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ENGLISH APPOSITIVE STRUCTURES AND RIGHT MOVEMENT

by

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A dissertation submitted to the Graduate Faculty in Linguistics in partial fulfillment of the requirements for the degree of Doctor of Philosophy, The City University of New York.

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Introduction

This thesis is proposed within the framework of a theory of grammar essentially like that set forth in Chomsky (1965). The purpose of this thesis is to demonstrate the existence of a very general process in English which I call Right Movement (RM). RM moves a constituent of certain kinds of NP's to S-final position. Not all NP's permit RM. Some that do not permit it have been associated with others that do permit it. Together they have been called "appositive NP's".

I will demonstrate that this class is not a homogeneous class, that in fact true appositive NP's have quite different properties from spurious ones. Only true appositive NP's permit RM. This distinction permits phenomena previously handled by Right Dislocation to be accounted for by RM and such rules as Right Dislocation can be disallowed in linguistic theory.

In chapter one appositive NP's are defined and distinguished from non-appositive NP's, in particular from structures like we men and my friend John. I propose that appositive NP's derive from appositive relative clauses. Structures like we men are analyzed as instances of $(\text{Det+NP})_{\text{NP}}$. The pronoun in these structures is claimed to be a demonstrative like this, these. Structures like my friend John have the underlying structure:

$$((\text{my friend})_{Det} (\text{John})_{NP})_{NP}$$

Such structures are generated by the phrase structure rule NP ⟶ Det + NP. This proposal is shown to resolve problems raised by other analyses of appositives.

In chapter two several postposing rules are examined. It is shown that they can be reduced to a single rule of RM. RM applies only in certain NP structures called "launching pads" which consist of an NP node which branches into a head NP node called a "launcher" and a non-head node called a "missile". The following claims are made:

(a) RM is the only rule which requires an S-final destination of a moved constituent;

(b) No other rules affect missiles;

(c) No rules can move or delete launchers.

Chapter One

1.0 Introduction

In this chapter I define a class of English appositive structures. In 1.1 I present the members of this class and list their properties. In 1.2 I consider similar constructions which are not part of this class. In 1.3 I give a brief summary of apposition in traditional grammars. In 1.4 I survey apposition as it has been handled in transformational grammar, focussing on problems raised by these analyses. In 1.5 I propose an anañysis which relates appositive NP's to appositive relative clauses thereby accounting for the properties of appositive NP's listed in 1.1 as well as some others. I then show how this analysis avoids the problems raised by the analyses discussed in 1.4.

1.1 English Appositive Structures and Their Properties

1.1.1 The term "apposition" is used to cover a large and disparate set of phenomena. In this study, I restrict my attention to the class of noun phrases and clauses in apposition to a preceding noun phrase.[1] Consider (1)-(3):

(1)a. John Smith, a famous architect, died yesterday.

b. John Smith, the famous architect, died yesterday.[2]

c. John Smith, famous architect, died yesterday.

(2) That famous architect, a young man, died yesterday.

(3) He, John Smith, died yesterday.

The underlined NP's in (1)-(3) are said to be "in apposition"

to their preceding NP's. I will call an NP that is in apposition to a preceding NP an "appositive NP".

Consider now instances of clauses in apposition to NP's:

(4) John Smith, who is a famous architect, died yesterday.

(5) My cousin, who is the lead actor in "Mary Hartman, Mary Hartman", is coming for dinner.

(6) Bella Lipset, who is a spokeswoman for West Side weightwatchers, will appear shortly in a new musical called "My Fat Lady".

(7) Ronald Reagan, who you know from California, is here now.

(8) This latest bit of news, that they captured the assassin, brought relief to many people.

(9) This idea, that there are black holes in the universe, hasn't been around all that long.

I will refer to the underlined relative and noun complement clauses in (4)-(9) as "appositive clauses". I refer to the NP to which appositive NP's and clauses are in apposition as the "antecedent". The antecedent and its appositive are together referred to as an "appositive structure".

1.1.2 The appositive structures in (1)-(9) have the following properties.

1.1.2.1 The appositive NP's and clauses in these appositive structures are preceded and followed by pause.[3] They are phonetically distinguishable from other sequences of NP's or NP and clause like the underlined sequences in (10):

(10)a. John made Mary a star of screen and stage.

b. They gave her the baby.

c. My friend Bill is here.

d. Jack the Ripper is still on the loose.

e. The girl that you met is Bill's sister.

f. The news that he's quitting leaked quickly.

g. They told his boss that he's quitting.

1.1.2.2 These appositive structures have the following semantic properties (meant to be taken as impressionistic rather than as definitive):

(a) the appositive NP or clause is additional, non-essential, incidental information, often having the character of an afterthought;

(b) the appositive NP or clause is non-restrictive;

(c) the appositive NP and its antecedent characterize the same entity;

(d) the appositive NP either is not an argument of the verb or its relation to the verb is the same as that of its antecedent.

1.1.2.3 These appositive structures behave like single NP's. Thus the appositive structure in (7) can occur in the focus position of the cleft sentence in (11) but the underlined sequence in (10)a cannot so occur, as is shown in (12):

(11) It's Ronald Reagan, who you know from California, that is here now.

(12)*It's Mary a star of screen and stage that John made.

Similarly, passive will derive (13) from (8) but not (14) from (10):

(13) Relief was brought to many people by this latest bit of news, that they captured the assassin.

(14) *She/Her the baby was given by them.

1.1.2.4 In anticipation of the discussion to be presented later in chapter one, the following properties of appositive structures are contrasted with those of similar structures that are claimed to be appositive.

There is a class of adverbials such as:

strangely	to be precise
frankly	for all intents and purposes
incidentally	to tell the truth
clearly	to use a cliche
luckily	to say the least
unfortunately	to my surprise
namely	by name

These are often called sentential adverbs or adverbials.[4] These adverbials can modify appositive NP's or clauses:

(15) My friend, namely John Smith, died yesterday.

(16) John Smith, a famous architect to say the least, died yesterday.

(17) Allen, who, to my dismay, plays the drums, lives upstairs.

(18) Ronald Reagan, who, luckily, you met, is here now.

(19) This latest bit of news, namely, that they captured the assassin, brought relief to many people.

(20) This idea, namely, that there are black holes in the universe, hasn't been around all that long.

Consider now structures which are identical to appositive structures except for the pause. Compare (15)-(20) with (21)-(25) respectively. (21)-(22) contain instances of

what has been called "restrictive" or"close" apposition.[5] (23)-(24) contain restrictive relative clauses. (25)-(26) contain restrictive noun complement clauses. None of these can be modified by sentential adverbials:

(21)*My friend namely John Smith died yesterday.

(22)*John Smith the famous architect to say the least died yesterday.

(23)*The boy that, to my dismay, plays the drums, lives upstairs.

(24)*The Ronald Reagan that, luckily, you met is not the one I know.

(25)*The news namely that they captured the assassin brought relief to many people.

(26)*The idea namely that there are black holes in the universe hasn't been around all that long.

(Exclude the readings where the sentential adverbial modifies the whole sentence.)

1.1.2.5 It is a well known fact that the possessive '<u>s</u> can be suffixed to an NP whether simple or complex. Witness (27)-(30):

(27)a. Bill's book

b. The king of England's book

c. The house in the wood's roof

(28)a. My friend Bill's book

b. My friend the butcher's book

c. John Smith the architect's daughter

d. The number two's correct spelling

(29)a. The man who I know's sister

b. The John Smith that is an architects's daughter

(30)a. The news that he was caught's implication

b. The argument that she's a minor's basic fault

(28)a-d are the so-called "restrictive appositive" cases. (29)a,b contain instances of restrictive relative clauses. (30)a,b contain instances of restrictive noun complement clauses.

Appositive structures cannot be followed by the possessive 's. Compare (28)-(30) with the appositive structures of (31)-(33):

(31)a.*My friend, Bill's, book

b.*My friend, the butcher's, book

c.*John Smith, the butcher's, book

d.*The number, two's, correct spelling

(32)a.*That man, who I know's, sister

b.*John Smith, who is an architect's, daughter

(33)a.*The latest bit of news, that he was caught's, implication

b.*The argument, that she's a minor's, basic fault

1.1.2.6 Appositive relative clauses but not restrictive relative clauses can embed questions.[6] Compare (34) and (35):

(34) Here's the book, which (didn't I buy for you?
(I bought for you, didn't I?

(35)*Here's the book that (didn't I buy for you?
(I bought for you didn't I?

1.1.2.7 Appositive relative clauses, but not restrictive relative clauses, will take some embedded performatives. Compare (36) and (37):

(36) This book, which I hereby promise to return, is hard reading.

(37)*The book that I hereby promise to return is hard reading.

It is not clear to me that appositive noun complement clauses can take embedded performatives. Restrictive noun complement clauses certainly cannot. Compare (38) and (39):

(38)?The following oath, that I hereby promise to repay this loan, should be recorded.

(39)*The oath that I hereby promise to repay this loan was never recorded.

1.1.2.8 (38)-(39) illustrate another property of noun complement clauses, namely, the appositive can be preceded by an antecedent modified by the adjective <u>following</u>. The restrictive cannot.[7] Compare (40) and (41):[8]

(40) The following fact, that they caught the assassin, was recently corroborated.

(41)*The following fact that they caught the assassin was recently corroborated.

1.1.3 In this section I consider three traditional tests for apposition. I show that while they maybe useful as a rule of thumb they are inadequate as defining criteria.

The first tradtional test is that of omissability.[9] Two NP's are said to be in apposition if the omission of each of the NP's separately results in an acceptable sentence. This test will in fact define a much larger class than

that which is defined in this thesis. Thus, in particular, the underlined NP's in (42)a-(44)a fall into this class since both are omissable, as in (42)b,c-(44)b,c respectively:

(42)a. John promised Mary a baby.

b. John promised Mary.

c. John promised a baby.

(43)a. John made Mary a good scholar.

b. John made Mary.

c. John made a good scholar.

