1. Introduction

Since Ross's first formulation of Left Dislocation (LD) as a movement rule (Ross (1967, ch. VI)), a number of people have challenged his analysis, proposing instead that the lefthand constituent be base-generated (Postal (1971); Hirschbühler (1974; 1975); Rodman (1974); Van Riemsdijk and Zwarts (1974); Gundel (1975)). Before briefly considering some of their arguments and alternative proposals, which I will argue focus on a quite different construction, I will present what I take to be rather strong evidence in favor of a movement analysis, for at least a large class of sentences in at least some languages.

All of the arguments I offer below have the following form:

(1) There is some rule operating on NPs that ordinarily displays either a governor or a trigger or a controller to the left of the affected NP.

(2) In our “LD” data the affected NP appears to the left of such a governor (or trigger, or controller) rather than to its right.

(3) Were we not to posit a movement rule that applies (we must assume) after the relevant rule has operated on the NP, we would be compelled to state the same restrictions twice, as if they were independent ones, thus missing a basic regularity.1,2

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1 I am grateful to Richard Kayne, Susumu Kuno, Andrew Radford, and Luigi Rizzi for very helpful criticism and for correcting me in a number of errors and infelicities contained in a previous version of this squib. I would also like to thank Elisabetta Folena, Jean Claude Maire-Vigueur, and Sorin Stati for lending me their native intuitions on the French and Rumanian sentences quoted below.

2 Notice that a phrase-structure alternative to the facts to be reviewed below presents certain difficulties due to the potentially unbounded distance to the left of the “governed” element from the “governor”, in surface structure, so that it would be at the very least extremely complex and cumbersome to state such interdependencies in the base.

2 The above reasoning crucially assumes that LD operates on linearly ordered structures, but notice that it is noncommittal as to whether remote structures (or any stage before shallow structure, if
1.1. Verb and Adjective Governed Prepositions in Italian and French

Consider the following examples:

(4) Non riesco a concentrarmi \[ {^\text{di}} \] questo lavoro.
    'I can't concentrate \[ {^\text{on}} \] this work.'

(5) \[ {^\text{Di}} \] questo lavoro, non riesco a concentrarmici.
    '\[ {^\text{Of}} \] this work, I can't concentrate-on-it.'

(6) Vado fiero \[ {^\text{dei}} \] miei figli.
    'I am proud \[ {^\text{with}} \] my children.'

(7) \[ {^\text{Coi}} \] miei figli, ne vado fiero.
    '\[ {^\text{With}} \] my children, I am proud-of-them.'

The prepositions in the lefthand PPs are clearly "governed" by the verb *concentrarsi* 'concentrate' and the adjective *fiero* 'proud'. Without assuming that the lefthand NPs are actually reordered with the consequent pied piping of the prepositions—a general and obligatory phenomenon in Italian—we would be hard put to account in a simple way for the selection of the correct preposition in front of the lefthand NP (see also fn. 1).

The same argument applies in French, where sentences like (8) pose the same problems for a non-movement analysis.

(8) \[ {^\text{De}} \] mes fils, j'en suis fier.
    '\[ {^\text{Of}} \] my children, I am proud-of-them.'

It does not affect the argument that (8') is equally well formed.

(8') Mes fils, j'en suis fier.

LD is postcyclic) are so ordered. However, should such an assumption, which is not universally accepted anyway, turn out to be wrong, my facts would be evidence for merely a copying rather than a strict movement (by copying) analysis of LD.

3 Some of the arguments that follow are taken from Cinque (1974).
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As we shall see in section 2 below, one can argue from their intonational, pragmatic, and syntactic characteristics that sentences like (8') are really instances of an entirely different construction.

1.2. Case Selection in German, Italian, and Rumanian

An analogous argument is offered by case selection in many languages. The first to present such an argument from German was Ross (1973). In languages like Italian and Rumanian a similar argument holds in the case selection of personal

4 He presents the following facts based on verbs governing particular cases:

(i) Sie lobten \{ \text{den} \} \text{Professor}.

"They praised \{ \text{the (Acc.)} \} \text{professor.}"

(ii) \{ \text{Den} \} \text{Professor, sie lobten ihn.}

(iii) Sie schmeichelten \{ \text{den} \} \text{Professor}.

"They flattered the professor."

(iv) \{ \text{Den} \} \text{Professor, sie schmeichelten ihm.}

Van Riemsdijk and Zwarts (1974, fn. 4), discussing facts similar to Ross's agreement cases in German left-dislocated sentences, observe that case agreement between the lefthand NP and the "copy" is not always possible in German and cite such sentences as (v) and (vi) as evidence:

(v) \{ \text{Die Anna} \} \text{, ich habe lange nicht mit ihr gesprochen.}

"Anna \{ \text{(Nom.)} \} \text{, I have a long time not with her (Dat.) spoken.}"

(vi) \{ \text{Der Hans} \} \text{, Anna behauptet dass ich ihn nicht beachten soll.}

"Hans \{ \text{(Nom.)} \} \text{, Anna claims that I to him (Acc.) not pay attention.}"

Given this, they conclude it is "safe to assume that case-marking is neutral with respect to the choice between the transformational and the PSR [Phrase Structure] treatment of LD" (p. 17).

However, it should be observed that—as shown by Ebert (1973)—dass clauses are strict islands in German and so are PPs. In fact Van Riemsdijk and Zwarts themselves point out that corresponding to (v) and (vi) there are no well-formed sentences that have undergone Y-Movement. (The same, of course, holds for all the other extraction rules.) Now, given that true copying rules do obey island constraints, as shown below for Italian and French and as argued more extensively
pronouns, as we see from the following examples:

(9) \[
\begin{align*}
\{ \text{Me} \} & , \text{ ha detto che mi vede domani.} \\
\{ \text{*Io} \} & , \text{ a spus că mâ vede mîne.} \\
\{ \text{Pe mine} \} & , \text{ he/she said he/she will see me tomorrow.} \\
\{ \text{*I} \} & , \text{ you know that I haven't seen her.}
\end{align*}
\]

(10) \[
\begin{align*}
\{ \text{Io} \} & , \text{ sai che non l'ho più vista.} \\
\{ \text{*Me} \} & , \text{ știi că n-am văzut-o.} \\
\{ \text{Eu} \} & , \text{ you know that I haven't seen her.}
\end{align*}
\]

In Cinque (in preparation), Ross’s facts and Van Riemsdijk and Zwarts’s (v) and (vi) are predicted by a copying analysis of L.D. The copying derivation (with consequent case agreement) being precluded out of PPs and dass clauses, the lefthand NPs in (v) and (vi) can only originate as hanging topics (see below), directly in the base in their lefthand position (hence no case agreement). The copying derivation, however, is available for Ross’s cases, which involve no islands (hence the case agreement through copying), although this is not the only possibility, the hanging topic construction being permitted as well (with no case agreement, as expected). Consider:

(vii) Der Professor, sie lobten ihn. (compare (ii) above)

The professor (Nom.), they praised him. (Acc.)

