F&M's theory would be straightforwardly disconfirmed. Consider (27).

- (27) Who slashed those samurai? *Each samurai* must have slashed *himself*.
Clearly the shogun couldn't have.

It appears that the elided portion takes *slashed those samurai* as its antecedent; otherwise, the stressed purported α -occurrence *himself* would not be dependent on *each samurai*, contrary to fact. If the last sentence is slightly odd, it is because the intervening sentence suggests a different VP antecedent (*slashed himself*), but one that clashes with the presuppositions of the question (we are talking about slashed samurai, not slashed shoguns).⁹

Thus, the claim that there are α -indexed anaphors subject to the binding theory is suspect, and along with it, F&M's account of noncoreference induced by the binding theory. I will argue in section 2.3 that there are in fact cases where Principle A is satisfied by an antecedent that the

anaphor does not depend on; but the dependencies that hold in those cases would not correspond to α coindexation either, since they are not cases of independent covaluation.¹⁰

In what follows, I will assume there is no need for a coindexation relation in formal grammar to express (linguistic commitment to) independent covaluation, nor any reason to introduce indices contingent on a c-command relation as in G&R's version of the CLP theory. All that needs to be represented to achieve the proper interpretations is a dependent identity relation, and this relation will be represented henceforth with the arrow notation.

1.3.2 Numeration Indices and Inclusiveness

One argument occasionally invoked for the existence of indices was that movement theory requires indices anyway, thus they can also be used to express coconstrual. With the modern reemergence of the copy theory, the view that indices arise independently from movement operations, and thus are already in the theory, is no longer valid. Chomsky (1995) does propose a new class of indices, numeration indices, which arise as a result of copying, but these indices refer to the number of selections from the lexicon in forming a numeration (the lexical items to be used in a derivation), not to referential properties. Relations of identity posited to hold between copies and what they are copies of arise from the identity of numeration indices matching word for word (not phrase to phrase).

Since I will have a great deal to say in the chapters that follow about how numeration indices are propagated, it is useful to pause here to illustrate what they represent. A minimalist derivation begins with a selection from the lexicon of forms to be used in the derivation. This set of selected forms is called the numeration. Suppose, for example, we are to derive the surface sentence in (28a). If so, we will need the lexical selections in (28b), including two selections of the word *the* and two selections of the word *brown*.

- (28) a. A brown dog bit the brown fox in the neck.
 b. the₁, the₂, brown₃, brown₄, dog₅, PAST₆, bit₇, a₈, fox₉, in₁₀,
 neck₁₁

The derivation proceeds by merging one word with another to form a phrase, and then by attaching another word from the numeration to the ones already merged, forming a larger syntactic constituent. A minimalist derivation is complete when every lexical item in the numeration has been

used in the derivation (thereby introduced into the syntactic tree structure) and all lexical requirements and features of the lexical items have been satisfied. The numeration indices indicate that the selection of forms is finite, and they permit distinctions between one instance of a form (e.g., *brown*) and another.

Minimalist derivations are ruled by an economy principle or principles, variously stated; but in all accounts, using the same form in a derivation more than once is uneconomical unless it is necessary to satisfy lexical requirements or syntactic features. Thus, in (28), it is also possible to select *the* more than two times in the derivation, but to do so would not be economical, since the third use of *the* would not be some newly indexed form, *the*₁₂, but a selection of either *the*₁ or *the*₂ again. Forms that bear the same numeration index are copies and are indistinct in their syntactic and semantic values, though they may occupy different positions in a syntactic structure and hence participate in distinct structural relations with other forms.

Appealing to a formulation of the movement relation from early versions of syntactic theory, Chomsky (1995) proposes that movement is a copying relation, such that displaced phrases contain copies of the forms in the launching site of movement. For example, consider (29a). (29a) has the numeration shown in (29b), which differs from that for (29c), let us suppose, by virtue of the presence of a topic marker (TOP) that attracts *Tom* to the fronted position.

- (29) a. Tom, Bill likes.
 b. Tom₁, Bill₂, PRES₃, like₄, TOP₅
 c. Bill likes Tom.

