

Left Dislocation and the Role of Topic-Comment
Structure in Linguistic Theory*

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1. Introduction.

Following Ross (1967) I use the term left dislocation (left dislocated noun phrase, left dislocated sentence) in referring to structures like those in the following set.¹

- (1) a. This room, it really depresses me.
- b. Women, I'll never be able to figure them out.
- c. This spot in the rug, you better get it out
 before the party on Saturday.
- d. The new Kubrick movie, Bill said Marvin told him
 it was great.
- e. Your second chapter, I haven't gotten around to
 reading it yet.
- f. That ridiculous smile of his, its so phony.
- g. Your cousin Agnes, is she coming?
- h. Those slacks I gave you for your birthday, can
 you still fit into them?

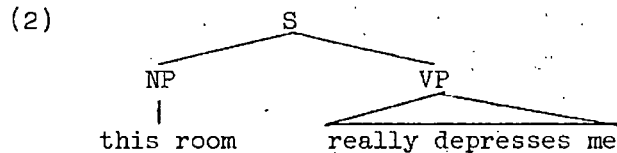
There are in general two ways in which such constructions may be analyzed. One way is to assume that there is a rule which moves the dislocated NP out of a corresponding non-dislocated structure. For example, in Ross (1967) it is suggested that sentences like those in (1) are derived from corresponding non-dislocated structures by the following rule:

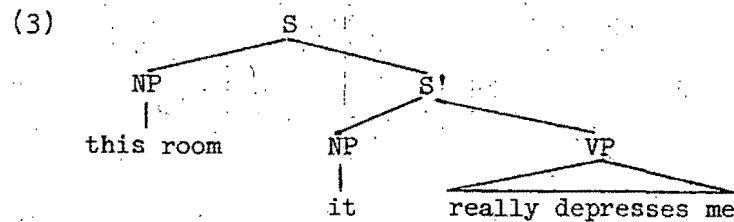
Left Dislocation

X	NP	Y
1	2	3

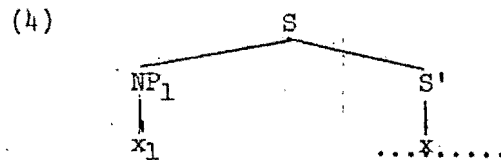
2 # 1	2	3
	+pro	

Such a rule would optionally convert (2) into (3), the structure immediately underlying (1a).

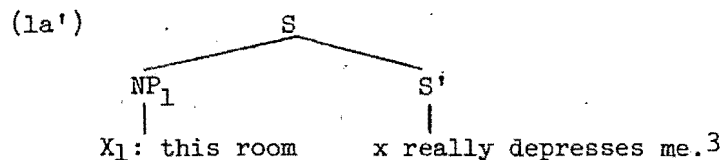




The other possibility is that the dislocated NP exists as such, i.e., as an adjunct to the main sentence, in logical structure. For ease of reference I will henceforth refer to these two alternatives as the Extraction Hypothesis (EH) and the Logical Structure Hypothesis (LSH) respectively. It is my purpose in this paper to argue in favor of the latter alternative, i.e., in favor of LSH. More specifically, I will propose that left dislocated sentences are derived from logical structures roughly like (4), where NP_1 is the dislocated NP and x is a variable ranging over the set of objects (which may be only one)² designated by NP_1 .



The logical structure of (1a) would then be roughly (1a').



1.1. In Part I, I will discuss some general properties of left dislocated sentences and will point out those properties which provide support for LSH. It will be noted that there are apparently no properties of left dislocated sentences which provide strong support in favor of EH over LSH, though the reverse is true in a number of cases. The discussion will be restricted primarily to dislocation in the main clause. Some special problems connected with dislocation in subordinate clauses will be discussed in the last section of Part I. In Part II, I will argue that logical structures like (4) can be generalized to non-dislocated sentences as well. Deriving non-dislocated sentences from structures like (4) would require few rules that are not needed in the grammar anyway and would make it possible to account for various semantic, syntactic and phonological relationships between dislocated and non-dislocated sentences in a principled way. In particular, such an analysis offers a basis for integrating into the grammar a description of topic-comment structure and of the existential presuppositions associated with topic noun phrases.

PART I

2. Left Dislocation and Pronominalization.

In order to derive left dislocated sentences from structures like (4) it is necessary to incorporate into the grammar a rule of feature copying. This rule copies the features of NP₁ onto a corresponding variable in S'. A later rule then replaces these features by the appropriate pronominal form. An analysis which would incorporate such a process into the grammar has already been proposed on independent grounds as an alternative to the problematic view of pronominalization which would replace by a pronominal form the second of two identical noun phrases (see, for example, Bach (1968)).

2.1. Though the noun phrase in S' which corresponds to the dislocated noun phrase is generally a pronoun it seems to me that sentences like those in (5) are at least marginally acceptable, and most of them are quite acceptable with a preceding as for or about phrase.

- (5) a. (As for) that book I borrowed from you last week,
I haven't read that book yet.
b. (Concerning) that article on pronouns, Bill said
Mary told him the article wasn't worth reading.
c. ?(What about) your mother, is your mother coming?
d. ?(As for) beans, I don't like beans at all.
e. ??(Concerning) beans, beans make me sick.

The acceptability of these sentences seems to vary in proportion to the amount (and nature?) of the material which intervenes between the two noun phrases and the extent to which the noun phrases are exact copies of one another. It is analogous, I believe, to other sentences where morphologically and referentially identical noun phrases are repeated in discourse or in two conjoined sentences, e.g.,

- (6) I haven't read that book you gave me yet, but I
heard the book was very good.
(7) ?If beans make you sick, you shouldn't eat the beans.
(8) ??Mary walked into the room and then Mary sat down.

The sentences in (5)-(8) are not as clearly unacceptable, on the other hand, as examples like the following, where noun phrases with identical subscripts are understood to be coreferential.

- (9) *John₁ said that John₁ would stay.
*I told Harry₁ that Harry₁ couldn't go to the party.
*Mary₁ doesn't like Mary₁.

On the basis of these facts I propose that the grammar be allowed to generate sentences like those in (5) and that they be assigned various degrees of acceptability by the same surface structure well-formedness constraint that applies to sentences like (6)-(8). We will return to the derivation of sentences like those in (5) in Part II.

2.2. So far we have been considering only sentences in which the dislocated noun phrase is a full noun. It may, however, also be a

pronoun, as illustrated by the (a) sentences below.

- (10) a. Me/Myself, I never drink beer.
b. *I, I never drink beer.
- (11) a. Him, he never does anything right.
b. *He, he never does anything right.
- (12) a. You and me, we ought to get together some time.
b. You and I, we ought to get together some time.
- (13) a. Them, I know they'll never believe me.
b. *They, I know they'll never believe me.

As these examples show, a dislocated pronoun must be an objective form, even though the corresponding pronoun in the main sentence is in subject position. In an extraction analysis, a special lexical rule would be required to replace the non-objective pronouns by corresponding objective forms, since a left dislocation rule would produce the ungrammatical (b) sentences in (10)-(13).

If the pronoun in the main sentence is in object position, and hence the same form as the dislocated pronoun, the resulting sentence is awkward in the same way as the sentences in (5). Though here too the sentence becomes somewhat more acceptable with a preceding about phrase.

- (14) ?(As for) me, no one invited me.
(15) ??(As for) him, I don't like him.
(16) ?(Concerning) her, I don't think we should call her anymore.

Note also that these sentences sound better in fast speech, e.g. when the initial h in him and her is elided. Thus, the same surface structure well-formedness constraint that applies to sentences like those in (5) will assign various levels of acceptability to sentences like (14)-(16) where the dislocated pronoun and the pronoun in the matrix sentence are of the same form.

Notice that a condition against dislocation of object pronouns would clearly be too strong, not only because (14)-(16) are not totally unacceptable but because it would block acceptable sentences like

- (17) a. You and me, I don't think they'll be able to get along without us.
b. You and her, no one will believe you anymore.

Note also that with the pronouns it and you which have only one form, there is no difference in acceptability between sentences in which the pronoun in the matrix sentence is in subject position and sentences in which it is in object position, another indication that it is the identity of the two forms and not the syntactic position of the pronoun that is responsible for the difference in acceptability between (10)-(13) and (14)-(16).

- (18) You, you can go tomorrow.
(19) You, we'll let you go tomorrow.

- (20) It, I just can't understand it.
 (21) It, it never seems to work right anymore.

The unacceptability of (20) and (21) indicates that the pronoun it can not be left dislocated.⁴ In an extraction analysis (EH) an ad hoc restriction would thus have to be placed on the left dislocation rule in order to prevent it from applying to this pronoun. The facts would follow naturally, however, from LSH. The pronoun it cannot be generated in left dislocated position, since it is necessarily anaphoric. Compare, (20') and (21'), where it has been replaced by that.

- (20') ?That, I just can't understand it.
 (21') ?That, it never seems to work right anymore.

Note also that it is equally less acceptable than other pronouns in a what about or as for (concerning, etc.) phrase. Thus, compare

- (22) What about her?
 What about him?
 What about you?
 What about me?
 What about them?
 What about that?
 ??What about it?

As for her...

As for him...

As for you...

As for me...

As for them...

As for that...

??As for it...

3. On the Function of the Dislocated Noun Phrase and Its Relationship to the Rest of the Sentence.

There are a number of facts which suggest that the function of the left dislocated noun phrase is to state the theme of the following predicative sentence--to indicate what the sentence is about. Let us designate this function as that of topic and the predicative element, i.e., the remainder of the sentence, as comment.

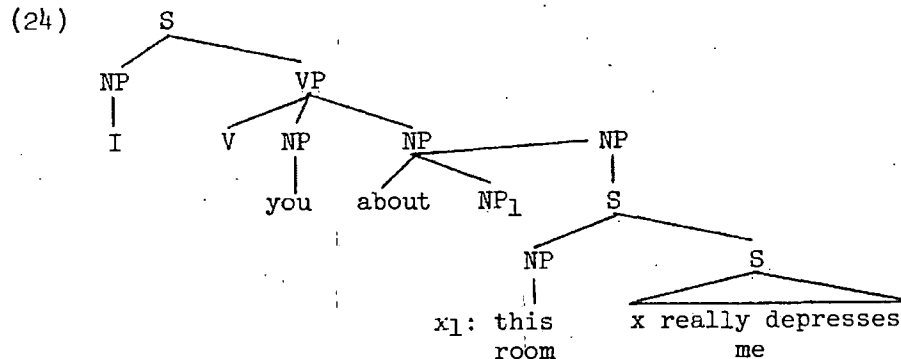
3.1. The dislocated noun phrase may be preceded by as for, concerning or about. Thus, the following sentences are paraphrases of (1a)-(13) respectively.

- (23) a. About this room, it really depresses me.
 b. As for women, I'll never be able to figure them out.
 c. Concerning this spot in the rug, you better get it out before the party on Saturday.
 d. Concerning the new Kubrick Movie, Bill said Marvin told him it was great.
 e. About your second chapter, I haven't gotten around to reading it yet.

A question with a dislocated noun phrase may be paraphrased by a sentence where the dislocated noun phrase is preceded by what about. Thus (23f) and (23g) are paraphrases of (1g) and (1h) respectively.

- (23) f. What about your cousin Agnes, is she coming.
g. What about those slacks I got you for your birthday, can you still fit into them.

In general a dislocated sentence without a preceding about⁵ element always has a corresponding paraphrase with such an element, though the reverse is not always true, i.e., in some cases a dislocated noun phrase must be preceded by about, concerning, or as for. These cases will be pointed out below. In order to account for the sentences where the dislocated noun phrase is preceded by an about element, we might propose a rule which optionally (in some cases obligatorily) places such an element in front of NP₁. Alternatively, it might be assumed that the about element (or some primitive term meaning roughly 'about') is already present in the logical structure. The latter alternative seems particularly attractive since the predicate about explicitly represents the function of the dislocated NP with respect to the rest of the sentence. An interesting possibility, it seems to me, is that an about phrase containing the dislocated NP is actually part of the performative clause,⁶ i.e., the logical structure of (1a) is roughly (24).



Unfortunately I am aware of no strong evidence in favor of such a hypothesis at present and I do not have time to investigate it any further here. One fact which may argue against such a hypothesis is that dislocation is sometimes possible in subordinate clauses (see section 8 below), though it will be noted that it is generally restricted to subordinate clauses that are objects of verbs which can take an about clause.

3.2. A left-dislocated sentence which is not itself a question always answers some implicit or explicit question: What about x?, where x is the dislocated NP. Thus, for example, (1a)-(1e) are appropriate responses to the respective questions: What about this room, women, this spot in the rug, the new Kubrick movie, and my second chapter.

3.3. I have argued in Gundel (1974) that the element which represents what the sentence is about (the topic) never carries the primary stress in the sentence. In English, and possibly in all natural languages, the constituent with primary stress always represents the new information in the sentence, that which is being predicated about the topic.⁷ That neither a dislocated noun phrase nor the corresponding pronoun in the matrix sentence can receive primary stress is witnessed by the ungrammaticality of the following sentences.

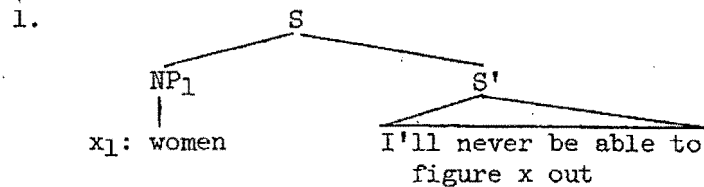
- (25) a. *This room, it really depresses me.
 b. *This room, it really depresses me.
- (26) a. *Women, I'll never be able to figure them out.
 b. *Women, I'll never be able to figure them out.
- (27) a. *Your second chapter, I haven't gotten around to reading it yet.
 b. *Your second chapter, I haven't gotten around to reading it yet.
- (28) a. *Your new haircut, I really like it.
 b. *Your new haircut, I really like it.
- (29) a. *Him he never does anything right.
 b. *Him, he never does anything right.

In order to account for these facts, I propose a rule of stress placement which may be stated informally as follows:

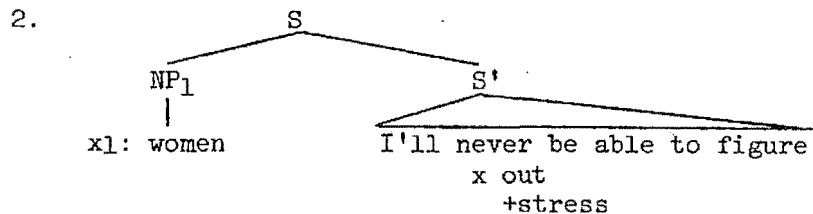
- (30) stress placement--assigns primary stress to the rightmost non-variable element in S.

(This rule naturally must apply before the rule that replaces the variable by a pronominal form.) At present the most widely accepted theory of sentence stress assumes that there are two separate rules of stress placement. The first of these--which assigns the 'normal' stress pattern--assigns primary stress to the rightmost element in S with special conditions that would prevent the rule from applying to pronominal forms and possibly other elements as well. A later rule of emphatic stress placement optionally assigns 'emphatic' stress to any element in the sentence. The inadequacy of such an analysis has recently been pointed out in works by Susan Schmerling (cf., for example, Schmerling (1974)). One of the problems is the sometimes counter-intuitive prediction as to what constitutes 'normal' as opposed to 'emphatic' stress. In EH it would be necessary depending on the order of rules to either (a) place a special condition on emphatic stress placement which would prevent it from applying to dislocated noun phrases and pronominal remnants of such phrases in the matrix sentence, or (b) place a special condition on left dislocation which would prevent it from applying to primary stressed elements. Either way, the relation between topic-comment structure and sentence stress is treated as an accident. I will argue in Part II that if topic-comment structure is explicitly represented in logical structure, namely by structures like (4), it will be possible to predict the stress pattern of all sentences by (30), thus eliminating the need for a special rule of emphatic stress placement. Such an analysis also captures more directly the relationship between sentence stress and the topic-comment structure of the sentence.