(viii) Der Professor, sie schmeichelten ihm. (compare (iv) above)

Furthermore, (ii) and (vii), (iv) and (viii) differ intonationally and pragmatically as indicated below in section 2, to which the reader is referred for a discussion of the hanging topic construction.

Thus, if something along these lines is correct, I believe that it can be maintained that Ross’s original argument is not weakened by Van Riemsdijk and Zwarts’s observation.

This argument is not valid for English, where lefthand personal pronouns must always be in the accusative:

(i) \[
\begin{align*}
\{ \text{*I} \} & , \text{ you know I haven't seen her since.} \\
\{ \text{Me} \} & , \text{ I think they'll never help us.}
\end{align*}
\]

In fact such data have been taken—e.g. by Gundel (1975)—to support the nonmovement hypothesis, in that, under the movement hypothesis “a special lexical rule would be required to replace the non-objective pronouns by the corresponding objective forms” (p. 75). I think, however, that such facts are neutral with respect to the two hypotheses, since—as Andrew Radford has pointed out to me—they would follow from the independent general convention that in English only pronoun subjects of tensed Ss have the nominative form (pace the formal It’s I who proposed that) (see Chomsky (1973, fn. 47)). However, from what I say later, it should become clear that these do not qualify as proper L.D cases, but as instances of a different construction.
1.3. Left-Dislocated Reflexive Adjectives in Italian

The possessive adjective proprio in Italian obeys the same clause-mate restrictions typical of other reflexive pronouns. It can be used to "pronominilize" an of+NP possessive phrase only if the third person controller NP is "within the same simple sentence" and precedes the phrase of+NP. Otherwise suo must be employed. For example:

(11) Piero, ha perso la propria, identità.
   'Piero, has lost his, identity.'

(12) Carlo, ha detto che non è disposto a rinunciare alla propria, fede.
   'Carlo, said that he, is not willing to give up his, faith.'

(13) Furio, ha detto che hanno ritrovato la \{propria_i, proprio_i\} sua_i borsa.
   'Furio, said that they have found his_i bag.'

(14) Quando il \{proprio_i, suoi\} capo entrò, Giorgio, trasalì.
   'When his_i boss came in, Giorgio, startled.'

Alongside (11)–(14), we find sentences in which proprio occurs in lefthand NPs and PPs that are indefinitely far away from, and precede, the controller NP:

(15) Alla propria, fede, Carlo, ha detto che non è disposto a rinunciarsi.
    'His, faith, Carlo, said that he is not willing to give it up.'

More interestingly, we find that the occurrence of proprio within a lefthand NP or PP is well formed just in case it is well formed in the corresponding non-left-dislocated sentences. That is, we find well-formed left-dislocated sentences (with proprio in the lefthand NP or PP) corresponding to (11) and (12) above and ill-formed left-dislocated sentences corresponding to (13) and (14). See (15) and the following sentences:

(16) La propria, identità, Piero, non l’ha ancora persa.
    'His, identity, Piero, has not lost it yet.'

There appears to be a very limited class of exceptions to the "precedence constraint": Proprio can precede the controller NP only in copulative sentences when the controller NP itself is indefinite. For example:

(i) La propria, fede è l’arma migliore (per PRO_i)
    the his, own faith is the weapon best (for PRO_i)

(ii) La propria, fede è l’arma migliore per Giorgio.

This, however, does not seem to me to weaken the general observation made in the text.
(17) "La propria, borsa, Furio, ha detto che l'hanno ritrovata.
    'His, bag, Furio, said that they have found it.'

Now it seems that a movement analysis of LD exactly predicts these two series of facts, whereas a phrase-structure solution would have to be implemented with two special mechanisms: one to account for the above correlation between left-dislocated sentences containing proprio in the lefthand constituent and the corresponding non-left-dislocated ones; the other to account for the fact that the reflexive adjective can occur in a position that can be indefinitely far from, and precede, the controller NP, whereas in general it must follow such a controller within the same simple sentence.

1.4. Idioms in Italian

An extremely strong argument for the movement analysis comes from the fact that we find lefthand NPs that are constituents of idioms. As is to be expected, these NPs are not autonomous in meaning, but together with the remaining part of the idiom they have a single meaning that cannot be predicted from that of its parts. Thus, such NPs will have to be inserted in a block with the entire idiom and only later moved away from it. This is particularly true of the following two Italian idioms tirare le cuoia (lit. 'to draw the leathers'='to die') and tirare moccoli (lit. 'to throw (?) or to draw (?) candles'='to swear'), where the NPs le cuoia and moccoli are obsolete words found only in these two idioms, and for which a phrase structure independent generation in their lefthand position would be very hard to maintain.

Now, we find perfectly well-formed sentences in which the object NP of such idioms shows up in a "left-dislocated" position, under the appropriate pragmatic conditions:

(18) Le cuoia, le tirerai prima tu, bello mio!
    (lit. 'The leathers, them-will-draw-you earlier you, beautiful mine!')
    'You will die earlier, my dear!'
(19) Moccoli, non ne ha più tirati da allora.
    (lit. 'Candles (?), not of-them-has anymore thrown (?) since then.')
    'He hasn't sworn anymore since that time.'

Clearly, no easy solution can be found for such cases out of the movement analysis.

1.5. Scope of Left-Dislocated Quantifiers in Italian and Rumanian

The last argument I will present has to do with the scope of quantifiers that have been left dislocated. Consider the follow-
ing identical discourse fragments in Italian and Rumanian:

(20) Speaker A:
   a. Se ne sono andati tutti, eh!
   b. Toți au plecat!
      'Everybody left.'

(21) Speaker B:
   a. Beh, tutti, non se ne sono andati.
   b. Chiar toți, n-au plecat.
      'Not everybody left.'

In (21) tutti, toți 'all' occur before a break and with a falling intonation typical of left-dislocated NPs. (21) means 'Not everybody left' (implying that (only) some did). It may not mean 'All did not leave' (i.e. everybody stayed).