(44)a. John fought Mary tooth and nail.

b. John fought Mary.

c. John fought tooth and nail.

On the other hand, the test fails in (45)-(46) since one of the NP's is not omissable:

(45)a. Bernie Bloom, owner of the corner drug store, was shot dead last night.

b. Bernie Bloom was shot dead last night.

c.*Owner of the corner drug store was shot dead last night.

(46)a. The referee, namely me, makes the final decision.

b. The referee makes the final decision.

c.*Me makes the final decision.

The second test is that of reversibility.[10] If two NP's in an appositive structure are reversible then they are in apposition. While this test excludes (42)-(44)a

it will also exclude (45)a-(46)a, since reversing the two NP's in these examples will have the same effect as the (c) examples in (45)-(46), as the reader can determine for himself.[11]

The third test is that of replaceability.[12] It is a version of the omissability test. Two NP's are in apposition if the second can replace the first without change or loss of meaning. Strictly speaking it is impossible to drop an NP from a sentence without loss or change of meaning. What is usually intended by the replaceability test, I believe, is that there is no loss or change of meaning other than that which has been lost or changed by the omission of the first NP. But (47) and (48) show that this interpretation of the test also fails since the first NP in each case is necessary for the interpretation of the whole sentence:

(47) The man who killed Alice, Bill Smith, now denies it.

(48) The richest man in twon, Allen Squirme, is the poorest worker.

1.2 Non-Appositive Structures

In this section I discuss some constructions which are often included in discussions of apposition and I justify their exclusion from the class of appositive structures defined in 1.1.

1.2.1 The construction we men in (49) is usually ana-

lyzed as some kind of appositional construction both in traditional grammar[13] and in transformational grammar.[14]

(49) We men are fed up with this.

Delorme and Dougherty (1972) present such an anlysis within the latter framework. A detailed discussion of their analysis is presented below (1.4.3). For the present I consider some facts which justify the exclusion of we men from the class of appositive structures.

First, note that this construction lacks the characteristic pause of appositive structures.[15] Second, in the appositive structures discussed in 1.1 the antecedent is understood in some sense as the head of the construction.[16] In contrast to this, in the we men construction the noun men seems to be the head. (This intuition is in fact formalized in Postal's anañysis (1970).) Third, the we men construction does not admit sentential adverbials,as in (50), while it permits the attachment of possessive 's (in some dialects), as in (51). Both of these features distinguish it from appositive structures:

(50)*We clearly men are on your side.

(51) They held up us firmen's paychecks for two weeks.

1.2.2 Constructions like my friend John and Smith the barber, as noted above, are often referred to as instances of "restrictive apposition". Phonetically, these constructions are distinct from appositive structures in that they lack pause. They also differ from appositive structures in that

they do not admit sentential adverbials (as in (21) above) and they take the possessive 's (as in (28) above). There are several other ways in which this construction differs from corresponding appositive structures. These will be fully discussed in 1.5.3.3.

1.2.3 Dvandva constructions like those in (52) are not appositive structures:

(52)a. an artist welder

b. the philosopher king

c. my neighbor friend

Like the constructions discussed in 1.2.1 and 1.2.2, they do not admit sentential adverbials as in (53) and they take a possessive 's as in (54):

(53)a.*an artist frankly welder

b.*the philosopher to be precise king

c.*my neighbor friend strangely[17]

(54)a. an artist welder's dream

b. the philosopher king's realm

c. my neighbor friend's idea

Furthermore, these constructions pluralize and take determiners, as do simple nouns. Thus (55)a-(56)a are acceptable dvandva constructions, but not (55)b-(56)b:

(55)a. the artist welders

b.*the artists welders

(56)a. this philosopher king

b.*this philosopher this king

1.2.4 Jespersen[18] considers the parentheticals in (57)-(58) to be instances of apposition:

(57) This, I think, is ridiculous.

(58) Bill, you'll be happy to know, is leaving.

Phonetic considerations make it reasonable to assume that parentheticals are "in apposition" in some sense. However, they lack the semantic properties of appositive structures discussed in 1.1.2.2 and have none of the properties discussed in 1.1.2.3-8.

Parentheticals and a preceding NP do not function as a single constituent under rules which affect NP's. Thus the house in (59)a can topicalize without the following parenthetical, as in (59)b:

(59)a. They insured the house, thank god, for $150,000.

b. The house, they insured, thank god, for $150,000.

Furthermore, parentheticals can have a wide variety of internal structure, as (57)-(59) show, while the material they are "in apposition" to may or not be a constituent. Appositive structures consist of an NP antecedent and either an appositive NP or an appositive clause.

1.2.5 Jespersen considers vocatives to be appositive if the subject of the sentence is you.[19] Thus Mary, in (60),

is an appositive:

(60) Come here, Mary.

I exclude vocatives from the class of appositive structures. Phonetically they are distinct from appositives. It is not clear that they are surrounded by pause. And they are intoned differently.[20] Consider (61):

(61) You, Mary, are very pretty.

This sentence in the written language is ambiguous between a vocative and an appositive reading of Mary. On the vocative reading the intonation on Mary is neutral, passively extending what precedes and flowing smoothly into what follows. On this reading the whole sentence has one intonation contour. On the appositive reading the intonation on Mary copies that on you. On this reading Mary has an independent intonation contour. The pause and intonation of (61) on the appositive reading is identical to that of (62):

(62) She, Mary, is very pretty.

(where she and Mary are coreferential)

Semantically, of course, vocatives are only coreferential to a preceding NP when the subject is you. Thus vocatives are not consistent with semantic property (c) in 1.1.2.2.

Like parentheticals, vocatives do not function as a single constituent under rules which affect NP's. The material to which they are "in apposition" has a wide variety of structure and may not be a constituent at all. And in imperative sentences the vocative can occur even when the you is deleted while the appositive cannot. These properties are

illustrated in (63)-(65) in order:

(63)a. I was insured for the house, Mary.

b. The house, I was insured for,Mary.

(64)a. I am not, Mary, going to put up with this.

b. I will count, Mary, up to three.

(65)a. You, Mary, come here.

b. You, namely Mary, come here.

c. Mary, come here.

d.*Namely Mary, come here.

1.3 Apposition in Traditional Grammar

In this section and the next I briefly examine the term apposition as it has been used by some traditional and transformational grammarians. My purpose is to provide a background and contrast to the notion of apposition presented in the previous sections and to point out some weaknesses which will be avoided in the analysis to be proposed in 1.5.

In traditional grammar the term apposition is generally used for both restrictive and non-restrictive constructions, while in transformational grammar the term has generally been reserved for non-restrictive constructions like the appositive relative clause. Because it is a partly semantic notion and a partly syntactic one and because the relationship of these two notions is not clear, the term apposition has been used to cover a wide range of phenomena.

1.3.1 Jespersen (1965) provides the following characterization:

> "an apposed word is not so closely connected with the head word as an adjunct and therefore has afterposition." (v.7:56)

The following examples of apposition are taken from Modern English Grammar (MEG) and Analytic Syntax (AS): (The item in apposition is underlined.)

(66)a. Edward the first (MEG v.7:56)

b. The City of Rome (")

c. A house not his own (MEG v.2:386-8)

d. The members present (")

e. Men forty were not likely to work. (")

f. A thing to human feeling the most trying (")

g. We each light a cigarette.(MEG v.7:596)

h. They have each their advantages. (")

i. The boys got a shillin g each. (AS ch.4)

j. the word love (")

k. I like my tea very hot. (")

l. you Germans (")

m. it's all over now (AS ch.12)

n. ill as he was, he received us (")

o. his last night alive (")

p. he was quite happy as a bachelor (")

q. come here, Mary (")

r. This, I think, is madness. (")

(67)a. Nicolas Forsyte, cleverest man in London (MEG v.7:517)

b. She had her son with her, Robert by name. (AS ch.12)

c. Edward VIII, the present king of England (" ch.4)

d. I discovered Mont Blanc, that giant among mountains. (")

e. I have come today, which you will excuse. (")

Only the examples in (67) have the properties discussed in 1.1.2.[21]

There are several inconsistencies in Jespersens's use of the term apposition. Note first that although "afterposition" is part of the characterization of appositives, in (66)n we have a case of an appositive before the element to which it is in apposition.[22]

Second, it is usually implied (in both traditional and transformational analyses) that an item in apposition is adjacent to the item to which it is in apposition. But this is not a requirement for Jespersen as we see from examples (66)f,h,i,m,o,p, and (67)b. Note that elsewhere Jespersen considers a case similar to (67)b an instance of "extraposition", which is for him generally distinct from apposition:

> "Where I speak of extraposition, most scholars would speak of apposition. There is,however, a distinction between the phenomenon here dealt with and such cases of apposition as "Thomas Brown, the eldest son of a wealthy merchant, was born in 1820," where the appositional words are placed in the middle of the sentence. Of course, there are cases in which apposition and and extraposition are hardly distinguishable, e.g. "I discovered Mont Blanc, that giant among mountains." I should speak of apposition in Coleridge's "A sadder and a wiser man He rose the morrow morn." A special

> case of extraposition is found when the additional words explain what was meant by a provisionally used pronoun, e.g. "He is a clever boy, that Tom Smith." (cf. "He is a clever boy, is Tom.") or"It was a pity that she should hear it." (MEG v.3:352) [23]

Finally, note that Jespersen's characterization of apposition correctly speaks of a connection between the apposed word and its head word. But in what sense are the subjects of the matrix clauses in (66)n,r to be considered the "head" word to which the apposed words are connected?

1.3.2 Curme (1931) uses the term apposition more broadly than does Jespersen. Elliptical sentences in which the copula has been deleted as in (68) (from Curme:28) are called the "appositional type of sentence":

(68)a. Our sister dead?

b. Everything in good condition.

Postcopular constituents of all sorts (predicate nominal, adjective and complement and certain adverbials) are called "predicate appositives" (p.30). Also noun complements and relative clauses[24] are "appositional" (p.89) categories. Curme is apparently motivated by the syntactic aspect of apposition in regarding the above as instances of apposition.