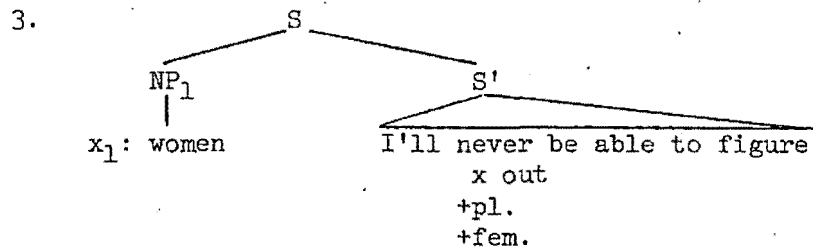
3.4. Summing up what has been proposed so far, the derivation of (1a), for example, is roughly as follows:



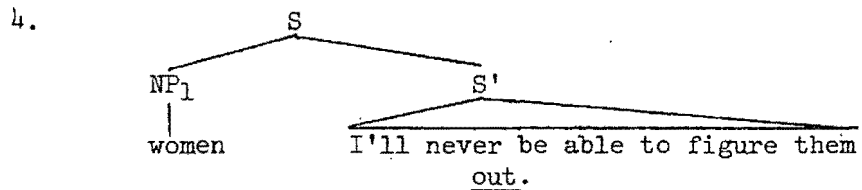
stress placement



feature copying



pronominalization



4. On the Nature of the Dislocated Noun Phrase.

The strongest argument in favor of LSH comes, I believe, from restrictions on the kinds of noun phrases which may be dislocated.

4.1. Left Dislocation and specificity. Consider the following sentences.

- (31) Gwendolyn would like to marry an honest politician.
 (32) He didn't charge me for a phone call.
 (33) The proofreader didn't see a misprint.

Sentences (31)-(33) are systematically ambiguous with respect to whether or not the speaker commits himself to a belief in the existence

of some specific individual or object designated by the indefinite noun phrase. This point is illustrated by the fact that (31)-(33) may be followed by either the (a) or the (b) sentences in (34)-(36) respectively.

- (34) a. His name is Percy Goodfellow.
b. But she hasn't been able to find one.
- (35) a. It was the one I made to Beirut.
b. He insisted on paying for them all himself.
- (36) a. It was the one on page ninety.
b. Your typing must be pretty good.

The reading which may be followed by the (a) sentences can be paraphrased by (37)-(39) respectively, the reading which may be followed by the (b) sentences cannot.

- (37) There's an honest politician that Alice would like to marry.
- (38) There was a phone call that he didn't charge me for.
- (39) There was a misprint that the proofreader didn't see.

The left dislocated sentences which correspond to (31)-(33) have some interesting properties. Dislocation of the indefinite noun phrase results in ungrammaticality if the corresponding pronoun in the matrix sentence is definite.

- (40) *(As for) an honest politician, Gwendolyn wants to marry him.
- (41) *(Concerning) a phone call, he didn't charge me for it.
- (42) *(About) a misprint, the proofreader didn't see it.

The ungrammaticality of sentences like (40)-(42) has led some authors to claim the dislocation cannot apply to indefinite noun phrases.⁸ Note, however, that dislocation of the indefinite noun phrase is possible if the corresponding pronoun in the matrix sentence is one.

- (43) (As for) an honest politician, Gwendolyn would like to marry one.
- (44) (As for) a phone call, he didn't charge me for one.
- (45) (As for) a misprint, the proofreader didn't see one.

The pronoun one in these sentences, like the indefinite noun phrase in the non-dislocated counterpart, can have a specific as well as a non-specific reading, as can be seen by following (43)-(45) by either the (a) sentences or the (b) sentences in (34)-(36).

- (43) a. (As for) an honest politician, Gwendolyn would like to marry one. His name is Percy Goodfellow.
b. (As for) an honest politician, Gwendolyn would like to marry one; but she hasn't been able to find one.

- (44) a. (As for) a phone call, he didn't charge me
for one; it was the one I made to Beirut.
b. (As for) a phone call; he didn't charge me
for one, he insisted on paying for them all
himself.
- (45) a. (As for) a misprint, the proofreader didn't
see one, it was the one on page ninety.
b. (As for) a misprint, the proofreader didn't
see one; your typing must be pretty good.

However, while the pronoun one may be interpreted either specifically or nonspecifically, the dislocated indefinite noun phrase cannot have a specific indefinite reading. This is indicated first of all by the fact that the corresponding pronoun in the matrix sentence cannot be definite, as witnessed by the ungrammaticality of (40)-(42). The antecedent of a singular definite pronoun can only have a singular specific reference. Thus, compare:

- (46) a. Henrietta would like to go out with a famous
juggler; but he won't have anything to do
with her.
b. Henrietta would like to go out with a famous
juggler; but its hard to find one these days.

Specific noun phrases may be preceded by determiners like a certain, a particular, non-specific noun phrases may not, as witnessed by the following examples.

- (47) a. I can't find a certain bottle of Scotch. It's
the one your cousin brought over last night.
b. *I can't find a certain bottle of Scotch; you must
have forgotten to buy some.
- (48) a. Olga wants to marry a certain Norwegian; his
name is Swen Swenson.
b. *Olga wants to marry a certain Norwegian; but
she hasn't been able to find one.

A dislocated indefinite noun phrase can never be preceded by determiners like a certain, a particular, regardless of the interpretation of the pronoun one in the matrix sentence.

- (49) a. (As for) a bottle of Scotch, I haven't been
able to find one; its the one your cousin
brought over last night.
b. *(As for) a certain bottle of Scotch, I haven't
been able to find one; its the one your cousin
brought over last night.
- (50) a. (As for) a Norwegian, Alice would like to marry
one; his name is Swen Swenson.
b. *(As for) a certain Norwegian, Alice would like to
marry one; his name is Swen Swenson.

A specific indefinite noun phrase may be followed by a non-restrictive relative clause; a non-specific indefinite generally may not.⁹ Thus compare

- (51) a. Wanda would like to marry a Frenchman, whose name is Jacques, but he hasn't proposed to her yet.
 b. *Wanda would like to marry a Frenchman, whose name is Jacques; but she hasn't been able to find one.
- (52) a. I'm looking for a dress, which is pink with white stripes; it was hanging in the closet this morning.
 b. *I'm looking for a dress, which is pink with white stripes; but I haven't been able to find one that fits.

That a dislocated indefinite noun phrase cannot be followed by non-restrictive relative clause is illustrated by the following examples.

- (53) a. (As for) a Frenchman, Wanda would like to marry one; but he hasn't proposed to her yet.
 b. *(As for) a Frenchman, whose name is Jacques, Wanda would like to marry one; but he hasn't proposed to her yet.
- (54) a. (As for) a dress, I'm looking for one; it was hanging in the closet this morning.
 b. *(As for) a dress, which is pink with white stripes, I'm looking for one; it was hanging in the closet this morning.

Non-specific indefinite noun phrases share properties with generic plurals and in many instances the former may be replaced by the latter without any significant change in meaning.¹⁰ Compare, for example

- (55) a. A turtle makes a great pet.
 b. Turtles make great pets.
- (56) a. Henrietta refuses to date a linguist.
 b. Henrietta refuses to date linguists.
- (57) a. He didn't charge me for a drink.
 b. He didn't charge me for (any) drinks.

That this is not the case for specific indefinites¹¹ is demonstrated by the following examples.

- (58) a. He didn't charge us for a drink; it was the gin and tonic.
 b. *He didn't charge us for (any) drinks; it was the gin and tonic.
- (59) a. Henrietta refuses to date a linguist; his name is Bill Turner.
 b. *Henrietta refuses to date linguists; his name is Bill Turner.

Left dislocated noun phrases may be replaced by the corresponding generic regardless of whether the pronoun one in the matrix sentence is specific or non-specific. In most cases, the sentence sounds better if the dislocated noun phrase is preceded by as for (about, etc.).¹²

- (60) a. (Concerning) turtles, a turtle makes a great pet.
 b. (Concerning) turtles, Bill has one.
- (61) a. (As for) linguists, Henrietta refuses to date one because she thinks they are all degenerate.
 b. (As for) linguists, Henrietta refuses to date one; his name is Bill Turner.
- (62) a. (About) drinks, he didn't charge us for one; they were all on the house.
 b. (About) drinks, he didn't charge us for one; it was the gin and tonic.

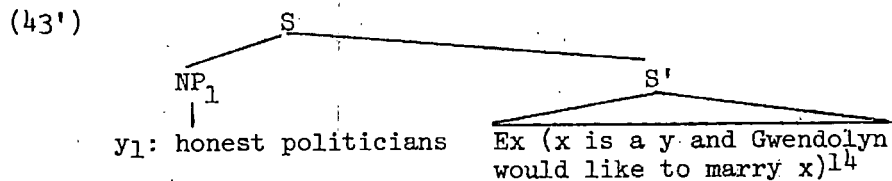
It has been suggested that the way to account for the ambiguity of sentences like (31)-(33) is by the position of the existential quantifier in the underlying (semantic) representation. Thus, the specific and non-specific readings of (31) would be distinguished by the fact that in the underlying representation of the former the whole sentence is in the scope of the existential quantifier, while in the latter it is not. The two representations would correspond roughly to (31') and (31'') respectively.

- (31') Ex (x is an honest politician and Gwendolyn would like to marry x)¹³
 (31'') Gwendolyn would like Ex (x is an honest politician and Gwendolyn marries x)

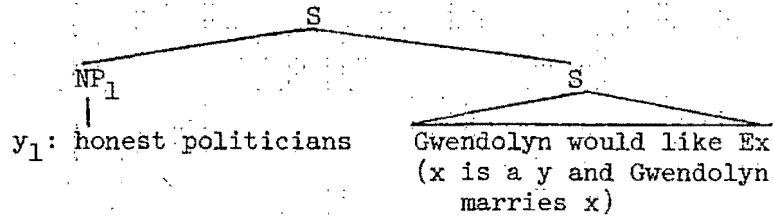
In (33) the distinction would lie in the fact that the negative is within the scope of the existential quantifier on the specific reading, but the existential quantifier is within the scope of the negative on the non-specific reading. Thus, the two interpretations would correspond roughly to (33') and (33'') respectively.

- (33') Ex (x is a misprint and the proofreader didn't see x)
 (33'') Not Ex (x is a misprint and the proofreader saw x)

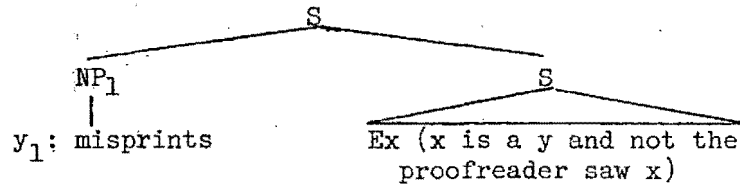
We may thus represent the logical structures of the two readings of (43) and (45) roughly as follows:



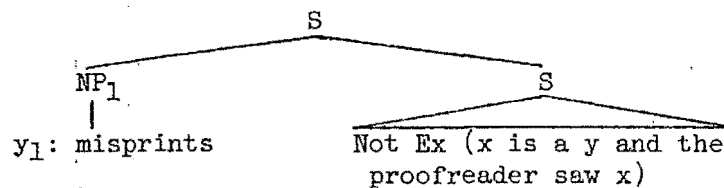
(43")



(45')



(45'')



Whether or not this particular solution for distinguishing the specific and non-specific readings of indefinite noun phrases turns out to be correct,¹⁵ it is clear that on the specific reading the speaker asserts his belief in the existence of a particular object or individual referred to by the indefinite noun phrase while on the non-specific reading this is not the case; the speaker either explicitly denies the existence of a particular object or individual or makes no commitment one way or the other. Whatever the correct solution turns out to be the above facts concerning non-specificity of dislocated indefinites (more correctly they don't refer to a specific object--they do of course refer to a specific class of objects) would require some ad hoc explanation under the extraction analysis. It would be necessary to place a condition on the left dislocation rule requiring that this rule cannot apply to a specific indefinite, assuming of course that this is even possible, i.e., it is not clear how such a condition could be stated unless specificity is considered a feature on the noun. Moreover, such a condition would be too strong. As was demonstrated above, though the dislocated noun phrase is non-specific, its pronominal remnant one may have a specific interpretation. On the other hand, these facts follow quite naturally from LSH. Assuming that specific indefinites can only be introduced into a proposition by an existential quantifier, they would automatically be excluded from the position of the dislocated noun phrase since this noun phrase originates outside the scope of any quantifier. Note also our earlier observation that the dislocated noun phrase is the topic of the sentence. Its function is to identify the object or set of objects that the sentence is about. Moreover, the existence of the topic noun phrase is not part of what is asserted in the sentence; it is presupposed.¹⁶ The dislocated noun phrase may, however, be generic, i.e., it may identify a particular class of individuals or objects; hence it may have the form of a

non-specific indefinite, an alternate form for a generic noun phrase (see above). We would predict, moreover, that indefinite noun phrases, whether they are specific or non-specific, cannot be dislocated if they have no generic counterpart. That this is in fact the case, is illustrated by the following examples:

- (63) a. I would like to catch one.
b. *(As for) one, I would like to catch one/it.
- (64) a. Someone is here to see you.
b. *(As for) someone, one/he is here to see you.
- (65) a. I didn't tell anyone about it.
b. *(As for) anyone, I didn't tell one/him about it.
- (66) a. Nothing can stop him now.
b. *(As for) nothing, one/it can stop him now.

Again, in EH these facts would be treated as accidental; special ad hoc restrictions would have to be placed on left dislocation to block the (b) sentences in (63)-(66).

4.2. Deep and surface noun phrases. Noun phrases which contain quantifier-like determiners generally cannot be dislocated, as witnessed by the following examples.

- (67) a. I like only John.
b. *(As for) only John, I like him.
- (68) a. Even Bill wasn't wearing a hat.
b. *(As for) even Bill, he wasn't wearing a hat.
- (69) a. We saw many monkeys at the zoo.
b. *(As for) many monkeys, we saw them at the zoo.
- (70) a. Every child was eating a lollipop.
b. *(As for) every child, he was eating a lollipop.
- (71) a. Few people will understand this thesis.
b. *(As for) few people, they will understand this thesis.
- (72) a. Bill said that all anthropologists admire Dr. Mead.
b. *(As for) all anthropologists, Bill said they admire Dr. Mead.
- (73) a. We interviewed three men yesterday.
b. *(As for) three men, we interviewed them yesterday.
- (74) a. None of the doctors wanted the senator to become president.
b. *(As for) none of the doctors, they wanted the senator to become president.
- (75) a. I must have eaten two pounds of candy last night.
b. *(As for) two pounds of candy, I must have eaten it last night.

Note however that with the exception of only and even these noun phrases can be dislocated if the quantifier is left behind.¹⁷ Thus compare

- (76) (As for) monkeys, we saw many at the zoo.

- (77) (As for) the children, every one was eating a lollipop.
- (78) (As for) people (?) (cf. however chemists), few will understand this thesis.
- (79) (As for) anthropologists, Bill said all (of them)/ they all admire Dr. Mead.
- (80) (As for) men, we interviewed three yesterday.
- (81) (As for) the doctors, none (of them) wanted the senator to become president.
- (82) (As for) candy, I must have eaten two pounds (of it) last night.

Again, an extraction analysis would require an ad hoc condition to block dislocation of noun phrases which contain quantifiers. But the facts follow automatically from LSH. The quantifiers which cannot be dislocated are precisely those which are not part of the noun phrase in logical structure. Though the source of quantifiers is still a matter of considerable debate, it is fairly clear that the quantifiers in (67)-(75) are not part of the noun phrase in logical structure but are introduced into it at some later stage in the derivation. Note that a sentence like (73) becomes acceptable if the noun phrase containing the quantifier is definite.

