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REVIEW ARTICLE

The extraction riddle: just what are we missing?

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Paul M. Postal, *Three investigations of extraction*. Cambridge, MA: MIT Press, 1998. Pp. x+215.

1. Overview

Three investigations of extraction (hereafter TIE) comprises a complex set of interlocking arguments on behalf of its author's views of extraction phenomena, including certain constructions that Postal claims SHOULD be regarded as extraction phenomena, in spite of the fact that they are taken in many quarters to be something quite different.[1] Although, as Postal mentions in his introduction, the chapters in the volume were written separately, they can be seen as constituting a single extended essay, with the following large-scale narrative structure:

- a certain set of putative facts about the distribution of extraction possibilities is argued in chapter 2 to constitute evidence for a bifurcation of extraction into major subtypes, which Postal christens A-extraction (whose gaps are traces) and B-extraction (whose gaps are null resumptive pronouns);
- this resumptive pronoun analysis is then invoked in chapter 3 to justify the claim that alleged violations of the Coordinate Structure Constraint

[1] I am indebted to an extremely large number of people who have contributed ideas and/or judgments of well-formedness to this project. The 1998 Synners discussion group at OSU, in particular Martin Jansche, Nathan Vaillette and Shravan Vasishth, provided valuable critical input and an abundance of robust counterexamples to many of the claims in TIE. Much of this work is an outgrowth of a research program carried out in conjunction with Thomas Hukari and Mike Calcagno, some of whose results are reported in Levine et al. (in press) and Levine et al. (1999). In addition, I have benefited greatly from discussion of this material with Peter Culicover, Shalom Lappin, Geoffrey Pullum and Ivan Sag. I should also like to express my sincere appreciation to the large number of faculty and graduate students in the Department of Linguistics at OSU who served as on-call informants in checking the judgments reported below. None of those cited should be assumed to agree with the author on the views reported in the following, or with anyone else.

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(CSC) adduced in Goldsmith (1985) and Lakoff (1986) are not genuine, because they do not involve actual extractions;

- Right Node Raising, which has been argued in e.g. McCawley (1982, 1987, 1988), Levine (1985) and McCloskey (1986) to involve no structural displacement of the 'raised' right node, is claimed best understood as yet another instance of extraction on the basis of arguments which depend in certain cases on the distinction between A- and B-extractions defended in chapter 2; and
- further elaborations of the extraction and resumptive pronoun typologies Postal defends and utilizes in the body of the text are discussed and supported in the introductory chapter 1.

This 'aerial' view of the book makes it clear how much depends on the hypothesis of a null resumptive pronoun type of gap, and how much is at stake in assessing its empirical adequacy. In essence, Postal argues that A-extractions are the canonical *wh* cases – restrictive relative clauses and questions – along with certain others, while B-extractions comprise topicalization, nonrestrictive relative clauses, clefting, parasitic gaps of all kinds and missing object constructions.[2] The crucial alleged difference between the two is that A-extractions involve a normal connectivity mechanism linking a filler directly to its gap, while in the case of B-extractions the element interpreted as the filler is not associated with the gap directly. Rather, in B-extractions a phonetically unrealized resumptive pronoun (RP) occurs in the underlying representation and, in certain cases, subsequently undergoes extraction itself, entering into a control relation with the filler. The chief empirical basis for the A/B extraction distinction, then, is the claim that what are identified as B-extractions are barred from occurring in the set of environments which also bar weak definite pronouns, on the assumption that such pronouns are the phonetically realized versions of the null RPs in B-gaps. Chapter 2 is devoted to assembling a mass of data to prove this central claim.

Readers of TIE will immediately be struck by the enormous range of facts that Postal has marshaled on behalf of his claims, reminiscent of a certain style of argumentation of the 1960s and early 1970s, when even a shorter paper by one of the protagonists in the central debates of that era might contain a dozen different lines of evidence buttressed by scores of examples. In the more recent theoretical culture, in which much of the literature

[2] A disastrous typesetting error on p. 25 lumps the various respective members of A and B extractions together in Postal's example (1) under the latter rubric. His text includes a pointer to data in the introduction which should clarify which constructions belong to which types, but the mistake is still inexcusable. Postal does not actually list parasitic gaps or *tough/too/enough* constructions as B-extractions in his initial inventory, but makes it clear later in chapter 2 that they have exactly the defining properties of the latter; hence I include them here.

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appears to reason slavishly from doctrine to analysis with only a rather modest basis in fact, Postal's approach is almost unique in the landscape for its preoccupation with what the data have to say about the predictions of alternative hypotheses. The presentation, though dense, is freewheeling, vigorous, almost compulsive in entertaining possible interpretations of the data that at first glance appear to challenge the analyses Postal is defending, ingenious in its refutations of such interpretations, and generous to allies and opponents alike in giving intellectual credit for prior discoveries bearing on the discussion. TIE stands so far above the pallid *ad vericundiam* arguments that current literature is infested with, in fact, that it is difficult not to want it to turn out essentially correct. But is it?

My own view is that FOR A SIGNIFICANT SUBSET OF ENGLISH SPEAKERS it almost certainly is not, and that extensive as Postal's survey of the data is, there is a vast empirical domain which contraindicates many, if not most, of Postal's crucial claims. But there is an important caveat that needs to be stressed, self-evident though it may be, which is that this assessment reflects my own grammaticality judgments and holds, presumably, only for those who share my judgments. I have checked these judgments in the relevant range of cases extensively, and am confident that a large number of speakers agree with enough of my examples that Postal's central hypothesis cannot hold for their grammars. Nonetheless, the divergence between Postal's own judgments and those of speakers in accord with mine has troubling implications for the methodology of syntax, and I return briefly to this point in section 5 below.

The narrative structure of my discussion is organized as follows: in section 2, I consider a representative number of Postal's core arguments and their factual basis in some detail, and argue that, contrary to his substantive claims, there is nothing like congruence between the B-extractions on the one hand and the environments which tolerate attested RPs on the other. In section 3, I review a number of his assertions about the class of conjuncts which, following Lakoff (1986), Postal considers in connection with CSC violations and argue that here too, his proposal fails to take into account the full range of facts. In particular, I show that these conjuncts fail his own criteria for the identification of weak (in his terms, selective) islands, and that, in particular, there are good cases of extraction from antipronominal contexts within these conjuncts. In section 4, a careful review of Postal's critique of non-extraction RNR accounts shows that the weight of evidence does contraindicate an extraction treatment. While it is impossible in the confines of an article to answer Postal's far-ranging and detailed argumentation point by point, I hope to have adduced a body of evidence sufficient to show that crucial components of his analysis do not go through, for the apparently quite large class of speakers who accept the data in question.

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2. A-EXTRACTIONS VS. B-EXTRACTIONS

2.1 *The empirical status of the A/B dichotomy*

The pattern of argumentation in TIE on behalf of treating B-extractions as instances of null RPs, which then invisibly move to give rise to island effects, is to demonstrate that a particular environment resists the appearance of weak definite pronouns such as *it* and *them*, present evidence that A-extractions such as interrogative *wh* extractions can be linked to gaps in these environments, and then give illustrations of the failure of B-extractions to support comparable linkages. Postal provides a dozen or so such environments with the appropriate contrasts between representatives of the two respective extraction classes. For example, he cites certain postverbal temporal NPs as resisting replacement by *it/them*, with corresponding failure of topicalization:

(1) (a) Frank stayed $\left\{ \begin{array}{c} \text{three days} \\ \text{*them} \end{array} \right\}$ in Ireland.
(b) [How much time]$_i$ did Frank stay t_i in Ireland?
(c) *[That much time]$_i$, Frank could never stay t_i in Ireland.

A second example of the same sort of reasoning hinges on extraposition from NP:

(2) (a) They published a scurrilous review of his book last year.
(b) They published $\left\{ \begin{array}{c} \text{a scurrilous review} \\ \text{*it} \end{array} \right\}$ t_i last year [of his book]$_i$.
(c) [No such scurrilous review t_i]$_j$ did they publish t_j [of his book]$_i$.
(d) *[Such a scurrilous review t_i]$_j$ they published t_j last year [of his book]$_i$.

And yet another example of the same general sort involves the postcopula NP position in existential *there* constructions:

(3) (a) He knew there were $\left\{ \begin{array}{c} \text{(no) such chemicals} \\ \text{*them} \end{array} \right\}$ in the bottle.
(b) [No such chemicals]$_i$ did he know there were t_i in the bottle.
(c) *[Such chemicals]$_i$, he knew that there were t_i in the bottle.

In each case, Postal supplies data to demonstrate that the contexts in question are antipronominal, that ordinary *wh* questions, restrictive relatives or neg-inversions can extract from these sites but that topicalization cannot. This distributional pattern is exactly what one would expect to find on the assumption that the gaps in question originate as RPs, and Postal takes such data to constitute the strongest possible argument for taking the origin of B-extractions to be null RPs.

