

Vehicle Change and Anti-pronominal Contexts¹

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Fiengo and May (1994) seek to explain the absence of certain Principle C violations in elided structures by appeal to a mechanism of *vehicle change*, which realizes names as *pronominal correlates* in elided syntax. The impossibility of certain extractions shows that elided phrases contain *anti-pronominal contexts* (ACs)—environments that preclude definite pronouns of various sorts. Therefore, the vehicle change analysis predicts a Principle C violation if a name in an elided AC is c-commanded by a coreferential pronoun, since a pronominal correlate would be ungrammatical. But the prediction does not bear out. Thus, an explanation for the missing Principle C violations has not yet been provided.

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Section 1 Introduction and Background

Fiengo & May (1994; henceforth F&M) propose a mechanism of *vehicle change*, as part of their theory of ellipsis, to provide, *inter alia*, an explanation for why the indicated coreferential reading of (1) is available.

- (1) Mary loves John₁, and he₁ thinks Sally does, too. (i.e. "...and John₁ thinks Sally loves John₁")

(=F&M:220; below, all page numbers refer to F&M unless otherwise noted)

The theory begins with the assumption that a *reconstruction* is necessary for ellipsis (p194). A reconstruction is a set of (sub-) phrase markers (PM's) defined over a terminal vocabulary meeting specific identity conditions (p236; 288). Typically, in a sentence containing an elided phrase, at least one of these PM's is overt, and at least one is covert (unpronounced). The covert PM is subject to the principles of grammar that F&M adopt (the Binding Theory, movement constraints, etc.) only at the level of Logical Form (LF), at which point it is *projected* (p258; 295-6). Example (2) thus provides a possible LF representation for (1). The two partially bracketed VPs constitute the reconstruction. (The elided PM is in boldface, a notation I adopt throughout.)

(2) Mary [_{VP} loves John₁], and he₁ thinks Sally does [_{VP} **love John₁**] too.

At this (final) stage in the derivation, all of the sentence's structure (both covert and overt parts) is projected, and the index *I* must therefore be evaluated by the Binding Theory. Example (2) thus runs afoul of Principle C of the Binding Theory, which does not permit linguistically determined² coreference between a name and a c-commanding phrase. Evidently, if reconstruction required strict lexical identity among PM's, then coreference would be impossible in (1).

But F&M's theory only requires identity among terminal items up to variance in *indexical value*³ and vehicle change (p236; 288). The mechanism of vehicle change allows, *inter alia*, names (and other so-called referring expressions) to undergo a *featural change* (p221) such that the [-pronoun] feature of the name in the overt PM is realized as

[+pronoun] in the elided PM, yielding its *pronominal correlate* (p221). The theory therefore permits (3), as well as (2), as the reconstruction of the bracketed VP in (1). *^pJohn* indicates the pronominal correlate of the coindexed *John*.

(3) Mary [_{VP} loves John₁], and he₁ thinks Sally does [_{VP} love **^pJohn₁**], too.

Principle C is respected in (3). The only binding principle relevant to items such as *^pJohn* is Principle B, which restricts the distribution of items bearing the feature [+pronoun] (p221). Since (3) contains no Principle B violation, the reconstruction in (3) provides the coreferential reading of (1)

This paper presents data that show the vehicle change account of this phenomenon is not correct. English, like many languages, has a variety of *anti-pronominal contexts* (ACs)—environments in which *weak definite pronouns* (*wdps*) cannot appear. See Postal 1994a: especially Section 4, 1994b: especially Section 2, 1998, and to appear a for discussion of the nature and distribution of ACs. (English *wdps* are *it* and unstressed *he, her, them*, etc.) Crucially, these ACs persist in elided phrases, in the sense that extractions that cannot take place from ACs in overt phrases are also impossible out of the elided counterparts of these phrases. Section 2 supports this assertion.

Therefore, given F&M's assumptions, vehicle change should not be an option for phrases in ACs. If vehicle change were possible in such contexts, the result would be ungrammatical—a [+pronoun] item would occur in an AC. If vehicle change is not

possible, and the PM contains a c-commanding pronoun, the sentence could be grammatical only on a non-coreferential reading, due to Principle C. But, as Section 3 shows, coreference is unaffected by ACs; the relevant sentences are grammatical with the relevant coreferential reading.