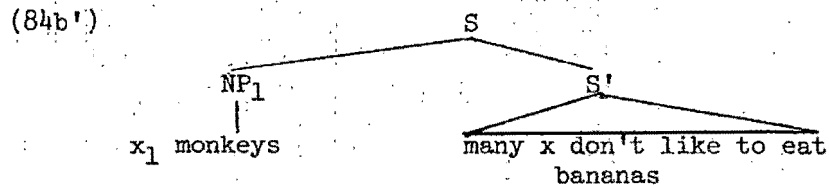
- (83) a. We interviewed those three men yesterday.
b. (As for) those three men, we interviewed them yesterday.

In (83), the quantifier three is an identifying property of the noun phrase in which it is contained, in (73) it is not.

It should be mentioned, however, that the situation is not as clear cut as the above facts would indicate. Some quantifier noun phrases can be dislocated out of subject position. This is particularly true for the quantifier some, but also to some extent for many, all and most. Thus, compare

- (84) a. Some people can't do anything right.
b. Some people, they can't do anything right.
- (85) a. Many monkeys refuse to eat bananas.
b. ?Many monkeys, they refuse to eat bananas.
- (86) a. Most Italians eat spaghetti as an appetizer.
b. ?Most Italians, they eat spaghetti as an appetizer.
- (87) a. All violators will be prosecuted.
b. ??All violators, they will be prosecuted.

In order to account for the possible grammaticality of the (b) sentences in (84)-(86) I will assume for the present that there is a rule which optionally moves certain quantifiers from subject position into position before the dislocated noun phrase. Thus, for example, (85b) would be derived by such a rule from the structure in (85b').



where x in S' is realized as they if the quantifier movement rule applies, but the result is (85b'') if it does not.

(85) b''. (As for) monkeys, many of them refuse to eat bananas.

Note that (85b'') is a paraphrase of (85b).

Such an analysis, even if it turns out to be correct, is admittedly not a very satisfying explanation for the facts in (84)-(87), but I have no better solution to propose at present. In any case, the situation is equally as problematic for the extraction analysis; at least LSH is able to account for some of the facts in a principled way.

5. Left Dislocated Sentences with No Non-dislocated Counterpart.

We have seen that the left dislocated noun phrase need not be coreferential with the corresponding pronoun in S', since this pronoun may refer only to a subset of the object referred to by NP₁, as in the case where NP₁ is generic and the pronoun in the matrix sentence is one (specific or non-specific). Actually, it is possible that the dislocated noun phrase has no corresponding pronoun in the matrix sentence at all; as in the following examples:

- (88) a. As for fruit, Jim likes cantelopes best.
 b. As for the weather, I think it will rain tomorrow.
 c. As for the democratic nomination, I don't think Mayor Sensenbrenner has a chance.
 d. As for Paris, the Eiffel Tower is really spectacular.

Unless one is willing to accept completely different analyses for left dislocated sentences and sentences with prefixed about elements, thus ignoring obvious similarities between the two, sentences like those in (88) are crucial examples against the extraction analysis for left dislocated sentences since they have no non-dislocated counterpart out of which the noun phrase could have been moved.¹⁸

These facts provide no problem, however, for LSH. Since the dislocated NP does not originate in the main sentence, it is not necessary that this sentence contain a coreferent of the dislocated NP. However, given the dislocated NP's function in naming what the following clause is about, it is necessary that there be some meaningful connection between the two, i.e. that the clause be a meaningful predication about the dislocated NP. This principle, which I propose as a well-formedness condition on semantic (logical) structures may be stated roughly as in (89) (note that (89) is similar to one of the

rules of successful predication proposed in Searle (1969:126)).

- (89) In order for a comment, C, to be successfully predicated of a topic, T, T must be of a type or category such that it is logically possible for C to be true or false of T.

The principle stated in (89) would correctly predict the unacceptability of sentences like those in (90). (In fact, I will attempt to demonstrate in section 6.3 below that (89) has much wider application in the grammar that goes far beyond assuring the well formedness of left dislocated constructions).

- (90) a. *As for fruit, Jim likes red snapper best.
 b. *As for the weather, Pricilla loves Tom.
 c. *As for the Democratic nomination, the A's beat the Mets.
 d. *As for Cleveland, the Eiffel Tower is spectacular.

Note that in (88a) the matrix sentence does in fact contain a noun phrase (canelope) which is a subset of the set of objects referred to by the dislocated noun phrase (fruit). In all the examples in (88) it is possible to construct a sentence which relates NP₁ to S'; these are, respectively:

- (88) a'. Canelope is a fruit.
 b'. Rain is a type of weather.
 c'. Mayor Sensenbrenner may be considered for the Democratic nomination.
 d'. The Eiffel Tower is in Paris.

This is not possible, however, for the examples in (90).

6. Left Dislocation and the Coordinate Structure Constraint.

Ross (1967) noticed that left dislocation does not obey his proposed constraints on movement transformations. That left dislocation does not obey the Complex Noun Phrase Constraint (CNPC),¹⁹ the Sentential Subject Constraint (SSC)²⁰ and the Left Branch Condition (LBC)²¹ is witnessed by the grammaticality of the (c) sentences in (91)-(93) respectively, as compared to the ungrammaticality of the corresponding (b) sentences where another alleged movement rule, topicalization, has applied.

- (91) a. The man who made that proposal must have been crazy.
 b. *That proposal the man who made must have been crazy.
 c. That proposal, the man who made it must have been crazy.
 (92) a. That Henry likes girls is obvious.
 b. *Girls that Henry likes is obvious.
 c. Girls, that Henry likes them is obvious.

- (93) a. Somebody stole my brother Jim's lawnmower
last night.
b. *My brother Jim's somebody stole lawnmower
last night.
c. My brother Jim, somebody stole his lawnmower
last night.

In order to maintain the generalization that the constraints he proposes are in fact constraints on movement, Ross suggests that the grammars of natural languages contain two types of reordering transformations-- chopping transformations, which do not leave behind any copy of the element that has been moved, and copying transformations, which do leave behind a copy of this element. Only the latter are subject to his constraints.

6.1. However, with respect to one constraint, the Coordinate Structure Constraint (CSC), stated in (94) below, the claim that copying rules are not subject to the constraints appears to be too strong. While (95b) and (96b), examples of sentences that Ross cited to demonstrate that left dislocation does not obey CSC, are indeed acceptable, the (b) sentences in (97) and (98) are not. The ungrammaticality of (97b) and (98b) indicates that in some cases at least left dislocation must be subject to CSC.

- (94) Coordinate Structure Constraint. In a Coordinate Structure, no conjunct may be moved nor may any element contained in a conjunct be moved out of that conjunct.
- (95) a. I hardly ever see my father and my mother when
they're not glaring at each other.
b. My father, I hardly ever see him and my mother
when they're not glaring at each other.
- (96) a. I've sung folksongs and accompanied myself on
this guitar all my life.
b. This guitar, I've sung folksongs and accompanied
myself on it all my life.
- (97) a. Jim has red hair and plays the guitar.
b. *The guitar, Jim has red hair and plays it.
- (98) a. Jim likes my mother and hates my father.
b. *My father, Jim likes my mother and hates him.

6.2. The assumption that there are two types of movement rules is not the only possible solution to the facts in (91)-(93). At least two other hypotheses merit consideration.

- (I) Rules that chop constituents over variables²² in the sense of Ross (1967) do not exist. Rules that appear to be chopping rules are actually copying rules that leave behind a pronoun which is later deleted.

- (II) There are no unbounded movement rules at all; neither chopping rules nor copying rules. Constructions which appear to be derived by such rules already contain a noun phrase, x, adjoined to a sentence, S, in logical structure, where S dominates a noun phrase that corresponds to x and this noun phrase is later optionally-- in some cases obligatorily--deleted.

Hypothesis I has been suggested by a number of authors,²³ most recently by Perlmutter (1972). Hypothesis II is the one which is being considered in this thesis, though our discussion is limited to only some of the rules in question.

Both Hypotheses I and II entail that Ross Constraints are constraints not on movement but on deletion, and both receive some support from the fact that constructions which appear to have been derived by a chopping transformation generally have corresponding 'copied' forms. Sentences which contain a pronominal remnant of the 'preposed' noun phrase are most common, moreover, in cases where deletion of the pronominal form would result in violation of one of the constraints, as illustrated by the following examples.

- (99) a. The girl who Harry believes the claim that she planted the bomb was arrested this morning.
 b. *The girl who Harry believes the claim that planted the bomb was arrested this morning.
- (100) a. The only one who I can ever remember her name is Buttons.
 b. *The only one who(se) I can ever remember name is Buttons.
- (101) a. Jones is the type of guy who you can't help but like him once you get to know him.
 b. ?Jones is the type of guy who you can't help but like once you get to know.
- (102) a. Which book did you say that you had just talked to the man who had ordered it.
 b. *Which book did you say that you had just talked to the man who had ordered.
- (103) a. ?It was the vodka that Bill rejected the claim that he had stolen it.
 b. *It was the vodka that Bill rejected the claim that he had stolen.
- (104) a. None of the students who the papers that they submitted had fewer than 25 footnotes will receive an A in the course.
 b. *None of the students who the papers that submitted had fewer than 25 footnotes will receive an A in the course.

If a pronominal remnant is left behind in a topicalized sentence like (105a), another construction allegedly derived by a chopping rule,

the result is a left dislocated sentence like (105b). In Part II I will argue that the former is in fact derived from the latter by deletion of the pronominal form.

- (105) a. That book, I don't think he'll be able to read.
 b. That book, I don't think he'll be able to read it.

In the present section, I hope to demonstrate that the Coordinate Structure Constraint is not a unitary phenomenon, but actually involves two separate phenomena. One of these is a constraint on deletion and the other is not a syntactic constraint at all, but a constraint on the semantic relationship between the 'preposed noun phrase' and the rest of the sentence, i.e., a generalization of the principle of successful predication, (89), proposed in the previous section.

6.3. Consider the following examples, where the (b) sentences all involve a violation of CSC.

- I (106) a. I never read The Godfather and Love Story.
 b. *The Godfather, I never read and Love Story.
 (107) a. I just saw your brother and his wife.
 b. *Your brother, I just saw and his wife.
 (108) a. John invited Mary and my friend Beatrice.
 b. *The girl who John invited Mary and is my friend Beatrice.
 (109) a. That vase and this one are both antiques.
 b. *It is that vase which and this one are both antiques.
- II (110) a. Pietro bought the Ferrari and Sofia adores him.
 b. *The Ferrari which Pietro bought and Sofia adores him was stolen.
 (111) a. Bill took the garbage out and Eleanor washed the windows.
 b. *The windows which Bill took the garbage out and Eleanor washed are still dirty.
 (112) a. Jim takes piano lessons and Tom plays the flute.
 b. *The flute, Jim takes piano lessons and Tom plays.
 (113) a. Knoblauch won the Democratic nomination and the Republicans are running Smith.
 b. *It is Smith that Knoblauch won the Democratic nomination and the Republicans are running.

As the formulation in (94) indicates, the examples handled by the Coordinate structure Constraint fall into two separate groups: (1) the reordered element is itself a conjunct, and (2) the reordered element is contained in a conjunct.

The first type is illustrated by (106) through (109), the second type by (110)-(113). It seems to me, moreover, that there is a clear distinction in manner and degree of acceptability between the

(b) sentences in the two sets of examples. The first set is much worse than the second. Further evidence for this distinction comes from the fact that while the sentences in the first group are somewhat--in some cases considerably--improved when a pronominal form of the 'preposed' noun phrase is left behind (at least they are brought to the level of acceptability of the second set), no appreciable difference in acceptability results in the second set; these sentences remain deviant in exactly the same way. Thus, compare

- (114)?*The Godfather, I never read it and Love Story.
- (115) Your brother, I just saw him and his wife.
- (116)?*The girl who John invited Mary and her is my friend Beatrice.
- (117) *It is that vase which it and this one are both antiques.
- (118) *The Ferrari which Pietro bought it and Sofia adores him was stolen.
- (119) *The windows which Bill took the garbage out and Eleanor washed them are still dirty.
- (120) *The flute, Jim takes piano lessons and Tom plays it.
- (121) *It is Smith that Knoblauch won the Democratic nomination and the Republicans are running him.

Some very convincing evidence in favor of distinguishing two separate coordinate structure constraints, corresponding to the two sets of sentences discussed above, is presented in Grosu (1973). Grosu notes that it is necessary in certain deletion rules to constrain the deletion of whole conjuncts but not of elements within conjuncts, for example, in the rule that deletes comparative elements.

- (122) a. *Leonid has more cars than Dick has cars.
b. Leonid has more cars than Dick has.
- (123) a. Leonid has more cars than Dick has cars and TV sets.
b. *Leonid has more cars than Dick has and TV sets.
- (124) a. Leonid has more cars than Dick has cars or than Mao has shirts.
b. Leonid has more cars than Dick has or than Mao has shirts.

These sentences illustrate that the rule of Comparative Deletion which derives the (b) sentences from the (a) sentences in (122)-(124) must be prevented from applying to whole conjuncts as in (123b) but at the same time must be allowed to apply to elements within conjuncts, as in (124b).

What these facts suggest is that the data handled by Ross' Coordinate Structure Constraint actually involve two separate principles. The first (like CNPC, SSC and LBC) depends crucially on the total deletion of elements in certain environments, in this case the deletion of one of the members of a conjunction--more specifically one of the

conjuncts to the right or to the left of and. The second one does not involve deletion at all. Not only are deletion rules not subject to a constraint on deletion of elements within conjuncts, but the ungrammaticality of (97b) and (98b) and the ungrammatical sentences in (114)-(121) show that copying rules are subject to some constraint on elements within conjuncts.

The grammaticality of (115) and (95b) as opposed to the ungrammaticality of (107b) and (125), (I repeat the sentences here for convenience), shows that a sentence where the deleted noun phrase is a conjunct may become acceptable if a copy of the pronoun is left behind.

- (107) b. *Your brother, I just saw and his wife.
 (115) Your brother, I just saw him and his wife.
 (125) *My father I hardly ever see and my mother when
 they're not glaring at each other.
 (95) b. My father, I hardly ever see him and my
 mother when they're not drunk.

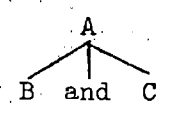
On the other hand, examples like the (b) sentences in (110)-(113) where the deleted element is inside a conjunct always remain unacceptable even when there is a pronominal remnant of the 'preposed' noun phrase inside the conjunct, as illustrated by (118)-(121). Moreover, deletion of a noun phrase inside a conjunction in cases where it appears that a chopping rule has applied does not necessarily result in ungrammaticality, and it is just in those cases when the corresponding 'copying' construction is acceptable as well. Compare for example (126) and (96b), one of the sentences that Ross cited to show that copying rules are not subject to CSC.

- (126) This guitar I've sung folksongs and accompanied
 myself on all my life.
 (96) b. This guitar, I've sung folksongs and accompanied
 myself on it all my life.

Note that the degree to which the presence of a pronoun form in sentences like (114)-(117) improves the sentence in relation to the corresponding construction where the pronoun has been deleted depends on whether or not the "preposed" noun phrase has some semantic connection with both conjuncts. Thus, (115) and (95b), where the conjunction and is interpreted in a joint sense, i.e., and is interpreted as with, are fully acceptable. Compare, however, (114), (116) and (117) where and cannot have a joint interpretation and where, consequently, the sentence remains unacceptable in spite of the presence of the pronoun form. Similarly, (126) and (96b) both conjuncts have some semantic connection with the preposed noun phrase; but in (118)-(121) one of the conjuncts has nothing to do with the 'preposed' noun phrase at all.

On the basis of the above facts, I propose that the Coordinate Structure Constraint has reformulated as two separate principles--one a surface structure constraint and the other a semantic well-formedness condition. They may be stated roughly as follows:

(127) Conjunct Deletion Constraint (CDC). Surface Structures of the type



where either B or C is null are ill-formed

(128) A noun phrase, x, that is adjoined to a sentence, S, must be semantically relevant to any sentence, S', that is immediately dominated by S, i.e., S' must be a meaningful predication about x.