Readers who have considered Postal's initial premise carefully will probably find themselves wondering if his illustrative data sets can possibly be the whole story. After all, when the full range of supposed B-extractions is examined carefully, it becomes clear that almost all of them allow straightforward linkages between non-nominal fillers and extraction sites in

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which no pronoun, resumptive or otherwise, may appear. Thus we have (4)–(5):

(4) (a) For Robin's behavior I have no explanation.
    (b) *I have no explanation NP.
(5) (a) Robin's behavior, for which I have no explanation, offended everyone.
    (b) No, no – it was for **Robin's** behavior that I refused to offer an explanation.

Given that the position immediately following *explanation* is not just antipronominal but antinominal, it is difficult to understand how the claim that the extractions in question involve null RPs can be maintained. Postal explicitly restricts his comments about B-extraction topicalization, for example, to NPs (e.g. '[B-extractions comprise] NP topicalization, NP clefting, and nonrestrictive relative clause extractions' (4)), but this does not begin to answer the obvious question: given that both non-nominal fillers and non-nominal gap sites are robustly attested for topicalization, clefting and nonrestrictive relative clause extraction, what could possibly block the application of such an extraction mechanism to NPs of any kind? And further examination of these data sets fully justifies such skepticism by showing the arguments for an RP analysis to be empirically vulnerable. Consider first the temporal NP paradigm in (1). It is noteworthy that while the in situ example in (1a) is fine, the large number of speakers I have consulted either reject outright or express considerable reservations over the datum corresponding to the presumed source for (1c):

(6) ??*Frank could never stay that much time in Ireland.

When the postverbal nominal is replaced by an actual time unit as in the well-formed first example in the paradigm, the results are impeccable:

(7) (a) Three days I stayed in Ireland without getting to see one goddamned leprechaun.
    (b) A **week** you get to stay in Ireland, no more!
(8) (a) *I was only allowed four days in Ireland, and I stayed them with Terry.
    (b) No, you've got it exactly backwards – **four** days I stayed with Terry, not three; and I was in Wales for **three days**, not four.

Thus, in a sense, Postal's weapon turns in his hand, for if these temporal NP environments are, as I strongly agree, antipronominal, then the unexceptionable status of (7) and (8) would seem to make it impossible for

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topicalization to derive from a null RP constructions; i.e., it cannot be a B-extraction.[3]

Exactly the same conclusion follows from examination of the PP extraposition examples and the existential copula constructions exhibited above. So far as the former is concerned, the careful reader will have noticed that the contrasting examples in (2c) and (d) are not parallel: the ill-formed (2d) contains a temporal adverb preceding the extraposed PP, which the well-formed (2c) lacks. When the two examples are made genuinely parallel, it is very difficult to see any significant difference between them at all:

(9) (a) [No such scurrilous review t_i]$_j$ did they publish t_j [of his book]$_i$.
(b) [Such a scurrilous review t_i]$_j$ they published t_j [of his book]$_i$!

And, in connection with the postverbal existential nominal, I have yet to encounter a speaker who objects to examples such as (10).

(10) (a) [Discussions like that]$_i$ there **have** been t_i from time to time, though we don't like to broadcast the fact.
(b) [Plans to intervene]$_i$ there definitely **were** t_i in some echelons of the Joint Chiefs of Staff.

There constructions actually constitute something of a Pandora's box for Postal, because not only do we find good examples of topicalization in the existential, but also, as has long been known in the case of certain speakers, in the presentational version, which is another antipronominal environment:

(11) (a) There then emerged $\left\{ \begin{smallmatrix} \text{a gigantic rabbit} \\ \text{*it} \end{smallmatrix} \right\}$, which frightened the wits out of poor Alice.
(b) [A gigantic **rabbit**]$_i$ there then emerged t_i from the cave, which frightened the wits out of poor Alice.

In all these cases, what we find is that topicalization is indeed possible, and in many other antipronominal environments that are not cited in TIE. Each such case thus constitutes a strong argument AGAINST the null RP treatment of topicalization, for the substantial set of speakers who agree with these judgments.

In fact, when a systematic comparison is made between the set of B-extractions and a wide range of antipronominal environments, it becomes

[3] A *Journal of Linguistics* referee suggests that the goodness of (7) might be due to a syntactic difference between topicalization and focus movement correlated with the pragmatic difference noted in Prince 1981. In this scenario, (7) would exemplify Focus Movement, taken to be yet another instance of A-extraction. But contrastive emphasis and focus are pragmatically quite distinct, so that examples of the former, as in (8), are distinctly implausible as instances of leftward focus, assuming that one took the latter to be syntactically distinct from topicalization. It follows that (8) must be taken to be an instance of true topicalization, and its goodness makes the same point: contrary to Postal's claims, quite unexceptionable instances of time-interval topicalization from the complement position of *stay* can readily be found.

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clear that each B-extraction can be linked to a gap in at least several of Postal's antipronominal contexts, though no two B-extractions are compatible with precisely the same subsets of antipronominal contexts.[4] Antipronominal examples of parasitic gaps, for which Postal claims B-extraction status in this chapter, building on the detailed arguments in Postal (1993), are cited in abundance in Levine et al. (2001). *Tough* extractions turn out to link gaps in a variety of antipronominal environments; thus, we have the kinds of data exhibited in (12)–(14).

(12) (a) *That Robin had never liked ice cream in the first place was untrue, but Terry* { **had** replied / responded } it anyway.
(b) [That Robin had never liked ice cream in the first place]$_i$ seems to me entirely reasonable for the defendant to have { replied / responded } t_i, in that situation.

(13) (a) You can do that { this way / *it }. (Postal's 'Adverbial NP' antipronominal environment)
(b) I can think of any **number of** ways that$_i$ would be easier [to do that] t_i!

(14) That particular shade of green is hard for me to imagine **anyone** wanting to paint their room(*, but Dana did paint her room it).

Examples such as these are, in fact, not at all difficult to construct, and the question is how Postal's central claim can be maintained in the face of them. There is, as it happens, a number of escape hatches that Postal resorts to in the face of clearly contradictory data.

On the one hand, Postal claims that unlike 'wide' antipronominal contexts which rule out ALL RPs, there may be a 'narrow' class of environments which only block overt RPs but admit null ones. By his own acknowledgment, the question 'does it amount to anything more than calling an antipronominal context that correlates with a B-extraction blockage a wide antipronominal context and one that does not a narrow one?' must be answered in the negative (40). Nonetheless, Postal argues for the reality of this distinction based on the claim that all 'narrow' contexts will be accessible to ALL B-extractions. But as already noted and illustrated in footnote 4, this claim is incorrect, and other examples are readily available; thus, simple topicalization is compatible with existential NP gaps, but parasitic gaps evidently are not: **Three days, I would never spend* t *in the U.K. without staying* t *in Ireland.* Hence this aspect of Postal's argument seems simply to represent a serious empirical weakening of his position, and cannot be invoked as a way around the contradictory data noted above.

[4] Thus, while nonrestrictive relatives can extract from postverbal *there* contexts, as in *Discussions like that, which I must admit there HAVE been t from time to time around here*, they do not seem to be able to extract temporal NPs: **I was allowed three days$_i$ for the United Kingdom, which$_i$ I stayed t$_i$ in Ireland.*

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A second, rather puzzling treatment of counterevidence arises in conjunction with Postal's argument based on predicate nominals, which he claims cannot be replaced by weak definite pronouns and hence are predicted to resist B-extraction.[5] But as he himself acknowledges, examples such as (15a) are well-formed, and the other examples in (15) also seem unexceptionable.

(15) (a) [A good doctor]$_i$, she isn't t_i. (Topicalization)
(b) [A fine specimen of humanity]$_i$ **you** are t_i. (Topicalization)
(c) … and he calls me [a slob]$_i$, which I am t_i. (From *Little Shop of Horrors*)[6] (Nonrestrictive relative extraction)
(d) [An Amway Senior Vice-President]$_i$ isn't easy to become t_i, but once you get there you'll find that it's the best job in the world.

Postal (1994a) asserts that in such examples, the B-moved constituent is not really an NP but rather some other kind of category, related in some altogether unspecified way to the AP *fond of Mike* in *Fond of Mike she isn't*. It is difficult to assess this suggestion, which offers no indication of what kind of non-NP constituent *a (good) doctor* in (15) is or what its phrase structure consists of, but surely a much more specific proposal would be required in order to be taken seriously. The sole defense of this suggestion offered by Postal is that the phrases *a good doctor* and *fond of Mike* share restrictions, claiming that both are blocked in nonnegative contexts (clearly contradicted by (15c), inter alia) and that both are unembeddable (which seems flat-out wrong on the face of it: *I learned the hard way that a natural actor I definitely am* **not**), and that both are possible targets of *though* extraction, citing *A good doctor though she is* as evidence. Virtually every informant I have consulted has IMMEDIATELY rejected this last example, and without exception pointed out that if you want to say something like this, it must take the form *Good doctor though she is*. Such facts effectively undercut this whole branch of Postal's argument, so that it may be superfluous to point out that if *A good doctor*, *she isn't* is, as Postal somewhat cryptically puts it, 'like' *Fond of Mike she isn't* – suggesting that the former 'represents extraction not of a PN but of some larger predicational constituent containing a PN' (29) – then why do we find the following kinds of data?[7]

[5] Postal has something more specific in mind than NPs following copulas, clearly, since *Nigel*, *Dirk and Rocco all claim to be the King of Norway*, *and based on what we now know*, *ANY of them could be him* is fine for many, perhaps most speakers. Postal evidently intends indefinite generic NPs by this terminology.