Curme also discusses what he calls "apposition propoer". This includes some constructions like those I refer to as appositive structures but it also includes "restrictive appositives" and the we men construction: (Some examples in (69) are from Curme:88-92)

(69)a. Smith, the banker

b. Smith the bookseller ('s)

c. We poor fellows

d. I have spoken to you as my brother

e. We're not like ordinary people, us Cardinals

f. You are humane and considerate, things few people can be charged with

g. the verb go

h. John Smith

i. Aelfred cyning (= OE King Alfred)

j. As a first step, I secured my vast property, so that the income would be certain.

As can be seen from (69)i-j, for Curme, appositives may precede their antecedents.And they need not be adjacent, as in (69)e. It is not clear from Curme's discussion whether indefinite NP's in second position like that in (70) would be considered "apposition proper":

(70) Smith, a banker

1.3.3 Poutsma (1926-9) provides the following definition of apposition:

> "By an apposition we may understand an attributive substantive, or a substantial word or word group intended to indicate the same person, animal or thing as its head word and, consequently, show its relation to it by no inflection of the latter, nor by any preposition. Secondary features of an apposition are: 1) its being approximately equal in grammatical (not necessarily semantic) status to its head word, 2) its standing in the same grammatical relationship to the predicate as its head word." (pp.268-9)

Of the traditional grammarians Poutsma's conception of apposition is the narrowest. It includes three kinds of

structures: (examples from Poutsma:270-1;483)

(71)a. The Welsh wizard, Mr. Lloyd George

b. The lovliest maiden in Plymouth, Priscilla

(72)a. The word banana

b. The planet Mars

(73)a. a little wine

b. a few shillings

The significant semantic criteria for Poutsma in defining appositive NP's is identity.[25] His claim is that in (71)-(73) we have instances of identity between the first and the second NP's of the apposition. This is transparent in (71). But in (72) it requires extending the notion of identity to class-member relationships and in (73) to the relationship between quantity nouns and the nouns they quantify.

It is interesting to consider what is not apposition for Poutsma. Thus the underlined constituents in (74)-(77) are not appositives: (examples from Poutsma:279)

(74) The young king himself, a trained theologian and proud of his theological knowledge, entered the lists against Luther.

(75) Expediency, the rule of the practic al man, is everything.

(76) Edward VII, king of England

(77) Priscilla, the lovliest maiden of Plymouth

Note especially (77), which is the reverse of (71)b. Poutsma

suggests that the underlined NP's in (74)-(77) are "better apprehended as...underdeveloped clause(s)" (p.279) since they are predicative rather than attributive.

1.3.4 Quirk, Greenbaum, Leech, and Svartik (1972) say that

> "for units to be appositives, i.e. in apposition, they must normally be identical in reference or else the reference of one must be included in the reference of the other." (p.620)

Note that both constituents in an appositive construction are referred to as "appositives". Quirk et al. provide three criteria for what they call "full apposition":

> (a) either of the appositives can be omitted without affecting the acceptability of the sentence;
>
> (b) in the resulting sentence each appositive fulfills the same syntactic function;
>
> (c) the original sentence and either of the resultant sentences don't differ in extralinguistic references. (p.621)

Appositives not meeting all three criteria are in "partial apposition".

Appositives are in either strict or weak apposition. The former if both appositives are of the same syntactic class, the latter if not. Appositives may also be in restrictive or non-restrictive apposition, as in (78) and (79) respectively. The former are in the same "information unit", the latter are in different "information units":

(78)a. Mr. Campbell the lawyer

b. My friend Bob

(79)a. Mr. Campbell, the lawyer

b. My friend, Bob

Differences between constructions of this sort are discussed above in 1.2.2.

Quirk et al.note that in constructions like (79) the second NP is"subordinate" to the first in its role in"the distribution of information".[26] This subordinate role is reflected in the fact that the second NP is marked as parenthetic by intonation or punctuation.

For Quirk et al. the important features of appositives is their identity of reference. However, they also discuss appositive adverbs, adjectives, and prepositional phrases, as well as appositive relative clauses. These kinds of constituents cannot be referential in the same sense that an NP refers. Thus they must have some other sense in mind. In section 1.5 it will be shown that coreference cannot be a necessary criterion for appositive structures.

1.3.5 Hockett(1955), contrasting apposition and and attribution, defines apposition as the relation between the immediate constituents of a constitute both of which may be analyzed as the head of the construction. Another way of saying this is that an appositive relation holds between the immediate constituents of a construction if that

construction has the same distribution as either of its constituents. Hockett gives the following examples of apposition:

(80)a. Mr. Jones

b. President Truman

c. John Jones

d. The Mississippi river

Such appositive structures as (81) are not discussed by Hockett:

(81) Allen Stewart, my old friend,

but his definition of apposition would certainly include it.

Appositive structures such as (1)c and (4)-(9) above are excluded under Hockett's definition because the distribution of the appositive structures is greater than the distribution of the appositive NP or clause. On the other hand the constructions in (80) cannot be appositive structures because they don't have the properties of appositive structures discussed above.

1.4 Apposition in Transformational Grammar

1.4.1 The earliest discussions of apposition in transformational grammar were restricted to appositive (non-restrictive) relative clauses. Smith(1969) is one of the first to propose an analysis for relative clauses in which restrictive and appositive relative clauses have different underlying structures. The main points of her analysis follow.

Relative clauses derive from conjoined sentences. Every NP consists of a determiner node and a substantive node. The determiner node consists of one node which specifies a determiner class and another optional node which is called a relative marker. Relative markers are either appositive (A) or restrictive (R).

Certain apparent restrictions on the occurrance of appositive relative clauses are built into the phrase structure rule which expands the detrminer node. Thus the A marker is expanded either with the proper name determiner class node or the specified determiner class node but not with the unspecified determiner class node. This accounts for the occurrance of appositive relative clauses with proper names and common nouns preceded by a, the, or Ø and the non-occurrance (according to Smith) of appositive relative clauses with nouns preceded by any, all. The latter is illustrated in (82)(=Smith (5)):

(82)*Any book, which is about linguistics, is interesting.

The R marker is expanded with the specified and unspecified determiner class nodes but not with the proper

name determiner class node. This accounts for the occurrance of restrictive relative clauses on common nouns but not on proper names, as (83) shows:

(83)a. The) man who is from the South hates cold weather.
Any)

b.(= Smith (2)) *John who is from the South hates cold weather.

A transformational rule embeds one of the conjoined S's into the other when an NP in one S and an NP in the other S have identical substantive nodes and identical relative markers. The S is embedded under the relative marker.

Certain restrictions have to be placed on the relativization rule. Smith claims that indefinite predicate nominals, as in (84), NP's after the NEG constituent, as in (85), and NP's in questions (except for non-questioned subject NP's in wh- questions), as in (86) cannot take appositive relative clauses:

(84)*He is an anthropologist, who studies Indian tribes. (=Smith (48))

(85)a.*He didn't eat the mango, which was overripe. (=Smith (50))

b.*We never go to the opera house, which is in Boston. (=Smith (58))

c.*No antique dealer, who had any sense, wanted to buy the table. (=Smith (56))

(86)a.*Did John, who is a journalist, write a novel? (=Smith (60))

b.*Who ate the mango, which Eleanor bought yesterday? (=Smith (61))

c.*Did he paint a mural, which hangs in the Hotel Prado? (=Smith (59))

d.*Who wrote a novel, which was published by McGraw-Hill? (=Smith (62))

Finally, a deletion rule derives (b) from (a) in (87)(=Smith (22)):

(87)a. John, who was a good salesman, charmed them immediately.

b. John, a good salesman, charmed them immediately.

There are several weaknesses with Smith's analysis that I will briefly mention. First, the expansion of the determiner node into a relative marker and one of three determiner class nodes makes two claims. The first is that the restrictiveness or non-restrictiveness of a clause is a property of one of its NP's. This is counterintuitive. The second is that a given definite NP will always be triply ambiguous depending upon whether its underlying structure had an R marker the determiner, an A marker or nothing. But in what way can <u>the boy</u> in (88) be triply ambiguous such that it could be related to the three options provided by Smith's phrase structure rules:

(88) The boy is here.

Secondly, it is hard to see what linguistically significant insight is captured by requiring <u>relativization</u> to operate under identity of both <u>substantive</u> nodes and identity of relative markers. It seems both superfluous and

counterintuitive to claim that both S's are appositive or restrictive in the relativization process.

Finally, appositive relative clauses have a wider distribution than that claimed by Smith. I concur with Smith in that (85)c-(86)c are unacceptable but I provide a different account for this be low (in 1.4.3.4).

1.4.2 Thompson (1969), like Smith, proposes a conjoined S source for relative clauses. However, her relativization rule Chomsky-adjoins one S to the antecedent NP, in contrast to the determiner embedding proposed by Smith. The burden of distinguishing between restrictive and appositive relative clauses is left to the semantics. Thompson claims that the meaning differences between these two types of relative clauses is not the kind that should be represented in the syntax because these have to do with presuppositions and speaker intentions. Furthermore, relativization can embed either S in the other. The choice depends again on presupposition and speaker intentions, which,it is claimed, should not be represented in the syntax.

Ross (1967) briefly discusses appositive relative clauses. He proposes a conjoined S source for them and a rule of appositive clause formation which embeds these S's in an NP.[27] This analysis, in contrast with Thompson's, distinguishes appositive from restrictive relative clauses syntactically, since the latter are base expansions of an NP.

1.4.3 Delorme & Dougherty (1972) (D&D) take issue with Postal's analysis (1969) of pronouns as articles. Their claim is that structures like (89)a are appositive constructions which are identical in structure to the appositive constructions in (89)b:

(89)a. we men

b. we, the men

Since this position conflicts with the one taken in 1.1-1.2 I will discuss D&D's paper at length. The exposition will begin with a presentation of the major claims of D&D's analysis. This is followed by a discussion of the inadequacies of their analysis. An alternative to D&D's analysis is presented in 1.5.