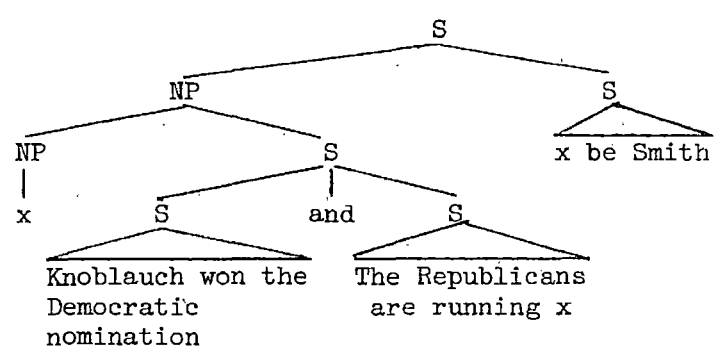
Notice that (128) is just a more general statement of (89), the well-formedness condition on the relationship between the topic and the comment in logical structure that was stated at the end of the last section.

6.4. Specific proposals in this part have been restricted to the derivation of left dislocated sentences. To show that in other constructions subject to CSC, namely questions, cleft sentences and relative clauses, (128) is a condition on the topic-comment relationship in logical structure, it is necessary to make a number of assumptions, most of which I am not prepared to justify here. These may be briefly summarized as follows.

(I) Cleft sentences (as well as corresponding pseudo-cleft sentences) are derived from underlying equative structures where the topic is a descriptive noun phrase. The underlying structure of (113b) is thus roughly (113b'). I repeat (113b) here for convenience.

(113) b. It is Smith that Knoblauch won the Democratic nomination and the Republicans are running.

(113) b'.

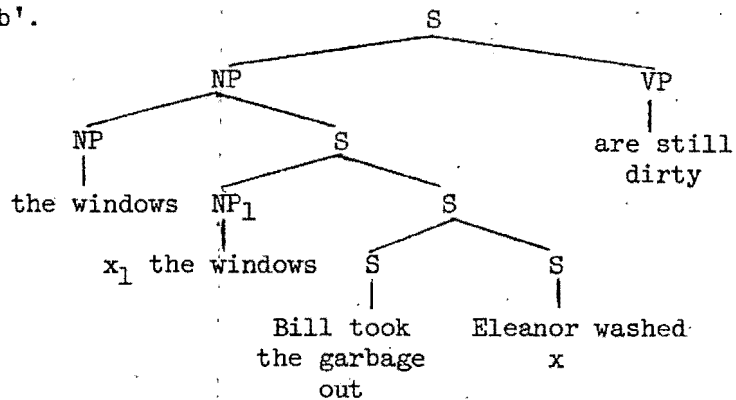


(II) The derivation of wh-questions is similar to that of cleft and pseudo-cleft sentences, i.e., these too are derived from equative structures like (113b').

(III) The sentence embedded inside a relative clause has a topic-comment structure where, moreover, the topic is necessarily coreferential with the head of the clause. The logical structure of (111b), irrelevant details (including topic-comment structure of the highest sentence) omitted, is thus roughly (111b'). (111b) is repeated here for convenience.

(111) b. The windows which Bill took the garbage out and Eleanor washed are still dirty.

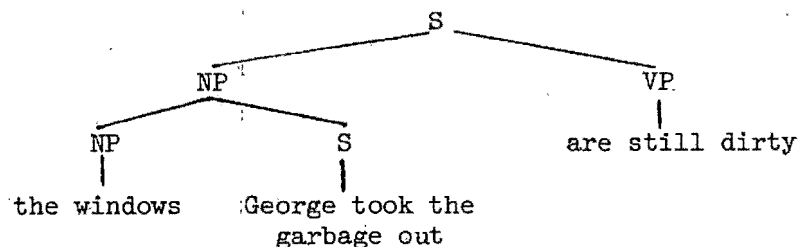
(111) b'.



If such a hypothesis turns out to be correct, it eliminates the need for a rule that moves relative pronouns to the front of the sentence, since the noun phrase that is relativized, the topic, is already in its surface structure position. This analysis also accounts for the fact that a pronoun copy of the relative pronoun may (and in some languages must) be present in the embedded sentence.

If assumptions I and II are accepted, then the semantic relationship in question in cleft sentences and questions is not between the clefted noun phrase (which I argued in Gundel (1974) is never the topic) or the question word and the rest of the sentence but between the head of a relative clause and the sentence embedded inside that clause, more specifically between the topic and comment of the sentence embedded inside a relative clause. Even if III cannot be maintained it is necessary to account for the fact that a structure like (129) cannot underlie any well-formed sentence in English.

(129)



The analysis which I am proposing here makes the claim that (111b) and (129) are ill-formed for the same reason. A theory that accounts for the ungrammaticality of (111b) by CSC, i.e., by the constraint

formulated in (94) treats these two facts as being completely unrelated.

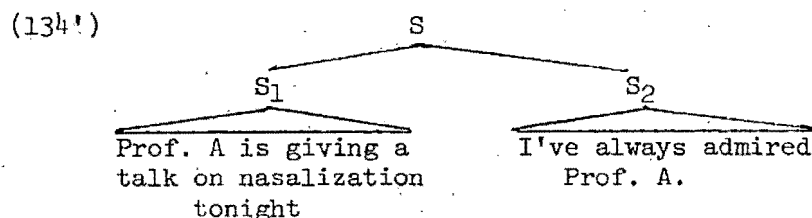
6.5. If CSC is reformulated as the two separate constraints in (127) and (128) we would predict that constructions that appear to have been derived by a chopping rule where the preposed noun phrase originates inside a conjunct but is in some way relevant to both members of the conjunction will not be ungrammatical. This was already illustrated by the grammaticality of (126) above. It is the case also with so-called asymmetric conjunctions like (130)-(133), which pose a problem for Ross' theory.

- (130) It was the bread which Jim went to the store and picked up.
 (131) What did Mary go to Paris and take several pictures of.
 (132) The guitar which Jim saved \$50 and bought was a Yamaha.
 (133) The arm which Mary went skiing and broke has healed remarkably well.

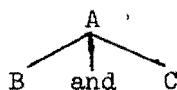
These sentences are acceptable because Jim's going to the store, Mary's going to Paris, Jim's saving \$50, and Mary's going skiing are interpreted as having something to do with the bread, something that Mary took pictures of, the guitar and Mary's arm respectively.

At the end of Chapter 6, Ross (1967) notes some facts which pose a problem for CSC. It is generally assumed that the correct analysis of appositive clauses (restrictive relative clauses) is that they are derived from conjoined structures by a rule that inserts the second conjunct into the first. Thus, the structure underlying (134) is derived from (134').

- (134) Professor Allerwissen, whom I've always admired, is giving a talk on nasalization tonight.



But the rule which is responsible for the derivation of (134) from (134') would violate CSC. If my reinterpretation of the facts is correct, however, no problem arises with respect to this rule because it violates neither (127) nor (128), i.e., it does not result in a surface structure like.



where either A or B is null, nor does it violate a well-formedness condition on the semantic relationship between a noun phrase and an adjoined sentence in logical structure.

7. An Alternative Solution

I have proposed here that left dislocated noun phrases are not moved into their surface structure position by a copying rule but are, rather, already generated in that position in the base. It was argued that certain properties of dislocated noun phrases--(a) they cannot be specific indefinites, (b) they cannot contain a quantifier, (c) their function is to name what the following sentence (and any sentence immediately dominated by it) is about, (d) they cannot have primary stress, (e) a dislocated pronoun is necessarily an objective form, and (f) the pronoun it can not be left dislocated--follow naturally from my theory, while they would require separate ad hoc restrictions on left dislocation in an extraction analysis.

Lakoff () has proposed that the underlying (semantic) representation of every sentence contains an element Topic (T) which is structurally independent of P_1 , the structure to which transformations apply. Moreover, various transformations may be made contingent on the information in T by means of global derivational constraints. In such a theory the properties of left dislocated noun phrases noted above (or at least some of these properties) would not require separate conditions on the left dislocation rule. They could all be accounted for by one derivational constraint which states that the noun phrase moved by this rule must be identical to T. I believe, however, that the analysis that I have proposed is preferable to such a solution for the following reasons.

1. Since T is structurally independent of P_1 , it is not obvious that separate conditions would not have to be stated to account for the fact that T cannot be an indefinite pronoun, a specific indefinite, a noun phrase containing a quantifier, i.e., precisely those conditions that would otherwise have to be stated on left dislocation. In my theory, on the other hand, these facts follow from the structural position of NP_1 with respect to S' (see above), i.e., the fact that NP_1 is generated outside the scope of any quantifier.
2. Such a proposal avoids the empirical question of whether the optimal analysis of the facts in question is one which complicates the base or one which complicates the transformational component. It complicates both.
3. The tremendous power of derivational constraints makes it possible to account for almost any phenomenon, thus making the task of choosing the correct grammar all that much more difficult. For this reason, it seems to me that a theory which is able to account for a given set of facts without appeal to such constraints, provided no other sacrifices such as loss of generalization need to be made, is to be preferred over a theory which accounts for the same set of facts with such constraints.

8. Left Dislocation in Subordinate Clauses

So far we have been considering only examples of left dislocation in the highest clause. Though left dislocation is possible in some subordinate clauses as well, the situation is not at all clear cut. That a general condition against left dislocation in subordinate clauses would be too strong is witnessed by (135)-(139), which appear to be acceptable to most speakers.

- (135) Mary said that her grades, they weren't too good.
- (136) I finally realized that those slacks you gave me for my birthday, I won't be able to fit into them unless I lose five pounds.
- (137) I know that those slacks, they're too tight for me now.
- (138) She dreamt that her brother, he had been in an automobile accident.
- (139) ?The professor admitted that his book, it wasn't worth buying.

Compare, however, (140)-(153), which range from only marginally acceptable to completely unacceptable.

- (140) ?The professor refused to admit that his book, it wasn't worth buying.
- (141) ?Mary said that her grades, she wasn't too proud of them.
- (142) ?Jim claims that beans, he doesn't like them.
- (143) ??Jim claims that beans, Mary doesn't like them.
- (144) ??If my father, he comes home late, my mother won't talk to him for the rest of the evening.
- (145) ??It started to rain after Jack and his friend, they had finally made it up the hill.
- (146) *It started to rain after Jack and his friend, we had finally managed to reach them.
- (147) *If my father, he comes home late, we get to stay up an extra hour.
- (148) *While your paper I was reading it, I fell asleep.
- (149) *That my brother, you don't like him is clear.
- (150) *Because those slacks, they don't fit me, I'll have to wear my new dress.
- (151) *That those slacks you gave me for my birthday, I won't be able to fit into them unless I lose five pounds, is obvious to me now.
- (152) *After that report, Mary talked to the man who had written it, she swore she would never eat peanut butter again.
- (153) *John entered the room after Bill he did.

The contrast between (146)-(153), on the one hand, and (135)-(139) or even (140)-(145), on the other, is striking. Still another contrast exists between all of these sentences and examples of left dislocation in a relative clause. The latter are not even intelligible, as illustrated by (154)-(156).

- (154) a. The man who wrote that book is a well known linguist.
 b. *The man that book, who wrote it is a well-known linguist.
 b'. *The man who that book, wrote it is a well-known linguist.
- (155) a. That dog who bit your friend has rabies.
 b. *That dog your friend, who bit him has rabies.
 b'. *That dog who your friend bit him has rabies.²⁴
- (156) a. The beans which your brother ate made him sick.
 b. *The beans which your brother, he ate made him sick.
 b'. *The beans your brother, which he ate made him sick.

The following conclusions may be drawn from these facts.

1. Left dislocation in an object clause which does not have a lexical head noun, i.e., precisely those subordinate clauses that are not subject to Ross constraints, is generally acceptable. Though it is less acceptable if the dislocated noun phrase is not the subject of the clause (compare however (136)) or if the verb is negated.
2. Left dislocation in complex noun phrases (including adverbial and conditional clauses) and sentential subjects is generally not acceptable, though acceptability of left dislocation in these clauses is increased somewhat if (a) the subordinate clause follows the main clause and the dislocated noun phrase is the subject, or (b) there is a noun phrase in the main clause which is coreferential with the dislocated noun phrase.
3. Left dislocation in a relative clause results in a completely unintelligible construction.

Though a good deal more research on left dislocation and on topic-comment structure in general is necessary before a satisfactory explanation of these facts can even be attempted, there is some evidence, I believe, that whether or not a noun phrase can be dislocated inside a subordinate clause depends on whether or not the whole sentence may be interpreted as a statement (question, etc.) about that noun phrase. If we claim that a dislocated noun phrase inside a subordinate clause actually originates outside the clause as an adjunct to the highest sentence, it will be necessary to incorporate into the grammar a rule which can move the topic noun phrase into an embedded sentence. In Gundel (1974) I argue on independent grounds in favor of such a rule.

Notice, for example, that a sentence with an adverbial clause is generally not 'about' a noun phrase inside that clause. Thus, it seems to me that sentences ((160)-(162) are not natural responses to the questions in (157)-(159).²⁵

- (157) What about the letter?
 (158) What about those slacks?

- (159) What about Bill?
 (160)??After Mary wrote the letter she want to bed.
 (161)??Because those slacks don't fit me, I'll have to wear my new dress.
 (162)??John entered the room after Bill did.

Similarly with sentential subject clauses, thus, compare

- (163) What about your brother? ??That Mary doesn't like my brother is clear.
 (164) What about those slacks? ??That I don't be able to fit into those slacks unless I lose five pounds is obvious.

On the other hand, noun phrases inside sentential complements of verbs like say, claim, believe, etc., are commonly what the sentence is about. For example,

- (165) What about those slacks? I know that those slacks are too tight for me now.
 (166) What about your aunt? I think that my aunt is coming.
 (167) What about his grades? Bill said that his grades weren't too good.

Notice also that if the assumption about the topic-comment structure of relative clauses which was made in section 6.4 turns out to be correct, this would explain why dislocation is impossible inside a relative clause. The reason is that the topic of the sentence embedded inside the clause is always that noun phrase which is identical to the head noun, i.e., the relative pronoun itself.

8.1. In section 1.1 it was noted that a left dislocated noun phrase may be a pronoun. Moreover, if it is a first person pronoun, it may be reflexive, for example,

- (168) Myself, I would have done it differently.

Consider now the following sentences.

- (169) As for myself, I never would have said that to Bill.
 (170) Harry told Glinda that as for himself, he didn't like bagels.
 (171) Mary believes that as for herself, she won't be invited to the party.
 (172) *As for himself, he doesn't like bagels.
 (173) *As for herself, she won't be invited.

Ross (1970) proposes that sentences like (169)-(171) are produced by a rule that optionally converts to a reflexive any pronoun appearing

in as for phrase which is prefixed to an embedded clause, just in case this pronoun refers back to the subject of the next highest sentence. This solution, if correct, provides evidence for the performative analysis which Ross proposes in this paper. If there is a higher clause in logical structure which contains a first person subject, this would explain why (169) unlike (172) and (173), is grammatical even though it does not refer back to the subject of a higher clause in the surface structure.

There are a number of cases where a reflexive in an as for phrase is not acceptable even though it is coreferential with a noun phrase in a higher clause. For example:

- (174) *That as for herself she wouldn't be invited enraged Glinda.
- (175) *John rejected the claim that as for himself he didn't like bagels.
- (176) *The girl as for herself who wasn't invited/who as for herself wasn't invited said that she would never speak to Glinda again.
- (177) *John told the girl who as for himself he didn't like/as for himself who he didn't like that she should never call him again.

Ross' condition that the reflexive must refer to the subject of the next highest clause will block (174); but it is not strong enough to exclude (175)-(177) as well.