Since ACs as defined above preclude only *wdps*, one might attempt to rescue the vehicle change analysis with the stipulation that pronominal correlates are *strong definite pronouns*. However, a handful of attested ACs permit neither weak nor strong definite pronouns—that is, the pronominal ban is not sensitive to the relative stress of the pronoun. Section 4 presents two such ACs, and shows that, again, the coreferential possibilities for elided nominals in such contexts are not limited by their AC character. The vehicle change analysis predicts such a limitation.

The overall conclusion of this paper is that a mechanism allowing realization of names as pronominal correlates has not yet been shown to provide a proper account of sentences like (1).

Section 2 Elided Phrases Contain ACs

Postal (1994; 1998) provides extensive evidence for Generalization (4), where *B-extraction* includes at least nominal topicalizations, clefts, non-restrictive relatives, and parasitic gaps. ((4) is Postal 1994: (59)).

- (4) An English B-extraction gap cannot appear in an AC.

Postal (1994) supports Generalization (4) by presenting eleven ACs and showing that B-extractions systematically fail out of them. Postal (to appear a) presents an additional eleven ACs for which the correlation holds. Work by Cinque (1990), Balari (1998) and others suggests that something quite like (4) is true for certain Romance languages as well. The present discussion is limited to English, however.

A typical AC is the “focus” position in cleft constructions. Example (5) illustrates the AC character of this context by showing that a sentence can be grammatical only if a *wdp* does not appear there.

- (5) a. It was *him (unstressed) / HIM (stressed) that crashed the hang glider.
 b. It was (just) *it / THAT that I tried to get them to understand.

Sentences (6a-b) show that topicalization and non-restrictive relative extraction are impossible from this AC, as predicted by Generalization (4).

- (6) a. *[John]₁, it was t₁ that crashed the hang glider.
 b. *John₁, [who]₁ it was that t₁ crashed the hang glider, ended up in prison.

Crucially, many non-B-extractions *are* possible from this position, suggesting that Generalization (4) is indeed the reason for the failures in (6a-b). Example (7) provides a successful question extraction. Pseudo-clefting and negative NP extraction are equally free from this context.

(7) [Who]₁ was it t₁ that crashed the hang glider?

The existence of extractions like the one in (7) is important because, of course, many factors can conspire to block extraction—e.g., island boundaries, lexical idiosyncrasies. Sentence (7) shows that such irrelevant factors do not interfere in this case.

Another AC is the “name” position of verbs like *name*, *nickname*, and *call*:

(8) They named their son Newt, but I wouldn't name my son *it / that.

As predicted, B-extractions invariably fail from this context:

- (9) a. *[Newt]₁, they named their son t₁ .
 b. *Newt₁, [which]₁ they named their son t₁ , does have an interesting ring to it.

But, again, there is no *absolute* ban on extraction from this context. Non-B extraction is in general free, as (10) suggests.

(10) [What]₁ they named their son t₁ is Newt.

A third AC is the object position of the verb *star*. As the following paradigm shows, however, this position does not allow extraction of any kind.

- (11) a. The film stars Madonna, but that film does not star *her / HER.
 b. *[Madonna]₁, I heard the film *Evita* stars t₁ .
 c. *Madonna₁, [who]₁ I heard the film *Evita* stars t₁ , is also a talented essayist.
 d. *[Which talented essayist]₁ does the film *Evita* star t₁ ?

The failed extraction in (11d) is due to the fact that *star* takes an indirect object, rather than a direct object. Indirect objects do not extract in English. Thus, it is not the AC character of the extraction site that blocks (11d).

One can use Generalization (4) to determine the status of ACs in elided phrases. Within the context of F&M's theory, this amounts to determining whether reconstructions permit variation among their respective PMs with regard to the presence or absence of ACs. Such a test cannot be performed more directly, of course, because—vehicle change aside—to get a *wdp* in an elided phrase there must be a corresponding *wdp* in the non-elided one. But if the relevant site is an AC, then the overt phrase will render the sentence ungrammatical regardless of the structure of the elided phrase.

However, as (12) - (13) show, B-extractions exist in which the extraction site is within the elided phrase, but all corresponding items in the overt phrase are *in situ*. Thus, reconstruction must permit this sort of variation in argument structure realization.

(12) John might have [_{VP} crashed the hang glider], but [the submarine]_i, he could not have [_{VP} **crashed t_i**].

(13) They might [_{VP} name their son Newt], but [their daughter]_i, they of course will not [_{VP} **name t_i Newt**].