[6] I am grateful to Neal Whitman for calling my attention to this example from naturally occurring discourse (or something closely related to it).

[7] I am grateful to an anonymous *Journal of Linguistics* referee for suggesting the following examples.

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(16) (a) There were many { people / firemen } [$_{AP}$ available].
(b) *There were many people [$_{NP}$ available firemen].

(17) Everyone { employed but unhappy / *an unhappy employee } is welcome to sign our petition.

Such appeals to vague alternative interpretations of the data whose content is left wholly inchoate, but which appear to suffer serious empirical deficiencies of their own, cannot count as satisfactory challenges to clear counterexamples. Neither the wide/narrow pronominal ban distinction nor the XP-in-NP's-clothing suggestion withstand critical scrutiny, leaving the null RP hypothesis deeply vulnerable along the lines sketched above.

2.2 *B-extractions and weak islands*

An important theme in TIE, introduced in chapter 2 but important throughout the book, is the relation of B-extractions to what Cinque (1990) called 'weak islands' and Postal refers to as 'selective islands' (though the two different terms overlap only partially in what they denote). Weak islands (60–65) are supposed to permit referential nominal constituents to extract mostly unscathed, but to block all other extractions. I defer discussion of Postal's rather complex approach to islandhood to sections 3 and 4, but for the time being it is sufficient to note that he takes the relative permeability of weak islands to reflect the presence in such cases of an UNEXTRACTED RP in the gap site itself.[8] There is a strong prediction which follows, viz., that non-nominal constituents (and nonreferential NPs) cannot be extracted since, obviously, they cannot antecede RPs. But this prediction is factually incorrect.

To begin with, it has been known since Kroch (1989) that nonreferential NPs, in particular amount nominals, can indeed be extracted from weak islands as long as the bizarre presuppositions which are often associated with such extractions can be accommodated. Kroch shows that when, contrary to normal practice, there is a specific amount of money such that Bill was wondering whether some book cost just that amount and the speaker is trying to ascertain that amount (or Bill is correcting an incorrect belief about that amount), examples like (18) cease to be problematic.

(18) (a) How **much** was Bill wondering whether that book cost?
(b) No, no, no – **Ten** dollars, I was wondering whether that book cost.

On a reading compatible with the assumptions given, these examples seem fine, although, interestingly, even under these assumptions *cost* cannot select *it*: **Ten dollars – you know, I was* **sure** *that this book cost it!* Kroch, in

[8] This characterization is strongly suggested by Postal's discussion in his section 2.5.2, though it is not made absolutely clear. As the discussion in section 5 below indicates, Postal's account is somewhat different in his introductory chapter 1, where the gap site in selective island extraction turns out to be occupied by a trace of a null RP linked to a still higher RP controlled by the filler.

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addition, noted examples of acceptable adverbial extraction, and additional examples of such extraction were given in Pollard & Sag (1994). Such examples strongly suggest that while the existential presuppositions introduced by *wh* questions may be sufficiently bizarre to defeat the possible scoping of the adverbial into the intended domain – as in (19a) – the fact that topicalization in effect establishes the relevant existential claim as a given results in examples such as (19b), (20b), (21b) and (22b) being pragmatically unremarkable and therefore judged to be fine.

(19) (a) #How carefully$_i$ were you wondering whether to wash my car t_i? (Where the presupposition that there is a specific degree of carefulness such that the hearer is supposed to be wondering whether to wash the speaker's car to that precise degree seems too strange to be accepted)
(b) **That** carefully$_i$, I wonder whether **anyone** will wash my car t_i.
(c) *She washed my car it.

(20) (a) *How$_i$ did you wonder why Sandy worded the letter t_i?
(b) **That** rudely$_i$, I wonder why **anyone** would word a letter t_i.
(c) *I worded the letter it.

(Pollard & Sag 1994: 181)

(21) (a) *How$_i$ did Kim not know who fixed the disk drive t_i?
(b) With nothing but a crowbar and a ballpeen hammer$_i$, I don't know who could fix this disk drive t_i.
(c) *Kim fixed this disk drive it.

(Pollard & Sag 1994: 181)

(22) (a) #How quickly$_i$ did you imagine who would respond to our request t_i?
(b) Forty-eight hours? Most outfits will get around to helping you if you give them a lot of lead time, but **that** quickly$_i$, I can't **imagine** who would respond to our request t_i.
(c) *They responded to our request it.

PPs which correspond to no resumptive pronoun in English can, nonetheless, also extract, as in (23).

(23) (a) [To which child]$_i$ were you wondering whether to give the book t_i?

(example provided by Kroch 1989)

(b) It's a cause [to which]$_i$ I wonder whether **any** rational being would be attracted t_i.[9]

[9] Locative PPs have corresponding proforms *here* and *there*, but neither of these is a proform for the *to* PPs in such examples: *Robin gave a book* [*to Leslie*]$_i$, *and I gave a book there*$_i$ *as well*. Kroch notes in connection with (23)(a) that the slight awkwardness which some speakers find in such examples is 'probably due to the fact that preposition stranding is generally more natural than pied-piping in English' (p. 16). For many speakers, Pied-piping is a marked, high-register option employed only infrequently in their normal speech.

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In defending his treatment of acceptable extractions from islands as dependent on the possibility of an RP at the gap site, Postal (44) cites examples such as (24).

(24) (a) I nicknamed my cat $\left\{ \begin{smallmatrix} \text{Fauntleroy} \\ \text{*it} \end{smallmatrix} \right\}$.
(b) *What$_i$ did he ask you whether I nicknamed my cat t_i?

But again, the pragmatics of the question in (24b), rather than the syntax, is almost certainly responsible for its ill-formedness, as shown by the impeccable example in (25).

(25) … but Fauntleroy, I just don't see how **anyone** could nickname their cat t!

This example is just as much a weak island instance as (24), but seems absolutely unexceptionable.

Thus, the essential factual premise taken by Postal as a basis for his account of island phenomena is, in my judgment, incorrect: weak islands are permeable to a variety of extractions from environments which strongly block the occurrence of RPs.[10]

The rest of chapter 2 is taken up with discussion of further subdivisions within the class of A-extractions, but again, I find Postal's claims thoroughly counterexemplified by a fuller range of examples than he cites. Thus A_1 extractions are said to permit the resumptive pronoun strategy, while A_2 extractions do not, entailing that A_2 extractions cannot link their fillers to gaps in weak islands (since such linkages are possible only by virtue of in situ

In a long footnote, Postal acknowledges that there are PP extractions from weak islands, but never comes to grips with the fact that if there are such extractions and if there are no proforms which can have such PPs as antecedents, then there is no reason whatever to believe that such weak island extractions involve the presence of a (null) RP; his allusions to a possible hierarchy of strength among selective islands seems empirically vacuous, since the only evident measure of this strength appears to be the very PP extractability that he seeks to explain, and in any case there is no slightest hint of a mechanism which would correspond to such a hierarchy, so the whole discussion here appears to be elaborate hand-waving. TIE is weakened by several such instances in which Postal, deviating from his generally forthright policy toward contradictory data, seems to avoid confronting apparently decisive contraindications to his claims: I note several such cases below.

[10] Interestingly, Cinque's (1990) null RP treatment fares better than Postal's in its predictions about what can extract from weak islands, for two reasons: on the one hand, Cinque's mechanism for weak island (as vs. strong island) extractability is based in part on whether the extracted constituent is referential, rather than whether the gap site is pronominal; and on the other, Cinque takes certain of Postal's B-extractions to be A-extractions, making a filler/gap linkage possible based on coindexing rather than antecedent government. Thus, the extractions in (23) and (24), where the filler is arguably referential, are not the severe counterexamples for Cinque's analysis that they are for Postal's. Where Cinque's approach runs into trouble is in connection with possible PP extraction from strong islands, such as *There are certain developmental stages* [*THROUGH which*]$_i$ *no one can reach true adulthood without first passing* t_i, which involves a non-nominal filler and hence should be illegal on his null RP account of strong island extractability. Obviously, such examples, with their antipronominal extraction sites, are serious challenges to Postal's analysis as well.