If, as I suggested earlier, the NP in an as for phrase is in fact a left dislocated NP, this would automatically account for the unacceptability of (174)-(177). The derivations of these sentences would be excluded by the same principle(s) (whatever these may turn out to be) which block left dislocation in subordinate clauses. The fact that most speakers accept sentences like (170) and (171) does not constitute a counterexample to this hypothesis since, as was already pointed out, left dislocation is generally acceptable inside an object clause which is not a complex noun phrase. Moreover, if I am correct in the observation that left dislocation inside such clauses is less acceptable when the pronominal remnant of the dislocated noun phrase is not the subject of the clause, we would predict that reflexives in as for phrases are also less acceptable under those conditions. This is in fact the case, as the following examples illustrate.

- (178) *John told Glinda that as for himself, we wouldn't invite him.
- (179) *Harry thinks that as for himself, I didn't see him.
- (180) *?Glinda said that as for herself, bagels make her vomit.

Ross' analysis would not exclude any of these sentences.

Ross cited one other example, however, which would appear to indicate that the higher subject condition must be maintained. For

him, and for many other speakers, (181) is less acceptable than (182).

(181)??Harry told Glinda that as for herself, she wouldn't be invited.

(182) Harry told Glinda that as for himself, he wouldn't be invited.

I myself find only little appreciable difference between the two. Moreover, I have found that even those speakers who reject (181) will accept it within an appropriate context, for example the following:

(183) Harry told Glinda that her children could come, but that as for herself, she wouldn't be invited.

This of course still does not explain why (181) is found to be less acceptable than (182). It seems possible, however, that this fact is not specifically related to as for reflexivization in a subordinate clause but rather to left dislocation subordinate clauses in general. It was already seen that there are various (as yet unexplained) conditions that affect the grammaticality of left dislocation in subordinate clauses. Just as dislocation in a subordinate clause is generally less acceptable if the dislocated NP is not the subject of the clause, it may also be less acceptable if it is coreferential with a non-subject noun phrase in a higher clause (possibly for the same reason). On the other hand, various conditions, such as the fact that the noun phrase in question contrasts with another noun phrase in a subordinate clause, as in (183) may be stronger than the subject condition. These assumptions are difficult to test since the dislocated noun phrase will necessarily be a pronoun if it is coreferential with a noun phrase in a higher clause and dislocated pronouns in subordinate clauses are in general not very acceptable. It seems to me, however, that there is a slight distinction in acceptability between (184) and (185), which parallels that between (181) and (182), i.e., (185) seems to me better than (184).

(184)??Harry told Glinda that (as for) her, she wouldn't be invited.

(185) ?Harry told Glinda that (as for) him, he wouldn't be invited.

I conclude therefore that the condition that reflexives in as for phrases must refer to a higher subject must be rejected for the following reasons.

1. The condition is too weak if as for phrases are not assumed to be the same as dislocated phrases because it does not block (175)-(180) and it is unnecessary if as for phrases are the same as dislocated noun phrases because the ungrammaticality of (174)-(180) would then follow from more general conditions on left dislocation in subordinate clauses.
2. The condition is too strong because it would block sentences like (183).

If the reflexive in an as for phrase does not have to refer to the subject of a higher clause, (a) does it have to refer to a noun phrase in a higher clause at all?, and (b) what exactly is the source of the as for reflexive.

Concerning the first question, the unacceptability of (172) and (173) demonstrates that in order for an NP in an as for phrase or any dislocated NP for that matter) to be reflexive there must be a coreferential noun phrase somewhere else in the sentence. Moreover, it appears that the noun phrase to which the reflexive refers must be 'to the left' of the as for phrase. Thus, (186) with the dislocated noun phrase adjoined to the highest sentence is unacceptable, regardless of whether the reflexive is to be interpreted as coreferential with Bill or with John.

(186) *As for himself, Bill told John that he wouldn't be invited.

In this sense, the facts concerning reflexives in as for phrases still provide some support for the abstract-performative hypothesis, since this hypothesis makes it possible to explain the grammaticality of (169). It is not clear, however, that the noun phrase 'on the left' to which the reflexive refers must necessarily be in a higher clause. Thus, it seems to me that the following examples are both acceptable.

(187) Bill doesn't mind if his guests smoke pot but as for himself, he never touches the stuff.

(188) All of Harriet's friends are coming to the party, but as for herself, she wasn't invited.

In (187) and (188) there is a coreferential noun phrase to the left of the as for reflexive, but this noun phrase is not in a higher clause.

There are other properties of reflexives in subordinate as for phrases which I am unable to provide any explanation for at present. Thus, while I believe that the noun phrase to which the reflexive refers is not necessarily the subject of a higher clause, sentences in which this is the case and where, moreover, the main verb expresses some positive and voluntary mental or verbal activity on the part of the subject are in fact the most common and most acceptable. Thus, for example, (189), where the verb is negative and (190) where it is not a voluntary verbal or mental activity reported by the speaker, are extremely awkward at best even though they meet the strongest conditions imposed on as for reflexives by Ross.

(189)??John doubts that as for himself, he will be invited.

(190)??Mary dreamt that as for herself, she wasn't invited.

Cf. also

(191) John thinks that as for himself, he won't be invited.

but

(192)?*John doesn't think that as for himself, he will be invited.

8.2. The Source of the as for Reflexive. There are at least two different reflexivization processes in English. The first, illustrated by (193) and (194) reflexivizes the second of two coreferential noun phrases if and only if these are in the same clause. Reflexives derived in this manner are generally unstressed. The second type, illustrated by (195) and (196), does not have to be in the same clause with its coreferent and most likely has as its source the so-called emphatic reflexive of sentences like (197) and (198). This type is never unstressed.

- (193) Mary forgot to wash herself this morning.
- (194) That John has a very high opinion of himself is obvious.
- (195) The only linguist who John thinks Mary can trust is himself.
- (196) John said that the letter had been written by Mary and himself.
- (197) The only linguist who John thinks Mary can trust is him/John himself.
- (198) John said that the letter had been written by Mary and him/John himself.

There is no reason to believe that the reflexive in as for phrases, i.e., the dislocated reflexive, is derived by a different rule than the one which optionally deletes the noun phrase immediately preceding an emphatic reflexive to produce sentences like (195) and (196), i.e. that the source for the as for reflexive is an emphatic reflexive. On the contrary, there is a good deal of evidence which suggests that it is so derived.

1. The emphatic reflexive, although it must be stressed, does not necessarily have to have primary stress; it may have secondary stress, as in the following sentences:

- (199) I myself never would have said that.
- (200) I thought that Jim himself didn't like bagels.
- (201) As for Jim himself, he never drinks tea.
- (202) I saw Jim's wife, but Jim himself I didn't see.

The reflexives in as for phrases always have secondary stress. While they, like dislocated noun phrases in general may never have primary stress (see above), they are never completely unstressed either,²⁶ as may be the case with pronouns as well as ordinary reflexives.

2. Reflexives in as for phrases have paraphrases with emphatic reflexives in non-dislocated sentences and with emphatic reflexives in as for phrases, though the latter are extremely awkward if the noun phrase preceding the reflexive is a pronoun (probably because of the repetition of identical forms--see above).

- (203) a. John told Glinda that he himself didn't like bagels.
- b. ?John told Glinda that as for himself, he didn't like bagels.

- (204) a. I think that you yourself probably have nothing to worry about.
 b. I think that as for you yourself,²⁷ you probably have nothing to worry about.
 c. I think that as for yourself, you have nothing to worry about.
- (205) a. Bill's wife often smokes pot, but Bill/he himself never touches the stuff.
 b. Bill's wife often smokes pot, but as for Bill/?him himself, he never touches the stuff.
 c. Bill's wife often smokes pot, but as for himself, he never touches the stuff.

3. A sentence may contain two reflexives if one of these is an ordinary reflexive and the other an emphatic reflexive, but not if both are emphatic reflexives. Thus, while (206) and (207) are acceptable, (208) and (209) are not.

- (206) Jim himself forgot to wash himself this morning.
 (207) I myself have more confidence in myself than I used to.
 (208) *Jim himself can't stand Mary herself.
 (209) *As for Jim himself, he didn't tell Mary herself that he was coming.

If reflexives in as for phrases are emphatic reflexives, we would predict that they could not be followed by a sentence which already contains an emphatic reflexive. The following examples illustrate that this is the case.

- (210) a. I don't like Jim himself.
 b. As for myself, I don't like Jim.
 c. *As for myself, I don't like Jim himself.
- (211) a. Jim claims that he didn't even tell Mary herself that he was coming.
 b. Jim claims that as for himself, he didn't even tell Mary that he was coming.
 c. *Jim claims that as for himself, he didn't even tell Mary herself that he was coming.

Thus, the hypothesis that reflexives in as for phrases are emphatic reflexives is not only consistent with the facts but receives support from them.

The conditions under which a noun phrase preceding an emphatic reflexive may be deleted are extremely complicated and, at present, unclear. It should be pointed out, however, that if a sentence like (212) is acceptable, which I think it may be, then the rule which deletes noun phrases preceding emphatic reflexives must be allowed to delete full nouns as well as pronouns.

- (212) ?All of Harriet's friends are coming to the party,
but as for herself, Harriet won't be invited.

This is so because there is no source, either in the extraction analysis or in the theory which I have proposed, for deriving sentences where the dislocated noun phrase is a pronoun and the corresponding noun phrase in the matrix sentence a full noun. Such examples are in fact never acceptable.

- (213) *As for her, Harriet won't be invited.

I have suggested, however (and will argue further in Part II), that the grammar be allowed to generate sentences in which both the dislocated noun phrase and the corresponding noun phrase in the matrix sentence are full nouns.

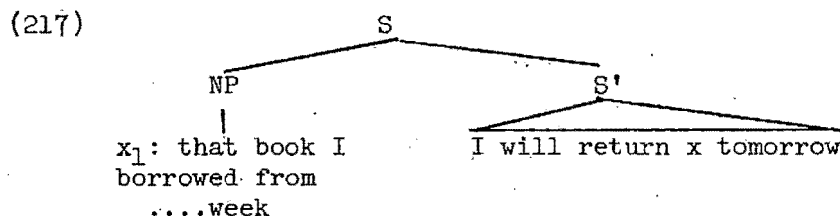
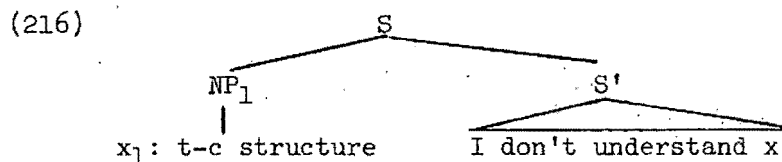
PART II

9. Topic and Comment in Other Sentences. On Deriving All Sentences From Underlying Left Dislocated Structures.

In Part I, I argued in favor of a theory which would derive the left dislocated sentences in (214) and (215) from the logical structures in (216) and (217) respectively.

- (214) (As for) topic comment structure, I don't understand it.

- (215) (As for) that book I borrowed from you last week, I'll return it tomorrow.



It was shown, moreover, that the function of the dislocated noun phrase, i.e., the function of NP₁, is to name what the following predicative sentence (S') is about. While S' represents what is actually predicated about NP₁, its illocutionary force (whether it asserts, questions, promises, etc.) depending on the particular speech act that the sentence is used to perform. We designated the former function as that of topic and the latter function as that of comment. A left dislocated sentence thus always answers some implicit or explicit question--what about x, where x is the dislocated noun phrase,²⁸

but is not responsive to such a question where x is some element other than the dislocated noun phrase.

The distinction between the element which names what the sentence (more exactly the speech act) is about and the actual predication made about that thing is, as I will argue below, not just a property of left dislocated structures, but is characteristic of all sentences. What distinguishes the left dislocated constructions is that in these the distinction is structurally explicit and unambiguous in the surface form of the sentence. Thus, for example, it is necessary to account for the fact that (218), like (214) is responsive to the question in (219).

(218) I don't understand topic-comment structure.

[An underlined word indicates position of primary stress.]

(219) What about topic-comment structure?

Sentence (220), on the other hand, is not responsive to (219); it may, however, answer any of the questions in (221).

(220) I don't understand topic-comment structure.

- (221) a. What about you?
 b. What about what you don't understand? What is the thing that you don't understand?
 c. What's new? What's wrong? What's happening? etc. (Tell me something about the situation you find yourself in at present.)

(218) is responsive to (221a) as well;²⁹ but it cannot answer (221b) or (221c). Similarly, (222) is responsive to (223) but not to (219) or any of the questions in (221).

(222) I don't understand topic-comment structure.

- (223) What about the person who doesn't understand topic-comment structure?
 Who is the person who doesn't understand topic-comment structure.

(222), moreover, is synonymous with (224), which is also responsive to (223).

(224) The one who doesn't understand topic-comment structure is me.

Compare also the following sentences.

- (225) As for topic-comment structure, I don't understand it.
 (226) As for what I won't understand, I don't understand topic-comment structure.

- (227) *As for the person who doesn't understand topic-comment structure, I don't understand it.
- (228) As for what I don't understand, I don't understand topic-comment structure.
- (229) As for what I don't understand, it is topic-comment structure.
- (230) *As for topic-comment structure, I don't understand topic-comment structure.
- (231) *As for topic-comment structure, what I don't understand is it.
- (232) *As for (the person) who doesn't understand topic-comment structure, I don't understand topic-comment structure.
- (233) As for (the person) who doesn't understand topic-comment structure, I don't understand it.
- (234)?*As for topic-comment structure, I don't understand it.
- (235) *As for what I don't understand, I don't understand topic-comment structure.
- (236) *As for me, I don't understand topic-comment structure.
- (237) As for (the one) who doesn't understand topic-comment structure, it is me.
- (238) *As for what I don't understand, the one who doesn't understand topic-comment structure is me.

These examples show that a particular noun phrase, *x*, may appear in an about phrase preceding a given sentence just in case that sentence is an appropriate response to the implicit or explicit question--what about *x*, but not otherwise.

We can account for the above facts in a natural way if we derive all sentences from structures like (216), where NP_1 will be identical for two given sentences, just in case they are both responsive to the same question--what about *x*? Topic may thus be formally defined as the relation $NP_1: S$ and comment as the relation $S': S$, where topic and comment are assigned semantic values roughly as follows:

- (239) Definition. If *T* is the topic of *S*, then *S* asserts, asks, promises, etc., something about *T*, depending on the type of speech act that *S* is used to perform.
- (240) Definition. If *C* is the comment of *S*, then *C* is what *S* asserts, asks, promises, etc., about the topic of *S*, depending on the type of speech act that *S* is used to perform.

Sentence (218), like (214) is derived from (216). But for (220) and (222), NP_1 and S' in logical structure are different. Sentences (218)

and (214), but not (220) and (222); are then interpreted as in (216')

(216') I don't understand x is asserted to be true
about x_1 , where x_1 is topic-comment structure.

In order to derive (218) from (216) it is necessary to incorporate into the grammar two rules, in addition to the ones we have already discussed in previous sections.

(241) Topic copying--copy NP_1 into the corresponding variable in S' .

(242) Topic deletion--delete NP_1 .

(241) and (242) could be two aspects of the same rule, i.e., we might propose a rule that copies NP_1 into the corresponding variable in S' and the same time deletes the original occurrence of NP_1 (in a sense the reverse of left dislocation), but then, unless the second part of the rule is somehow made optional, there would be no way of deriving sentences like (243) and (244):

(243) (As for) topic-comment structure, I don't understand topic-comment structure at all.

(244) (Concerning) that book, I promise to return that book to you next week.

These sentences seem to me at least marginally acceptable and certainly acceptable with the preceding about phrase. Notice that when there is a greater amount of material separating the two identical noun phrases (see also my note in Part I) such constructions become more acceptable even without the about phrase.

(245) (As for) topic-comment structure, Bill told Mary his professor claimed he was working on an analysis of topic-comment structure that would revolutionize linguistic theory.

(246) (As for) that book, I promised Bill that I would ask Harriet to return that book the next time she went to the library.

Another possibility is that topic-copying is just a special case of feature copying, the rule that copies the features of a noun phrase onto a corresponding variable that is later replaced by a pronominal form. That is, there may be a rule which applies 'in degrees' copying various aspects of a noun phrase--specific features, the whole noun phrase or possibly just the head of a complex noun phrase, as in (247).