1.4.3.1 According to D&D, Postal's analysis of pronouns makes the following claims about the structures in (89):

(a) (89)a and (89)b are neither structurally nor derivationally related;

(b) we in (89)a is an article, hence (89)a has the structure $(\text{Det} + \text{N})_{\text{NP}}$;

(c) (89)a is not always understood as an appositive.

In contrast to these claims, D&D make the following claims:

(a) (89)a and (89)b and (90)a-b are "in a natural class".[28]

(90)a. my friend Bill

b. my friend, Bill

(b) (89)-(90)a-b have the deep structure $(\text{NP NP})_{\text{NP}}$;

(c) (89)-(90)a-b are always understood as appositives.

In addition to the above claims, note also the following points in D&D's analysis:

(d) the deep structure $(NP\ NP)_{NP}$ accounts automatically for the facts of (91)-(93), for which Postal's analysis requires ad hoc restrictions: (judgements are D&D's)

(91) *(I / (you) / (he)) man, (we / (you / they)) men

(92) *we youngest ones
we, the youngest ones

(93) *we very ones
*we same ones

D&D claim the ungrammaticality of the starred examples follows from the ungrammaticality of the second NP in these constructions. Thus,for example, (93) is bad because (94) is bad:

(94) *very ones
*same ones

(e) D&D (as well as Postal) reject the derivation of appositive NP's from appositive relative clauses (contrary to Smith's proposal), because appositive relative clauses are ungrammatical in questions and negations but constructions like (89) are not. Compare (84)-(86) above with (95):

(95)a. It's us men.

b. He didn't eat them bananas.

c. We never saw you guys.

d. Did you girls ever write a novel?

e. Who told you people?

1.4.3.2 In this section I discuss deficiencies of D&D's analysis following the order of exposition in 1.4.3.1.

The following facts show that (89)a+b have very different properties. Thus if "natural class" has the meaning I assume it to have in footnote (28) then these facts show that D&D's analysis is deficient in that it provides no account nor any explanation of these differences. If, on the other hand, "natural class" is taken to mean "a set of constructions having the same (or almost the same) syntactic properties" then these facts show that (89)a-b are not "in a natural class".

1.4.3.2.1 It was already noted above (1.2.1) that (89)a+b differ phonetically. (89)b has the characteristic pause appositive structures while (89)a lacks it.

1.4.3.2.2 (89)b is part of a paradigm the whole of which is (96):

(96) (I / you / he), the man — (we / you / they), the men

(89)a only occurs in the plural as was seen in (91).

1.4.3.2.3 (89)b has the properties of other appositive structures. Thus, in particular, it accepts sentential adverbials, as in (97), and it doe not take a possessive 's, as in (98):

(97) We, to be precise, the men, quit.

(98)*We, the men's, paychecks are being held back.

But (89)a does not share these properties. Witness (99)-(100):

(99)* We to be precise men quit.

(100) We) men's paychecks are being held back.
Us)

The distinction between (89)a+b is even more striking when we consider (101):

(101)we, men

(101) is superficially identical to (89)a except for the pause but it behaves in every way like (89)b: i.e., it has the characterisitic pause of appositive structures, it occurs in the paradigm (96), and it takes sentential adverbials but blocks the possessive 's. D&D predict the existence of a unique structure (102):

(102) $(\ (we)_{NP}\ (men)_{NP}\ )_{NP}$

The pause difference between (89)a and (101) is apparently[29] not to be accounted for in the syntax. Thus it is a completely unexplained fact that sometimes the structure (102) has one set of properties and sometimes (102) has a different set of properties.

1.4.3.2.4 (89)a, but not (89)b or (101), is an appropriate answer to the question (103):

(103) Which men are on duty tonight?

1.4.3.2.5 Compare the following:

(104)a. Us Tarryton smokers would rather fight than switch.

b.*Us, Tarryton smokers, would rather fight than switch.

c.*Us, the Tarryton smokers, would rather fight than switch.

Structures like (89)a have a variant form with the objective form of the pronoun in subject position. However, (104)b-c show that structures like (89)b do not.

1.4.3.2.6 Structures like (89)b can often occur in reversed order, as in (105), but structures like (89)a never can, as in (106):

(105)a. The men,(we) (us) in particular, have agreed.

b. The new boys,(namely)you, will begin working tomorrow.

c. Men with good records, (we) (us) in particular, have been given raises.

(106)a.* Men we have agreed.

b.* New boys you will begin working tomorrow.

c.* Men with good records(we) (us) have been given raises.

1.4.3.2.7 Structures like (89)a can occur in apposition to identical pronouns, as in (107), but structures like (89)b in apposition to identical pronouns result in redundant sentences, as in (108):

(107)a. We, we men in particular, have the most to lose by this.

b. You, you seniors in particular, don't know how lucky you are.

(108)a. We, we, the men in particular, have the most to lose by this.

b. You, you, the seniors in particular, don't know how lucky you are.

1.4.3.2.8 (89)b can take comparatives and superlatives freely, as in (109):

(109)a. We, the (older) men, are here.
(oldest)

b. You, the (fatter) ones, don't need ice cream.
(fattest)

c. Is that how you talk about us, holiest members of the church?

But in some dialects (e.g. that of D&D) (89)a apparently cannot take superlatives. Witness (110):

(110)a. We(older) men are here.
(*oldest)

b. You (fatter) ones don't the ice cream.
(*fattest)

c.*Is that how you talk about us holiest members of the church?

1.4.3.2.9 Finally, note that structures like (89)a differ with respect to their ability to be modified by relative clauses. Structures like (89)a can take relative clauses on either the whole structure or just the second NP, but not on the first NP. This is true for both restrictive and appositive relative clauses, as in (111) and (112) respectively:

(111)a. We women that take ourselves seriously usually succeed.

b. We women that take themselves seriously ususally succeed. [30]

c.*We that take ourselves seriously women usually succeed.

(112)a. We women, who take ourselves seriously, usually succeed.

b. We women, who take themselves seriously, usually succeed.[30]

c.*We, who take ourselves seriously, women usually succeed. (where we...women is a structure like (89)a)

On the other hand, structures like (89)b cannot take relative clauses on the whole structure but can take them on either NP. This is true for both restrictive and appositive relative clauses, as in (113) and (114) respectively:

(113)a.*We, women that take ourselves seriously, usually succeed.

b. We,women that take themselves seriously, usually succeed.

c. We that take ourselves seriously, women, usually succeed.

(114)a. We,women, who take ourselves seriously, usually succeed.[31]

b. We, women, who take themselves seriously, usually succeed.

c. We, who take ourselves seriously, women, usually succeed.

1.4.3.3 The facts of 1.4.3.2 show that (89)a+b are not "in a natual class". Structures like (89)a are not appositive structures at all. Structures like (89)b are appositive structures as the criteria of 1.1.2 indicate. If the differences between (89)a+b are to be represented at the level of deep structure then it follows that D&D's proposed structure $(\text{NP NP})_{\text{NP}}$ cannot be the correct deep structure for both (89)a and (89)b. In this section I will discuss several inadequacies with D&D's proposed deep structure and some problems this raises. I will show that the proposed deep structure is inadequate for both (89)a and (89)b.

Some of the facts of the preceding section (1.4.3.2) show that D&D's proposed deep structure is inadequate for either (89)a or (89)b. Thus, for example, this structure cannot be the correct deep structure of (89)a since it cannot account for the non-occurrance of (106) and (111). On the other hand, D&D's structure cannot be correct for (89)b either since it cannot account for the fact that sentential adverbials can modify such structures and the fact that all NP's can take a possessive 's except structures like (89)b.

D&D claim that their proposed deep structure will account for the paradigm in (92) above since they claim that NP's modified by a superlative adjective require the

the definite article. Thus youngest ones is out for them. But this is apparently a fact of their dialect, as the grammaticality of (115) shows:

(115)a. Youngest brothers are always happiest.

b. Please leave throught the rear door, oldest members first.

c. In the Catholic church, the Pope is holiest mortal of all.

Thus the facts of D&D's dialect actually support the structural distinction of (89)a+b.

D&D also claim that (93) above follows from their proposed deep structure. But while these facts conform to their analysis they are not strong support at all since,on the one hand same ones can occur in isolation, as in (116), while, on the other hand, the unacceptability of we very ones probably follows from the unacceptability of the very ones when it is not modified by a restrictive relative clause:

(116) Please sort these pieces by putting opposite ones here and same ones there.

Following are some more arguments against D&D's proposed deep structure.

1.4.3.3.1 D&D claim that the deep structure $(NP\ NP)_{NP}$ accounts automatically for the paradigm in (91). This is because singular count nouns require an article while plural count nouns do not. However, D&D's proposal cannot be extended to the following perfectly acceptable sentences:

(117)a. I, president of the club, hereby quit.

b. You dare speak that way to me, chairman of the board!

c. I can't imagine that she, darling of Hollywood, could want anything.

d. He, winner of the Nobel prize, is treated like a criminal in Russia.

e. This is James Carter, new owner of the Playboy Club.

Note the NP sequences in (117) are like appositive structures in that they have pause around the second NP in the sequence. The NP sequences in (117) are in fact appositive structures since they have the properties of appositive structures discussed above.

Note now that the article-less appositive NP's of (117) also occur in predicate nominal position, as in (118):

(118)a. He is president of the club.

b. She is chairman of the board.

c. Gloria is now darling of Hollywood.

d. He is winner of the Nobel prize.

e. James Carter is new owner of the Playboy Club.

The appositive NP's of (117) can occur only as appositives or as predicate nominals. To the extent that they occur in other sentence positions, they are titles which have the properties of proper names[32] and are thus to be distinguished from their use as common nouns. Witness (119):

(119)a.*I saw president of the club.

b.*Give this to chairman of the board.

c.*Did you meet darling of Hollywood?

d.*Winner of the Nobel prize is coming here.

e.*New owner of the Playboy Club is on TV.