Clearly, in the logical structure of (21) NEG must command the universal quantifier. Now this is consistent with the movement analysis that would derive (21) from the structures underlying (22),

(22) a. Non tutti se ne sono andati.
   b. Nu toți au plecat.
      'Not everybody left.'

in which the negative precedes the quantifier in surface structure in accordance with Lakoff's derivational constraint.\(^7\)

The fact that in (21) the universal quantifier, after the application of LD, ends up in surface structure to the left of the logically commanding NEG, in apparent violation of Lakoff's constraint, is something that needs to be accounted for.\(^8\)

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\(^7\) Notice that the facts are just the same if one left dislocates a quantifier from object position:

(i) Tutti, non li devi leggere. (Solo alcuni, ti
   all not them you must read only some to you
   ho detto.)
   I-said
   'You don't have to read them all. (I only said some of
   them.)'

The only reading allowed here is with the universal quantifier in the scope of NEG (not all).

\(^8\) I had originally thought that such facts could be compared with Lakoff's claim (based on sentences like Fond of many boys, Sarah Weinstein isn't) that late rules such as Y-Movement are not sensitive to his derivational constraints, which he supposed to be operative only up to shallow structure. However, Susumu Kuno has pointed out to me that Lakoff's claim cannot be correct in the face of sentences like (i) and (ii), which are not synonymous with (iii) and (iv), respectively:

(i) Many boys, Sarah Weinstein isn't fond of.
(ii) Many boys, every girl is fond of.
(iii) Sarah Weinstein isn't fond of many boys.
(iv) Every girl is fond of many boys.

A. Radford, however, tells me that in some dialects of British English
However, within a movement analysis there is a straightforward way to account for facts like (21) and their interpretation: by positing that LD is not sensitive to Lakoff's derivational constraint (or its equivalent) (see fn. 8). Within the non-movement analysis, on the other hand, I do not see any simple way to account for the fact that whereas the quantifier is generated in a position that both commands and precedes NEG, the meaning indicates that NEG commands the quantifier.

2. Apparent Counterexamples to the Movement Analysis

Let us now look at the principal kind of evidence brought forth against a movement analysis of L.D. Hirschbühler (1974; 1975) adduces examples of the following kind from French:

(23)  Paul, Pierre vient de se battre avec cet idiot.
     'Paul, Pierre has just fought with that idiot.'

(i) and (ii) do allow for a reading synonymous to (iii) and (iv), this reading differing in intonation from the nonsynonymous reading. Furthermore, in both Italian and Rumanian Y-Movement is sensitive to Lakoff's constraints, since (v) and (vi) can only mean (vii) (NEG (x left)).

(v) Tutti, non se ne sono andati. (italics indicate heavy stress)
(vi) Töti, n-au plecat.
     'All, did not leave.'

These facts together may indicate that sensitiveness or insensitivity to Lakoff's constraints might be tied up with the different derivation of the lefthand NP, either through Y-Movement or through L.D.

With regard to the insensitivity of LD to Lakoff's constraints, one might try to defend the following position: if we assume that LD is a copying rule (where the copy is later pronominalized if the constituent in question has a pro-form, otherwise kept in full form or just deleted if it has none—as independently supported by Italian, for which see Cinque (1974)), then a copy (real or shadow) still occupies the original position of the left dislocated constituent in surface structure so that no command/precedence relation would in fact be violated. Notice that a similar explanation is not available to the chopping rule of Y-Movement, which could be said to account for the fact just noted that the rule is indeed sensitive to Lakoff's constraints. As to Lakoff's original sentence, there are doubts that it is an instance of Y-Movement. Both intonationally and syntactically it behaves differently (see *Fond of many boys, Sarah Weinstein isn't, not fond of many girls). On the other hand, the insensitivity of lefthand clauses to Lakoff's constraints is in all likelihood to be ascribed to a different principle such as that proposed in Kuno (1971, 360, fn. 32), since (vii) only allows a reading that is synonymous with (viii):

(vii) That many boys like her, every girl wants to believe.
(viii) Every girl wants to believe that many boys like her.

The principle reads: "If a quantifier A is in a matrix sentence, and quantifier B is in an embedded structure, . . . , the order of the quantifier interpretation is always that of 'A-B' regardless of whether A precedes B or not" (p. 361).
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(24) La chasse à l'étudiant, je pense que la police a toujours considéré cette activité comme un sport très agréable.

'Student hunting. I think the police have always considered that activity as a pleasant sport.'

Similar examples can be easily constructed for Italian and no doubt other languages too. They all show some kind of anaphoric element that is not a simple pronominal copy left behind to mark the original place of the dislocated NP. Rather, it represents a description that is coreferential with some NP in the previous context. Thus, the lefthand NP must be directly generated in the position where it appears in surface structure. And in fact Hirschbühler has suggested a revision of the phrase structure rules to include a rule like $S \to NP S$.  

Now, how are we to reconcile this evidence with arguments of the type I presented above? I want to argue that the phenomena shown in (8'), (23), (24), (i) and (ii) of fn. 5, and (i) of fn. 9 are of a very different nature from those shown in (4) through (21). The former are not cases of LD proper and I would agree in claiming—just as Hirschbühler, Rodman, and others do—that they should not be derived through a movement rule but should rather be generated, in the base, directly in their lefthand position, from whence they may control the pronominalization of the coreferential constituent to the right (if there is any).

Besides the intonational and pragmatic facts that will be hinted at below, I know of at least four syntactic phenomena that lend support to my interpretation of the facts by clearly

9 Rodman (1974) presents examples of a similar type from German, e.g. (i):

(i) Fisch, ich esse Hering am liebsten.

'Fish, I (like to) eat herring the best.'

Here I will not go into the numerous other facts brought forth by the defendants of a phrase-structure solution to LD. It should become clear from the evidence and the discussion I present below that in most cases I am in accord with their observations and conclusions but also that I would regard such cases as instances of a construction different from LD. Thus, in my opinion, such facts do not really bear on the nature of the rule here referred to as LD.

10 Notice that an identical proposal is contained in Gruber (1967), where the phenomenon is labeled Topicalization. Also identical is Rodman's (1974) proposal, but for the inclusion of a variable X ($S \to (X) NP S$) that ranges over a number of constants such as as for, speaking of, y'know about, etc., since—as in Postal (1971, 136)—he considers sentences like (i) as equivalent to (ii)

(i) Peter, I saw him with Clara yesterday.

(ii) \begin{itemize}
\item As for
\item Speaking of
\end{itemize} Peter, I saw him with Clara yesterday.

where the material in X can be optionally deleted.
differentiating the two constructions. I will choose examples from Italian and French, but I trust that a corresponding behavior can be easily detected as well in other languages that possess the two constructions.