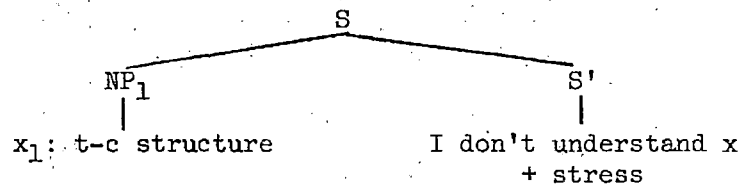
(247) That book I borrowed from you last week, I'll return the book to you tomorrow.

I will assume for the present, however, that the rules involved in deriving (218) from (216) are (241) and (242). The derivation of (218) from (216) is thus roughly as follows.

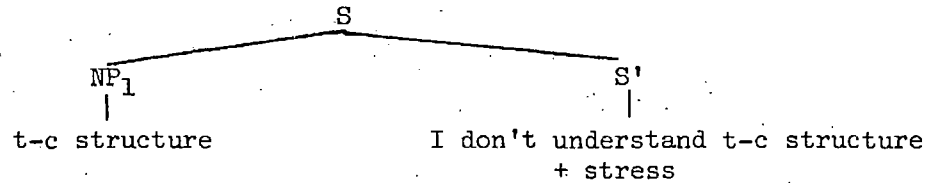
1. (216)

stress placement (see section 3.3)

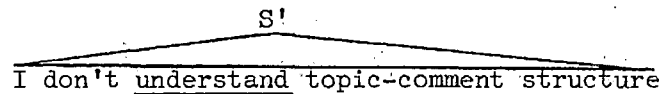
2.

topic copying

3.

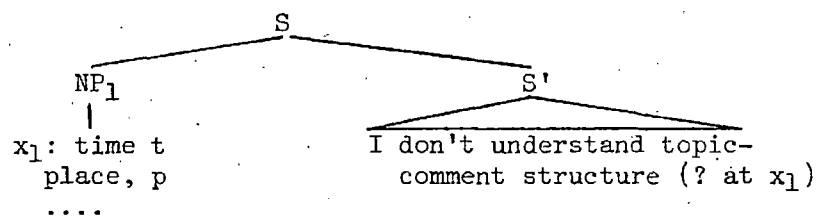
Topic deletion
Tree Pruning³⁰

4.

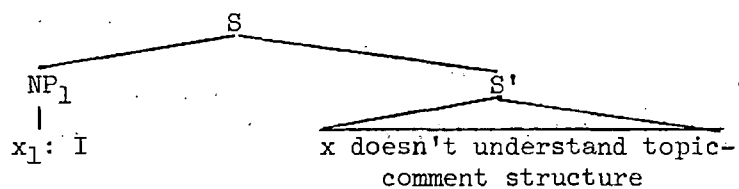


Sentence (220) will be derived from any of the structures (248)-(250).

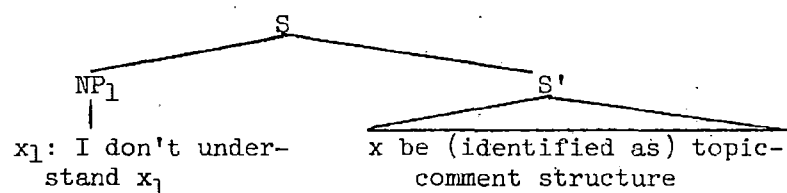
(248)



(249)



(250)



These structures are interpreted respectively as follows:

- (248') I don't understand topic-comment structure is asserted to be true about a particular situation (time and place), x_1 .
- (249') x doesn't understand topic-comment structure is asserted to be true about x_1 , where x_1 is the speaker.
- (250') x is identified as topic-comment structure is asserted to be true about x_1 , where x_1 is what the speaker does not understand.

The derivation of (220) from (248) involves stress placement, which will assign primary stress to the noun phrase topic-comment structure, and topic-deletion, which deletes NP_1 . In deriving (249) from (220), (a) stress placement assigns primary stress to the noun phrase, (b) t-c structure, topic-copying copies NP_1 , I, onto x and (c) topic deletion deletes the original NP_1 .

9.1. In order to derive (220) from (250) it is necessary to incorporate into the grammar a rule of predicate nominal incorporation, which may be stated informally as follows:

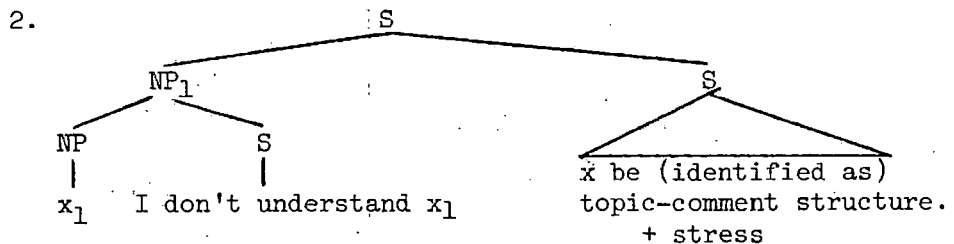
- (251) predicate nominal incorporation
- (1) copy a predicate nominal onto a variable in the sentence embedded in the noun phrase to the left of be (i.e., the subject noun phrase with which the predicate nominal is asserted to be coreferential), where that variable is coreferential with the head noun.
 - (2) Delete be, the predicate nominal, and the variable which is the head noun.

This rule, which must apply after topic copying, will move the noun phrase topic-comment structure into the position of the second occurrence of the variable in the subject noun phrase in (3) below and then delete be, the predicate nominal and the first occurrence of the variable.

The derivation of (220) from (250) is thus as follows.

1. (250)

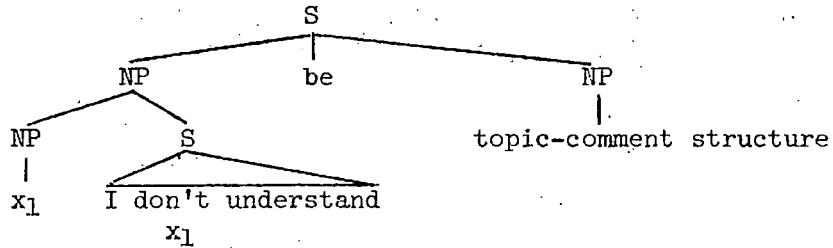
stress placement



topic copying

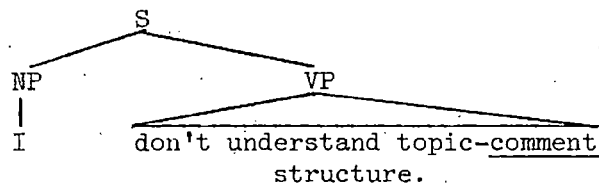
topic deletion
tree pruning

3.



predicate nominal incorporation

4.

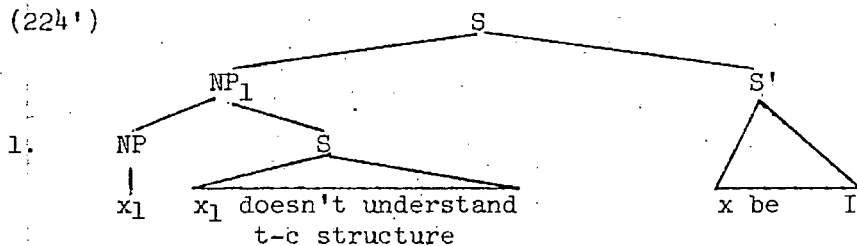


If topic deletion had not applied, the result would be, after relativization,

(252) As for what I don't understand, I don't understand topic-comment structure.

Sentence (222) which is only responsive to a question--what about x?, where x is (the one) who doesn't understand t-c structure is, like (224) derived from the structure in (224'), as follows.

(224')

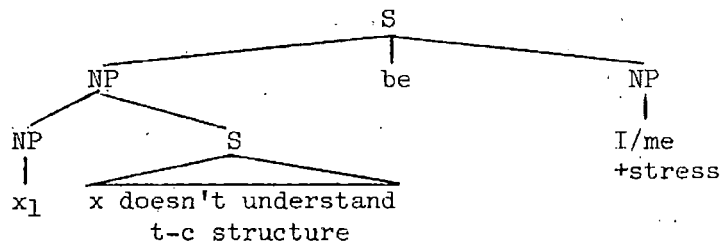


stress placement

topic copying

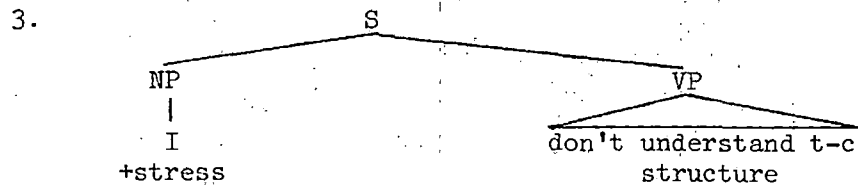
topic deletion

2.



(224) if predicate nominal incorporation doesn't apply:

predicate nominal incorporation



Although the derivation of (222) from (224') and of one reading of (220) from (250) involves a complication in the grammar for which there does not appear to be any independent syntactic evidence, namely the rule of predicate nominal incorporation, this complication is not just a consequence of the analysis of topic-comment structure that I have proposed here, i.e., the hypothesis that topic and comment are co-generated constituents NP₁ and S' in logical structure. It has been argued, quite independently of such an analysis (cf. for example Postal (1971)) that sentences with so-called 'emphatic stress', that is, sentences which have readings that may be paraphrased by equative sentences like (224), should have the same underlying source as the latter. In addition to the paraphrase relationship between sentences with 'emphatic stress' and equative sentences, the following arguments may be adduced in favor of an analysis which derives the two from the same underlying structure.

1. Sentences with different stress patterns differ not only in 'emphasis' but in cognitive content, i.e., in aspects of meaning relevant to determination of the truth value of statements. Compare, for example, the two sentences cited by Postal (1971).

(253) Only voiced consonants can occur in word final position.

(254) Only voiced consonants can occur in word final position.

The first sentence is incompatible with the statement that either voiceless consonants or vowels can occur in word final position; the second one is not, since it asserts only that the only voiced elements which can occur are voiced consonants.

2. As I argue in Gundel (1974), sentences with 'emphatic stress' share presuppositions (hence also facts concerning appropriateness of response to different questions) with corresponding equative sentences, but differ in presuppositions from corresponding sentences which are structurally identical except that they have a different stress pattern. Deriving emphatically stressed sentences from the structures underlying corresponding equative sentences makes it possible not only to account for these facts in a natural way, but, if my analysis of topic-comment structure is accepted, to relate the presuppositions in question to existential presuppositions in general. It will not be necessary to devise separate means of accounting for the presuppositions associated

with sentences with different stress patterns, equative sentences and definite referring expressions. Rather, these will all be accounted for by the same general principles, which may be stated informally as follows:

- (255) If T is the Topic of S and C is the Comment of S, then S is successfully used in predicating C of an object (or set of objects) X if and only if T involves a successful reference to X.
- (256) An expression, R, involves a successful reference if and only if there exists in some real or imaginary world an object (or set of objects) X such that either R contains an identifying description of X, or the speaker is able to supplement R with an identifying description of X, and such that, in the utterance of R, the speaker intends to pick out or identify X to the hearer.³¹

If a sentence like (222) presupposes a successful reference to some object--the one who doesn't understand topic-comment structure then it of course follows that it also presupposes there is someone who doesn't understand topic-comment structure.

3. If we derive a sentence like (220) (more exactly one reading of this sentence) from the structure which underlies the corresponding equative sentence, this explains the possibility of a sentence like (252). Otherwise, the dislocated noun phrase, which has no copy in the main sentence in surface structure, would have no source.

4. Along side question and answer pairs like

- (257) Was it Bill who hit Loretta?
 (258) No, it was Harry.
 (259) Was the one who hit Loretta Bill?
 (258) No, it was Harry.

where (258) is a proper response to both (257) and (259), and it refers in both cases to the description the one who hit Loretta³² we have pairs like

- (260) Did Bill hit Loretta.
 (258) No, it was Harry.

where it, again can refer only to the one who hit Loretta and the deleted clause in (258), apparently who hit Loretta is not present in the surface structure of (260). (Normally in question-answer pairs an element may be deleted in the answer if it is a repetition of an element in the question, e.g., Are you going with Bill? No, (with Harry.) Deriving (260) from the same structure that underlies (257) and (259) offers a principled basis for explaining the fact that (258) is a proper response to (260), and, in particular, for the source of it, which in this case cannot refer to any element in the surface structure of (258).

5. The syntactic behavior of certain emphatically stressed elements, for example reflexives, is distinct from that of the corresponding non-stressed elements. Thus, as discussed in Postal (1971), a noun phrase may not cross over a coreferential noun phrase within the same clause. Such a restriction is necessary in order to block derivation of (261a) and (261b).

- (261) a. *John is admired by himself.
b. John admires himself.

Unless stressed reflexives have a derivation which is distinct from non-stressed reflexives, in particular one in which the reflexive and the noun phrase with which it is coreferential do not originate in the same clause, sentences like (261c) constitute an unexplained exception to the above generalization.

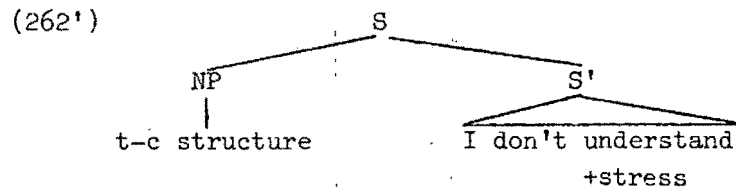
- (261) c. John is admired (only) by himself.

If we derive sentences like (261c) from corresponding equative structures this exception will be explained.

It seems plausible that the source for the reflexive in sentences like (261c) is the emphatic reflexive discussed in section i.e., (261c) is derived from (261d), which in turn is derived from the structure underlying (261e).

- (261) d. John is admired only by John himself.
e. The only one who John is admired by is John himself.

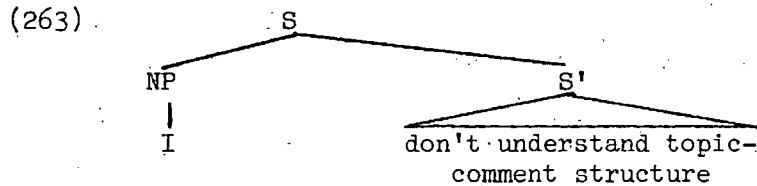
9.2. We have been assuming so far that either feature copying or topic copying must apply to copy part (or all) of NP_i onto the corresponding variable in S'. But what if neither rule applies? Assuming that there is already a rule in the grammar which will delete any surface structure node that does not dominate any lexical material, the result for a structure like (216), for example, would be (262'), the structure immediately underlying (262) (assuming that topic deletion can apply only if either topic or feature copying has applied as well).



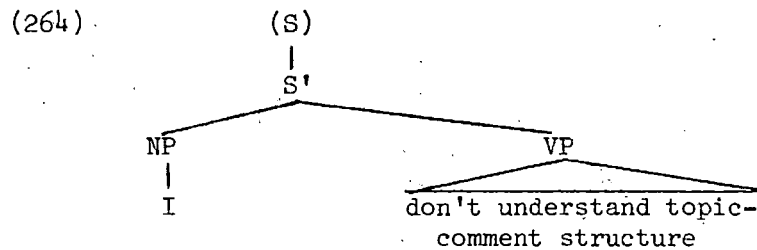
- (262) Topic-comment structure, I don't understand.