Thus D&D's proposed deep structure for appositive NP's fails to generate a class of appositive NP's on the one hand, and,on the other, leaves unexpressed the facts that these appositive NP's must be surrounded by pause (while the plural, on their analysis, has the optional pause variants (89)a+b)and that these appositive NP's are just those that occur as predicate nominals.

1.4.3.3.2 Consider the following paradigm:

(120)a. I, John Smith, quit.

b.*John Smith, I, quit.

c. John Smith, me, quit.

d.*Me, John Smith, quit.

To the extent that this paradigm can be accounted for by some ad hoc conditions on the form of the personal pronoun in certain configurations, it will be totally unrelated to the conditions which determine the paradigm for coordinate NP's in subject position. But, worse, the conditions for appositive structures will be the opposite of those for coordinate NP's. Consider (121):

(121)a. John and I will go.

b.*I and John will go.

c. Me and John will go.

d. John and me will go.

1.4.3.3.3 Related to the problem of 1.4.3.3.2 is the inability of D&D's deep structure to account for the ungrammaticality of the objective form us in subject position in (104)a especially since it is clearly out in the appositive structures of (104)b-c. Furthermore, the grammaticality of us Tarryton smokers in (104)a is in sharp contrast to the ungrammaticality of the coordinate NP's in (122)a and the grammaticality of that in (122)b:

(122)a.*Us and Tarryton smokers would rather fight than switch.

b. Tarryton smokers and us would rather fight than switch.

1.4.3.3.4 D&D's deep structure leaves unexplained the following pattern of agreement:

(123)a. We, the men, have given the most of (ourselves). (*themselves)

b. The men, we in particular, have given the most of (*ourselves). (themselves)

(124)a. I, Ben Schapiro, (am), turning into a (*is) nervous wreck.

b. Ben Schapiro, me, (*am) turning into a (is) nervous wreck.

Furthermore, this pattern is in striking contrast to the behavior of coordinate NP's in the same position:

(125)a. We and the men have given the most of ('ourselves). (*themselves)

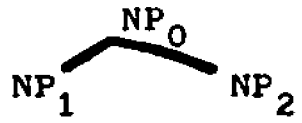
b. The men and us have given the most of (ourselves). (*themselves)

(126)a. Ben Schapiro and (I) are turning into (me) nervous wrecks.

b. Me and Ben Schapiro are turning into nervous wrecks.

1.4.3.3.5 As was noted above (89)a but not (89)b is an appropriate answer to the question in (103). This means that under D&D's analysis that NP_1 in structure (127) can can be replaced by the interrogative which in the same way that adjectives can:

(127)



But D&D cannot account for the strange fact that all NP's can be questioned by who or which, as in (128), but NP_1 can only be questioned by which, as in (103), not by who, as in (129):

(128)a. The men and women are on duty tonight.

b. Who are on duty tonight?

c. Which are on duty tonight?

(129)*Who men are on duty tonight?

Furthermore, D&D also cannot explain why NP_2 can never be questioned, as in (130):

(130)a.*We which are on duty tonight?

b.*We who are on duty tonight? [33]

1.4.3.3.6 If we assume that some NP's can expand into an NP+PP sequence (as Chomsky (1970) claims) then D&D's proposed deep structure will generate (131):

(131) Two robberies, one in New York the other in Rochester, were reported yesterday.

Note however that the NP+PP sequences in (131) have the interesting property that they easily accept sentential adverbials as in (132):

(132) Two robberies, one by the way in New York the other apparently in Rochester,were reported yesterday.

But this prpoerty is not a general property of such NP+PP sequences. When these are in subject position or object position they do not accept sentential adverbials:

(133)a.*The robbery by the way in New York was audacious.

b.*I was awitness to the the robbery apparently in Rochester.

D&D have no way of predicting this property.

1.4.3.4 I close this discussion with a remark about D&D's argument against the derivation of appositive NP's from appositive relative clauses. The argument is based on Smith's observation that appositive relative clauses cannot occur is questioned or negated contexts.

D&D argue that since appositive NP's can occur in these environments they cannot be derived from appositive relative clauses. As I Noted in section 1.4.1, my dialect permits the occurrance of appositive relative clauses in these environments. Thus (85)a-b and (86)a-b are perfectly acceotable (as is (84), which D&D do not discuss).

I believe Smith's claim is not a general fact about appositive relative clauses. However, I agree with Smith in the unacceptability of (85)c and (86)c, which I repeat here:

(85)c.*No antique dealer, who had any sense, wanted to buy the table.

(86)c.*Did he paint a mural, which hangs in the Hotel Prado?

But the unacceptability of these sentences is not the result of her restriction on appositive relative clauses. Compare (85)c-(86)c to (134)a-b respectively:

(134)a. No antique dealers, who are incidentally usually quite wealthy, will buy these tables.

b. Did he paint that mural, which, to tell the truth, is horrendous?

The sentences of (134) are perfectly acceptable even though they are quite similar to (85)c-(86)c. (86)c is unacceptable because the some/any suppletion rule has applied from the negative constituent in the matrix clause into an appositive relative clause. But (135) shows that this, in general, is disallowed:

(135)a. Never will Bill, who has (*any / some) sense, do something like that.

b. I didn't realize that Bill, who had (*any / some) difficulties, could see you.

Compare (135) with (136), in which the relative clauses are restrictive:

(136)a. Never will a person who has any sense do something like that.

b. I didn't realize that anyone that had any difficulties could see you.

(86)c is bad because the appositive relative clause presupposes the existence of something which the matrix clause does not. In the matrix clause no presupposition of existence is associated with the occurrance of a mural, but in the appositive relative clause the mural is presupposed to exist.[34] (134)b is acceptable because both the matrix and

the constituent clauses share the same presupposition with regard to the mural .

A similar remark can be made about Smith's sentence in (137):

(137)*He didn't write a novel, which was published by McGraw-Hill.

(137) is bad because in the matrix clause (on one reading) there is no presupposition of existence associated with the occurrance of a novel while the constituent clause presupposes its existence. Compare (137) with (138):

(138) He didn't write that novel on the table, which was published by McGraw-Hill.

(138) is acceptable because the presuppositions of the clauses no longer contradict. It is presupposed that the novel exists in both clauses.

Note,furthermore, that the presuppositions of the matrix and appositive relative clauses can contradict, and thereby result in unacceptable sentences, in non-negative, non-questioned contexts, as in (139):

(139)a.*He needed to write a novel, which was published by McGraw-Hill.

b.*He refused to write a novel, which was published by McGaw-Hill.

c.*He will write a novel, which was published by McGaw-Hill.

The unacceptability of (139)c cannot be attributed to some general constraint on the cooccurrance of tenses in matrix and constituent clauses, rather, it is because presuppositions about the existence of the novel are contradictory in

the two clauses. Proof of this comes from (140) in which the same sequence of tenses occurs, but the presuppositions about the existence of the novel are the same in both clauses.

(140) He will bring a novel, which,incidentally, was published by McGraw-Hill.

The point of this brief discussion is to indicate that, in fact, appositive relative clauses are a possible source for structures like (89)b, as I will argue in section 1.5.

1.4.3.5 In this section I examine D&D's arguments that (89)a is always understood as an appositive. I show that their arguments do not show what they intend them to show.

Postal claims that (89)a is not understood as an appositive on the basis of the fact that it is not paraphrased by an appositive relative clause. Thus (141)a-(142)a are not paraphrased by (141)b-(142)b respectively:

(141)a.(=Postal (40)a) You troops will embark but the other troops will remain.

b.(=Postal (41)a) You, who are troops, will embark but the other troops will remain.

(142)a.(=Postal (40)b) Let us three men leave first.

b.(=Postal (41)b)*Let us, who are three men, leave first.[35]

D&D claim that Postal's argument says nothing about the "appositive meaning" (D&D:16) of (89)a. It only shows that (89)a cannot derive from appositive relative clauses and this issue is separate from the question of whether (89)a has an

"appositive meaning". D&D never specify what this"appositive meaning" is. They simply assert that it is there in structures like (89)a.

D&D claim that (89)a has an"appositive meaning" because (143)a-c are all contradictory:

(143)a.(=D&D (60)) We, who are men, think that we, who are women, should go.

b.(=D&D (61)) We, the men, think that we, the women, should go.

c.(=D&D (62)) We men think that we women should go.

But even if D&D's judgements about (143) are accepted[36] all (143) shows is that (143)a-c are contradictory. (143) says no more or less about the "appositive meaning" of structures like (89)a than does Postal's argument.

Now, it is not the contradictoriness of all these examples that makes them unacceptable,as D&D claim; rather, it has something to do with a restriction on the use of the first person pronouns <u>we</u> and <u>I</u>. It seems that every occurrance of these in a sentence (and probably larger stretches of discourse too) must have the same referenc e. Two facts point to this conclusion. First, it is well known that English <u>we</u> can be either exclusive or inclusive. But in a given sentence (and probably a given discourse) only one interpretation is possible. Consider (144):

(144)a.We think we'd like to get married.

b.We think we'd like to go.

The two we's in (144) can be either both exclusive or both inclusive. Thus,for example, (144)a could not possibly have a reading in which the first we refers to a prospective bride and groom and their parents while the second refers to just the bride and groom. (144)b could not have a reading where the first we is exclusive and the second in clusive.

Second, the other pronouns are not restricted in this way. Thus it is quite normal for third person pronouns to switch reference and second person pronouns may also but not first person. In fact,this seems to be a general requirement on identical pronouns in a clause. Consider (145)-(146):

(145)a. Him and Him are gonna get it.

b. They can't stand them.

c. It's killing it.

(146)a. You and you better leave here quick.

b. I think you're smarter than you.

c. You stand here next to you.