2.1. Subject Pronoun Drop in Italian

Consider first the following sentence:

(25) Giorgio, sapevo che lui voleva andare a stare in campagna.
    ‘Giorgio, I used to know that he wanted to go and live in the country.’

This sentence is well formed only under a particular intonation that is not the one typical of LD cases (sentences (4)–(21)). A much longer break intervenes between the left-hand NP and the rest of the sentence; besides, Giorgio has a contour somewhat similar to that of questioned NPs. If read with an LD intonation, (25) is ill formed. What makes it unacceptable, if we compare it with the perfectly well-formed LD version of it (26), is the presence of the subject pronoun “copy” lui.

(26) Giorgio, sapevo che voleva andare a stare in campagna.

Subject pronouns in Italian are deleted everywhere but in contrastive environments (i.e. when they convey new information). A necessary condition for left dislocating an NP in Italian is that it be old information (see Cinque (1974)); hence the ill-formedness of (25) on the LD reading (furthermore, the copies of left dislocated NPs and PPs in Italian can only be clitics; compare fn. 12). The acceptable reading of (25) I will call the hanging topic reading, to borrow a term of A. Grosu, since it exemplifies a construction that mainly serves to promote an NP to topic status at a point in the discourse when it was not a topic.11

Compare the following discourse fragments in Italian:

(27) Speaker A: Sai che Maria è andata a stare da Giorgio a Roma? (Maria is topic)
    ‘You know that Maria has gone to live with Giorgio in Rome?’

Speaker B: Ah, Giorgio, sapevo che lui voleva andare a stare in campagna.
    ‘Ah, Giorgio, I used to know that he wanted to go and live in the country.’

(26) read with the typical LD intonation is somewhat odd as a

11 For a detailed pragmatic analysis of this construction see Keenan and Schieffelin (1976), although the authors refer to it as ‘left dislocation’.
response to Speaker A in (27). On the other hand, it is
perfectly appropriate in a context where Giorgio is already a
topic (hence old information for the following sentence). For
example:

(28) Speaker A: Sai che tuo cugino mi ha telefonato ieri
per dirmi che ha trovato un
bell’apartamento a Roma?
‘Do you know that your cousin called
me up yesterday to tell me that he found
a nice apartment in Rome?’

Speaker B: Ma guarda. Giorgio, sapevo che voleva
andare a stare in campagna, e in-
vece…

(25), instead, is ill formed in the context of Speaker A’s utterance in (28).\textsuperscript{12,13}

2.2. Island Constraints in Italian and French

The second phenomenon that appears to discriminate between
the two constructions is sensitivity to island constraints.

\textsuperscript{12} Strictly speaking, these facts about Subject Pronoun Drop
(SPD) and lefthand NPs are just a special case of a more general
phenomenon: LD requires clitic copies.

Recall that SPD deletes only nontonic subject pronouns. Now it
appears that tonic (i.e. nonclitic) "copies" are allowed only by
lefthand hanging topics, not by real left-dislocated NPs and PPs which
require nontonic clitic copies (hence, in the case of subjects, the clitic
pronoun obligatorily deleted by SPD).

If we choose lefthand PPs to make sure that a movement has
taken place and that we are facing a proper case of LD (otherwise,
how could we account in a simple way for the correct selection of the
"governed" preposition? See section 1.1 above) the contrast appears
clear-cut:

(i) \{ *A Giorgio \\
Giorgio \}

\textquoteleft(*To) Giorgio, I am sure that I have never written to him
(nonclitic).\textquoteright

(ii) \{ *Di Piero \\
Piero \}

\textquoteleft(*Of) Piero, I think that they have never talked of him
(nonclitic).\textquoteright

Compare also the following identical facts from French:

(iii) \{ *A Pierre \\
Pierre \}

\textquoteleft(*To Pierre, I always think of him (nonclitic).\textquoteright

(iv) \{ *De mes fils \\
Mes fils \}

\textquoteleft(*Of my children, I am not proud of them (nonclitic).\textquoteright

\textsuperscript{13} Notice, also, the following facts—suggested to me by R.
Again, picking out lefthand PPs as true representatives of L.D (see fn. 12), we observe that the copy left behind cannot be inside an island. For example:

(29) *A Giorgio, ieri ho conosciuto la ragazza che gli ha scritto quelle insolenze.
    'To Giorgio, yesterday I met the girl who wrote those insolent words to him.'

(30) *A Giorgio, chi può credere alla calunnia che gli abbiano dato dei soldi?
    'To Giorgio, who can believe the slander that they gave him money?'

(31) *Di quel libro, mi sono seduto in poltrona e ne ho letta una metà, ieri.
    'Of that book, I sat in the armchair and read half of it yesterday.'

(32) *A Giorgio, che tu gli abbia scritto vuol dire che sei ancora innamorata.
    'To Giorgio, that you wrote to him means that you're still in love.'

On the other hand, "copies" of lefthand NPs, which display no governed prepositions (and thus may well be hanging topics), are not sensitive to island constraints, just as we would expect of ordinary pronominalization cases. For example:

(33) Giorgio, ieri ho conosciuto la ragazza che gli ha scritto quelle insolenze.

(34) Giorgio, non posso credere alla calunnia che gli abbiano dato dei soldi.

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Kayne—about an interaction of the two constructions:

(i) Ah, Giorgio, di libri, sapevo che lui voleva comprarne due.
    'Giorgio, of books, I-knew that he wanted to buy two of them.'

(ii) *Di libri, Giorgio, sapevo che lui voleva comprarne due.
    'Of books, Giorgio, I-knew that he wanted to buy two of them.'

(to be compared with the perfect *Di libri, Giorgio, sapevo che voleva comprarne due without the subject pronoun copy so that Giorgio too can qualify as a left-dislocated constituent like di libri). If, as assumed elsewhere here, lefthand PPs can only arise through a copying operation, whereas NPs that leave a nonclitic "copy" through a direct generation in the base as topics, it becomes apparent from examples such as (i) and (ii) above that only the sequence "hanging topic + left-dislocated constituent" is allowed, and not vice versa (owing presumably to the very nature of topics that in general occupy the first position in a sentence).

The contrast between (i) and (ii) would seem to provide a serious puzzle to the proponents of a unitary analysis for all lefthand NPs and PPs.
(35) Quel libro, mi sono seduto in poltrona e ne ho letting una metà, ieri.
(36) Giorgio, che tu gli abbia scritto vuol dire che sei ancora innamorata.

Once again, the two series appear to differ in their respective prosody and pragmatics, as indicated in section 2.1 above.

