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Anaphora resolved

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In the first part of this dissertation I examined several existing accounts of pronominal anaphora. A number of problems were identified, but these problems were all resolved without departing in any substantial way from the fundamental ideas underlying the original theories. For example, the new interface rule I proposed, Rule S, preserved Reinhart's idea that hearers minimize interpretive options, and the new economy constraint, Free Variable Economy, preserved Fox's idea that syntactic derivations are subject to economy principles. The distinction between bound and referential pronouns, and the assumption that binding is encoded in the syntax, were also preserved.

In this second part, I will consider certain objections to some of these ideas and advance an alternative theory which is based on the idea that pronouns and elided VPs always retrieve their meaning from the context in which they are used. In a slogan: *anaphora are resolved*.

4.1 Issues of Unification

The framework adopted in Part I was based on the following two assumptions about the nature of pronominal anaphora and VP ellipsis:

1. Pronouns are either bound or referential.
2. VP ellipsis consists in deleting a VP constituent at PF.

These assumptions immediately raise the following two issues:

1. Can't we treat all pronouns alike?
2. Can't we treat pronouns and VP ellipsis alike?

I will discuss each of these issues in somewhat more detail.

Bound and Referential Pronouns. In section 1.1 it was argued that not all pronouns should be treated alike, and in particular, that a distinction should be made between bound and referential pronouns. The primary reason for doing so was that pronouns seem to be interpreted as bound variables in sentences like (1.1), repeated here as (4.1), whereas they seem to function as referential expressions in sentences like (1.2), repeated here as (4.2).

(4.1) Every man thinks he will win.

(4.2) John is in good shape. I think he will win.

A secondary reason to adopt the distinction between bound and referential pronouns was that it yields an attractive explanation of the ambiguities exhibited by sentences like (1.3)-(1.5), repeated here as (4.3)-(4.5).

(4.3) MAX called his mother.

(4.4) Only MAX called his mother.

(4.5) Max called his mother and Bob did too.

Thus, there seemed to be good reasons to assume that English pronouns are in fact systematically ambiguous between a bound variable interpretation and a referential interpretation. However, if such a systematic ambiguity were real, then we would expect to find other languages in which certain pronouns are either always interpreted as bound variables or always interpreted referentially (no matter in which context they are used).

To make this point clear, let me briefly consider another case of apparent lexical ambiguity in English. The sentences in (4.6) and (4.7) exemplify two seemingly distinct usages of the verb *to know*.

(4.6) I know John McEnroe.

(4.7) I know that John McEnroe won Wimbledon in 1984.

Intuitively, in (4.6) *to know* roughly means *to be acquainted with*, whereas in (4.7) it roughly means *to have conclusive evidence for*. Evidence for the hypothesis that the verb *to know* is lexically ambiguous comes from the fact that languages other than English indeed have distinct lexical items for *being acquainted with* and *having conclusive evidence for*. In Dutch, for example, the first is translated as *kennen* and the second as *weten*. Similarly, German has *kennen* and *wissen*, Spanish has *conocer* and *saber*, and Italian has *conoscere* and *sapere*. In each of these languages, (4.6) would be translated using the first verb, and (4.7) would be translated using the second verb.

In the case of pronouns, to the best of my knowledge, no languages have been found in which there are specialized lexical items either for bound or for referential pronouns. This makes one think again. Couldn't there be a unified analysis of

pronouns which would be compatible with their seemingly distinctive use in (4.1) and (4.2), and which would moreover still provide a natural explanation for the ambiguities in (4.3), (4.4), and (4.5)?

Pronouns and VP ellipsis. The idea that VP ellipsis and pronominal anaphora are fundamentally different dates back to an influential paper by Hankamer and Sag (1976). These authors argued that there are two types of anaphora: *deep* anaphora and *surface* anaphora. Pronouns were classified as deep anaphora, whereas VP ellipsis was classified as surface anaphora. The main difference between the two was taken to be that deep anaphora (pronouns) can be deictic—that is, their meaning may be retrieved from the non-linguistic context—while surface anaphora (VP ellipsis) always require a linguistic antecedent. Soon after the publication of Hankamer and Sag’s paper, Schachter (1977) already presented several counterexamples to the claim that VP ellipsis always requires a linguistic antecedent:

(4.8) [John meets Mary in a bar. He points at a chair near her and says:]
May I?