But such a requirement predicts[37] that multiple occurrances of identical first person pronouns in a clause will be unacceptable since these require identity of reference. This is borne out in (147):

(147)a.*I and I are gonna get it.

b.*I can't stand myself. (where I ≠ myself)

c.*We stand here next to us.

d.*We and we better leave now.

D&D's examples of contradictoriness were examples with we. This is misleading since the same sentences with you are perfectly acceptable. Compare (143) and (ii)a-(iii)a of footnote (36) with (148) and (149) respectively:

(148)a. You, who are men, think that you, who are women, should go.

b. You, the men, think that you, the women, should go.

c. You men think that you women should go.

(149)a. You troops think that you generals should go.

b. You giants think that you midgets should go.

Thus I have shown that D&D's examples in (143) do not indicate anything about the putative "appositive menaing" of (89)a;and that furthermore the problem with (143)a-c is not that they are contradictory, rather that they violate a restriction on the use of the pronoun we.

D&D claim that,on the one hand, Postal's analysis cannot account for the difference in acceptability of the (a) and (b) sentences of (150)-(151) and, on the other hand, it cannot relate the unacceptability of the (b) sentences in (150)-(151)(=D&D (67)-(70)) to the unacceptability of (152)(=D&D (71)-(72)):

(150)a. The honest policemen think that the dishonest policemen should go.

b. We honest policemen think that we dishonest policement should go.

(151)a. The policemen who are honest think that the policemen who are dishonest should go.

b. We policemen who are honest think that we policemen who are dishonest should go.

(152)a. We, the honest policemen, think that we, the dishonest policemen should go.

b. We, the policemen who are honest, think that we, the policemen who are dishonest, should go.

But from the above discussion it is clear that the unacceptability of (150)b-(151)b follows from general properties of first person pronouns and these facts also account for the unacceptability of (152).

1.4.4 Of all the definitions of apposition so far discussed that of Burton-Roberts (1975) (BR) is the most restrictive. BR's analysis, like that of D&D's, is limited to appositive NP's. In what follows I give a brief presentation of BR's claims (1.4.4.1) followed by a discussion of inadequacies of his analysis (1.4.4.2).

1.4.4.1 Appositives (by which BR means both the appositive NP and its antecedent) have the following properties:

(a) they are coreferential;

(b) "they must have the same function with respect to the same constituents." (BR:405);

(c) they are connected by an "appositive marker" like that is, that's to say, namely, Ø .

These properties define the set of appositives under the traditional tests of omissability and reversibility discussed in 1.1.3. Thus,according to BR, properties (a)-(c)

above and the tests for apposition will define the underlined structures in (153)-(154) as instances of apposition but not those in (155)- (156):

(153) Sterne, the author of Tristram Shandy, returned to London. (=BR (2))

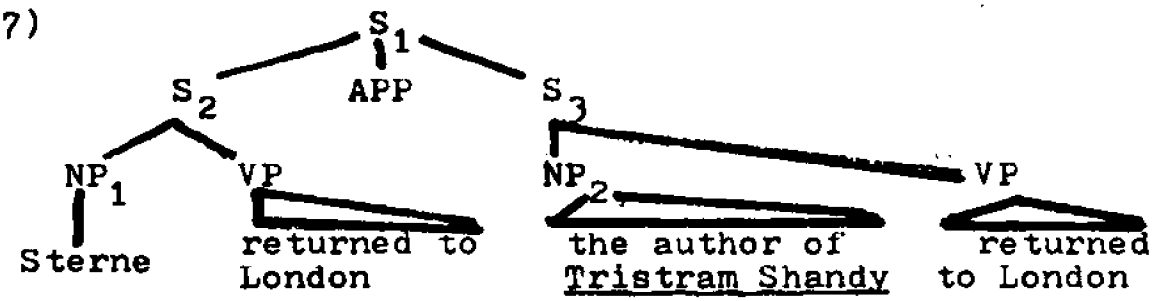
(154) A soldier, a man in uniform, came in just now. (=BR (78))

(155) The poet Burns was born in 1759. (=BR (1))

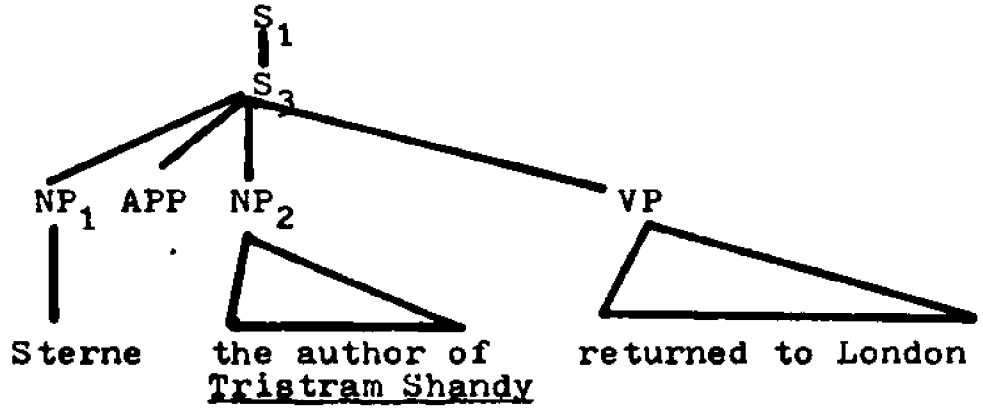
(156) Mr. Pontefract, an upholsterer, called today. (=BR (55))

Appositives like those in (153) have the underlying structure of (157). A transformational rule takes NP_1 and the APP node and places them under S_3, as in (158):

(157)



(158)



1.4.4.2 I have discussed the inadequacy of the traditional tests of omissability and reversability for apposition in 1.1.3. I consider now the the adequacy of the three defining properties of appositives that BR offers.

1.4.4.2.1 BR claims that appositive NP's are corefe-rential to their antecedents and have the same function as their antecedents. It is unfortunate that no precise definition of these properties is provided since they are given as criteria for apposition. However, since the occurrance of appositive markers is also a feature of these NP's, I will assume that any pair of NP's connected by an appositive marker will be "coreferential" and have "the same function with respect to the same constituents".[38]

Thus in (153) the underlined NP's must be coreferential because the appositive marker that is can connect them, as in (159):

(159) Sterne, that is, the author of Tristram Shandy, returned to London.

But consider the following. On the one hand, the NP's the evening star and the morning star are clearly corefe-rential in the sense that they designate the same entity in the world. Yet, their connection by appositive markers is odd:

(160) The evening star, (ø / namely / that is) the morning star, is bright this evening.

On the other hand. the NP's my parents and my father are clearly not coreferential, in the above sense, Yet, the

appositive markers will define them so:

(161) My parents,(that is) my father, won't go.
(that's to say)

Consider now the underlined NP's in (162):

(162) My father and my uncle are the same person.

(162) asserts that the two NP's my father and my uncle are coreferential.[39] But clearly they cannot be appositive. Furthermore and is surely not an appositive marker or else all coordinated NP's are coreferential.

The coreferentiality condition also creates a problem for the statement of reflexivization. Thus if the appositives in (163) must be coreferential and reflexivization operates on coreferential clause mates, then appositives violate this general condition on reflexivization:

(163) John Brown's baby, namely me, has a cold.

Note one cannot claim that reflexivization precedes the appositive formation rule because (164) requires the latter rule to apply first:

(164) John Brown's baby, namely me, hates herself.

If the reverse order obtains the VP's of the source sentences of (164) will not be identical.

1.4.4.2.2 I am not certain what BR intends by the second property of appositives. First, it is unclear whether syntactic or semantic function is intended, or both. Second, if we assume BR means semantic function (also an unclear notion) then it is not clear that his own examples of appositives do, in fact, have the same semantic function.

Recall Quirk et al.'s observation (1.3.4 above) that the second of two NP's in (non-restrictive) apposition plays a subordinate role in the distribution of information.

BR does not consider (156) to be an instance of apposition. Hid claim is that an upholsterer in (156) does not have the same function as Mr. Pontefract; rather, it has the same function that an upholsterer has in (165):

(165) Mr. Pontefract, who is an upholsterer, called today.

BR calls this an "attributive" (p.411) function. This is in contrast to the "referring" (p.395) function of Mr. Pontefract in (156) and (165) and of the appositive NP's in (153) and (154). More precisely, an upholsterer in (156) and (165) is said to have an attributive function "in respect of" Mr. Pontefract . However, Mr. Pontefract (and here is another aspect of the confusion that exists in BR's use of the term "function") is said to have a referring function "in respect of" called today. But this is using the term function in two different ways. In the first case "function" is equivalent to "grammatical relation". In the second case "function" is a new kind of relation which simultaneously involves grammatical relation and reference.

BR's evidence for the claim that an upholsterer has attributive function comes from the adjective certain,

which he claims can only modify a "referring" NP. Since attributive NP's have no referring function they cannot be modified by certain. Thus (166) is out:

(166)(=BR (63))*Mr. Pontefract, a certain upholsterer, called today.

Moreover, predicate nominals like an upholsterer in (165) are never referring NP's.[40] Thus it follows that certain cannot modify predicate nominals as in (167):

(167)(=BR (65))*Napoleon is a certain French soldier.

On the basis of these considerations BR concludes that an upholsterer in (156) is not an appositive NP; rather, it is a reduced appositive relative clause. Furthermore, since predicate nominals have no referring function, they cannot be coreferential to anything. The reduced relative clause source of an upholsterer in (156) is thus supported by BR's coreferentiality condition.

BR's relative clause source for the second of the underlined NP's in (156) hinges on the claim that certain occurs only with referring NP's hence never with predicate nominals. But this simply is not the case. Compare (168) with (167):

(168) A napoleon is a certain French pastry.

Other examples of certain modifying predicate nominals are:

(169)a. The one arrested was a certain Mr. Bergman.

b. That was a certain password we used to use.

c. Wasn't he supposed to be a certain king in that play.

d. The "Acme" process is a certain method we use.

(168)-(169) show that it cannot be true that certain modifies only referring NP's and that predicate nominals never have referring function. Either one or the other or neither is true.