The same situation, which clearly falsifies Ross's original characterization of copying rules, seems to obtain in French. In this way I interpret the contrast pointed out by Hirschbühler (1975, 161) between the ungrammatical (37), which is a case of LD proper (see the "governed" preposition), and the grammatical (38), which I would interpret as a case of hanging topic.

(37) *A moi, le gars qui me fera peur n'est pas encore née.14
    "To me, the guy who will frighten me hasn't been born yet."
(38) Ce projet, ceux qui en parlent le plus sont ceux qui en savent le moins.
    "This project, those who talk the most about it are those who know the least about it."

In the same way I would interpret the following judgments of French native speakers:

(39) a. *A Georges, j'ai connu la fille qui lui a écrit hier.
    b. Georges, j'ai connu la fille qui lui a écrit hier.
    'Georges, I met the girl who wrote to him yesterday.'
(40) a. *De ce livre, hier j'avais le temps et j'en ai lu la moitié.
    b. Ce livre, hier j'avais le temps et j'en ai lu la moitié.
    'This book, yesterday I had time and read half of it.'
(41) a. *A notre frère, le fait que tu n'y penses jamais, est absurde.
    b. Notre frère, le fait que tu n'y penses jamais, est absurde.
    'Our brother, the fact that you never think of him, is absurd.'

14 The oddness of constructions like (37), which some French speakers tend to judge to be less severely ungrammatical than does Hirschbühler, becomes clearer if we introduce a hedge just after the lefthand PP, as in (i):

(i) *A moi, je crois que le gars qui me fera peur n'est pas encore née.
    'To me, I believe that the guy who will frighten me hasn't been born yet.'
Thus it seems that sensitivity to island constraints is not merely characteristic of chopping, feature changing, and certain kinds of deletion rules but extends also to copying rules; it seems also that the original facts on which Ross based his claim about copying rules might eventually turn out to be cases of "hanging topics + pronominalization" (see Cinque (in preparation)).

2.3. Embedded Lefthand NPs and PPs in Italian

Another set of facts that clearly differentiates hanging topics from left-dislocated constituents is the possibility of the latter and the impossibility of the former in embedded structures.15 Again, taking PPs as representatives of LD and NPs with nonclitic "copies" (see section 2.1 and fn. 12) or with "copies" within islands (see section 2.2) as representatives of the hanging topic construction, we obtain the following pattern:

(42) a. Ho paura che a Giorgio, Marco gli abbia già scritto.
    'I fear that to Giorgio, Marco has already written-to-him (clitic).'

    b. Ho sentito che di Piero, non ne parlano più.
    'I heard that of Piero, they don't talk-of-him (clitic) anymore.'

(43) a. *Sono sicuro che Mario, lui, vuole andare al mare.
    'I am sure that Mario, he (nonclitic) wants to go to the sea.'

    b. *Ho l'impressione che Paolo, sappiate benissimo chi gli ha scritto.
    'I've got the impression that Paolo, you know very well who wrote to him.'

2.4. Clefting in Italian and French

The fourth phenomenon differentiating the two constructions is represented by the following contrast:

(44) a. *A Giorgio, è a lui che ho scritto.
    b. *A Georges, c'est à lui que j'ai écrit.
    'To Georges, it's to him that I wrote.'

    c. Giorgio, è a lui che ho scritto.
    d. Georges, c'est à lui que j'ai écrit.
    'Georges, it's to him that I wrote.'

15 This last fact should hopefully descend from a general and independent analysis of topics in natural language.
(45) a. *Di Maria, è di lei che hanno parlato.
b. *De Marie, c’est d’elle qu’ils ont parlé.
   ‘Of Marie, it’s of her that they have talked.’
c. Maria, è di lei che hanno parlato.
d. Marie, c’est d’elle qu’ils ont parlé.
   ‘Marie, it’s of her that they have talked.’

This contrast may well be a particular case of the previously mentioned island facts. No left dislocation is allowed of clefted constituents, whereas “anaphors” of hanging topics can be freely clefted.

3. Summary

It has been argued above that in languages like Italian and French there is evidence that lefthand NPs enter into two quite distinct constructions, one of which is the result of a copying operation, while the other consists of a base-generated topic followed by the pronominalization of the coreferential NP to the right (if there is any). If this conclusion, and the proposed suggestion that other languages (such as English) possess just the hanging topic construction, prove correct—as the diagnostics used here would seem to indicate when applied to English—then languages will be shown to differ as to whether they allow both LD and the hanging topic construction, or just the latter.16

References

Ebert, R. P. (1973) “On the Notion ‘Subordinate Clause’ in Standard German,” in C. Corum et al., eds., You Take the High Node and I’ll Take the Low Node, Chicago

16 Notice what this dichotomy predicts for a non-LD language: it will lack lefthand PPs, lefthand idiom chunks, lefthand reflexive pronouns and adjectives, and embedded lefthand NPs and PPs; it will not allow for more than one lefthand NP or PP; the resumptive pronoun will be able to appear within islands, etc. The reverse will be true in general for LD languages.

Further research is obviously needed to put this hypothesis to the test, though it seems to be confirmed so far by the data of the languages I have been looking at.
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0. Introduction

Perlmutter (1972) claims that there are no chopping rules in the syntax of natural languages. He suggests that the processes that have been regarded as chopping processes should be analyzed as two-step operations: first, a copying rule creates

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a pronominal copy in the place of the chopped constituent; then, there is obligatory deletion of this "shadow" pronoun.

The fact that chopping processes are island-sensitive in Ross’s sense is captured in this new framework by the Shadow Pronoun Deletion (SPD) rule; according to Perlmutter, it is this part of the process that is island-sensitive.

This squib is devoted to presenting counterexamples to Perlmutter’s Shadow Pronoun Hypothesis.

1. Constructions that Do Not Qualify as Counterexamples

Any grammatical instance of an extraction out of a syntactic island (i.e., without a copy left behind—let us call such constructions chopping constructions) is an apparent counterexample to the Shadow Pronoun Hypothesis. Because SPD seems to have applied here, and since Perlmutter claims that this rule is island-sensitive, the cases in question should be ungrammatical. Their grammaticality therefore constitutes a potential counterargument to the theory.

However, such potential counterexamples can be argued away if it can be shown that the deletion of the "shadow" pronoun is accomplished not by SPD but by some rule independently motivated in the language (such as Pro-Drop), which deletes pronouns. Since it is claimed that SPD is the only rule available to natural languages that is island-sensitive, derivations not involving SPD will not display island-sensitivity.

In fact, Perlmutter claims that natural languages fall into two classes, according to whether they have SPD in their grammars or not. Languages that have this rule, he claims, exhibit sensitivity to island constraints; languages that do not have it do not.