Let us assume for the purposes of presentation that TOP is a phonologically null lexical item consisting of a feature that must be satisfied. The feature can be satisfied by the presence of an appropriate phrase in the specifier relation to the Top head (e.g., specifier-head agreement or a feature-checking relation). The derivation (simplified for presentation) proceeds as follows:

- (30) a. [like₄ Tom₁]
 b. [PRES₃ [like₄ Tom₁]]
 c. [Bill₂ [PRES₃ [like₄ Tom₁]]]
 d. [TOP₅ [Bill₂ [PRES₃ [like₄ Tom₁]]]]
 e. [Tom₁ [TOP₅ [Bill₂ [PRES₃ [like₄ Tom₁]]]]]

The two copies of *Tom* are necessary, since one satisfies the thematic selection of the verb *like* while the other satisfies the feature of TOP. Which copy is pronounced is a function of which copy is preserved in phonological form (assuming that not all copies are preserved). The copy preserved in LF is semantically interpreted in its structural position (again assuming that not all copies are preserved).

It is clear for cases like (29a), however, that there is no sense in which forms that share the same numeration index are in a relation of referential identity in any sense. The fact that the form Tom_1 in Spec,Top picks out an individual indistinct from Tom_1 in the complement position of *like* is incidental in (30e), since only one of these forms is interpreted at LF; rather, what the common numeration index marks is an identity of forms that could hold as well between adjectives or determiners and their copies arising from movement. These relations will be examined in some detail in chapter 4. What matters at this point is that numeration indices are not referential indices.

Chomsky (1995, 228) suggests further that (referential) indices should be eliminated from syntactic theory entirely as a consequence of his principle of Inclusiveness:

A “perfect language” should meet the condition of inclusiveness: any structure formed by the computation (in particular, [PF and LF]) is constituted of elements already present in the lexical items selected for [the numeration]; no new objects are added in the course of computation apart from rearrangements of lexical properties (in particular, no indices . . .) . . .

The dependency arrows I propose also would violate Inclusiveness since they represent relations that are not lexical properties and they do not correspond to numeration indices. However, a slightly weaker version of inclusion would permit dependency arrows but still be forceful enough to exclude symmetric indices. Suppose Inclusiveness is considered more as a ban on new individual properties assigned to lexical forms or phrases in the derivation than as a ban on new relations between forms and/or phrases. An index is a property assigned to a head or phrase that could happen to be the same index as that of some other head or phrase, in which case an unwanted (accidental) coincidence of indices could create a commitment to covalued interpretation that is reminiscent of features that happen to match. By contrast, arrows are inherently relational: one end of an arrow has no meaning; hence, it could not accidentally match some other end of an arrow in any meaningful way (as Higginbotham pointed out when he invented them).

An alternative view would be to treat the arrows in the same way that G&R treat indices, that is, as the mere notation of a class of relations, the distribution of which is entirely determined by principled constraints. If so, the arrow notation is nothing more than a convenient presentational description, not itself part of UG. To put it another way, dependent identity, like covaluation, may be a semantic notion that is functionally necessary outside of sentence grammar or, for that matter, outside UG, but only dependent identity is specifically restricted by the nature of natural language. It is a separate question whether the representation of dependent identity must be part of actual representations, rather than just a set of options for relations that the semantics can compute. Only if the notational form of arrows is crucial to the statement of syntactic constraints or principles must we treat them as part of UG. The issue will hover in the background in the chapters that follow, but I know of no compelling evidence that the patterns of dependency I examine require representation with arrows. Rather, I will use the dependency arrows in presentation over indices because the dependencies with syntactic consequences are more precisely represented that way.

1.3.3 Obviation

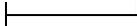
Once we eliminate indices, hence the notion “binding,” Principles B and C must be reformulated, not only to rule out dependency, but also to block covaluation where dependency fails.¹¹ As an intermediate step (before I reformulate Principles B and C as a single principle in section 1.4), we could assume a binding theory like that of Higginbotham (1985, 572), as in (31).

- (31) a. An anaphor is locally linked.
 b. A pronominal is locally obviative.
 c. An r-expression is obviative.

Higginbotham assumes that (31a–c) only hold under c-command by an antecedent. He defines *obviative* as in (32), and he uses *linked* to mean ‘connected by the hook end of a dependency arrow’.

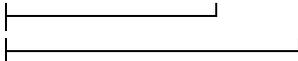
- (32) If x and y are obviative, then they cannot be determined by the structure in which they occur to share a value.

Principle B as given in (31b) determines that *Jack* and *him* must be “obviative” in (33a), and Principle C determines that *Jack* in object position in both (33a) and (33b) is obviative with respect to the matrix subject *Jack*.