Consider (170):

(170) I'm looking for a certain unicorn.

If"refer" means "designate an entity in the world" then unicorn in (170) does not refer. But certain can modify it and (170) is an acceptable sentence of English. Thus certain can modify non-referring NP's.

Consider (171):

(171)a. I am Ben Schapiro.

b. This is David Crockett.

c. That girl is Holly Bauman.

BR himself notes (p.397) that it is counterintuitive to think of proper names as non-referring and that "it seems that names will always refer" (p.398). Yet, (171)a-c are perfectly acceptable instances of proper names of proper names in predicate nomin al position.[41] (171)a-c indicate that at least some predicate nominals can have referring function.

Other facts corroborate this conclusion. Note that (171) corresponds to (172) not to (173):

(172)a. Who are you?

b. Who is this man?

c. Who is that girl?

(173)a. What are you?

b. What is this man?

c. What is this girl?

Similarly, the definite NP's of (174) correspond to the questions of (175) not those of (176):

(174)a. That man on your left is the Pope.

b. Michael is the kid next door.

c. Alice was my brother's first wife.

(175)a. Who's that man on your left?

b. Who is Michael?

c. Who was Alice?

(176)a. What is that man on your left?

b. What is Michael?

c. What was Alice?

On the other hand, indefinite predicate nominals like those in (177) and (178) correspond to the questions in (173) and (176) respectively not to those in (172) and (175):

(177)a. I am an atheist.

b. This man is a truck driver.

c. It's a boy.

(178)a. That man on your left is a vegetarian.

b. Michael is a faggot.

c. Alice was a cleaning woman.

The definite NP's of (174) are like proper names in that they"refer" in the above sense. The indefinite NP's in (177) do not seem to refer in this way. And the choice of

interrogative pronoun apparently depends on this distinction.

Note now that (177) and (178) can in some cases correspond to (172) and (175) respectively and not to (173) and (176). But these are just the cases in which <u>some</u> or <u>certain</u> can modify the predicate nominal. Compare (179)-(180) to (177)-(178) respectively. (179)-(180) corresponds only to the questions in (172) and (175) respectively:

(179)a. I am(just) some atheist.

b. This man is some truck driver in New York.

c. It's some boy.

(180)a. That man on your left is a certain vegetarian I know.

b. Michael is a certain faggot that lives next door.

c. Alice was some cleaning person in my office.

A similar situation obtains with relative pronouns, that is, the choice of relative pronoun also depends on the referring/non-referring distinction. Thus (171) corresponds to the relative clause in (181)a, not that in (181)b:

(181)a. Ben Schapiro, who I certainly am

b.*Ben Schapiro, which I certainly am

But (177)a corresponds to the relative clause in (182)a, not that in (182)b:

(182)a. An atheist, which I am

b.*An atheist, who I am

This pattern of correspondance further indicates that not all instances of proper names and definite predicate

nominals are referring, as is shown in (183)-(184):

(183)*He's not the Bill Smith who he used to be.

(184)*She's acting like the pompous woman who she is.

The foregoing demonstrates that predicate nominals can be both referring and non-referring. Returning to BR's claim that an upholsterer in (156) is non-referring, it is clear now that this point is irrelevant for the purpose of distinguishing (156) from BR's appositives in (153)-(154). This is because predicate nominals may also refer so that BR cannot prevent his class of appositive NP's from being derived from appositive relative clauses as well.

1.4.4.2.3 I turn now to a consideration of the adequacy of BR's third defining property of appositives, namely, the acceptance of an appositive marker. BR lists the following appositive markers:

ø	in other words
that is	to be precise
that's to say	you know
namely	etc.

We have already seen above that,on the one hand,appositive markers will connect non-coreferential NP's, as in (161), and, on the other havd, fail to connect two coreferential NP's, as in (160).

Consider now (185):

(185) He's a mendicant, that's to say, a beggar.

The underlined NP's in (185) will be defined as appositives by BR since an appositive marker connects them. But the NP's

in (185) are predicate nominals and as such can be either referring or non-referring. The fact that (185) corresponds to the question (186) indicates that the underlined NP's in (185) are non-referring:

(186) What is he?

If the NP's are non-referring then they can't be coreferential. Thus we find that appositive markers can not only connect NP's that aren't coreferential but also NP's that don't even refer.

Furthermore the appositive markers above can connect virtually any syntactic class (as BR himself notes), as in (187), while the appositive marker <u>you know</u> need not connect anything, as in (188). It is therefore difficult to understand on what basis BR chose the acceptance of appositive markers as a crucial test[42] for defining his class of appositives:

(187)a. This rug is magenta, that is, purple.

b. He's working at, to be precise, on, my house.

c. He works sporadically, that is, on and off.

d. We have off next Shabbat, that is, next Saturday.

e. Bill is, that's to say, was, a good friend.

(188)a. Why don't you invite, you know, your girlfriend?

b. He's Bahai, you know.

It is a curious fact that the appositive markers <u>that is</u> and <u>that's to say</u> (the latter of which is the only one of the markers BR uses in his examples other than ∅)

have the grammatical structure of constructions which BR assumes take non-referring NP's. That is has the structure NP + Copula. Thus an NP that follows it is in fact a predicate nominal. BR presents no evidence whatsoever which would lead us to conclude otherwise. Similarly, the NP which follows that's to say is in fact the metalinguistic object of say which can be shown never to corefer (if it refers at all) to a preceding NP, as in (189):

(189)a. Bill said "Bill"

b.*Bill said himself.

Again BR provides no evidence which would require us to analyze these so-called appositive markers as anything other than the embedded or paranthetical clauses they seem to be. Note further that that is and that's to say are paraphrasable by the clearly relative clause structure which is and which is to say. BR provides no basis for excluding these from the class of putative appositive markers.

Finally, the existence of the APP node implies that there exist in English (or other languages) special lexical items to indicate the appositive relation, which are not homonymous or isomorphic to any other lexical items or class of lexical items. Thus the fact that none of the above appositive markers have these properties makes them all the more suspect. I predict that appositive markers of this sort do not occur.

1.4.4.2.4 I turn now to a consideration of the problems raised by BR's proposed underlying and derived structures for his class of appositive NP's.

Consider first BR's proposed underlying structure (157) which is transformed into the drived structure (158) by a rule of appositive formation. The rule applies to structures like (157) only when NP_1 and NP_2 are coreferential. This restriction will prevent appositive formation in structures like (157) where NP_1 and NP_2 are not coreferential. The latter structures are subject to conjunction reduction, the rule that creates coordinate NP's from conjoined S's. Thus if NP_1 and NP_2 in (157) were not coreferential then conjunction reduction would apply to yield (190):

(190) Sterne and the author of Tristram Shandy returned to London.

BR wants to capture the following generalizations by the above analysis:

(a) appositive NP's and their antecedents are similar to but not the same as coordinate NP's;

(b) appositive NP and antecedent do not constitute a grammatical constituent;

(c) the appositive NP and its antecedent have the same function with respect to the same constituents;

(d) coreferentiality, hence apposition, is a logical not a grammatical relation.

I have shown that BR's coreferentiality condition for appositives is inadequate. This inadequacy will reflect

itself in BR's proposed deep structure analysis. Thus, for example, the coreferentiality condition on the appositive formation rule will prevent the derivation of (161) and (185). Furthermore, the awkwardness of coreferential NP's in apposition such as those in (160) is unaccounted for.[43]

BR's underlying structure also raises problems for semantic interpretation. Consider (191):

(191)a. Your friend the butcher, namely your butcher friend , lives in Brooklyn.

b. ((Your friend the butcher lives in Brooklyn)$_S$
APP (Your butcher friend lives in Brooklyn)$_S$)$_S$

Note that (191)b, which is claimed to underlie (191)a, does not have the tautological character that (191)a does. Instead, it is interpreted as a repetitive sequence of S's.[44] The tautological nature of the appositives in (191)a could be accounted for if the appositive NP derived from an appositive relative clause since (192) is also tautological:

(192) Your friend the butcher is your butcher friend.

Now, since semantic interpretation proceeds from deep structures the semantic interpretive rules, in the case of structures like (157), would, in effect,have to duplicate the predicative relation expressed syntactically in the appositive relative clause. This would complicate the semantic component of the grammar unnecessarily.

Furthermore, the awkwardness of (193)b in comparison with

(193)a indicates that although the appositive NP and its antecedent may have the same function with respect to other constituents, they do not have the same function with respect to each other and that this function might be best expressed as a grammatical relation:

(193)a. Mrs. Jones is married to Mr. Jones, that is, Harry the barber.

b. Mrs. Jones is married to Harry the barber, that is, Mr. Jones.

Consider further (194):[45]

(194)a. Gerald Ford, the present king of France, is bald.

b. The present king of France, Gerald Ford, is bald.

Under BR's analysis both of the S8s in (194) have the sentences in (195) in their underlying structure:

(195)a. Gerald Ford is bald.

b. The present king of France is bald.

(195)a presupposes the existence of Gerald Ford and makes the assertion that he is bald. (195)b presupposes the existence of the king of France at the present time and makes the assertion that he is bald. However, since the presupposition that there exists at the present time a king of France is false, (195)b is said to fail to make an assertion or to be without truth value. Katz and Langendoen (1976) argue that the conjunction of two sentences one of which fails to make an assertion itself fails to make an assertion.

This can be seen in (196):

(196) Gerald Ford is bald and the present king of France is bald.

But under BR's analysis there is no account of the fact that (194)a, although strange, makes an assertion while (194)b fails to make an assertion all together.

A final problem raised by (157) is in the derivation of (164) above,which must come from the structure (197):

(197) ((John Brown's baby, hates herself)$_S$ APP (I hate myself)$_S$)$_S$

(164) is problematic because it requires an unmotivated obligatory change of the subjective to the objective form of the pronoun and it also requires the deletion of a VP which is not identical to the deleting VP.