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null RPs). In view of the dubiousness of Postal's assertions about B-extractions into weak islands, it is not surprising that putative A_2 extractions turn out to allow gaps in such contexts. Thus, the *no matter + wh* construction, comparatives, and free relative extraction are all said to belong to the A_2 subtype; that is, they should not link fillers to weak island gaps. But all of the following seem to me impeccable (where, following Postal, I notate weak islands using angled braces):

(26) (a) They are looking for more cars$_j$ than they know ⟨what$_i$ to do t$_i$ with t$_j$⟩.
(b) No matter what tasks$_i$ they ask you ⟨how$_j$ to accomplish t$_i$, t$_j$⟩, just tell them you know nothing about anything.
(c) Whatever life forms$_i$ we $\left\{ \begin{array}{c} \text{try to figure out } \langle \text{what}_j \text{ to do } t_j \text{ with}_i \rangle \\ \text{go out to dinner with } t_i \end{array} \right\}$, we always wind up trying to get them to eat pizza.

where the status of the two (c) examples seems exactly the same. Thus, by the end of chapter 2, there seems no convincing evidence for either the A/B or the A_1/A_2 dichotomies.

3. The coordinate structure constraint

Postal's third chapter consists of an extended argument that certain supposed counterexamples to the Coordinate Structure Constraint (CSC) adduced in Goldsmith (1985) and Lakoff (1986) are actually irrelevant, because the CSC was originally stated by Ross (1967) to apply only to cases of movement, not cases where a RP occupies the apparent gap site, while all of the putative counterexamples involve cases where the conjuncts containing the gaps can be argued to be weak islands, and conform to the predictions Postal believes are empirically supported so far as pronominal versus antipronominal contexts are concerned. Postal's strategy in this chapter is to review the various subclasses of coordination itemized by Lakoff and show that in each case, what is involved is either not movement or not 'true' coordination, a notion he invokes throughout the chapter but never actually defines, and, crucially, never characterizes syntactically in contrast to spurious coordination.[11]

Following Lakoff, Postal considers what he labels A-Σ, B-Σ and C-Σ coordination scenarios, illustrated in (27).[12]

[11] Nonetheless, certain properties seem to be central, such as the independence of the truth of a sentence involving a true coordination from the order in which the conjuncts appear. But there is never any independent basis provided for believing that 'true' coordination differs *syntactically* from any other kind of coordination.

[12] There is, according to Postal, something called a D-Σ, which supposedly does not license extractions; Postal gives as an example *Frank criticized de Gaulle and hence criticized a Frenchman* vs. **It was de Gaulle who$_i$ Frank criticized t$_i$ and hence criticized a Frenchman*. This claim seems to me to be incorrect; thus, compare *Frank criticized de Gaulle and in*

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(27) A-Σ the stuff which$_i$ Arthur sneaked in and stole t$_i$.
B-Σ [How many dogs]$_i$ can a person have t$_i$ and still stay sane?
C-Σ That is the drug which$_i$ athletes take t$_i$ and become quite strong.

A-Σ coordination, which receives by far the greatest share of attention, is said to 'manifest a relation between a conjunct […] and the one that follows it, in which, minimally, the first must characterize an event/state of affairs preceding that characterized by the second' (56); B-Σ and C-Σ coordinations have somewhat more specific relational criteria. (B–Σ coordination instances correspond to scenarios in which events run counter to conventional expectations, and C–Σ coordination instances correspond to correlations of clauses with their alleged results.) By this point in the book, readers will probably find Postal's modus operandi entirely familiar: assemble a set of data which appear to show that A-Σ CSC violations cannot involve antipronominal contexts, employing both nominal and non-nominal fillers. Postal provides a detailed set of criteria which are taken to characterize weak islandhood: a filler linked to a gap in a weak island must be an NP (with the exception of certain PP extractions for which Postal has no account; see footnote 9) the gap site may not be a finite subject position or an antipronominal context; the filler may not be either a reflexive or an 'inherently unpassivizable' constituent with respect to its context of extraction. Postal's salient claim in chapter 3, then, is that all extractions in A-Σ coordinations which appear to violate the CSC link fillers to gaps sites within conjuncts which display just this set of properties, thereby justifying a null RP characterization of the gap site in coordinate extractions.

This claim can be refuted for A-Σ exceptions to the CSC on every component of the criteria Postal states. We have the following examples:

(28) (a) [**That** rudely]$_i$. I can't **imagine** anyone sitting down and wording t$_i$ a letter to an old friend. (Non-nominal filler)[13]
(b) There were a number of people who$_i$ I had to $\left\{ \begin{matrix} \text{sit down} \\ \text{grit my teeth} \end{matrix} \right\}$ and tell myself t$_i$ were coming to the party and there was no way I could do anything about it. (Gap in finite subject position)
(c) [Discussions like that]$_i$, I think we should $\left\{ \begin{matrix} \text{go ahead} \\ \text{summon up our courage} \end{matrix} \right\}$ and admit there **have** been t$_i$ at certain key points in the negotiations. (Gap in antipronominal context)
(d) Can you believe it?! – **Francine**$_i$, they snuck in and named my kid t$_i$ while the rest of us were in the living room watching television! (Gap in antipronominal context)

doing so criticized a Frenchman with *No. It was* **de Gaulle** *who$_i$ Frank* [*criticized t$_i$ and in doing so criticized a Frenchman*] – which speakers seem to find perfect – as a response to the assertion *In criticizing Descartes, of course, Frank was criticizing a Frenchman.*

[13] *Rudely* clearly is not scoping over *sitting down*, since there is no sense on the normal reading of this example that it was rude to sit down or that the sitting down was itself done in a rude manner (e.g., extremely loudly in an apartment building with very thin floors at 3:30 a.m.)

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(e) At the meeting he was mild in his criticism of the others, but **himself**$_i$ he publically condemned t_i – and then went home and committed hari-kiri. (Reflexive filler)

(f) Dana has no objection to bashing other people, but **herself**$_i$ she refuses to sit around and criticize t_i endlessly. (Reflexive filler)

(g) Those are the rocks$_i$ that I phoned the City and said I wanted t_i moved. (Inherently unpassivizable context)[14]

These are just a small sample of the data that contradict Postal's claim that A-Σ conjuncts are weak islands. But the actual problem is somewhat different and more basic: similar examples can be given for a whole range of non-conjunct weak islands (e.g. *These are the rocks which$_i$ I had no idea* ***who***$_j$ *she told* t_j *she wanted* t_i *moved*; … *but* ***themselves***$_i$ *I wonder whether they*$_i$ ***ever*** *talk about* t_i etc.) Once these latter data are taken into account, it seems clear that conjuncts are weak islands to about the same degree that *wh* islands are, insofar as extraction from neither can be motivated in terms of the null RP strategy.[15]

In addition to arguments from extraction, Postal attempts to buttress his claim that A-Σ conjuncts are islands by appealing to islandhood properties of such conjuncts which do not involve filler/gap linkages. Thus, one argument in effect runs, negative polarity effects are blocked by islands (**I didn't hear the rumour that Robin had* †*budged*, *etc*., where † indicates items that require a polarity licensor); such effects are blocked in A-Σ conjuncts; therefore we have additional evidence that A-Σ conjuncts are islands. But this and all similar arguments fail to strengthen the main point in any way, since there is no necessary connection between islandhood for one kind of dependency and islandhood for any other. For example, *or* conjunction yields undisputed 'true' coordinations, and none of the examples of CSC violations has ever, to my knowledge, involved *or* coordination. Yet *or* conjuncts are NOT islands for negative polarity and related dependencies in the slightest, e.g. *I don't believe that Robin has lied on this occasion or*, *indeed*, † *ever done* † *anything dishonorable*; *I don't believe that Terry has been off her feet or* † [*had a bite to eat all day*], and so on, where † marks NPIs. By the same token, finite clauses are known islands for quantifier scopings (*I said no worker at the plant was to blame for the accident* does not, for most speakers, have a reading 'There was no worker at the plant such that I blamed that

[14] The point is that *Everyone wanted those rocks moved* cannot be paired with a form **Those rocks were wanted moved* (*by everyone*). This is the sense in which Postal intends the description 'inherently unpassivizable', as he makes clear in his discussion of A-Σ coordination.

[15] Postal's claim that A_2 extractions cannot have gap sites in A-Σ conjuncts, which follows directly from his proposals, can also be shown to be incorrect; cf. *I had to suffer through* [*more sitcoms*]$_i$ *in a week than most people can sit down and watch* t_i *in a year*.

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worker for the accident'), but such clauses are hardly islands for extraction. Thus, Postal's invocation of nonextraction island properties of A-Σ coordinations seems beside the point, and in principle unable to shore up his previous arguments in any respect.[16]

The rest of this chapter attempts to provide analyses of B-Σ and C-Σ coordinations which render these cases harmless as challenges to the CSC. In view of the damage sustained by the CSC on the basis the examples presented above, the status of these other coordination types seems moot; but a few points are worth noting, since they reinforce my previous observations about the range of data that needs to be considered in assessing TIE. Postal argues, for example, that B-Σ coordinations are not 'true' coordinations, but rather adjuncts, essentially on two grounds: 'non-NP extractions resembling [Across-the-Board] cases are not permitted, and what look like ATB extractions from B-Σs satisfy independently known conditions for an analysis in which the rightmost gap is a [parasitic] gap' (83). So far as the first of these claims is concerned, it seems to me immediately counterexemplified by examples such as (29).