- (33) a. **Jack* saw *him*/*Jack*.

- b. *Jack* said that *Jacky* saw *him*/**Jack*.


Notice that obviativity is part of the syntactic binding theory, but not defined on arrows at all. This appears necessary within the dependency arrow account to avoid permitting examples like (34a–c) where two elements that must not be coconstrued are not blocked from coconstrual with a third term.

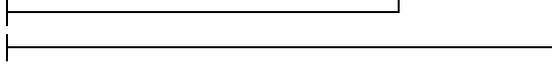
- (34) a. **He* said that the woman *he* loves saw *Phil*.

- b. **John's* mother said *he* saw *him*.

- c. *A person who hates *John* says *he* insulted *John's* mother.


In (34a), *Phil* cannot be dependent on the matrix *he* because of Principle C, but Principle C does not rule out coreference between *Phil* and the second *he*. In (34b), both *he* and *him* can be dependent on *John*, but *him* cannot be covalued with *he*. Similarly, dependency of *John's* on *John* is permitted, as is dependency of *he* on *John* in (34c), but all three cannot be covalued.¹² Examples (34a–c) illustrate a transitivity problem originally raised by Lasnik (1976). Lasnik points out for examples like (34a,c) that it is not enough for Principle C (as Lasnik's noncoreference principle came to be known) to simply require that the name and its c-commanding antecedent are not marked coreferent. Elements not marked coreferent by rule could then “accidentally” happen to have the same referent. Lasnik concludes that failure of coreference is not strong enough and so formulates his principle to require noncoreference between *he* and *John's*. This is captured in Higginbotham's system by the force of obviation, which does not permit *x* and *y*, once they are obviative, to share a value; hence, the transitivity relation is ensured.¹³

However, examples like those in (35), pointed out by Heim (1993), show that Higginbotham's theory is too strong, since (35a) is acceptable under a reading like that in given (36a).

(35) a. *Each female candidate believes only she* voted for *her*.



b. *Each female candidate believes only she* voted for *herself*.



(36) a. Each x , x a female candidate (x believes (only y ($y = x$) (y voted for x)))

b. Each x , x a female candidate (x believes (only x (x voted for x)))

The reading that is impossible for (35a) is the one where *her* depends on *she*, which is presumably blocked by Principle B (*she* and *her* should be obviative), but it is indeed possible for *she* and *her* to share a value, both of them depending on *each female candidate* (or its trace at LF), a reading that may be described as “codependent” (and to which I will return in section 2.3). The existence of this codependent reading is part of the reason why I have characterized the empirical force of Principles B and C (for interpretation) to be one of expected noncoreference, which can be overcome when there is a marker of exceptional expectations, such as *only*, or an instantiation context like those discussed earlier.

Notice also that (36b) permits dependency of *herself* on *only she* because the choice of form in (35b), *herself*, does not exclude the dependency in question, but *her* in (35a) cannot support that dependency. We may now ask whether or not failure of dependency and the obviation effect (which I now take to be expectation of noncovaluation) are induced by the same principle, or whether they are distinct effects. Examples like (36a) suggest they are distinct effects, since even where obviation is overcome by the right sort of adjustment of expectation, dependency of *her* on the subject *only she* is still blocked (an effect noted earlier with respect to ellipsis).

Suppose we separate the obviation effect and the blocked dependency effect by treating them separately, as in (37) and (38), now explicitly incorporating c-command since it is no longer folded into binding.

(37) a. *Principle A*

An anaphor is locally linked to a c-commanding antecedent.

b. *Principle B*

A pronominal cannot be locally linked to a c-commanding antecedent.

c. *Principle C*

An r-expression cannot be linked to a c-commanding antecedent.

- (38) a. If a pronoun *x* cannot be linked to *y* by Principle B, then *x* and *y* are obviative.
 b. If an r-expression *x* cannot be linked to *y* by Principle C, then *x* and *y* are obviative.

Even if obviativity can be neutralized when coreference is contrary to expectation, (37) ensures that blocked dependency cannot be so neutralized.

There is much to be suspicious of in (37) and (38), particularly (a) the separate appeals to c-command in (37a–c), which are the residue of what was formerly folded into “binding” based on indexing and (b) the separate injunctions in (38a,b) necessary to connect both Principles B and C to the obviativity effect. The latter inelegance dates back to the binding theory itself, insofar as the noncoreference enforced by that theory treats Principles B and C as separate. It is time to eliminate the need to posit distinct Principles B and C.