(4.9) [She answers:] Please do.

(4.10) [He offers her a drink, but she says:] I really shouldn’t.

(4.11) [Then he invites her to dance:] Shall we?

Webber (1978) also discussed several cases of VP ellipsis which do not involve direct linguistic antecedents. One famous example is the following:

(4.12) Irv and Mary wanted to dance together, but Mary couldn’t, because her husband was there.

VP ellipsis is not really deictic here, as in Schachter’s examples, but the antecedent must be *inferred* from the linguistic context (*Irv and Mary wanted to dance together* entails *Mary wanted to dance with Irv*). Many authors have been convinced by Schachter’s and Webber’s examples that VP ellipsis does not require a direct linguistic antecedent. In fact, Sag (2006) himself provides many more cases of inference-based VP ellipsis, and abandons the viewpoint expressed in (Hankamer and Sag, 1976) and (Sag, 1976).

Still, there are also authors who have tried to keep the distinction between deep and surface anaphora alive. In particular, Hankamer (1978) argued that Schachter’s counterexamples were all highly conventionalized, idiosyncratic expressions which do not involve ellipsis at all. Pullum (2000) endorses this view. But I am not convinced. I do think Schachter’s counterexamples are legitimate. It is true that deictic pronouns are much more common than deictic VP ellipsis, but there are good reasons for why this is so. First, pronouns usually carry some (gender/number/person) information, which makes it easier to determine their

intended referent. Elided VPs do not convey such information. Second, there are many more situations in which a particular object is the single most salient (female/singular/third person) object than there are situations in which a certain property or activity is the single most salient property or activity. Thus, the intended meaning of elided VPs is generally much harder to recover from the non-linguistic context than the intended meaning of pronouns.

In sum, I do not think that there are any good reasons to assume that pronouns and VP ellipsis are fundamentally distinct. In fact, there is significant evidence to the contrary. In particular, as discussed at length by Wasow (1972) and also emphasized by Williams (1977), pronouns and VP ellipsis have several striking properties in common. I will briefly illustrate three such properties here. First, neither pronouns nor elided VPs can c-command their antecedents. This is illustrated by the following examples from (Wasow, 1972, p.81):

- (4.13) a. *John* dropped out after *he* tried LSD.
 b. After *John* tried LSD, *he* dropped out.
 c. After *he* tried LSD, *John* dropped out .
 d. #*He* dropped out after *John* tried LSD.

- (4.14) a. *John* *tried LSD* after Bill *did*.
 b. After Bill *tried LSD*, *John* *did*.
 c. After Bill *did*, *John* *tried LSD*.
 d. #*John* *did* after Bill *tried LSD*.

Second, neither pronominal anaphora nor VP ellipsis are subject to Ross' (1967) island constraints. Example (4.15) shows this for the Complex Noun Phrase Constraint, example (4.16) for the Coordinate Structure Constraint, and example (4.17) for the Sentential Subject Constraint. All the examples are from (Wasow, 1972, pp.94-95). The relevant islands are indicated by square brackets.

- (4.15) a. John believes [the prediction that he will win].
 b. John didn't take LSD, but Bill believed [the claim that he did].
- (4.16) a. Nixon seems to believe that [he and Agnew] had to cheat to win.
 b. The public realizes that Nixon lied, although Mitchell claims that he [never would and can be trusted].
 c. The public realizes that Nixon lied, although Mitchell claims that he [is an honest man and never would].
- (4.17) a. Ford believes that [for him to resign] would be a disaster.
 b. Although Ford didn't resign, [that many people wanted him to] is encouraging.