(29) (a) That's the shelf [**on** which]$_i$ Robin has crammed her entire CD collection t_i and (yet) still managed to put the latest additions to her owl collection t_i.
(b) It's the kind of outfit [**for** which]$_i$ you can work t_i all your life and yet feel little affection t_i.

I and and many other speakers find them flawless. And if B-Σs are adjuncts, then they should not, on Postal's account, be able to support extractions from antipronominal contexts, inter alia; yet the following seems to me and my informants to be totally acceptable:

(30) There are [certain shades of green]$_i$ that you can be flat-out color-blind and **still** refuse to paint your walls t_i.

where it is absolutely clear that what you are refusing to do is paint your walls any of those shades of green. So far as the second point is concerned. Levine et al. (2001) argue that Postal's conclusions about what restrictions hold on parasitic gaps are incorrect in any case.[17]

C-Σs are also dismissed as instances of true coordination, on grounds that are in some cases simply perplexing. Thus, Postal comments that disjunctive

[16] Postal is in fact aware of the nonislandhood of *or* conjucts for negative polarity and similar dependencies, but only notes that 'Disjunctions contrast [with the A-Σ cases] for reasons that need not concern us here' (p. 191). This comment seems excessively sanguine, since the existence of this and similar mismatches between different kinds of islandhood undercuts the logical structure of Postal's entire argument in this part of the chapter, and therefore should concern both author and reader very much.

[17] Space considerations preclude discussion of Postal's other arguments for the adjunct view of B-Σ structure, but these seem to me to have no more weight or empirical support than those already discussed; thus Postal argues that 'true' coordinations don't tolerate VP

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coordinations cannot be C-Σs, and hence the latter are not genuine coordination structures; but since one of the chief defining criteria of C-Σs is the fact that there is a CAUSAL relationship between the first and second conjuncts, it is hard to see how something could possibly have the semantic properties of a C-Σ if it DID involve a disjunction. Postal's strategy here therefore amounts to ruling out such cases as genuine CSC violations by denying coordination status to conjunctions with the specific licensing semantic properties that make possible the non-ATB extractions in question – in effect, reserving coordination status for those cases which do not violate the CSC, and so making his defense of the CSC tautological. Another instance of this strategy arises in the course of Postal's discussion of C–Σs, whose status as 'true' coordinations he challenges on the grounds, inter alia, that they fail to exhibit 'interwoven dependencies' (91) – i.e., cases where the meaning of the parts of one coordinate substructure is distributed over the parts of another coordinate substructure. He cites in this connection the badness of *the stuff which*$_i$ *the guys in the Caucasus and the guys in the Himalayas drink* t$_i$ *and live to be 100, respectively*. But again, Postal appears to be stacking the deck; the inclusion of *respectively* in such examples inevitably eliminates the causal relationship between the two VP conjuncts, and if this causal connection is part of the interpretive conditions that are required in order for a CSC violation to be well-formed, then of course the appearance of *respectively* will block such violations. Hence, the appearance of *respectively* on the one hand and legal CSC violations on the other will be mutually exclusive, so that, by insisting that only that coordinations which allow *respectively* readings are to be characterized as 'true', Postal in effect has dealt with Lakoff's C-Σ examples by defining them away – a dubious line of argument, particularly in view of the lack of any INDEPENDENT characterization of the notion 'true', as opposed to spurious, coordination.[18]

ellipsis when the antecedent is outside the relevant conjunct, but B-Σs do allow such ellipsis (*Helen said she can eat 13 burgers and still feel hungry and she can* [vp e] *and still feel hungry*), but note that *Helen said that she could eat thirteen burgers and drink NINE beers but I don't think she could* [vp e] *and drink TWENTY beers*, which is syntactically exactly parallel to Postal's example (144) of 'true' coordination, is fine when *nine* and *twenty* receive the indicated contrastive stress.

[18] One bit of syntactic argumentation that Postal does give for C-Σs not being 'true' coordinations is based on what seems to be mistaken data. He cites, on p. 82, the example **Who claimed Frank studied for how long and failed math* to show that 'true' coordinations do not allow non-ATB multiple *wh* interrogation; later, in connection with C-Σs, he offers this example as contrasting with the possibility that C-Σs display for multiple interrogations involving non-NPs (p. 92). But his example of the latter in a C-Σ structure is *Who said the guys in the Caucasus eat what and live to be a hundred?*. This example, which is supposed to show that C-Σs do allow non-nominal multiple *wh* in only one conjunct, hardly involves a non-NP. And when a genuine non-NP example is substituted (and *claim*, as in the form Postal cites for 'true' coordination, replaces SAID), as in ??*Who claimed the guys in the Caucasus fast for how long and live to be 100?*, the results are, to my ear at least, no better than Postal's example for a 'standard' coordination.

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On the whole, then, Postal has not established his case. On the contrary, in view of the examples cited earlier, I do not see how one can maintain the view that the only violations of the CSC are those which mandate an analysis in terms of null RPs. And since the non-nominal and antipronominal filler/gap linkages above actually rule out the possibility of null RPs occurring in these gap sites, there is no alternative to regarding these constructions as genuine extractions. In short, it appears that Lakoff was right after all, and the CSC cannot be maintained as a syntactic restriction.

4. The status of right node raising

In chapter 4 of TIE, Postal takes up the question of whether Right Node Raising (RNR) should be regarded as an extraction phenomenon, as in much of the early work on this construction, or something quite different, as suggested in more recent studies. His conclusion is that RNR is indeed an extraction phenomenon, and that various proposals to the contrary (particularly those in McCawley (1982, 1987 and 1988)) cannot account for various properties he observes in a number of RNR constructions, leading him to conclude that there is no alternative to an extraction treatment. After defending this conclusion, he proceeds to consider whether the kind of SLASH propagation mechanism employed in various avatars of phrase structure grammar can capture the range of RNR facts he considers, concluding that it cannot.

This is, on the face of it, a rather curious combination of arguments; for the SLASH propagation mechanism is an extraction mechanism, and the treatment of rightward extractions, including RNR, in Gazdar (1981) via SLASH is an extraction analysis. Logically, then, it must be the case that there is some property of extraction which the SLASH mechanism does not capture but which is available on some other treatment of extraction, one which Postal's discussion might be expected to consider in detail. But there is no such discussion. Rather, Postal acknowledges at various points in this chapter that the data sets in question pose a problem for ALL frameworks. It is hard to see how such argumentation can then be taken to favor either of two approaches neither of which has a straightforward solution for the difficulties posed by the data. Likewise, Postal appears to simply assume, without question, that a solution for these difficulties will be available under some (non-SLASH) extraction mechanism but not under the 'in situ' approach taken in McCawley's or related work, giving no substantive basis for this assumption.

A typical example of this strategy is provided by Postal's (172) example in (31).

(31) (a) The pilot claimed that the first nurse was a spy and the sailor proved that the second nurse was a spy.

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(b) The pilot claimed that the first nurse t_i and the sailor proved that the second nurse t_i $\left\{ \begin{array}{c} \text{were spies} \\ \text{*was a spy} \end{array} \right\}_i$.

(c) The pilot claimed that the first nurse was t_i and the sailor proved that the second nurse was t_i $\left\{ \begin{array}{c} \text{a spy} \\ \text{*spies} \end{array} \right\}_i$.

The problem is that the RNRed constituent in (31) could not appear in any of the contexts marked by traces, given that examples like **The nurse was spies* is bad; hence, an analysis which treats these as instances of a shared in situ constituent cannot avoid predicting the goodness of such bad examples. But of course, by the same token, if each trace is linked to the RNRed constituent, then again an impossible element must appear in the gap site within each conjunct.

It is useful to consider Postal's own comment in this context: 'although examples like [(31)] raise problems for any approach, at least under an extraction view there is the possibility of seeing *were spies* in [(31)] as some sort of realization of an *n*-ad of ATB extracted singulars' (172). But the reader is never given the slightest idea of what kind of solution Postal is actually alluding to here, in terms of specific mechanisms based on some well-defined notion of a single constituent being an '*n*-ad of extracted singulars'. In the absence of a real proposal, such examples are equally mysterious for the extraction and the in situ view and hence have no bearing on the comparative assessment of these two competing perspectives.

A number of other examples of Postal's attempt to show that RNR and leftward extractions sort together by documenting supposedly parallel restrictions on them. Thus, Postal asserts (124) that both RNR and left extraction cannot affect genitive NPs – claiming, in effect, that in (32) the two examples are equally unacceptable.

(32) (a) Terry is a niece, and Leslie is a cousin, of Robin's.
(b) *It was Robin's that she saw several children of t.