Perlmutter cites Japanese and Arabic as instances of the latter kind of languages and argues for this view on two grounds:

(A) Both languages have an optional Pro-Drop rule, and in both languages, "chopping constructions" have similar versions with pronominal copies in the place of the chopped target;

(B) Both languages exhibit grammatical extractions out of islands.¹

Perlmutter concludes that these languages lack SPD and that the constructions exhibiting grammatical island violations are the result of Pro-Drop.

¹ Haig (1976) shows that, while there are instances in Japanese that seem to confirm the Shadow Pronoun Hypothesis, other data can be found that falsify it. Japanese, then, cannot confirm Perlmutter's hypothesis unequivocally.
The Shadow Pronoun Hypothesis, then, does seem to make the correct predictions about extractions in cases that, initially, seemed to counterexemplify it.

2. Genuine Counterexamples to the Shadow Pronoun Hypothesis

Constructions that do qualify as counterexamples to Perlmutter's hypothesis are of two distinct types, which I consider below.

2.1. First Type of Counterexample

2.1.1. Characterization These are similar to the apparent counterexamples of the previous section in several respects:

(a) The language in question has an optional Pro-Drop rule.

(b) "Chopping constructions" in this language have versions where a pronominal copy is left in the place of the chopped constituent.

Perlmutter's theory predicts that such languages will not be island-sensitive (and we saw that Arabic and Japanese confirm this prediction). Languages with features (a) and (b) that are island-sensitive are therefore counterexamples to Perlmutter's theory.

2.1.2. Examples Hebrew exhibits cases of the sort we are looking for: similar to Japanese in features (a) and (b), it differs from it in being island-sensitive.

In Hebrew relative clauses, a pronominal copy of the target can optionally appear on the surface; e.g. (1):

(1) ze ha-psanter, še ganavti \( \phi_i \) \( \text{of} \)

this (is) the piano, that I stole \( \phi_i \) \( \text{Acc.} \)

Perlmutter's hypothesis would interpret this fact as the result of the lack of his SPD rule and would therefore predict that Hebrew tolerates island violations.

An attempt to relativize out of a relative clause, however, will yield a grammatical output only in case a pronominal copy is left behind; note, for example, (2):

(2) ze ha-psanter, še kulam

this (is) the piano, that everybody

makirim et ha-iš, še \( \phi_i \) bana

know-pl. the man that built

\( \{ \phi_i \} \)

\( \{ \phi \} \)

\( \text{Acc.} \)
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'This is the piano which everybody knows the man who built (it).'

The same situation holds with complex NPs of the fact-type, which are generally less rigid islands than relative clauses; nevertheless, the deletion of the pronominal copy of the relativized constituent results in an ungrammatical sentence:

(3) ze ha-psanteri [ṣe ṣp[ha-ṣmuṣ se this (is) the piano that the rumor that

David xiven \( \left\{ \phi_i \right\} \) NP hiftia et

David tuned \( \left\{ \phi_i \right\} \) [it-Acc.] surprised Acc.

kulam]
everybody

'This is the piano which the rumor that David tuned (it) surprised everybody.'

How can we explain, in Perlmutter's terms, the ungrammaticality of those relativizations out of islands in Hebrew where deletion of the pronoun in the target position has applied?

Example (1) (which is by no means an exception, but rather a typical instance of simple relative clauses in Hebrew) clearly shows that Relativization in Hebrew cannot be said to involve the step of obligatory SPD; rather, an optional Pro-Drop rule must be posited in order to derive the pronoun-less version, and this is a plausible analysis, since Hebrew does exhibit instances of optional Pro-Drop elsewhere.

But if so, this optional Pro-Drop rule must be island-sensitive in Hebrew. This would account for the ungrammatical instances of relativizations out of complex NPs where the pronominal copy of the extraction target has been deleted.

On the other hand, to allow such a solution means automatically to reject the Shadow Pronoun Hypothesis as a means of accounting for the behavior of chopping phenomena on a universal basis, because then the SPD rule would have lost its special status as the only island-sensitive rule, and thus the Shadow Pronoun Hypothesis would have no way to determine which languages are island-sensitive. On the other hand,

\(^2\) Perlmutter can avoid the statement that Pro-Drop is island-sensitive in Hebrew by imposing conditions on the application of this rule. If Pro-Drop is not completely unrestricted, as he implies, but rather is excluded from applying in certain configurations on independently well-motivated grounds, Perlmutter can still maintain that Hebrew does not have SPD and is therefore not island-sensitive, but that the ungrammaticality of examples like (2) and (3) is due to the mentioned conditions on Pro-Drop. In order for such an explanation to be valid, however, it has also to be shown that the set of configurations blocking Pro-Drop is not completely the same as the set of islands for extraction rules, since if these lists were identical, this would only mean that Pro-Drop is island-sensitive.
hand, to keep the Shadow Pronoun Hypothesis as it is means that languages like Hebrew that lack SPD are predicted to tolerate island violations, while some of them, e.g. Hebrew, do not.

2.2. Second Type of Counterexample

2.2.1. Characterization Perlmutter's theory is counterexemplified in a different way by another kind of data. Consider "chopping constructions", which do not have versions with a copy left behind. Whether the language has an optional Pro-Drop rule or not, these "chopping constructions" cannot be the result of this rule, since the optionality of Pro-Drop calls for the existence of alternative constructions with a pronoun. Perlmutter is forced to claim that the "chopping constructions" are produced by (obligatory) SPD and that, consequently, the language in question is island-sensitive.

If, however, it can be shown that this language does tolerate island violations—in other words, if there exist constructions that are, in Perlmutter's framework, results of SPD in syntactic islands and should therefore be ungrammatical while, in fact, they are grammatical—Perlmutter's theory is directly falsified.

2.2.2. Examples Turkish provides counterexamples of the second type. In Turkish, relative clauses are formed by obligatory deletion of the embedded NP that is coreferential to the head. Relative clauses with pronouns in the place of the target are ungrammatical; therefore, Perlmutter is correct in claiming\(^4\) that although Turkish does have an optional Pro-Drop rule, it must be another process that is responsible for the deletion of the pronoun in relative clause constructions. This process must be the obligatory SPD.