Finally, as observed by Williams (1977, pp.101–102), both pronominal anaphora and VP ellipsis may operate across sentence boundaries and even across speaker boundaries. The following examples illustrate this:

(4.18) A: John called.
B: What did he say?

(4.19) A: Who called?
B: John did.

Pronominal anaphora and VP ellipsis differ in these respects from other operations, such as Gapping, Comparative Deletion, Object Deletion, and Relative Deletion (for illustrations of this fact, see Wasow, 1972; Williams, 1977).

Thus, I think we should seek a unified treatment of pronouns and VP ellipsis. This means that the basic assumptions underlying the framework adopted in chapter 1 should be revised.

4.2 Issues of Stipulation

In the previous section, we considered the assumptions adopted in Part I as to what pronominal anaphora and VP ellipsis are. Now, let us consider the proposed account of how the interpretation of pronouns and VP ellipsis is *constrained*. The conclusion we reached in Part I was that the interpretation of pronominal anaphora is subject to the following four constraints:

1. Condition B
2. Rule S
3. Free Variable Economy
4. Movement Economy

The interpretation of VP ellipsis was assumed to be governed by Focus Match and a Semantic Identity constraint.

We saw that Rule S and Movement Economy can be derived from general ideas about how people behave in communication. In particular, Rule S is derived from the idea that hearers minimize interpretive options, and Movement Economy can be derived from the idea that speakers minimize the risk of being misinterpreted. It was also pointed out that Condition B may be derived from general syntactic principles, that Focus Match may be taken to follow from a general theory of information structure encoding, and finally, that Free Variable Economy may be derived from the general idea that syntactic derivations are subject to economy principles. The Semantic Identity constraint on VP ellipsis, however, was not shown to follow from more general ideas. This is rather dissatisfying: if VP ellipsis is indeed subject to a Semantic Identity constraint we would like to have an explanation for why this is so. Such an explanation was not given in Part I.

4.3 Pronouns Revisited

In Part I we assumed that pronouns can be bound or referential. A bound pronoun is translated as a variable; a referential pronoun takes on the meaning of its antecedent. Section 4.1 raised the issue of whether the distinction between bound and referential pronouns is really necessary. In this section, we will see that there are several usages of pronouns that cannot be classified as either bound or referential (in the above sense). The conclusion will be that the distinction between bound and referential pronouns drawn in Part I is not only conceptually undesirable, but also empirically too narrow to cover all usages of pronouns.

Deixis. Pronouns can be used deictically. That is, they can be used to refer to an object in the non-linguistic context:

(4.20) [Pointing at John] He won.

Strictly speaking, this usage does not count as referential in the terminology of Part I, because the pronoun does not take on the meaning of its antecedent (there is no antecedent). Rather, its meaning is retrieved from the context in a more liberal way.

Inferred Antecedents. Deictic pronouns are not the only pronouns which do not have an explicit linguistic antecedent. Pronouns may also have *inferred* antecedents:¹

(4.21) If I get pregnant, I'll definitely keep it. (overheard in conversation)

(4.22) There was not a man, a woman or child within sight; only a small fishing boat, standing out to sea some distance away. Harriet waved wildly in its direction, but they either didn't see her or supposed that she was merely doing some kind of reducing exercises.
(Gundel *et al.*, 1993, quoted from a novel by Doroty Sayers)

(4.23) What's that shadow creeping up the wall? Could it be a burglar?
(Geurts, 2008)

(4.24) John bled so much it soaked through his bandage and stained his shirt.
(Tic Douloureux, 1971)

(4.25) Maxine was kidnapped but they didn't hurt her. (Bolinger, 1977)

Again, no explicit antecedent is involved in these cases.

¹Examples (4.24) and (4.25) are taken from (Geurts, 2008), who provides several more examples of the same kind.

Verbal Antecedents. The following example shows that the meaning of a pronoun is sometimes retrieved from a verbal antecedent.

(4.26) We built the house ourselves, but it wasn't easy.

Indefinite Antecedents. Pronouns can have indefinite antecedents:

(4.27) A man came in. He sat down.