In Gundel (1974) I argue that so-called topicalized sentences like (262) are in fact derived from corresponding left dislocated structures by a rule that deletes the variable in S'. If this deletion rule is a general rule deleting nodes which dominate no lexical material, then no special rule is needed in order to derive topicalized sentences

like (262). Notice, however, that the result of such an analysis for a structure like (249) is not a topicalized sentence, but rather precisely the same sentence that would be derived if topic copying and topic deletion had applied, i.e., (220). This means that (220), where the topic is the speaker, could actually have two separate derived structures, represented in (263) and (264).



variable deletion



topic copying
topic deletion

But this situation is not as bad as it may at first appear; in fact, it may explain certain intonational properties of a sentence like (220). Thus, for example, it has often been noted that a sentence like (265) (or (220)) may be uttered with or without an intonational pause between the subject noun phrase and the rest of the sentence. The former option is particularly common if the subject is being explicitly contrasted or compared with someone else in the given context.

(265) John has always been one of my best friends.

If there are two possible derivations for (265), where John, moreover, is topic in both, then this fact is explained. If the structure that immediately underlies (265) is one like (263) then there is a pause between John and the rest of the sentence; if it is a structure like (274) then there it no pause.

10. Some alternative solutions.

In Gundel (1974) I argue that there is no semantic or syntactic motivation for distinguishing a notion 'topic' as first element or first noun phrase in surface structure, or in general for distinguishing a division of the sentence into topic 'what the sentence is about' and comment 'what is said about that thing' which is different from the distinction between what is presupposed in the sentence (sometimes referred to as given or known information) and what is actually predicated

(i.e., asserted, questioned, promised, etc.). I argue further that what is presupposed is in fact derivable from the existential presupposition (the principle of successful reference) associated with what the sentence is about.

It was shown further that if x is the topic of a given sentence, what that sentence is a predication about (in a sense which is consistent with the relationship between topic and presupposition noted above) it is possible for that sentence to answer an explicit or implicit question--what about x ?; and to be preceded by an about phrase containing x .

In Part I of this paper, I argued that sentences of the latter type, i.e., left dislocated sentences, are derived from logical structures in which a noun phrase, NP_1 , is cogenerated with a sentence S' , where NP_1 is designated as the topic, the noun phrase which names or identifies what the sentence is about, and S' is designated as comment, the actual predication that is made about NP_1 . In Part II it was shown that such structures could, without considerable unmotivated complications in the grammar, be generalized to all sentences. Such an analysis would make it possible to account for the notion of what the sentence is about, whether or not it may answer a particular question--what about x ?, and at the same time, given certain principles of reference and predication, would explain the relationship between the topic-comment distinction and an account of the presuppositional differences between sentences.

It is generally recognized that the concepts which I have attempted to account for in the theory presented above are crucial in determining certain paraphrase relationships between sentences, whether or not a given sentence is responsive to a particular question and, in general, whether or not a sentence may be successfully uttered in a given context. These facts, moreover, intertwine with the application of such proposed transformations as pseudo-cleft formation, left dislocation, topicalization, emphatic stress placement, etc. I will now briefly examine some alternative proposals to account for these facts. I will first discuss the possibility of accounting for these facts by means of interpretation rules that operate on the surface structure of sentences, and will then examine two specific proposals that have been put forward which would account for these phenomena at the level of logical (semantic) structure and which are, moreover, distinct from the proposal put forward here.

10.1. An Interpretivist Solution. It might be suggested, following the proposed analysis of focus and presupposition suggested in Chomsky (1970) that the distinction between what the sentence is (or may be) about and what is actually predicated about that thing may be interpreted from surface structure roughly as follows:

- (266) Replace some constituent containing the intonation center (primary stress) by a variable and replace Y in the formula in (267) by the resulting sentence. Place the constituent which was chosen to be replaced by a variable in the position of Z in (267).

- (267) x is Z is predicated (i.e., asserted, questioned, etc.) of x_1 where x_1 is Y.

Y is what is presupposed and the topic of the sentence is the object (concept, etc.) identified by the property Y. This principle would predict that (268) has roughly the three interpretations represented in (269).³³

- (268) Henry signed the treaty.
 (269) a. x is [Henry signed the treaty] is predicated of x_1 , where x_1 is [x (happened?)].
 b. x is [signed the treaty] is predicated of x_1 , where x_1 is [Henry x (something?)].
 c. x is [the treaty] is predicated of x_1 , where x_1 is [Henry signed x_1].

Subject to certain refinements (such as what exactly does the x in (2) and (b) stand for), (269a)-(269c) are in fact analogous to the interpretations assigned by our theory to sentence (220). There are a number of reasons, however, why I believe the proposal outlined above is less adequate than the analysis that I have suggested.

1. It cannot correctly predict what is predicated as opposed to what is presupposed (what the sentence is about) in those cases where the element that represents new information is not a continuous constituent in surface structure. For example, a sentence like (270).

- (270) John said that someone told Mary she couldn't attend the meeting tonight.

(270) can certainly be interpreted as a statement about Mary. It can answer the question--What about Mary?, What happened to Mary?, etc., and it may be preceded by an about phrase containing Mary, i.e.,

- (271) (as for) Mary, John said someone told her she couldn't come to the meeting tonight.

In other words, (270) may be interpreted as follows:

- (272) John said that someone told x that x couldn't attend the meeting tonight is predicated of x_1 , where x_1 is Mary.

Yet the Interpretivist position outlined above would predict that the only possible interpretations of (271) are:

- (273) a. x is [she couldn't come to the meeting tonight] is predicated of x_1 , where x_1 is [someone told Mary x_1].
 b. x is [told Mary she couldn't come to the meeting tonight] is predicated of x_1 , where x_1 is [John said someone (did) x_1].

- (273) c. x is [someone told Mary she couldn't come to the meeting tonight] is predicated of x_1 , where x_1 is [John said x].
 d. x is [said someone told Mary...] is predicated of x_1 , where x_1 is [John (did) x].
 e. x is [John said someone told Mary...] is predicated of x_1 where x_1 is x [something happened??].

Notice that (274), the question corresponding to (272) may appropriately be answered by any of the statements in (275), indicating that what is requested in (274) is information about Mary.

- (274) Did John say that someone told Mary she couldn't come to the meeting tonight?
 (275) No. Harry claims that Bill insisted she wouldn't be able to understand what was going on.
 No. Bill asked her to go to the movies.
 No. Mary never attends meetings.
 No. Mary is crying because she thinks no one understands what she's trying to say.
 No. Bill ordered her to stay home.
 I know nothing about what's going on with Mary.

2. Unless an additional condition is placed on (266) (or any theory that attempts to interpret what is being predicated from surface structure) which states that the constituent including the primary stressed element, i.e., the constituent replaced by a variable, may not itself contain an explicit performative clause, the interpretive rules will incorrectly predict that in (276) the speaker is asserting that he is giving an order.

- (276) I am hereby ordering all of you to turn your thermostats down to 68°.

That (276) cannot be an assertion about what the speaker is doing is witnessed by the fact that the expressions in (278) are possible responses to (277), for example, but not to (276).

- (277) I am reading the book now.
 (278) No you're not.
 That's a lie.
 Do you expect me to believe that?

3. As I argued in Gundel (1974) the topic and hence the presupposed elements of sentences like

- (279) There will be a tornado.
 It is windy.
 Someone just walked in.
 There's nothing to do.

may not be a constituent in surface structure, or even any element that may be interpreted from some constituent in surface structure.

4. Replacing a primary stressed constituent by a variable makes false predictions about the presuppositions of cleft and pseudo-cleft sentences. While the presuppositions of (280)-(282) are the same, this principle would predict that they are different, worse yet it would predict that (281) and (282) presuppose a near tautology.

- (280) The television woke me up.
 prsp: something woke me up.
 (281) What woke me up was the television.
 prsp: *What woke me up was something
 (282) It was the television that woke me up.
 prsp: *It was something that woke me up.

Since the predicted presuppositions for (281) and (282) themselves presuppose that something woke the speaker up they either fail to assert or assert a truth (hence the unacceptability of these sentences).

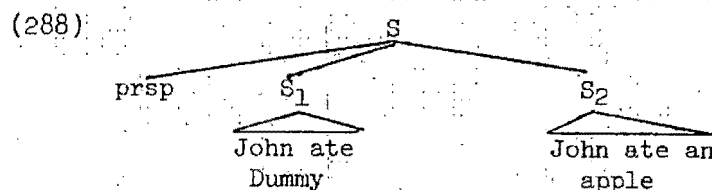
5. Interpreting the presuppositions of a sentence like (280), for example, from surface structure, precludes any uniform and coherent treatment of presuppositions since it does not relate the presupposition associated with (280) with that associated with the clause what woke me up in (281) or with the relative clause in (283).

- (283) What woke me up is difficult for me to talk about.

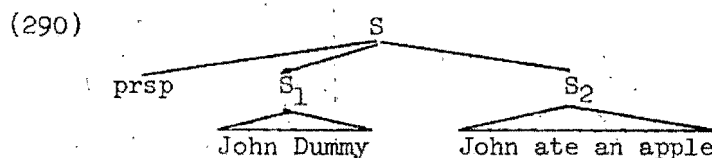
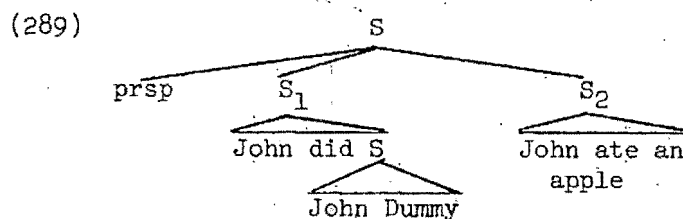
A completely different means would therefore have to be invented to account for what appears to be essentially the same phenomenon.³⁴

10.2. Muraki's Theory. In his dissertation Muraki (1970) proposes that the underlying (semantic) representations of sentences contain as their highest predicate the verb presuppose which relates two sentences, S_1 and S_2 , the first of these representing the presupposition and the second the assertion of the given sentence. The rule of left dislocation is made sensitive to the material in S_1 , i.e., it is constrained to apply only to an element that 'represents the presupposition'. The intonational pattern of sentences is determined by a rule that operates on two structures S_1 and S_2 which are identical except for the fact that there is a dummy in S_1 which corresponds to some element in S_2 and assigns primary stress to this element. Optional rules convert S_1 into the relative clause of cleft and pseudo-cleft sentences and a later rule deletes S_1 after all transformations which are sensitive to the information contained in it have applied. Thus, for example, (284)-(287) would all be derived from the structure in (288).

- (284) John ate an apple.
 (285) (As for) John, he ate an apple.
 (286) What John ate was an apple.
 (287) It was an apple that John ate.



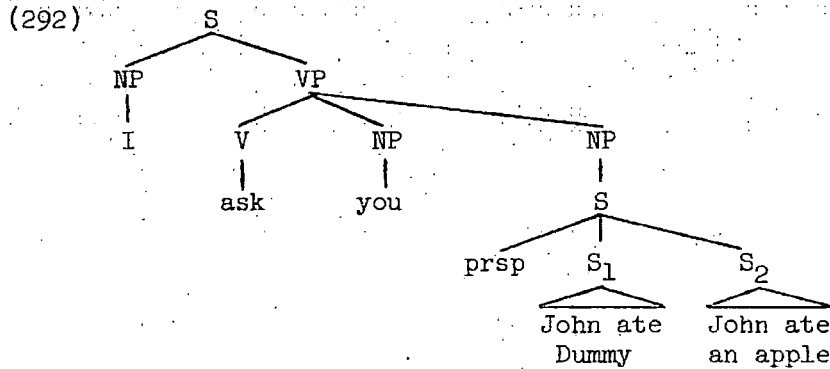
While (286) and (287) can have as their source only the structure in (288), (284) and (285) can also be derived from any of the following.



A clear advantage of this theory is that it offers a principled basis for explaining the relationship between presupposition and sentence intonation. It does so, moreover, with a single rule of stress specification, thus eliminating the need for two separate rules--nuclear stress rule (for 'normal' stress) and emphatic stress rule (for 'emphatic' stress) which is assumed in the standard theory.

However, I find a number of serious objections to Muraki's proposal. First of all, there are in general, two reasonable alternatives to account for presuppositions associated with a given sentence: (1) simply list the presuppositions of a sentence in its semantic representation and (2) invent a principle which would systematically interpret the presuppositions of a sentence from some level (or levels) in its derivation. I believe that the second alternative would clearly be preferable for reasons of simplicity and generality and should therefore be fully explored before any version of the first alternative is accepted. Muraki's proposal not only makes it necessary to list presuppositions separately for each sentence, but it does so in a highly artificial manner. His theory makes the claim that the underlying (semantic) representation of a sentence is an assertion about what the sentence presupposes. Note, in particular, the problems that such a solution would pose for a performative analysis such as the one proposed in Ross (1970). Thus, we certainly would not want to claim that the semantic representation of (291) is (292).

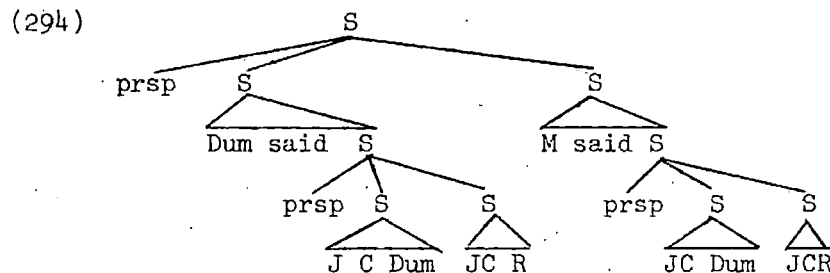
(291) Was it an apple that John ate?



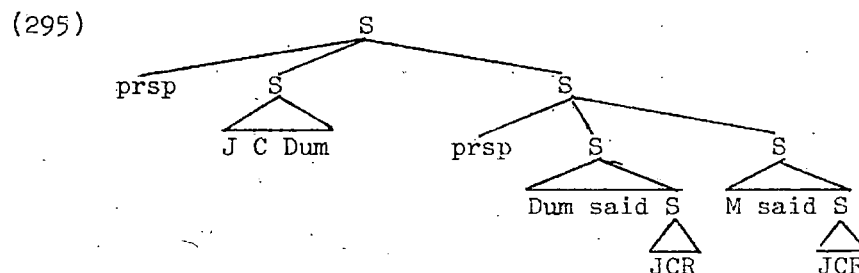
(291) clearly does not request information about the presupposition of S_2 . As Muraki himself points out, a similar problem arises in connection with a sentence like (293).

(293) It was Mary who said that what John was carrying was a revolver.

The P-marker which immediately precedes stress specification for (293) should be (294).

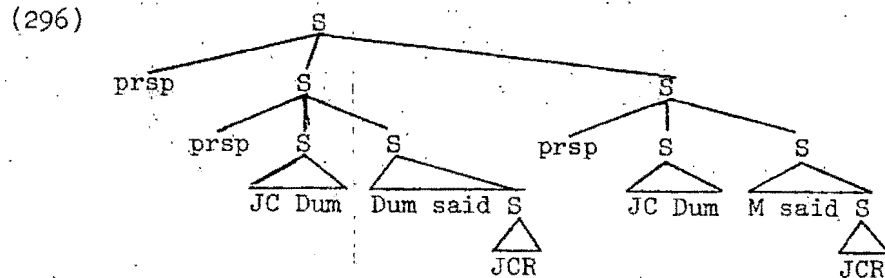


But (294) does not correctly represent the semantic structure of (293). In particular the predicate prsp should not be within the scope of the predicate said. In order to cope with this problem, it is necessary for Muraki to propose an additional rule of presupposition embedding which would operate on the presuppositions in (295), the correct semantic structure for (293), and embed it into the constituent sentences, resulting in the structure in (294).



However, another problem arises with respect to a sentence like (293).

The structure in (294) makes the claim that the speaker commits himself to the presupposition that John was carrying something. But this is not necessarily the case. In order to account for this fact, it is necessary for Muraki to propose an alternative source for (293), namely the structure in (296).



Another objection to Muraki's proposal concerns his treatment of the notions topic and presupposition. Muraki refers to the noun phrase with the postposition wa in a Japanese sentence like (297) as the theme.