I know of no speakers who find (32a) ill-formed; it is impeccable for most, and only slightly odd for a minority. On the other hand, I know of no speakers who consider (32b) acceptable. So far as I can tell, then, Postal's equation of RNR and leftward extraction as both subject to 'the Genitive Constraint', and therefore a single species, is just factually incorrect. Another instance of this same line of argument raises a somewhat different problem, where Postal attempts to show (122–123) that RNR and leftward extraction are both blocked from affecting the indirect object of ditransitive verbs:

(33) (a) Ernest sold drugs to Lydia.
(b) *Which hostess$_i$ did Ernest sell t_i drugs?

(34) (a) I first offered the immigrant from Paraguay apples and then sold the immigrant from Paraguay peaches.
(b) *I first offered t_i apples and then sold t_i peaches the immigrant from Paraguay.

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But the reason for the badness of (34b) has nothing to do with the 'Indirect Object Constraint' that Postal posits for leftward extractions; it is simply that RNR is essentially impossible for any string which is not, or cannot be, rightmost in its VP. Postal attempts to challenge this generalization by citing as well-formed the examples in (35).

(35) (a) *I talked to t_i about love [the tall woman in the black dress]$_i$.
(b) Mike may have talked to t_i about love and certainly talked to t_i about marriage [the tall woman in the black dress]$_i$.

To quote Postal's own words in a different context, perhaps there is a natural language with facts like these, but it is certainly not mine or that of any speaker I know.[19] I am aware of no genuinely good data which jeopardize the assertion that RNR raises right nodes, or more correctly, sequences of one or more right nodes, as I discuss directly. Once this point is recognized, certain other of Postal's arguments collapse, since they are based on the mistaken premise that RNR can displace constituents at arbitrary points in coordinated categories.

Space considerations preclude a systematic review of Postal's arguments on RNR, a situation I hope to rectify in the near future. But there are a number of points that bear crucially on the debate that demand discussion. For example, in attempting to rebut the case that RNR is not a species of extraction, Postal addresses the assertion that it has distinctly different, and far more general extraction targets than leftward extractions, including finite VPs and uncomplementized clauses. Postal argues that 'the difference in question shows only that RNR is distinct, not that it is fundamentally distinct in nature' (106). But there IS evidence that RNR is different in nature which Postal has no account of, viz., the fact, known since Abbott (1976), that RNR is not limited to constituents. Abbott provides the following examples:

(36) (a) Smith loaned, and his widow later donated, a valuable collection of manuscripts to the library.
(b) I borrowed, and my sisters stole, large sums of money from the Chase Manhattan Bank.
(c) Joan offered, and Mary actually gave, a gold Cadillac to Billy Schwartz.
(d) John tried to persuade – but failed to convince – his skeptical examiners that he knew the right answer.

[19] This actually is not quite true: there is a very strange prosody under which BOTH examples in (35) are good, wherein *talk to* is very heavily stressed in both conjuncts, and *about love* and *about marriage* are pronounced almost *sotto voce*, but this kind of exaggerated phonetic flagging of parenthetical status leaves the point unaffected, since both examples in (35) are good under the specialized intonation in question and therefore the RNR example can still be treated as derivable from a legal structure in which the RNRed constituent is rightmost in both conjuncts.

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More complex examples yet can be easily constructed:

(37) Robin plans to mail, and DHL had better be ready to carry, a package of books this coming Thursday to the King of Norway.

This is an absolutely crucial distinction with respect to leftward extraction, and one which on the face of it is fatal for any effort to identify the latter with RNR. Postal's response to this challenge makes no reference to Abbott's actual examples, but only alludes to an example due to Oehrle, and comments (193) that examples which show the possible non-constituency of RNRed elements 'are indeed troubling', acknowledging that he has no analysis of them. But WITHOUT a serious analysis of such cases, I cannot imagine how any treatment of RNR as extraction can be taken seriously.[20]

In a similar vein, Postal attempts to construct an argument for the unity of RNR and leftward extraction based on the putative parallelism of preposition stranding environments under these two respective types of operation. Apart from the fact that many of Postal's judgments here are simply perplexing – what is supposed to be wrong with *They **could** have made light, and **should** have made light, of the difficulties in question* or *Jan **could** have scoffed – and indeed **should** have scoffed – at that idea*, two data which are claimed to parallel their leftward extracted analogues in ill-formedness? Postal simply does not mention at all, either in this section or anywhere else, the really important fact about preposition stranding, viz., that in many language it is strictly forbidden EXCEPT for RNR constructions. This fact was pointed out for Irish, French, Polish and Spanish in an important paper by McCloskey (1986), who further notes that other RIGHTWARD displacements such as Heavy NP Shift are also forbidden to strand prepositions. One might have expected McCloskey's observations to receive at least some discussion in the section of this chapter devoted to preposition stranding, for the challenge again is quite serious: if RNR is the only putative extraction type in the language, rightward or leftward, that can strand a preposition, then it is not only the case, as McCloskey (1986: 185) observes, that the Irish RNR extraction pattern 'is entirely expected and natural' under the in situ hypothesis, but conversely, that the extraction analysis of RNR is entirely anomalous.

A final comment is in order about an argument which Postal claims as 'striking' on behalf of the unitary nature of RNR and leftward extractions, providing 'a sharp objection to the view of RNR endorsed by McCawley […] and Levine' (133), is based on data such as (38).

[20] One approach that will NOT work is taking a non-constituent RNRed string of phrases to be the result of successive applications of RNR to individual constituents. Since RNR applies to the rightmost constituent in the VP, the result of such successive RNRing applied to $\ldots x_1 x_2 x_3$ would give $[[[[\ldots t_1\ t_2\ t_3]\ x_3]x_2]x_1]$. In fact, the only way in which the output of such successive RNR applications would yield the correct string order is if RNR was constrainted to apply to the LEFTMOST element in the VP first, clearly contrary to fact.

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(38) Jerome fired t_i after finding t_i drunk and Bill hired t_i after finding t_i sober [the tall young woman standing over there]$_i$.

These examples actually involve an obvious RNR of a shared right node linked to what appear to be extraction sites in the main VPs and adjuncts of the respective conjuncts; thus, what is at issue is the status of (39).

(39) Jerome fired, after finding drunk, that tall young woman over there.

Postal notes that since only extraction is standardly assumed to license parasitic gaps, an in situ account has no story about such parasitic gap constructions licensed by RNR. And elsewhere in this chapter, Postal alludes to this argument. But it turns out to be, by his own acknowledgement, no argument at all, for in a footnote at the very end of this discussion Postal comments (196) that

> I have concluded in [Postal (1994b)] that the view taken [in this argument] that cases like [(39)] involve P-gaps 'licensed' by RNR is incorrect, on the grounds that such examples do not in fact contain P-gaps. However, since it is not possible to consider the motivations for such a view here, I have left the present study as is and refer the interested reader to my previously published but subsequently written paper.

But then why include an argument based on a premise that one not only no longer believes in, but has refuted in print several years earlier? Postal remarks that the treatment of examples such as (39), originally noted by Engdahl, as a non-parasitic gap phenomenon, would be sufficiently controversial to warrant inclusion of the erroneous argument in the text. But this makes little sense to me, since all that would have been required would have been brief footnote citing the data as superficially supportive of, but in fact irrelevant to, Postal's argument, with a pointer to the reader to the 1994 paper, without going into any further detail – just what Postal does here in any case, but without the narrative strangeness of introducing an admittedly incorrect argument in the text and then withdrawing it in a footnote.[21]

In short, then, I do not find any arguments in the first half of this chapter which come close to making the RNR/leftward extraction connection plausible, in the face of the severe contraindications noted above, or others, which space considerations preclude my addressing in this context.[22]

[21] Still another instance of this kind of editorial inconsistency is afforded by Postal's offering **What fool your interviewing thrilled* in support of his A_1/A_2 distinction and then immediately withdrawing it in footnote 5, attached to this very example, in which he notes that exclamative *wh* constructions simply do not support parasitic gaps of any kind. But again, why not simply have removed the example from text in the first place?

[22] A number of Postal's arguments, such as his challenge to the anaphora argument in Levine (1985), lose their force once it is acknowledged that RNR can only affect VP-final constituents, and that the linear order in which linguistic expressions are pronounced affects cataphora possibilities regardless of any other structural difference (e.g., *I talked with Mary*$_i$ *about herself*$_i$ vs. **I talked about herself*$_i$ *with Mary*$_i$). (Considerations involving linear order, which can be elegantly captured using the linearization formalism

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The remainder of chapter 4 is taken up with arguments that the SLASH propagation devices which have been used to express connectivity in phrase-structure-theoretic grammars are inadequate to account for the range of facts associated with RNR. But as already discussed, it is not at all clear what alternative version of an extraction analysis would be any more successful in the cases Postal adduces, or why; if there were means available to one extraction approach to handle such cases, these means would be in principle be unavailable to the SLASH-based treatment of unbounded dependency constructions. The vital step necessary for Postal's argument to go through – the demonstration that some reasonably fully specified filler/gap analysis could overcome the problems his data present but that SLASH propagation cannot even in principle incorporate the relevant properties of this analysis – is missing. This omission is, in turn, virtually inevitable, since TIE presents neither an explicit analysis of RNR nor a precise definition of the connectivity mechanism. But without such components of the argument there is simply no way to show that one kind of extraction solution succeeds where another fails in principle.[23] Thus, the discussion of SLASH vis-à-vis RNR ultimately seems largely tangential, quite apart from the fundamental problems noted above that any filler/gap analysis faces.