Again, the pronoun does not simply take on the meaning of its antecedent in this case: (4.27) differs in meaning from (4.28).

(4.28) A man came in. A man sat down.

Donkey Pronouns. A pronoun can also have an indefinite antecedent which does not introduce any specific individual. The following classical examples are from Geach (1962):

(4.29) Every farmer who owns a donkey beats it.

(4.30) If a farmer owns a donkey, he beats it.

Notice that there is no single man and no single donkey to which *he* and *it*, respectively, refer. Pronouns of this kind are called *donkey* pronouns, *E-type* pronouns (Evans, 1980) or *D-type* pronouns (Elbourne, 2005b).

Pronouns of Laziness. The following example from Karttunen (1969) exemplifies another usage of pronouns which is difficult to classify as either bound or coreferential:

(4.31) The man who gave his paycheck to his wife is smarter than the man who gave it to his mistress.

The pronoun *it* refers to the second man's paycheck, while its antecedent refers to the first man's paycheck. Such pronouns are called pronouns of laziness, or paycheck pronouns.

Conclusion. Many pronouns cannot be classified straightforwardly as either bound or coreferential. In particular, pronouns do not necessarily take on the meaning of an explicit linguistic antecedent. Rather, the meaning of pronouns is sometimes retrieved from the context in more liberal ways.

4.4 VP ellipsis Revisited

Similar observations can be made concerning VP ellipsis. In this section, we will see various examples which seem to disprove the idea that VP ellipsis consists in deletion under VP Identity.

Deixis. As remarked in section 4.1, VP ellipsis may be deictic. See examples (4.8)–(4.11).

Inferred Antecedents. As also remarked in section 4.1, VP ellipsis may involve inferred antecedents. See example (4.12) (from Webber, 1978) and the ones below (from Sag, 2006).

- (4.32) A: I just need the impetus of someone to collaborate with.
B: Well, I'd love to.
- (4.33) I'm gonna send them an email saying that Ling 1 is something they could take. I don't think that many of them will, though. (DB, Sept. 26, 2005)
- (4.34) They can't come here to Akron or to any other place in America and talk to you about all the jobs that they created, because they haven't. (John Kerry, Sept. 4, 2004)
- (4.35) Scott: They need reassurance that I can't give them.
Harper: Yes you can. (Boston Public, Dec. 2, 2002)
- (4.36) There will be a "total evacuation of the city. We have to. The city will not be functional for two or three months," Nagin said. (Guardian Unlimited, Aug. 31, 2005)

Nominal Antecedents. Just like pronouns can have verbal antecedents—see example (4.26) above—elided VPs can have nominal antecedents. The following three examples, all taken from Hardt (1993, p.35), show that the meaning of elided VPs can be retrieved from nouns, nominalized verbs, and gerundive nominals, respectively.

- (4.37) People say that Harry is an excessive drinker at social gatherings.
Which is strange, because he never does at my parties.
- (4.38) We should suggest to her that she officially appoint us as a committee and invite faculty participation. They won't, of course, . . .
(example attributed to Bonnie Webber)
- (4.39) Seeing them did not greatly surprise Enid either, though she would wish later she hadn't. (*You Must Remember This*, Joyce Carol Oates, p.287)

Cascaded VP ellipsis. In section 2.5 we discussed the following case of cascaded VP ellipsis:

(4.40) Bob called his mother, and Max did too. But Tom didn't.

It was observed that (4.40) does not have the following mixed reading:

(4.41) Bob called Bob's mother, and
Max called Max's mother.
But Tom didn't call Max's mother.

That is, the pronoun cannot be interpreted sloppily in one elided VP and strictly in the other, and this is correctly predicted by VP Identity.

However, several authors, including Dahl (1973), Dalrymple *et al.* (1991), Fiengo and May (1994), Fox (1999a), and Schlenker (2005), have pointed out that mixed readings do obtain in slightly different cases of cascaded ellipsis, and have used this observation as an important argument against VP Identity. Consider the following example from Fox (1999a, p.117) (see footnote 12 on page 62):

(4.42) Smithers thinks that his job sucks, and Homer does, too.
But Marge doesn't.