If elided phrases contain ACs, then B-extraction out of them should be impossible, due to Generalization (4). And examples (14) - (15) show that such extractions are indeed ungrammatical, exactly as in cases where the extraction site is overt.

(14) a. *It might have been [_{VP} John that crashed the hang glider], but [Bill]_i, it could not have been [_{VP} **t_i that crashed the hang glider**].

b. *It might have [_{VP} been John that crashed the hang glider], but Bill, [who]_i it could not have [_{VP} **been t_i that crashed the hang glider**], is really the culprit.

(15) a. *They might [_{VP} name their son Newt], but [Yoda]_i, they of course will not [_{VP} **name their son t_i**].

- b. *They [_{VP} named their son Newt], but William, [which]₁ they did not [_{VP} **name their son t₁**], might have caused him less anguish on the playground.

These data, in conjunction with Generalization (4), suggest one or both of the Generalizations in (16)⁴:

- (16) a. Elided phrases contain ACs
- b. Let R be a reconstruction, and PM₁ and PM₂ be arbitrary members of R. If PM₁ contains an AC in position X, then PM₂ contains an AC in the position corresponding to X.

Generalization (16) is not surprising from the point of view of the theory presented in F&M, which assumes that “grammatical principles apply equally well to elided and unelided structures” (p 288). In particular, F&M provide extensive evidence that movement constraints—e.g., the Complex NP Constraint, the Wh-island Constraint—hold in elided PMs just as they do in overt ones (see F&M, Section 6.3 in particular). Generalization (4) is, in effect, a movement constraint, in that it places a constraint on the extraction sites of a certain class of extractions. F&M’s statement therefore predicts that it will hold in elided phrases.

Moreover, F&M arguably appeal to a special sort of AC (though without this terminology) to explain the ungrammaticality of (17).

(17) *Dulles suspected everyone who Angleton wondered why Philby did. (p284)

This form can have either of the LF representations in (18).

- (18) a. everyone [who_1 Angleton wondered why Philby [**suspected t_1**] [Dulles suspected t_1]]
- b. everyone [who_1 Angleton wondered why Philby [**suspected \bar{t}_1**] [Dulles suspected t_1]]

In (18a), the relationship between t_1 and who_1 violates the Wh-Island Constraint (roughly, the intervening *why* blocks the extraction). In (18b), however, t_1 is instead realized as a pronominal correlate. But the structure is still ruled out because “the pronominal correlate would be functioning as a resumptive pronoun. But English does not allow resumptive pronouns in this context, so that on this analysis the ungrammaticality of (138a) (=18a) is comparable to that of (141) (=19)” (p285).

(19) * Who_1 did Angleton wonder why Philby suspected him_1 ?

That is, F&M claim, in effect, that if a given environment is an “anti-resumptive-pronominal context” in overt syntax, it is also such in covert syntax. Hence, vehicle change is rightly powerless to “save” (17).

Section 3 Vehicle Change does not Respect ACs

F&M's reasoning cannot be properly extended to the ACs referenced in Generalizations (4) and (16). In cases in which vehicle change would yield a pronominal correlate in an AC, the theory predicts either of two results: (1) the sentences will be grammatical only on the non-coreferential readings, since Principle C (and perhaps Principle A: see below) will still be relevant; or (2) the sentences will be ungrammatical, but coreference possible, since vehicle change will have illicitly allowed pronominal correlates in ACs.

Examples (20) - (21) illustrate, however, that neither of these predictions holds. In both cases, coreference is possible and the (elided) sentence is grammatical.

(20) Sally said that it could have been [_{VP} John₁ that crashed the hang glider], but he₁ denied that it could have been [_{VP} ^PJohn₁ that crashed the hang glider].

(21) Frank claimed in his review that the movie stars Madonna₁, but she₁ refused to admit that it did [_{VP} star ^PMadonna₁].

Given Generalizations (4) and (16), these data render the vehicle change analysis untenable.

With regard to (20), one might argue that it is grammatical because vehicle change has the option, in this environment, of realizing *John* as a reflexive element, which F&M analyze as having the form $NP_i + self$, where *self* restricts the associated NP to configurations allowed by Principle A of the Binding Theory. (Principle A requires all

reflexives to have co-indexed antecedents within some limited c-commanding domain.) Indeed, within the theory of vehicle change, realization of the name as a reflexive is a possibility in the elided PM in (20), as suggested by (22), which is fine for many speakers.