5. Introduction

The Introduction to this book seems oddly placed; the reader encountering Postal's work on extraction for the first time in this volume will be able to make very little of the discussion here, because much of it is concerned with technical refinements or further developments of the material introduced in the following chapters, or afterthoughts on later material. In particular,

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of Reape (1993) and Kathol (1995), might be related to the semantics for *respective*(*ly*), *the latter* and similar string-referential predicates recently proposed by Gavron and Kehler (2000), in terms of a mechanism where the interpretation of such predicates is stored and later retrieved at points definable in terms of the linearization domain in which such predicates appear. Such a treatment appears readily extendable to gaps linked to fillers containing *respective*(*ly*) and comparable elements as well, in a fashion parallel to the treatment of quantifiers in Pollard and Yoo (1998) (see also footnote 23 below). Once such possibilities are raised, there is no longer a principled basis for assuming that such denotations must be evaluated within individual conjuncts.) Other arguments hinge on what I take to be factually incorrect claims about the data, such as the assumption that Heavy-Shifted constituents, and object NPs in general, cannot support leftward extraction; cf. *The equations* [*TO which*]$_i$ *I worked out for Robin some interesting solutions* t_i *are on the blackboard*; *This is a volume* [*TO which*]$_i$ *I should be making plans to contribute* t_i. I hope to discuss these issues in detail in the near future.

[23] Suppose, for example, that there is a storage mechanism similar to the QSTORE for quantifier scope which instead regulates the scoping of elements such as *respectively*. If this novel attribute is not a LOC(al) feature of the sign, then the trace at the gap site will not contain the semantic properties of *respectively* and similar symmetric predicates. Hence such elements will not make semantic contributions at their associated gap sites, and the problems Postal appears to regard as inevitable thus immediately disappear.

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Postal presents a more ramified typology of extraction types, subdivides the class of RPs, and fleshes out his chronologically earlier treatment of islands and the factors determining their relative permeability. The result is a system of considerable complexity, for which, as I note briefly below, there is no motivating empirical basis.

Postal begins by arguing for a dichotomy, alluded to above, within the A-extraction class into A_1 extractions, which have the option of linking fillers to null RPs, and A_2 extractions, which lack this option. From this distinction a number of predictions are supposed to follow. In particular, A_1 and B extractions will both be possible from syntactic islands, on Postal's assumption – explicitly following the proposal in Ross (1967) – that islandhood regulates only linkages between actual extractions from a particular configuration resulting in a gap at that site ('chopping rules', in Ross' terms), but not those mediated by null RPs, as discussed above, whereas A_2 extractions, unable to avail themselves of linkages to null RPs, cannot connect fillers with island-internal gaps. Postal offers contrasts such as (40)–(41) to support this distinction, where comparatives and *the more... the more…* are supposedly unable to extract from weak islands.

(40) (a) The guy who$_i$ they asked whether the police questioned t_i.
(b) Joe saw more students than (what$_i$) they (*asked Jane whether the police) questioned t_i.

(41) (a) [Which spy]$_i$ did the police arrest anyone who had contacted t_i?
(b) The more people they praised, the more people (that$_i$) the police arrested (*anyone who had contacted) t_i.

A_1 and B-extractions, on Postal's account, can be linked to null RPs at their gap sites, hence apparently linking fillers to gaps within islands. But there is a problem this analysis creates, as Postal notes (9–10): null RPs themselves need to extract to a position structurally proximate to the fillers which control them, hence allowing the filler to be 'read' into the gap site, but this implies that movement of null RPs themselves can escape from islands. If so, however, there is no apparent basis for NON-selective islands, where both A_1 and B-extraction fail to link fillers. Postal therefore introduces a second distinction, between types of island: LOCKED islands bar all RP extractions, whereas unlocked islands allow RPs to extract. This extra distinction would seem to allow the discrepancy Postal seeks to explain: A_1 and B-extractions can both involve gaps within selective islands because these allow the RP to extract to a suitable position adjacent to the filler which must control it, whereas absolute islands bar such movement, and therefore leave a null RP in a position where it cannot be controlled, leading to ill-formedness. And A_2-extractions cannot link fillers to gaps in islands of either kind.

However, Postal introduces an extra complication: rather than simply allow the distinction between locked and unlocked islands to lead to the effects noted, he assumes a third distinction: that between PRIMARY null RPs,

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which require the kind of locality alluded to with respect to their controllers, and SECONDARY RPs, invariably null, which can be controlled from further away, although the exact domain of control is left unspecified. Although Postal does not make the relevant mechanisms especially clear, what he envisages appears to correspond to something like the following: primary RPs move to controllable positions proximate to the corresponding fillers, as long as their 'launch sites' are within nonisland or unlocked island configurations, leaving secondary RPs in their gap sites. Secondary RPs then move to the borders of any island configurations they appear in. Although it is not entirely explicit, Postal's discussion creates the strong impression that just as the primary RP is controlled by the filler, the secondary RP is controlled by the primary RP, while the secondary RP itself cannot leave an RP but only a trace. No RPs can escape from 'locked' islands; a primary RP can escape from unlocked islands, just in case it leaves a secondary RP in the gap site, which cannot itself move out of any kind of island (since it is linked not to an RP but only a trace), but which can be controlled with its containing island by the higher RP. Postal argues that this considerable additional complexity is justified by the consequent availability of an explanation for a set of facts which he claims hold in certain extraction data. The essence of the claim is that, while extractions from certain positions are possible for B-extractions, and extractions from unlocked islands are possible for B-extractions, extractions from those same positions when they occur within unlocked islands is impossible. Thus, although topicalization is possible from finite subject position (as in (42a)), and from selective islands (as in (42b)), topicalization from finite subject position within a selective islands is impossible (e.g. (42c)):

(42) (a) Terry, on the other hand, I am sure that under normal circumstances would be quite cooperative.
(b) Terry, on the other hand, I seriously regret having criticized.
(c) *Terry, on the other hand, I seriously regret married Mary.

Given the fact that in two separate environments topicalization is good, the restriction yielding (42c) cannot apply to the primary RP, since this element, as the first two examples clearly show, is able to extract both from from finite subject position and from a selective island. But if we assume that the covert form of (42c) is (43), with RP^1 denoting the primary RP and RP^2 the secondary, then an alternative account becomes available:

(43) [Terry] RP^1 … [I seriously regret RP^2 [t married Mary]].

Suppose that, for some reason, whatever factors are involved in control of RP^2 disallow such control in this particular configuration. Then even though RP^1 has been able to move to the position proximate to its controller in all three examples, the idiosyncratic restrictions on control of RP^2 have not been met in the third example corresponding to (43); hence the result is ill-formed.

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What are we to make of this discussion, which constitutes the central substantive core of the introduction to TIE? Consider, first, the A_1/A_2 extraction distinction, based heavily on examples such as (40) and (41) above. Once again, it turns out that a far-reaching claim in TIE rests on quite shaky empirical bases. The data in (40) and (41) are effective counterexamples to Postal's claim that comparatives and *the more … the more …* instantiate such a distinction, and those in (44b) and (45b), again widely accepted by native speakers and certainly on a par with the respective (a) examples, appear to refute decisively his claims about these extraction types:

(44) (a) [the book]$_i$ I had asked the librarians whether I could borrow t_i.
(b) I borrowed more books from Jan than$_i$ I had **asked** her whether I **could** borrow t_i.[24]

(45) (a) Those are things that$_i$ I can't find [anyone$_j$ to talk to t_j about t_i].
(b) The older I get, the more things$_i$ I'm just not able to find [people$_j$ to talk to t_j about t_i].

Here and elsewhere, a slight modification in content of Postal's examples to make them pragmatically less bizarre or convoluted without altering their structure yields a remarkable improvement in their status, suggesting that what is at issue are practical and psychological factors bearing on interpretability, not structural ones at all.[25] Other examples which strongly contraindicate Postal's claim that specific extraction constructions cannot link fillers to gaps in selective islands are readily available. Thus, while Postal identifies the *same X that* quasi-relative construction as a member of the A_2 class, examples of such extraction from coordinate structures in violation of the CSC are unexceptionable:

(46) The same pile of rocks that I called up the city and had t removed from my lawn showed up two days later in my neighbor's back yard.

Thus, the factual basis for the dichotomy within the A-class of extraction constructions is wholly suspect.

The same criticism can be fairly leveled against Postal's elaborate mechanism account of island permeability, as I document directly. But there

[24] My thanks to Nathan Vaillette for this example.