Fox claims that (4.42) does have a mixed reading, at least for people who recognize that it is about a popular American sitcom, *The Simpsons*, in which Marge is Homer's wife and doesn't have a job of her own. The reading in question can be paraphrased as follows:

(4.43) Smithers thinks that Smithers' job sucks, and
Homer thinks that Homer's job sucks.
But Marge doesn't think that Homer's job sucks.

Here is another case of cascaded ellipsis which has been claimed to have a mixed reading (Sem, 1994, p.22):

(4.44) John didn't wash his car, but Bill did, even though Harry already had.

VP Identity cannot account for these mixed readings.

Unexpected Sloppy Readings. The idea that a pronoun can be interpreted sloppily in an elided VP if and only if it is interpreted as a bound variable in the antecedent VP cannot be quite right. Sometimes a pronoun can be interpreted sloppily in an elided VP, even though it cannot possibly be interpreted as a bound variable in the antecedent VP. The following examples are from Wescoat (1989) and Hardt (1993), respectively.

(4.45) The police officer who arrested John insulted him, and the one who

arrested Bill did, too.

- (4.46) If Harry has trouble at school, I will help him. But if John has trouble at school, I won't.

The pronouns in the antecedent VPs cannot be bound by *John* and *Harry*, respectively, because *John* and *Harry* cannot be raised out of the syntactic islands in which they are contained (the relative clause in (4.45) and the *if*-clause in (4.46)). This is confirmed by the fact that the pronouns in (4.47) and (4.48) cannot be interpreted as anaphorically related to *every murderer* and *every student*, respectively:

- (4.47) The police officer who arrested every murderer insulted him.

- (4.48) If every student has trouble at school, I will help him.

Thus, it is unexpected that the pronouns in the elided VPs in (4.45) and (4.46) can be interpreted sloppily. Notice that the source clauses in (4.45) and (4.46) are structurally analogous to Geach's donkey examples (4.29)-(4.30).

Conclusion. The above examples all seem to refute the idea that VP ellipsis consists in PF deletion under VP Identity. As in the case of pronouns, it is particularly clear that the meaning (let alone the form) of an elided VP does not necessarily correspond to the meaning of an explicit linguistic antecedent. Rather, it seems that the meaning of elided VPs is sometimes retrieved from the context in more liberal ways.

4.5 Economy Principles Revisited

Next, let me consider the hypothesis that the derivation of syntactic structures is subject to economy principles. As support for this idea, Fox (1999a) does not only consider Dahl's puzzle, in which VP ellipsis interacts with binding, but also another famous puzzle, due to Sag (1976), Williams (1977), and Hirschbühler (1982), in which VP ellipsis interacts with scope. Fox argues that these puzzles can be explained by the idea that non-local binding and non-local scope are only allowed if the resulting interpretation differs from the local binding/scope interpretation. Let me consider the phenomena in question in some detail to see whether this could be the right kind of explanation.²

Binding Economy. Recall Dahl's puzzle:

²In section 3.2, I argued that, in the case of binding, Fox's Locality principle is problematic, and suggested that it should be replaced with Free Variable Economy. But Free Variable Economy is still an economy principle. Here, I will have to conclude that Dahl's puzzle should not be explained in terms of syntactic economy principles at all.

- (4.49) Max said that he called his mother, and Bob did too.
- a. ... Bob too said that Bob called Bob's mother. [sloppy-sloppy]
 - b. ... Bob too said that Max called Max's mother. [strict-strict]
 - c. ... Bob too said that Bob called Max's mother. [sloppy-strict]
 - d. #... Bob too said that Max called Bob's mother. [strict-sloppy]

The fact that the strict-sloppy reading in (4.49d) is not a possible reading of (4.49) can be explained by means of an economy principle (either Locality or Free Variable Economy). The problem, however, is that there are contexts in which (4.49d) *is* a possible reading of (4.49). Hardt (1993, page 119) discusses such a context: Max is suspected of murdering Bob's mother. Bob has claimed that Max was visiting Bob's mother at the time of the murder. But Max has presented as his alibi that he was at home with his own mother during the night in question. When the district attorney asks where Max was, someone replies:

- (4.50) Well, Max says he was visiting his mother, but Bob does too.