One should expect, then, that relativization out of islands is blocked in Turkish. Perlmutter gives an example where this is the case:

\[(4) \text{[=(131)] ad} \text{amba-} \text{y} \i \text{a} \text{d} \text{i} \text{the man the car-Acc. buy-Past} \text{The man bought the car}\]

If ad\(\text{a}\)m ‘the man’ is relativized, (4) yields (5):

\[(5) \text{[=(132)] } [\phi, \text{amba-} \text{y} \i \text{a} \text{an}] \text{ad} \text{a} \text{m} \text{the car-Acc. buy-Participle man} \text{the man who bought the car}\]

\(^4\) This point is argued for in the article under discussion (Perlmutter (1972)), in the section pertaining to Turkish examples. The square brackets as given with the examples below denote the numbers of the examples as they appear in Perlmutter’s article.
A version of this relative clause, where a pronoun appears in the place of the relativized constituent, is ungrammatical:

\( (6) \) \([\phi_i \text{ arab-}y_i \text{ al-an}] \) \( \text{adam}_i \)
\[ \begin{array}{l}
\text{he the car-Acc. buy-Part man} \\
\text{the man who he bought the car'}
\end{array} \]

The grammaticality of (5) versus the ungrammaticality of (6) shows, according to Perlmutter, that the grammar of Turkish includes the rule of obligatory SPD.

Relativization out of (5) is blocked, as predicted by the Shadow Pronoun Hypothesis:

\( (7) \) \([\phi_i \text{ arab-}y_i \text{ al-an}] \)
\[ \begin{array}{l}
\text{the car-Acc. buy-Part.} \\
\text{adam}_i \text{ sev-iyor-um} \\
\text{the man-Acc. love-Pres.-1.sg.} \\
\text{I love the man who bought the car.'}
\end{array} \]

(7) cannot yield a grammatical relative clause on arabı ‘car’:

\( (8) \) \([\phi_i \{ \phi_j \{ \phi_{on-u_j} \} \} \text{ al-an}] \)
\[ \begin{array}{l}
\text{it-Acc. buy-Part.} \\
\text{adam}_i \text{ sev-diğ-im} \text{ arabı} \\
\text{man-Acc. ‘my loving’ car} \\
\text{‘the car that I love the man who bought (it)}'
\end{array} \]

(8) is ungrammatical, whether or not a pronominal copy is left behind in the place of the target of relativization out of this syntactic island.

However, examples can be found where relativization out of a relative clause (again by obligatory deletion) is grammatical. This is usually the case when the target of the second relativization is the subject of the most deeply embedded clause. Perlmutter’s own example can illustrate this, if the order of relativizations is reversed, i.e. if the target of the first relativization is the object arabı ‘car’, and the target of the second relativization is adam ‘man’. For example, after the first relativization, (4) yields (9):

\( (9) \) \([\phi_i \{ \phi_{on-u_j} \} \text{ arabı} \)
\[ \begin{array}{l}
\text{man-gen. \{ it-Acc. \} ‘his buying’ car} \\
\text{‘the car which the man bought’}
\end{array} \]

Now, consider a sentence like (10):

\( (10) \) \([\phi_i \text{ al-diğ-i} \text{ arabı} \text{ bozuk çıktı} \text{ man-Gen. ‘his buying’ car defective turned out} \)
\[ \begin{array}{l}
\text{‘The car which the man bought turned out to be defective.’}
\end{array} \]
Embedded under *adam* 'man', (10) yields the grammatical (11):

(11) \[\{\phi_i \phi_j \text{al-dig-i}} \quad \text{araba}_i \text{bozuk} \quad \text{çik-an}\]
    'his buying' car defective 'turning-out'

\text{adam}_i

\text{man}

'the man who the car (which) (he) bought turned out to be defective'

In the framework of Perlmutter's theory, this can only mean that in spite of the obligatory application of SPD, an island violation has given a grammatical result—a fact by which the theory is falsified.⁴

### 4. Conclusion

We have seen that the Shadow Pronoun Hypothesis makes wrong predictions about relativizations out of islands both in Hebrew and in Turkish. Perlmutter's theory is both too weak and too strong. It is too weak, because it cannot account for the ungrammaticality of some island violations in Hebrew, and it is too strong, because it predicts that some grammatical extractions out of islands in Turkish will be ungrammatical.

### References


⁴ The assumptions underlying this argument are the following: that island phenomena can be characterized in terms of some given structures that cannot be penetrated by a certain kind of rules (i.e. islands; in this case, relative clauses) and in terms of some given rules that cannot penetrate these structures (here: relativization, or, in Perlmutter's terms, SPD).

However, even if these assumptions are wrong (and we think they are), this argument is still a valid counterargument against Perlmutter's theory: the Shadow Pronoun Hypothesis itself is based on these very assumptions, and we have based our argument on the same construction and the same rule as Perlmutter.

These assumptions, together with Perlmutter's claim that island phenomena can be universally characterized in the same way for every language, constitute the main weaknesses of the Shadow Pronoun Hypothesis, which, in its current formulation, too simple.
ROSS (1967) proposed an "across-the-board" (ATB) principle for applying Right Node Raising and WH Movement. There is the possibility of eliminating the Coordinate Structure Constraint (CSC) in favor of such a principle of rule application applied to all rules. The principle would read, "If a rule applies into a coordinate structure, then it must affect all conjuncts of that structure."

For example, consider (1):

(1) the man [who [s[sBill saw φ]]s and [sMary talked to John]]s

This sentence can be ruled out by the CSC. But it could also be ruled out by the ATB principle described above. Thus, there is no evidence for ATB or CSC from this sentence. Now consider (2):

(2) the man [swho [s[sBill saw φ]]s and [sMary talked to φ]]s

This sentence is grammatical under both theories. Under the ATB theory, it is grammatical because both conjuncts have been affected by WH Movement. Under the CSC theory, it is grammatical because it can be derived from the grammatical (3) by Coordinate Structure Reduction:

(3) the man [s[swho [sBill saw]]s and [swho [sMary talked to]]s]

Despite the fact that we have no evidence for the ATB theory at this point, we will formalize the ATB principle so as to generate (3); evidence will come later.

We will use the notion of "simultaneous factorization" to formalize the ATB principle. We will say that two strings are "simultaneously factorized" if their factors can be matched up one-to-one with each other. We will require that conjuncts of a coordinate structure be "simultaneously factorized" for the purposes of applying a transformation. To make the correspondence between factors of a pair of conjuncts clear, we will write the conjuncts on top of each other; for example, consider the deep structure of example (2) written in this way:

(4) the man [s COMP [s[sBill saw]s who]]s

Now we may factor (4), requiring that factor-lines that pass through one conjunct also pass through the other:

(5) the man [COMP 1 Bill saw 2 Mary talked to 3 who 4 and who]

1 The conjunction itself does not enter into either of the "simultaneous factorizations" (since it is not a member of either conjunct), so it is represented as belonging to the last factor of the transformation.
Now we have four factors for the relative clause, and the two conjoined Ss are “simultaneously factorized”. These four factors satisfy the structural description of WH Movement:

(6) the man [COMP Bill saw Mary talked to who x and] 
    WH: [COMP who Y]

Now we may apply WH Movement:

(7) the man [who Bill saw Mary talked to X φ and] 
    WH [X φ Y]

Notice that both the simultaneous factors corresponding to the term “WH” have been deleted. Notice also that only one who appears in the derived string—the COMP in the structural description of WH Movement did not analyze simultaneous factors; it analyzed the single factor “COMP”. In effect, WH Movement has moved who from two (simultaneously factorized) places to one place.