(22) He₁ denied that it was himself₁ that crashed the hang glider t₁.

Since reflexives are not, strictly speaking, *wdps*, this analysis allows coreference and respects the AC.⁵

However, such reflexivization is not an option in (23), though again, the coreferential reading of the overt material is available. I have starred (23) because the reflexive *^PJohn₁+self* cannot properly take *he₁* as an antecedent.

(23) *Sally said that it could have been [_{VP} John₁ that crashed the hang glider], but he₁
 refused to believe Sally would ever say that it could have been [_{VP} **^PJohn₁ + self**
that
crashed the hang glider].

Thus, even if names can be realized as reflexives, the vehicle change analysis is incompatible with the facts about elided ACs in the “focus” position of clefts.

Section 4 A Possible Solution

An initially promising way to keep the data so far reviewed consistent with the vehicle change analysis would be to adopt (24).

(24) Pronominal correlates are strong definite pronouns (*sdps*).

Though *ad hoc*, (24) is perhaps not implausible, since pronominal correlates differ from names in just one feature, and names are presumably “strong” in the requisite sense. The viability of (24) depends on the assumption that there is more to the (presently ill-understood) strong-weak distinction than just relative stress, but this seems to follow anyway from Postal’s (1994: Section 4.5) observation that pronominal *it* does not qualify as strong no matter how much it is stressed. Rather, says Postal, the nearest *sdp* equivalent of *it* is stressed *that*. He supports this conclusion with contrasts in dislocation structures, copy-raising, and sub-standard island extractions. See Postal 1994: example (68); also, my example (5b) above.

However, consideration of a more diverse selection of ACs reveals that (24) makes the same erroneous predictions as the more natural assumption that pronominal correlates are *wdps*, and is therefore no solution at all.

For instance, as observed by Paul Postal (class lectures, 1998), the focus position of the existential *there* construction does not permit *sdps* (or *wdps*):

(25) Sally told me there are monsters in her closet, but I don’t believe there are *them / *THEM / monsters there.

The construction manifests the grammaticality pattern predicted by Generalizations (4) and (16), given the facts in (25): B-extractions fail from this position, whether the extraction site is unelided ((26a)), or elided ((26b)).

- (26) a. *[Monsters]_i, Sally told me there are t₁ in her closet.
 b. *There could have [_{VP} been monsters in Sally's closet], but [ghosts]_i, there could not have [_{VP} **been t₁ in Sally's closet**].

The grammatical restrictive-relative extraction in (27) suggests that the AC character of the site is responsible for the non-existence of comparable B-extractions (though see Heim 1988 for an account of some related extraction restrictions that does not reference ACs).

- (27) [The monsters]_i that there are t₁ under Sally's bed are scary but harmless.

Conclusion (24) thus makes a clear prediction about elided NPs in this position: they should not permit coreferential pronoun antecedents, since they must be reconstructed as full NPs. The required pronominal correlates, construed as *sdps*, would be illicit for the same reason *THEM* in (25) is illicit. But sentence (28) shows that the prediction is not born out. The sentence has the interpretation suggested by the boldface (elided) material.

- (28) I [_{VP} informed Mary that there was [a man from the FBI]₁ waiting to see her], but he₁ refused to believe that I actually did [_{VP} **inform Mary that there was [a man from the FBI]₁ waiting to see her**].

The grammaticality of (28) is also inconsistent with the claim that pronominal correlates are *wdps*, given the failure of *wdp them* in (25).

It must be noted, however, that certain aspects of the existential *there* construction may provide grounds for excluding it from this discussion.

First, it is somewhat misleading to say that the position precludes “definite pronouns”, strong or weak; the “pronoun” specification is extraneous, since the position does not permit the majority of definite nominals (e.g. “*There is the monster / Godzilla in Sally’s closet.”) See the articles in Reuland & ter Meulen (1988) for discussion of this *definiteness restriction*. Although it does not follow from this fact that Generalizations (4) and (16) are less relevant, or that the site is not a genuine AC, it does make existential *there* different from the other ACs considered above.