The preferred interpretation of the target clause in (4.50) is that Bob said that Max was visiting Bob's mother. But this reading corresponds exactly with the strict-sloppy reading in Dahl's puzzle.

Another relevant context is discussed by Reuland (2008): John used to be a fanatic gambler. His brother Bill never really liked gambling himself, but he did entrust John with his capital. When John went to Las Vegas to play big, things did not turn out so well, but of course now:

- (4.51) John does not dare to admit that he lost his fortune in Vegas,
and Bill doesn't either.

A natural interpretation of the target clause in (4.51) is that Bill does not dare to admit that John lost Bill's fortune in Vegas. Again, this reading corresponds exactly with the strict-sloppy reading in Dahl's puzzle.

I take these examples to show that Dahl's puzzle should not be explained in terms of grammatical economy principles, but rather in terms of interpretative preferences, which can be overruled by world knowledge and contextual information.

Scope Economy. Fox argues that economy principles also solve a long-standing puzzle concerning the interaction of scope and VP-ellipsis. The puzzle is that the scope ambiguity in (4.52a) is not present in (4.52b) (Sag, 1976; Williams, 1977) but reappears in (4.52c) (Hirschbühler, 1982). Let us call this the scope puzzle.

- (4.52) a. A boy admires every teacher. ($\exists > \forall$)($\forall > \exists$)
 b. A boy admires every teacher. Mary does, too. ($\exists > \forall$)($\forall \rightarrow \exists$)
 c. A boy admires every teacher. A girl does, too. ($\exists > \forall$)($\forall > \exists$)

Fox's economy constraint on scope is formulated as follows (notice the similarity with Binding Locality):

4.1. DEFINITION. [Scope Locality]

A logical form is illegitimate if it is semantically indistinguishable from one of its local scope alternatives.

4.2. DEFINITION. [Local Scope Alternatives]

Let LF be a logical form, and let Q be a scope-taking element which takes non-local scope in LF. Let LF' be just like LF, but with Q taking local scope instead of non-local scope. Then LF' is a local scope alternative of LF.

Fox assumes that VP ellipsis is subject to a *Parallelism* constraint, which says that the relative scope of scope-taking elements in the target clause must be parallel to those in the source clause.³ Then, he argues that Scope Locality and Parallelism together account for the scope puzzle. The argument goes as follows. In the target clause of (4.52b), inverse scope is ruled out by Scope Locality. Therefore, by Parallelism, inverse scope is also ruled out in the source clause of (4.52b). In the target clause of (4.52c) on the other hand, Scope Locality does *not* rule out inverse scope, because the LF with inverse scope is semantically distinguishable from the LF with local scope. Therefore, by Parallelism, inverse scope is also allowed in the source clause of (4.52c). This resolves the puzzle.

However, just like Binding Locality, Scope Locality is sometimes too strong. To see this, consider the following example (compare with (4.52b)):

- (4.53) In the morning, a nurse checked every patient. $(\exists > \forall)(\forall > \exists)$
 In the afternoon, Doctor Jones did.

Johnson and Lappin (1997, p.311) (cited by Fox, 1999a, p.35) already discussed very similar examples:

- (4.54) At least one natural number other than one divides into every prime number, and one does too. $(\exists > \forall)(\forall > \exists)$
 (4.55) At least two cabinet members bear responsibility for each government department, and the Prime Minister does too. $(\exists > \forall)(\forall > \exists)$

What these examples show is that the scope puzzle, just like Dahl's puzzle, should not be explained in terms of grammatical economy principles, but rather in terms of interpretive preferences, which may be overruled by world knowledge and contextual information.