(297) John-wa Mary-o nagutta
 John Mary hit
 "As for John, he hit Mary"

He further suggests that the relationship between a theme x and the rest of the sentence y be read as follows: y is stated about x which is the theme of the present discourse. Thus, what Muraki calls theme corresponds essentially to what I have been calling topic. However, he also distinguishes a notion of topic which he refers to as "any sentence initial NP." It is not clear, however, what motivation exists for distinguishing the latter category.

The rule of thematization in Japanese, which corresponds roughly to the English process of left dislocation, then chooses some unstressed noun phrase which "represents the presupposition" and Chomsky-adjoints it to the left of the S. The objections to such an analysis are as follows:

1. Since thematization is optional, if we accept Muraki's suggestion for how the relationship between theme and the rest of the sentence is to be interpreted, this would lead to the conclusion that some sentences are about nothing. If the statement that a sentence is about something is to have any semantic content at all then it seems to me that what the sentence is about must be considered as an essential element of a successful speech act, namely that object (or objects) about which a predication is made and without which successful predication is in fact not possible at all. Note, for example, the absurdity of a statement that only thematized sentences are sentences about something if we consider that the English equivalents of thematization, namely left dislocation and topicalization are not as common in English as thematization is in Japanese. This would force us to conclude that Japanese sentences are more often statements (questions, etc.) about things than are English sentences.

2. The restriction that the theme must "represent the presupposition", which is itself somewhat unclear, accounts for the fact that two sentences may have the same presupposition but different themes, as in (298), and (299), but they may not have a theme that is not somehow included in the presupposition, as illustrated by the unacceptability of (300).

- (298) As for Mary, John gave her the book.
 (299) As for the book, John gave it to Mary.
 (300) *As for John, he gave the book to Mary.

Notice, however, that (300) is unacceptable not because the noun phrase John is not part of the presupposition associated with the structure underlying a particular cleft or pseudo-cleft construction. It is unacceptable because John is part of the comment, i.e., what is actually predicated in (298)-(300) (notice it has primary stress); thus, as our theory would also predict it cannot possibly be the topic (or theme). There are, however, perfectly acceptable sentences, like (301), where the presupposition necessary to form the relative clause of the pseudo-cleft construction in Muraki's analysis does not include the theme.

- (301) As for John, what Mary said was something that didn't concern him.

This fact strongly suggests that a different analysis is necessary to account for the facts in (298)-(300).

3. Muraki's analysis of presupposition, like Chomsky's, does not allow a uniform and coherent treatment of this notion, i.e., one that would relate the presuppositions associated with different readings of a sentence with general presuppositions associated with definite referring expressions. Notice, in particular, that a presupposition itself must be a well formed proposition; yet it is not at all clear what well-formed proposition is represented by

- (302) John Dummy

which is the presupposition that Muraki assumes for the reading of a sentence that answers the question--What about John? Even if it could be argued that (302) is to be interpreted as

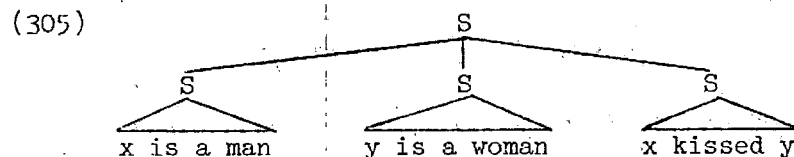
- (303) There is something which is true of John.

the analysis still does not capture the fact that the presupposition associated with a sentence that is an appropriate response to a question like--What about John? is actually existential in nature, i.e., it would still be necessary to incorporate into the grammar a principle which predicts that the proposition expressed by (302), i.e., (303), itself presupposes (304).

- (304) there exists in some real or imaginary world an individual uniquely identified as John (the referring expression John uniquely identifies someone or something).

In fact, since (303) presupposes (304) and is at the same time entailed by it, (303) cannot possibly be false, i.e., either (304) is true, in which case (303) is true as well, or (304) is false in which case (303) is neither true nor false; it fails to make any statement at all. The reverse does not hold, however, since (304) does not presuppose (303).

10.3. Dahl's Theory. Assuming McCawley's (1968) hypothesis that a statement is to be represented by a proposition plus a set of NP descriptions (atomic sentences), roughly as in (305), Dahl (1969) proposes that topic-comment structure is a reflection of the inter-relationship between the atomic sentences.



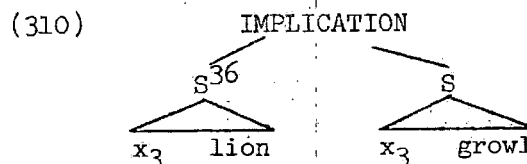
The topic, Dahl suggests, is one or more NP descriptions and the 'proposition will usually be found in the comment', where the relations between the two corresponds to that of a material implication in propositional logic. The left hand side of the implication is the topic and the right hand side is the comment.

Thus, the underlying representations of (306)-(309) would be roughly (306')-(309') respectively.

- (306) Lions growl.
 (307) Henry won't be coming.
 (308) Mary, I don't like (her).
 (309) It was the man who won.

- (306') $(x_3 \text{ is a lion}) \supset (x_3 \text{ growls})$
 (307') $(x_3 \text{ is Henry}) \supset \text{Not. } (x_3 \text{ is coming})$
 (308') $(x_3 \text{ is Mary}) \supset ((x_1 \text{ is the speaker}) \supset (x_1 \text{ doesn't like } x_3))$
 (309') $(x_3 \text{ won}) \supset ((x_3 \text{ is a man}) \supset (x_3 \text{ won}))$

where the accent mark over the implication sign signifies that the NP description to the left of the implication refers to a definite noun phrase.³⁵ The formulas in (306')-(309') may be represented as trees like (310).



If x_3 in the rightmost S in (310) is replaced by the corresponding pronominal form, the result would be (311) or (312).

- (311) A lion, he growls.
 (312) Lions, they growl.

If not, the result is (306) or (313).

- (313) A lion growls.

There are a number of problems with this analysis. First of all, Dahl notes that (309') and not (314) must be the semantic representation of (309).

- (314) x_3 won \supset x_3 is a man

This is so because (314) does not make it possible to distinguish between (309) and (315).

- (315) It was a man who won.

(309'), however, cannot possibly be the semantic representation for (309). The representation in (309'), $p \supset (q \supset p)$, is a tautology. What it says is that if some individual won, then if he is a man he won. This statement, which is necessarily true, is clearly not what is expressed by (309).

Secondly, these representations do not adequately account for the fact that the successful identification of the NP description (the topic) is a necessary condition for the successful predication of the proposition to the right of the implication sign (the comment). In a review of Dahl's work, Wayles Browne (1972) has pointed out that if implication is being used in the accustomed logical sense (which Dahl seems to be claiming it is) then, for example, (307') holds true in any instance in which x_3 refers to something or someone other than Henry, since a false antecedent makes a material implication true.

Even if these objections to Dahl's proposals did not exist, there is, I believe, a good reason to prefer the analysis that I have proposed in this chapter. Aside from the fact that generic statements like (306) may be paraphrased by a hypothetical statement like (316), Dahl offers no evidence for why his theory should be preferred over some reasonable alternative. All other things being equal, the more highly valued theory should, I believe, be the one that posits underlying structures which are more 'natural' and relatively less remote from observable semantic and syntactic facts. Few speakers of English (or any other language) would agree that when they utter a sentence like (308) what they are really saying is that if a particular individual is Mary they don't like her, or that (316) really means that if a particular set of individuals is the Mets they will win the Series.

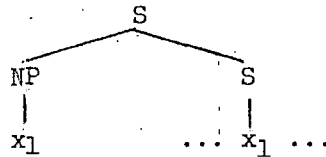
- (316) The Mets will probably win the Series.

Any theory which deviates to this extent from native speakers' semantic

intuitions requires strong justification. Yet, aside from (1) the fact that some sentences, for example, general statements, have 'natural' hypothetical paraphrases and (2) it is possible to represent the topic-comment distinction in logical structure by assuming an implication relationship between atomic sentences, Dahl offers no evidence for why his theory should be preferred over some reasonable alternative. That the theory which I have proposed is more 'natural' and less remote from observable semantic and syntactic facts is demonstrated, I believe, by the following facts.

1. There are constructions in English (and in other languages as well), namely dislocated (and topicalized) sentences, in which the division of the sentence into topic and comment is structurally explicit. Such constructions have in fact the structure which I have proposed underlies and accounts for the topic-comment distinction in all sentences. While most (possibly all) languages contain conditional sentences, the purpose of such constructions is not to make clear the division into topic and comment, but to state that a conditional relationship exists between the propositions expressed by two sentences.

2. There are many languages in which the most common sentence form is one which has the structure



i.e. a structure roughly corresponding to a left-dislocated sentence in English. There is, as far as I know, no language in which the typical sentence form is a conditional construction.

3. In general, any sentence in English has a natural paraphrase in which the noun phrase which is topic is adjoined to the left of the highest sentence, optionally preceded by an about element. As was noted above, however, only a restricted set of sentences have natural hypothetical paraphrases.

4. In a very interesting paper (which to some extent led me to investigate this topic) Gruber (1969) notes that at a certain stage in the development of a child's grammar of English, the typical sentence structure is one in which a noun phrase is adjoined to the left (or sometimes to the right) of a sentence, i.e., roughly the type of structure that I have proposed underlies and represents the topic-comment distinction in all sentences of an adult grammar.

Footnotes

*This paper is a slightly revised version of Chapter 3 of my dissertation, *The Role of Topic and Comment in Linguistic Theory*. University of Texas, Austin, 1974.

1. No theoretical significance should be attached to my use of these terms or to the term pronominal remnant which I will sometimes

use to refer to the pronoun in the matrix sentence that corresponds to the dislocated noun phrase. I do not mean to imply thereby that the dislocated noun phrase has actually been moved or dislocated out of its position in the sentence; in fact, I will argue that just the opposite is the case.

2. Two important empirical assumptions are implicit in this rather rough formulation: (1) there is no need to distinguish in descriptions of natural languages between unit sets and individuals (2) we refer to and talk about members of a group collectively in the same way that we talk about and refer to individual members of a group and both carry presuppositions of existence. There is thus no reason to assume, as is often done in quantificational logic, that the only subject-predicate (topic-comment) statements are statements in the singular while, all other statements are existential.

3. This structure, like all others represented in this thesis, is grossly oversimplified. I have omitted all details except those that are immediately relevant to the point under discussion. In particular here the pronoun me most likely also originates outside of S', its position in S' being occupied by another variable. I do not believe, however, that all noun phrases originate outside the proposition (cf. McCawley 1970), in particular, not specific indefinites, which are introduced into S' by an existential quantifier, or any NP which does not carry an existential presupposition.

4. Similar observations have been made by Hankamer (1972:198).

5. I will henceforth use the terms 'about' element, 'about' phrase to refer in general to phrases containing an element which means roughly 'about', e.g. concerning, as for, etc.

6. I am assuming here that the most abstract representation of all sentences contains a higher performative clause. For arguments in favor of this hypothesis see Ross (19) and Sadock (19). I will omit the performative clause from tree diagrams, except in those cases where it is immediately relevant to the point at issue.

7. Similar claims have been made by other authors. Cf., for example, the discussion in Chafe (19

8. This is sometimes used as an argument against the hypothesis which I argue for in Gundel (1974: Chapter 5)), that topicalized sentences like (i) are derived from dislocated sentences by a rule that deletes the pronominal remnant.

(i) That book, I haven't read yet.

Indefinite noun phrases may be topicalized, as illustrated by the grammaticality of (ii) and (iii).

(ii) A dog I don't have.

(iii) A Norwegian I don't think you could persuade her to marry.

9. Certain non-restrictive clauses are possible after a non-specific indefinite, e.g.,

(i) Alice would like to marry a Norwegian, who is bound to be dependable.

10. Unless, of course, singular number is necessarily implied, as in (31), for example.

11. Unless these are already plural. e.g.

(i) I forget to bring two dresses; the blue one and the red one.

12. This is generally the case when the matrix sentence does not contain a noun phrase that is coreferential with the dislocated NP.

13. Actually, I believe that if something like this solution turns out to be correct, the order of the two conjuncts is significant. In these sentences, for example, the order should be the reverse of what it is in (31') and (31''). At least two reasons suggest this: (1) the position of the primary stress and (2) the rather counter-intuitive implication of (31') that in uttering (31) the speaker is asserting the existence of honest politicians. Thus, a more correct representation of (31), it seems to me, would be

(i) Ex (Gwendolyn would like to marry x and (that) x is an honest politician).

14. I leave open for the present the exact representation of these structures.

15. For an interesting discussion of the notion of specificity and various logical and linguistic problems in attempting to account for it, see Dean (1971).

16. For further discussion of this claim, see Gundel (1974).

17. Notice that the noun phrases modified by only and even always have primary stress. We would correctly predict therefore that they can never be dislocated (because they can never be topics), even when the quantifier is left behind.

18. The existence of sentences like those in (88) in Japanese, where a sentence with an initial NP-wa has no corresponding sentence out of which this noun phrase may have been moved, are used by Kuno (1972) as evidence that this noun phrase already is an adjunct to the main sentence in the underlying structure and is not moved out by a chopping or copying rule.

19. The Complex Noun Phrase Constraint is stated as follows:

No element contained in a sentence dominated by a noun phrase with a lexical head noun may be moved out of that noun phrase by a transformation.

20. Sentential Subject Constraint:

No element dominated by an S may be moved out of that S if that node S is dominated by an NP which itself is immediately dominated by S.

21. Left Branch Condition:

No NP which is the leftmost constituent of a larger NP can be reordered out of this NP by a transformational rule.

22. What is meant by this statement is roughly that the element may be moved over an indefinitely large amount of material, i.e., it may originate indefinitely far down in the tree. Thus, in the statement of the rule, variables are used because it is impossible to list all the elements over which the noun phrase may be moved.

23. See, for example, Sanders and Tai (1969), Drachman (1970).
24. This sentence may be acceptable as an example of relativization with a pronominal remnant in the embedded sentence, where it means that the friend bit the dog; but this is not the meaning intended here.
25. In Russian, where word order is considered to be 'free', it is in fact considerably restricted in precisely those clauses where left dislocation is unacceptable in English. This point is discussed further in Gundel (1974).
26. This is equally true for dislocated noun phrases in general.
27. This seems to me somewhat better than him himself, them themselves, etc., possibly because the phonetic form of you and your (self) is different.
28. This is not true, of course, if the sentence is itself a question.
29. More exactly it answers some implicit or explicit question-- 'What about you and topic-comment structure?', i.e., what is the relation between you and topic-comment structure, where the topic is a conjoined NP and one of the members of the conjunction need not be overtly expressed, though it is still implicit in the question. For the purpose of the present discussion, however, I will ignore this complication.
30. This convention introduced in Ross (1967) deletes a (non-root) S-node if the latter does not branch, i.e., does not dominate more than one node.
31. This is essentially the condition for successful reference proposed in Searle (1969:95).
32. This claim would be disputed by many linguists; in particular those who adhere to the widely held hypothesis that the it in a cleft sentence like It was Harry who hit Bill is semantically empty, i.e., is not an anaphoric pronoun. In Gundel (1974) I put forward a different proposal, namely that the it in the cleft sentence is a pronominalization of the relative clause in the corresponding pseudo-cleft sentence. In any case, the source of the deleted clause who hit Loretta still remains to be explained in a theory which does not derive the sentences under discussion from corresponding equative structures.
33. I am grateful to Stanley Peters for pointing out to me that Chomsky's proposed analysis of focus and presupposition could be interpreted in this way.
34. For some more arguments against Chomsky's proposal to interpret focus and presupposition from surface structure, see Lakoff and Postal (1972).
35. Browne (1972) notes the difficulty connected with Dahl's attempt to account for definite reference in this manner. He writes "Is this a quality that can just be postulated? Are we to interpret (23) as 'X₃ is a lion and if it is definite it grows?' or perhaps 'if X₃ is definite and a lion it growls.'"
36. Dahl actually writes AF (= atomic formula) here instead of S.

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