1.4 The Form-to-Interpretation Principle and Pragmatic Obviation

I have just concluded that Principles B and C feed obviation in the same way, which suggests that the two principles can be unified. In this section, I briefly introduce a theory I defend in Safir 2004, which reduces Principles B and C to the outcome of a competition between more and less dependent forms. However, the main purpose of introducing my competition theory is to distinguish its effects more thoroughly from those induced by the INP, which returns as our primary focus in chapter 2.

The elimination of a distinct Principle B would be desirable for a number of reasons, besides the general scientific desideratum of eliminating unneeded principles. Conceptually, Principle B has always had a rather odd status, in that it singles out as a lexical class a set of forms that are specified for an environment where they cannot occur. Normally pronouns can pick up antecedents in the sentence or not (unless they are also anaphors susceptible to Principle A). It seems similarly odd to say of r-expressions that they have a lexical property of being specified for an environment where they cannot occur (where they would have a c-commanding antecedent). It is further suspicious that pronouns are excluded in exactly those environments where anaphors are available; that is, they are in complementary distribution, at least for the most part.

The complementary distribution of pronouns and anaphors was enshrined in the binding theory (and crucial to the PRO Theorem, abandoned by most linguists since the early 1990s; see Chomsky and Lasnik 1995). Yet the binding theory achieved that complementarity by proposing separate statements for Principles A and B, rendering largely accidental the fact that the domains in which they apply overlap. Indeed, C.-T. J. Huang (1983) exploits the accidental enforcement of complementarity in the *LGB* binding theory by assigning different domains for Principles A and B in order to account for cases where complementarity appears to break down.

By contrast, some have argued that the complementarity between pronouns and anaphors, on the one hand, and between pronouns and names, on the other, is absolute under the right interpretation of the data and have proposed that the complementarity effect should be derived. Most typically, it is proposed that Principle B effects should be derived from the distribution of Principle A effects. In other words, pronouns are excluded where anaphors are available, and, at least where the antecedent c-commands, r-expressions are excluded where pronouns are available.

Among the various derived complementarity theories that have been proposed, those put forth by Hellan (1988), Burzio (1989, 1991, 1996), Levinson (1987, 1991), and Y. Huang (1991, 1994) have been developed in some detail. Burzio's approach treats the complementarity effect as determined by a syntactic theory of competition, and in this respect it is the immediate ancestor of mine, as opposed to proposals based on pragmatic principles developed from Gricean maxims, such as those of Levinson and Y. Huang. Reinhart's (1983a) proposal that names are excluded where a c-commanded bound variable pronoun is possible is another ancestor, though her theory is based on the CLP, which I reject, as well as some assumptions about the role of pragmatic strategies that I also reject (for reasons related to the primary reason I reject the Gricean-maxim-based proposals). I will not review here my reasons for formulating my approach in terms different from these antecedents; for details, see Safir 2004, where I also defend my contention that complementary distribution between anaphors and pronouns and between pronouns and names holds empirically, once apparent deviance from this norm is understood in the proper light.¹⁴

The essential idea behind my version of the derived complementarity approach is that dependent readings with c-commanding antecedents are only possible if the form that is used to achieve the dependent reading

is the “most dependent form available” in a given context. A form is available if the lexicon contains it and nothing prevents it from occurring in a given position. From this perspective, consider the operation of Principle A, which I reformulate within my approach as *Local Antecedent Licensing* (LAL). (I will not explore the details of domain D here as they will not affect my later reasoning—most standard versions of the domain for Principle A of the binding theory will do.)

(39) *Local Antecedent Licensing (LAL) (provisional)*

An anaphor must be anteceded in domain D.

(40) *Most dependent hierarchy*

Anaphor > pronoun > r-expression

If a given form, such as an English pronoun-SELF form, is an anaphor, then it is always more dependent than either a pronoun or a name, as indicated in the dependency hierarchy assumed in (40). However, since I do not assume Principle B, both pronouns and anaphors are available in the local domain; but in that domain, a pronoun will always lose to an anaphor in the competition to represent the dependent reading. Similarly, where both pronouns and r-expressions are available, a pronoun will always win the competition to represent the dependent reading. The principle that rules this competition is the Form-to-Interpretation Principle.