³This Parallelism constraint on VP ellipsis follows from Focus Match (see page 40), which in turn is supposed to follow from general theories of information structure encoding (cf. Rooth, 1992a; Tancredi, 1992; Schwarzschild, 1999). Alternatively, the Parallelism constraint on VP ellipsis can be derived from general theories of discourse coherence establishment (cf. Prüst *et al.*, 1994; Asher *et al.*, 2001).

4.6 A Closer Look at Dahl's Puzzle

It is true that, if Dahl's sentence is considered in a neutral context, the fourth reading (strict-sloppy) is strongly dispreferred. But there is something else about this sentence which many informants find even more striking, namely that the first two readings (sloppy-sloppy and strict-strict) are distinctly preferred over the second two (sloppy-strict and strict-sloppy). Let us call the first two readings *across-the-board* readings and the second two *mixed* readings. A complete analysis of Dahl's puzzle, then, should explain two things. First, it should explain why, in neutral contexts, across-the-board readings are preferred over mixed readings. And second, it should explain why the sloppy-strict reading is easier to accommodate than the strict-sloppy reading. The theory developed in Part I is far from complete in this sense. In particular, it has nothing to say about the preference for across-the-board readings over mixed readings.

4.7 Condition B Data Revisited

It was assumed in Part I, following Reinhart (1983) and many others, that there are certain environments in which coreference is not subject to Condition B effects. In particular, coreference was assumed to be possible in:

- (4.56) Only Max himself voted for him.
- (4.57) I know what John and Mary have in common.
John hates Mary and Mary hates her too.
- (4.58) If everyone voted for Oscar, then certainly Oscar voted for him.

I remarked in section 2.1.1 that many of my informants actually find coreference very marginal in (4.56), (4.57) and (4.58), and emphasize that there are certainly much more natural ways to convey the intended messages. In the recent literature, several authors have acknowledged the controversial status of these data (cf. Schlenker, 2005; Grodzinsky, 2007; Heim, 2007). This complication was deliberately ignored in Part I, but should of course eventually be accounted for.

I think it would be best to interpret the judgments of my informants, as well as the remarks of Schlenker (2005), Grodzinsky (2007), and Heim (2007) as follows. On the one hand, the constructions in (4.56), (4.57) and (4.58) are felt to be improper ways of expressing coreference (informants often use the word *ungrammatical*). But on the other hand, there is something about these sentences which somehow gives the impression that coreference is in fact intended.

It should be remarked that it is not so uncommon for hearers to associate a sentence with a certain meaning even if that sentence does not constitute a proper way of expressing that meaning. For example, if someone says:

- (4.59) John has three brother.

a hearer typically concludes that John has three brothers, even though the sentence is felt to be ungrammatical.

Thus, a theory of anaphora should explain, first, why (4.56), (4.57) and (4.58) are felt to be ungrammatical on a coreferential reading, and second, why these sentences somehow give the impression that coreference is in fact intended. Clearly, the theory presented in Part I does not provide such explanations.

4.8 Summary

In this chapter, I have considered various objections that could be raised against the theory proposed in the first part of this dissertation. First, the theory does not provide a unified account of pronominal anaphora and VP ellipsis. Second, the theory is partly stipulative. In particular, Condition B, Free Variable Economy, and VP Identity cannot be derived from general ideas about human behavior and/or cognition. Third, several usages of pronouns cannot be classified as either bound or coreferential. Fourth, several cases of VP ellipsis seem to refute the idea that VP ellipsis consists in PF deletion under VP Identity. Fifth, it seems that Dahl's puzzle should not be explained in terms of grammatical economy principles such as Locality or Free Variable Economy, but rather in terms of interpretive preferences, which may be overruled by world knowledge or contextual information. Furthermore, a complete analysis of Dahl's puzzle should not only explain why the strict-sloppy reading is so strongly dispreferred, but also the more basic observation that across-the-board readings are distinctly preferred over mixed ones. Finally, the borderline status of certain Condition B effects should be acknowledged and explained.

In the next chapter, I will present a theory that addresses these issues.