Now, as I have indicated, there is no evidence from WH Movement for such a principle as ATB as a general principle of rule application. However, there is evidence of this kind from Bresnan’s formulation of the rule of Comparative Deletion (CD) (Bresnan (1975)). This rule can apply in two ways. In one case, it deletes only the QP of the than clause:

(8) John saw [more horses than] 
    CD: [X W₁ than] 
    Bill saw [x cats W₂] 
    W₂ [X W₃] 
    [φ]

Here, the relevant terms of CD are written under the factors of (8). The rule deletes the second X under identity with the first X. When W₁ and W₂ are null, CD applies so as to delete the whole object phrase of the than clause, again under identity:

(9) John saw [more horses than] 
    CD: [X W₁ than] 
    Bill saw [x horses W₂] 
    W₂ [X W₃] 
    [φ]

Thus for (8) and (9), the operation of CD will give us (10) and (11), respectively:

(10) John saw more horses than Bill saw cats.
(11) John saw more horses than Bill saw.

Now, observe that when we have conjoined Ss within a single than clause, both the deletion where W₁ is null and
where it is filled are possible:

\[(12)\]

\[
W_1, W_3 \text{ null}
\]

John saw more horses than \([s_{[\textit{Bill saw}]}s]\) or Pete \([s_{\text{stalked to}}]s\)

\[(13)\]

\[
W_1, W_3 \text{ nonnull}
\]

John saw more horses than \([s_{[\textit{Bill saw cows}]}s]\) or \([s_{\text{Pete talked to cats}}]s\)

But now, consider the following ungrammatical sentence:

\[(13')\]

*John saw more horses than \(\underbrace{\text{Bill saw}}_{W_2} \underbrace{\ddots}_{X} \underbrace{\text{cows}}_{W_3}\) or \(\underbrace{\text{Pete talked to}}_{W_2} \underbrace{\ddots}_{X} \underbrace{\text{W_3}}_{W_3}\)*

The ATB principle of "simultaneous factorization" can explain the ungrammaticality of \((13')\). Suppose that we write the deep structure of \((13)\) in such a way that the elements to undergo deletion in each conjunct are "simultaneous factors":

\[(14)\]

\[
\text{John saw more horses} \begin{array}{c|c|c}
\text{than} & \text{than} \\
\text{Bill saw} & x & \text{cows} \\
\text{Pete talked to} & x & \text{horses or} \\
W_2 & \hat{X} & W_3 \end{array}
\]

There is no way to factor the matrix \(\text{more horses}\) into an \(\hat{X}\) and a \(W_1\) factor in such a way that the \(\hat{X}\) factor will be identical to both of the simultaneous factors to be deleted. If we let the antecedent \(\hat{X}\) be \(\text{more}\) and \(W_1\) be \(\text{horses}\), then the second of the simultaneous deletion factors will not be identical to the antecedent; if we let the antecedent \(\hat{X}\) be \(\text{more horses}\) and let \(W_1\) be null, then the first of the simultaneous factors to be deleted will not be identical to the antecedent. Thus CD cannot apply to \((14)\), and \((13')\) is not generated, much to the credit of the ATB theory.

The theory without ATB, but with the CSC and a rule of Coordinate Structure Reduction (CSR), will be hard-pressed to avoid generating \((13')\). First, in order to generate the grammatical \((12)\) without ATB, it will be necessary to derive \((12)\) by CSR from a structure in which the two deletion sites that \((12)\) contains can be obtained by two independent operations of CD. Finding such a source is a tricky matter in itself; there is no source that uses the conjunction or, and which is synonymous with \((12)\). However, there is a source with and, and we will charitably ignore the discrepancy between the conjunctions in \((12)\) and its source, \((15)\):

\[(15)\]

\[
[s_{\text{John saw more horses than Bill saw}}]s\] and \([s_{\text{John saw more horses than Pete talked to}}]s\)
In (15) CD has applied independently within each of the two conjuncts, and (12) can be derived from (15) by CSR.

However, if such a derivation for (12) is allowed, then what is to stop the ungrammatical (13') from being derived by CSR from the grammatical (16)?

(16) \[ [\text{John saw more horses than Bill saw cows}]_S \text{ and } [\text{John saw more horses than Pete talked to}]_S \]

In (16), CD has applied independently in each conjunct, and (13') can be derived from it by the same rule of CSR that derived (12) from (15). Hence, the theory with CSR and CSC fails in this same case in which the ATB theory succeeded. Hence, we are to prefer the ATB theory, under which we will want to strongly restrict possible applications of CSR, in order to eliminate such derivations as (13') from (16).

The strongest way to restrict Conjunction Reduction is to eliminate the rule of Conjunction Reduction, which yields conjoined phrases that were not conjoined in deep structure. This revision has grave consequences for received analyses, and cannot be adopted without thorough investigation of the relevant data. Such an investigation is beyond the range of this squib; however, two examples come to mind. First, passive verb phrases must be base generated, since a transformational derivation of the following sentence involving a rule moving the object of the first VP into the subject position will violate the ATB principle:

(17) John was registered by the police and told his story.

But Joan Bresnan (1976) has recently defended this view of the passive, independent of the issue raised by the ATB principle.

Similarly, there can be no rule of Tough Movement, in the sense of a rule relating a subject to an extraction (or deletion site), for such a rule would violate the ATB principle in the following sentence:

(18) Few rules are explicit and easy to read.

But Chomsky (1976) has in fact proposed that there is no rule of Tough Movement per se—that in fact WH Movement, followed by a local deletion, is responsible for the surface of tough sentences. Under this analysis, the derivation of (18) will proceed as follows:

(19) few rules are explicit and easy to read which \[ \downarrow \text{WH Movement} \]
    few rules are explicit and easy which to read \[ \downarrow \text{local del. of WH} \]
    easy to read

Neither of the rules that apply in this derivation violates the
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ATB principle. Again, Chomsky’s analysis is motivated independently of the issue raised by the ATB principle.

References