(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 dependent on x .

One of the advantages of the FTIP is that it reduces Principles B and C to a single principle. There is now no lexical statement about where otherwise independent forms cannot appear; rather, it is just a question of whether or not a form has lost the competition on the most-dependent scale to represent the dependent identity interpretation. The obviation effect can now be directly keyed to the output of the FTIP.

(42) *Pragmatic Obviation*

If the FTIP does not permit y to be interpreted as directly dependent on x , then x and y form an obviation pair.

Notice that in this formulation, Pragmatic Obviation simply characterizes a relation between two nominals without determining their structural relation to one another. The structural relation is entirely expressed by the

FTIP, which only identifies which nominal is blocked from depending on which other, and it is only this relation that Pragmatic Obviation enhances. Thus, the c-command effect on coreference is indirect since Pragmatic Obviation makes no direct appeal to syntactic structure.

This division of labor permits Pragmatic Obviation to be overcome where unexpected coreference is focused, while the effect of the syntactic constraint is not; blocked dependency is impervious to any accommodating pragmatic factor. This is worth illustrating again. As Lasnik (1976) has pointed out, epithets can be used as bound variables, but they are still sensitive to his c-command restriction.

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

In (43a), the bound variable interpretation succeeds because the quantified expression does not c-command it from an A-position, in contrast to (43b), which can only succeed with a bound reading if *the bastard* is replaced by a more dependent form, namely, the pronoun *he*.¹⁵ Example (44a) shows, just like (43b), that *the bastard* does not permit a bound reading, even in a context that heavily favors a gestural interpretation, such that the hand in question might be expected to be the one that belongs to the bastard who raises it. Rather, the gestural reading that expresses the sort of accidental correlation of hands and bastards is achieved with the use of the indefinite, *a bastard's hand*, in (44b). A more natural bound reading for (44b) is only achieved where *his* replaces *a bastard's*.

The competitive approach has a wide variety of other advantages, some of them pointed out as support for some of the ancestors to my theory (as cited above). For example, it follows from the FTIP that no language that has antisubject orientation for pronouns fails to have subject orientation for anaphors in the same positions. Moreover, anaphors can compete against each other on the most-dependent scale, and if so, an anaphor that cannot be anteceded locally (because another anaphoric competitor is available) may still outcompete pronouns and names in a wider anaphoric domain; this explains why some anaphors have a locality gap in their distribution (i.e., it is unnecessary to say of these forms that they act like pronouns in one domain and like anaphors in a wider one). Thus, differences in the inventory of potentially dependent forms in a

language can result in different patterns, even though the principle determining their distribution, the FTIP, is invariant and universal. Quite a few other results are explored in Safir 2004.

Let's consider more concretely now how FTIP competitions are constructed. In (45a), for example, a reflexive pronoun is available (would be licensed by LAL) and so it wins over *him* and *Larry*. In (45b), *himself* is not available because it would not be licensed by LAL, so the only competitors are *him* and *Larry* and *him* wins. *Larry* cannot support the dependent reading and will be marked obviative with respect to *he* by Pragmatic Obviation.

- (45) a. *Larry* loves *himself*/**him*/**Larry*.
 b. *He* says Malva loves **himself*/*him*/**Larry*.

Cases like (45a), for example, where the matrix subject is marked as part of an obviative pair with either *Larry* or *him*, disguise a second effect, an INP effect, that I will distinguish later. After all, nothing in the FTIP precludes dependency of the matrix subject on *himself*/*him*/*Larry*. As we will see, the INP does ensure that the subject could not be anteceded by its c-commandees, but failure of a dependency relation under the INP, unlike under the FTIP, does not feed Pragmatic Obviation. If it did, then the only successful competitor in (45b), the lower pronoun *him*, would also be marked obviative with *he* (because dependency of *him* on *he* would fail, even if the opposite dependency can succeed). This would be the wrong result (a matter I will return to from time to time).

The notion of obviative pairs proposed here does involve a kind of relational recordkeeping that is presumably added to recordkeeping in a discourse, as in any theory of discourse tracking.¹⁶ I am assuming that if *x* is obviative with *y* and *y* is covalued with *z*, then *x* is obviative with *z*. Since obviativity is a relation, not an inherent property (like a referential index), marking it would be consistent with the reinterpretation of Inclusiveness suggested in section 1.3.2; but there is no obvious reason to suppose that this sort of recordkeeping is any part of syntactic representation. I know of no syntactic condition that refers to the obviativity relation; moreover, such relations seem to be necessary external to grammar, unless one assumes that all presupposition of identity (or the lack of it) is linguistic, a view that few if any would support.