[25] This is particularly evident in connection with Postal's claim that A_2 extractions cannot target a 'backward' controller (marked by *p*) in examples such as (i). For when the content is changed to correspond to a reasonable situation, even such extremely convoluted and easily misparsable examples become greatly improved, as (ii) shows:

i. *Jacqueline interviewed more employees than p_i meeting the director thrilled t_i.
ii. Meeting the director thrilled fewer people than I had expected meeting the director to thrill t_i.
iii. The more people the director gives free drinks to t_i, the more people meeting him appeals to t_i. (where the prosody of *the more people meeting him appeals to* clearly distinguishes the phonological phrases [Φ_1 *more* people] [Φ_2 *meeting him appeals to*].)

I am greatly indebted to Nathan Vaillette for these examples.

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is, in addition, an immediate conceptual difficulty with Postal's scheme implicit in his discussion of paradigms such as (42). Notice that in the case of (42b), which like (42c) involves an RP^2 on the left edge of the island domain, the relevant factors determining control possibilities must be stated to ensure that control of RP^2 by RP^1 is indeed possible. But there is no difference between (42b) and (42c) so far as the configurational relationship between RP^1 and RP^2 is concerned. The sole difference is the location of the gap site to which RP^2 is linked in the two cases. Thus, the relevant control determinant – never even hinted at in Postal's discussion – turn out to have to disallow control between two elements in one of two configurationally identical situations, but not the other, based solely on whether one of those elements is itself coindexed to a trace in finite subject or in object position. This requirement is so sufficiently bizarre that it merits a deeply skeptical response. Such skepticism could in principle, of course, be overcome by a display of empirical success for the double RP analysis sufficient to eliminate theoretical misgivings. But this coverage is nowhere provided, and the empirical domain offers its own reinforcement for grave doubts about the double RP treatment.

Note, in the first place, that it is simply untrue that selective islands preclude extraction from finite subject position. Levine et al. (2001) provide ample documentation that preposed adverbial clauses allow finite subject extraction in parasitic gap constructions, e.g. *There go Robin and Dana*, *who*$_i$ [[*as soon as I realized* t_i *were coming my way*] *I made every effort to hide from* t_i]; note also the possibility of CSC violations involving finite subject position exhibited in (28) above.

In the second place, it should be noted that there is a serious problem with Postal's *regret* examples. Postal gives the specific datum **Mike*, *they regret* t *married Mary* and similar examples, but in all such cases the corresponding in situ form is highly questionable: ?? *I regret Mike married Mary*. The form *regret* is strongly preferred or required by most speakers I know to take a *that* complementizer. When a different selective island inducing verb is chosen, extraction from finite subject position is straightforwardly acceptable:

(47) (a) ??*How did you doubt [Robin was able to do that t]?
(b) Robin, on the other hand, I very much **doubt** t could have been working for Ostrogoth intelligence.

Furthermore, the entire line Postal pursues in this chapter, as in the rest of the book, is decisively undermined by the existence of robust extractions from selective islands linked to antipronominal contexts. For example, (25) and (28) above contain ample documentation of extractions from such contexts, and others are readily forthcoming (e.g. *Which nation's army did you wind up regretting that you had entered?*, which seems exactly as well-formed as *Which nation's army did you wind up believing that you had entered?*).

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Moreover, many of the same difficulties noted above in connection with the arguments in the main text surface in chapter 1; thus early in the Introduction Postal claims that the object of *tell*, in the sense of 'determine', is antipronominal, citing *We could easily determine/*tell it*, whereas, in fact, there are examples of such uses in the naturally occurring text material collected in the Brown and British National Corpora respectively:[26]

(48) (a) Something was beginning to stir and come alive in her, too (it may have been there for a good while, since she was twenty now; but if it had been, it had been smothered until now by fear): you could tell it by the way she watched the older, bigger boys, like Jack.
(Brown Corpus)

(b) You could tell it just by looking at his flabby features.
(BNC: AE0 145)

Moreover, of the many native speakers whom I have consulted about (49), not one found it less than perfect.[27]

(49) Robin was spying for the Visigoths, and anyone could tell it just by looking at him.

We are back in familiar territory: an important empirical claim, which underpins one of Postal's key examples (his (25) on page 10) turns out to be factually unsupportable, markedly lessening the credibility of the points that Postal invokes it to support. The combination of an elaborate technical machinery with almost completely unspecified, but apparently strongly suspect, theoretical underpinnings, and an empirical base vulnerable in the extreme, makes the proposals in this introductory chapter as shaky as those in the rest of the book. At the end of the day, the game just doesn't seem worth the candle.

6. Conclusion

If both the empirical basis and, in some instances, the logical structure of Postal's argumentation seem gravely inadequate to support the A/B extraction dichotomy and the null RP theory of weak islands, is there any value for the reader in struggling through two hundred pages of such dense, intricately structured reasoning? In spite of the negative tone of my comments in the preceding sections, I believe there is. For students who have been exposed to theorizing driven almost entirely by deduction from a set of supposedly established principles to claims about structure, Postal's relentless pursuit of factual bases for his proposals may come as a shock, and a very

[26] I am greatly indebted to Martin Jansche for bringing these examples to my attention.

[27] Many of the examples cited here emerged in the spring 1999 meetings of the Synners: my thanks to Martin Jansche, who recorded many of the relevant counterexamples that were spontaneously generated by members of the group.

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salutary one. A nice example of just this kind of thinking is contained in one of the appendices to TIE, in which Postal reproduces (at least some portion of) the comments of an MIT Press referee criticizing various parts of his discussion. The referee has apparently failed to absorb the fact that Postal does not assume the GB framework and, therefore, that GB-internal prohibitions and constraints are irrelevant to the content of Postal's hypotheses and cannot be used to refute the relevant parts of his analysis. And experienced practitioners of syntax will find a tremendous range of anomalies and perplexing data that require explanation. For while it is the case, as I have tried to document above, that Postal's specific examples of ill-formed data fail in the end of establish his particular theses based on null RPs, there is no question that many of the examples he cites as bad are indeed bad. If there are structurally parallel well-formed examples, what is it about the ill-formed cases that makes them bad?

This question is, I believe, the key to the significant contribution TIE makes to syntactic theorizing. Postal's recent work deserves to be taken far more seriously than my reading of the literature leads me to think it has been, even if the kind of null nominal analysis that he, Cinque (1990), Lasnik & Stowell (1991) and others have pursued proves incorrect, as I believe it is for the reasons given above. My own hunch is that much of what Postal has documented is the result of an interaction of pragmatic and processing factors that can be teased out and identified in a rigorous and principled way, along the lines suggested in Kroch (1989) and Kluender (1998). Thus TIE's enduring contribution to syntax is the collection of puzzles that it presents to readers, challenging their own explanatory ingenuity, even if, in the end, its own solutions prove unsuccessful for a large subset of speakers.

But Postal's work raises questions of a somewhat darker nature. A possible response to at least the data-based challenge given in preceding sections is simply to accept that the null RP-driven analyses exhibited in TIE are indeed untenable for speakers who accept these counterexamples as well-formed, but to maintain that the RP analysis correctly characterizes the grammars of speakers who do not accept such data. As I have noted above, my experience is that a large number of speakers whom I have consulted find most of these examples well-formed, though naturally there is some variation. But logically, one story goes, that entails nothing about the grammars of other speakers. Even if Postal alone were to reject such counterexamples, would that not simply mean that the null RP hypothesis was defensible for at least one natural language grammar, viz., Postal's own?

There is no simple answer to this question, which potentially arises in cases where investigators proposing different analyses of the same phenomenon disagree about the status of various crucial data. Most syntacticians have encountered responses to their proposals based on rejections of crucial judgments of key data, and it is not difficult to find in the literature specific proposals whose far-reaching consequences depend on judgments explicitly

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denied by other researchers covering the same ground. One could imagine that speakers have a range of options available to them for the construction of models of filler/gap linkage, and that confronted with parasitic gaps and other so-called B-extractions, some speakers induce grammars in which filler/gap connectivity is exactly the same as in canonical *wh* extractions, while others uniformly supply the B-constructions with null RPs along the lines Postal suggests – with still others treating some B-extractions as *wh* constructions and other such extractions as null RPs. In place of the excessively implausible community made up of idealized speaker/hearers sharing a single model of grammatical competence with at most a small degree of variation, restricted to the lexicon, we have the prospect of a speech community in which people have significantly different grammars – with, however, considerable extensional overlap. While it is not obvious that such a model is correct, the existence of severe disagreements about the status of critical examples such as those considered above makes it unwise to dismiss this possibility out of hand.

Considerations such as these raise questions that go well beyond the bounds of a review article. Nonetheless, the readiness with which a large number of people accept crucial counterexamples to Postal's null RP hypothesis leads me to conclude that a substantial speakership possesses grammars for which the extraction dichotomy Postal defends is unwarranted, and in which, more generally, null resumptive pronouns play no role. The consequences of this state of affairs, implicating the violability of islands and the other issues Postal considers, are far-flung, and – if we accept the existence of another subpopulation of speakers who share Postal's crucial judgments – rather disturbing.

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