A second difficulty with the construction as it relates to this argument is that, due to the definiteness restriction, any nominal that appears as its focus is indefinite. F&M do not offer a treatment of indefinites, and there is disagreement in the literature about whether they are subject to the same principles as definite NPs. So it might be possible to argue coherently that the indefinite NP *a man from the FBI* in (28) is not subject to Principle C. Within the context of F&M’s theory, it would then follow that vehicle change

either cannot, or need not, yield a pronominal correlate (depending on whether the theory posits pronominal correlates for indefinites at all).⁶

In light of these considerations, the existential *there* facts alone might not provide sufficient motivation for rejecting (24).

However, a somewhat different sort of AC, one I now turn to, does yield straightforward evidence that (24) is not a solution. First, in certain limited contexts such as (29), most genitive pronouns, stressed or unstressed, can appear without a following nominal head. Call such genitive pronouns *free-standing*.

(29) Joan / Phil / The politicians said the mistake was hers / his / theirs.

Surprisingly, free-standing *its* is ungrammatical in a context like (29), as example (30) shows. It could be that free-standing *its* does not exist at all, but I require only the more limited claim that (30) contains, in effect, an “anti-free-standing *its* context”.

(30) Joan said the mistakes were the company’s, but they weren’t (in fact) *ITS / the company’s.

Furthermore, *its* does not have an *sdp* counterpart in *THATS* (cf. “The desk’s / its / *THATS surface is marred.”). So there is *no* grammatical pronominal form corresponding to *the company’s* in (30). Significantly, this fact seems unrelated to the

strong-weak distinction—both *wdps* and *sdps* can appear here—and it does not appear to stem from a more general, independent restriction, as in the existential *there* case.

Given that referring expressions in this context cannot have coindexed pronoun antecedents (e.g., “*It₁ / he₂ denied that the mistakes were the company’s₁ / Phil’s₂.”), F&M’s theory makes a by now familiar prediction: elided singular neuter nominals in this position, lacking grammatical pronominal correlates, should be unique among nominals in not taking pronoun antecedents. Strict reconstruction is the only option.

The grammatical (31) shows that the prediction is erroneous; (31) has a reading comparable to “the company has denied that it made the mistakes”.

- (31) Joan argued that the mistakes were the company’s₁, but it₁ has denied that they were.

Example (32) provides a similar paradigm with the verb *consider*.

- (32) a. The houses should henceforth be considered the bank’s / *ITS.
 b. *Joan argued that the houses cannot be considered the bank’s₁, but it₁ argued
 that they can be considered the bank’s₁.
 c. Joan argued that the houses cannot be considered the bank’s₁, but it₁ argued
 that they can be.

The upshot of the facts reviewed in this section is that stipulation (24) does not do any work, because pronominal correlates do not display the properties of *any* attested pronounced pronoun. So the vehicle change analysis can at this point be saved only by denying that pronominal correlates are pronouns in any significant respect. This would indeed explain why they can appear in ACs, but at a great theoretical price. Susceptibility to Condition B of the Binding Theory is a prime motivation for this aspect of vehicle change. But Condition B references only pronouns. This solution therefore requires a re-statement of that condition, so as to restrict pronouns *and* pronominal correlates. This quite ugly revision lacks independent motivation.

Section 5 Closing Remarks

The facts discussed in this paper constitute a genuine conundrum. Generalization (16) supports at least the general notion of syntactic reconstruction in elided phrases. The coreferential reading of sentences like (1) shows that this reconstruction cannot be strict (up to lexical identity among PMs). But the pronominal correlate solution clashes with the facts about ACs. Thus, it is unclear how to reconcile the existence of ACs in elided phrases with F&M's insights into the syntactic structure of such phrases.

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² For the purposes of this paper, “linguistically determined” coreference can be assumed to mean that the two items bear the same numerical index. Items that cannot bear like indices are said to display “not-coreference”—i.e., coreference is possible only under “appropriate conditions of use” (p7). All claims about coreference possibilities made in this paper concern only “linguistically determined” coreference.

³ Variation in indexical value allows, e.g., the “sloppy” reading in (i).

(i) Lucy₁ [_{VP} shot her₁^β parole officer], and Betty₂ did [_{VP} **shoot her**₂^β **parole officer**] too.

⁴ Postal (to appear b: nt. 8) provides more data supporting Generalization 16.

⁵ However, as pointed out to me by Paul Postal, reflexives in ACs must also be strong (stressed) for grammaticality. So the definition of AC should be expanded to reference weak reflexive pronouns as well as *wdps*.

⁶ I thank Robert Fiengo for discussion of these issues.