This presentation of the intuitive idea behind the FTIP competition approach will do for what I have to say in later chapters, and so I will not argue further for it here. Interested readers can explore the FTIP and its effects in Safir 2004.

However, what will be important in later chapters is that the FTIP effect can be neutralized in certain contexts by a mechanism that also has (indirect) consequences for the INP. The exact nature of these cases I take up in chapter 4, but the neutralization mechanism deserves discussion here. As F&M (1994) note, examples like (46) permit coconstrual between *Orville* and the object of the elided verb *praise* in the second conjunct.

- (46) a. Ollie expects that the boss will talk to *Orville*, but *Orville* hopes she won't [talk to *Orville*]
 b. We knew the boss would fire *Orville*, but *Orville* didn't [know the boss would fire *Orville*]

If the material in brackets is reconstructed with the name in strict parallel fashion, then Principle C will predict (46a,b) to be ill formed, and so would the FTIP. F&M propose that in contexts of ellipsis, parallelism can be relaxed in the following sense: names can undergo so-called vehicle change to become pronouns, in which case, Principle C will not apply in (46a) and (46b). As F&M observe, vehicle change does not neutralize Principle B, since a pronoun is still a pronoun even if it undergoes vehicle change (see F&M 1994, 222).

- (47) **Malva* aggravates *him*/*Nigel*, but *Nigel* doesn't [aggravate *him*/*Nigel*]

Here a pronoun copied or vehicle-changed in the second conjunct does not improve its acceptability.

Consider how the difference between (46a,b) and (47) plays out with respect to the FTIP. Suppose that the second conjunct, though unpronounced, has exactly the same lexical selection (a fairly strict notion of structural parallelism) as the first conjunct except that in the second conjunct, pronouns are always available in lieu of exactly matched nominals from corresponding positions in the first conjunct. Since a pronoun is always possible in the second conjunct, there is no more dependent form than a pronoun that could have been selected for cases like (46a,b), and so the object of *talk to* or *fire* in the second conjunct is not obviative with the c-commanding *Orville*. In (47), once again a pronoun is a possible alternative for the elided object of *aggravate*, but the most dependent form in that position for that clause would be a reflexive, and that is not available for the second clause—only *Nigel* or the vehicle-changed pronoun is. Thus, neither *Nigel* nor the pronoun *him* is the most dependent form with respect to the subject *Nigel*, and the result is obviation in (47).

Now consider that parallelism can also apply to overt conjuncts (e.g., see Chomsky and Lasnik 1995, 125). With parallelism forced on overt conjuncts, as in (48a), there is no vehicle-changed option, as there is in (48b), to submit to the FTIP competition; thus, the FTIP rules that the last *John* is obviative with the second one, since a competing numeration with a pronoun in place of the name was not selected.¹⁷

- (48) a. *Mary loves *John* and *John* admits she loves *John*, too.
 b. Mary loves *John* and *John* admits she does [love *him*], too

I am not assuming, however, that vehicle change can provide an alternative nominal other than a simple pronoun. If a reflexive could replace a pronoun in (47), then we would predict, contrary to fact, that (47) would be acceptable with *aggravate* understood reflexively with respect to the subject *Nigel*. On the other hand, a reflexive can be vehicle-changed to a pronoun. The strict reading in (49) illustrates this possibility.

- (49) Lyndon has managed to praise himself more than any of his aides could (have)

In this case, vehicle change permits the object of elided *praise* to fail to be dependent on *his aides* (though, as explained in section 2.1, the elided object must still be dependent on whatever antecedes *himself*).

The FTIP will play only a supporting role in the main lines of argument for chapters 2 and 3, but the role it plays is part of what distinguishes my approach, as the discussion in those chapters will show. Moreover, it is important to keep in mind that while the FTIP triggers Pragmatic Obviation, the INP does not. In other words, I contend that failure of dependent identity cannot be taken *generally* to establish an expectation of noncoreference, especially once it is clear that the CLP cannot be maintained. As we will see, the distinction between cases where failure of dependent reference results in obviation and cases where it does not has a variety of interesting consequences.