1.4.4.2.5 Consider now the derived structure (158). First, note that (158) leaves unex plained the constituent break and pause that obligatorily occur after the second NP in an appositive structure. Second, (158) implies that appositive NP's and their antecedents do not constitute a single constituent. But clearly they are because they function as such under rules that operate on NP's, like left dislocation and clefting. Thus the underlined appositives of (153)-(154) can be left dislocated or clefted,as in (198)-(199) respectively:

(198)a. Sterne, the author of Tristram Shandy, he returned to London.

b. It was Sterne, the author of Tristram Shandy, that returned to London.

(199)a. A soldier, a man in uniform, he came in just now.

b. It was a soldier, a man in uniform, that came in just now.

It might be argued that the appositive formation rule applies after these rules have applied. But consider what this requirement entails. It requires that left dislocation and clefting be listed as "across-the-board" rules (Ross (1967)) if they apply in structures like (157) but not when they apply in other coordinate structures since (200)a-b, which are instances of these rules applying in only one conjunct, are grammatical:

(200)a. Sterne, he returned to London and Dickens returned to London too.

b. It was Sterne that returned to London and Dickens returned to London too.

In fact, for all rules of English there will have to be a requirement that they apply in "accross-the-board" fashion just in case they apply in structures like (157). Such a move would unnecessarily enrich linguistic theory with a device that was tentatively proposed for just two rules.

Finally BR's derived structure (158) cannot account for the ungrammaticality of (201), which derive from (202):

(201)a.*Bill, the boy, came that you met.

b.*The boy, Bill, came that you met.

(202) ((Bill came)$_S$ APP (The boy that you met came)$_S$)$_S$

Note that (203) is perfectly acceptable:

(203) The boy came that you met.

(203) derives from the second S in (202) by a rule which Ross has called extraposition from NP. Given structures like (158) there is no way to account for the inability of this rule to apply since the rule generally moves a clause from within an NP to the end of the first NP up. If,however, appositive NP's are further embedded than they are in (158) an account is possible. This is proposed in 1.5.

1.5 Sources of Appositive NP's "we men" and "my friend John"

In this section I argue for the proposal that appositive NP's (ANP's) derive from appositive relative clauses (ARC's). In 1.5.1 evidence is advanced for this proposal. In 1.5.2 it is shown how this proposal avoids the problems that arise on the analyses discussed in 1.4. In 1.5.3 I adopt Ross's structure $(NP\ S)_{NP}$ for ARC's; I propose the structure $(Det\ N)_{NP}$ for structures like we men ; and I propose the structure $(Det\ NP)_{NP}$ for structures like my friend John.

1.5.1 I propose that ANP's derive from ARC's. This is Smith's proposal (Smith:251) but the relationship between ANP's and ARC's has been noted by traditional grammarians as well.[46]

As noted above, D&D and Postal reject this proposal because, according to them, ANP's and ARC's have different distributions. However, I have shown (1.4.3.4) that, in fact, their distribution does not differ. Furthermore, unless ANP's derive from ARC's the fact that they share the properties of appositive structures discussed above (1.1) is totally unaccounted for. This is all the more curious when it is noted that many of the properties of ANP's are properties of sentential structures and not noun phrases.

Thus, for example, ANP's and ARC's take sentential adverbials. If ANP's do not derive from ARC's but are

directly generated then the statement of the distribution of sentential adverbials will have to include the ad hoc condition that they can occur with certain NP's, namely the ANP's. Similarly, the otherwise general fact that NP's take a possessive 's has to be restricted in the case of NP's whose second member is an ANP (as in example (30) above). But this is automatically accounted for it ANP's derive from ARC's since the latter also cannot take a possessive 's.

Conversely, ANP's may follow an NP with possessive 's in structures such as that in (204) while non-ANP's cannot as in (205):[47]

(204)a. These promises were Carter's, the president-elect.

b. He's a good friend of that director's, Ingmar Bergman.

(205)a.*These promises were Carter's the president-elect.

b.*He's a good friend of the director's Ingmar Bergman.

But just in these cases an ARC may also occur as in (206):

(206)a. These promises were Carter's, who is the president-elect.

b. He's a good friend of that director's, who is Ingmar Bergman.

As noted above (1.4.3.3.1) certain NP's can occur without articles in predicate nominal position. These same NP's can also occur as ANP's. This follows if ANP's derive from ARC's.

Furthermore, the fact that ANP's can be either referring or non-referring (1.4.4.2.2) also follows from the fact that the predicate nominals of ARC's can be either referring or non-referring.

Finally, note that ARC's can modify sentences, as in (207):

(207) He smokes two packs a day, which is a disaster.

The analysis proposed here predicts that the ARC in (207) can reduce to an ANP. This is borne out in (208):

(208) He smokes two packs a day, a disaster.

1.5.2 I show now how the analysis proposed in 1.5.1 resolves the problems raised by D&D'S and BR's analyses and accounts for other facts as well.

1.5.2.1 In the discussion that follows I restrict my attention to the problems that arise under D&D's analysis of structures like (89)b. The solution to problems that arise under D&D's analysis of structures like (89)a will be seen to follow from the analysis I propose for these structures in 1.5.3.2.

1.5.2.1.1 Under both D&D's analysis and BR's analysis the syntactic similarities of ANP's and ARC's are accidental.

1.5.2.1.2 In D&D's analysis the grammaticality judgements of (104) are unaccounted for. Under the analysis proposed here (104)b-c contain instances of pronouns followed by reduced ARC's. These sentences, therefore, are unacceptable

because of the general fact about English that unconjoined pronominal subjects of non-embedded clauses are always in the nominative case.

The grammaticality of (120) follows from the same considerations as that of (104)b-c. (120)d is unacceptable because <u>me</u> cannot function as a subject. (120)b is unacceptable because I cannot occur (or it can only marginally) in predicate nominal position in an ARC.

(104)a has no appositive structures in it and the <u>us</u> in (104)a is a demonstrative adjective , as will be shown below in 1.5.3.2. Thus the grammaticality of (104)a is unrelated to the ungrammaticality of (104)b-c.

On the other hand, since under D&D's analysis both ANP's and their antecedents and coordinate NP's have the structure $(NP\ NP)_{NP}$, D&D have no explanation for the fact that in subject position all objective forms of pronouns can occur freely in the second position of coordinate NP's but only some objective pronouns can occur in the first position (in only certain dialects); while in appositive structures only nominative forms of pronouns can occur in the first position but objective and nominative forms (except for <u>I</u>) in second position. Under the analysis proposed here the case forms of the pronouns in (104) and (120)-(122) follow from the general facts about English pronominal case forms.

1.5.2.1.3 Under the analysis proposed here the grammaticality of (105) follows automatically. Thus (105)a-c derive from (209)a-c respectively:[48]

(209)a. The men, who are (we) (us) in particular, have agreed.

b. The new boys, who are (namely) you, will begin working tomorrow.

c. Men with good records, who are (we) (us) in particular, have been given raises.

The ungrammaticality of (106) follows from the fact that the pronoun in structures like (89)a is a demonstrative adjective and the fact that demonstrative adjectives must precede their heads.

Similarly, the redundancy in (108) follows from the redundancy of the appositive structures with ARC's, as in (210):

(210)a. We, who are we

b. You, who are you

This redundancy does not occur in (107) because the second instance of the pronoun in (107) is not the result of a reduced ARC. These pronouns are functioning as demonstrative adjectives in these sentences, as will be shown below.

1.5.2.1.4 D&D cannot account for the pattern of agreement found in (123) and (124) without some ad hoc statement. Furthermore, such a statement will differ from that needed for the coordinate NP's in (125)-(126) which have the same

structure that D&D's appositives have. Under the analysis proposed here the pattern of agreement in (123)-(126) follows from the general principles of reflexivization and subject-verb concord.

1.5.2.1.5 Under D&D's analysis it is totally unexplainable that structures like (89)b cannot be modified by a restrictive relative clause (RRC), as in (113)a, while an ARC on these structures can modify only the first NP and not the whole structure, as in (114)a. But this fact follows naturally from the analysis proposed here since RRC's cannot modify NP's containing ARC's, as in (211), while ARC's do not stack, as in (212):

(211)*The girl, who, incidentally, is a medical student, that you met is twenty two.

(212)*My daughter, who lives in Buffalo, who is a medical student, is twenty two.

On the other hand, the fact that structures like (89)a can be modified by RRC's or ARC's follows from the fact that NP's of the structure $(\text{Det N})_{NP}$ can be so modified. But determiners can not be so modified, hence the ungrammaticality of (111)c-(112)c.

1.5.2.1.6 The behavior of one in New York in (133) and (133) follows from the analysis proposed here since one in New York is not an NP in (131)[49] as it is in (133)a, rather it is a reduction of the ARC in (213):

(213) Two robberies, one of which was in New York the other of which was in Rochester, were reported yesterday.

1.5.2.1.7 Finally, for D&D the contradictoriness of (143)a is unrelated to that of (143)b. Under my analysis the contradictoriness of (143)b follows from that of (143)a.

1.5.2.2.1 I turn now to a consideration of BR's analysis. I have shown that BR has no basis for deriving referring NP's from a conjoined S source while deriving non-referring NP's from an ARC source. Since predicate nominals may be both referring and non-referring the ARC source is adequate for both.

1.5.2.2.2 Under BR's analysis an ad hoc statement has to be made to account for (214):

(214) John Brown's baby, namely (*I / me), has a cold.

Similarly, BR's analysis cannot account, except by an ad hoc device, for (215):

(215) John Brown's baby, namely me, hates (herself / *myself).

(214)-(215) follow from my analysis as was shown in the discussion of similar examples in D&D's analysis.

1.5.2.2.3 Another ad hoc feature of BR's analysis is the fact that his appositive markers are part of the class of sentential adverbials which occur also in ARC's. This follows naturally from my analysis but is an accidental fact of his.

1.5.2.2.4 As was suggested above, the tautological nature of (191)b follows from the ARC source of the ANP in (191)a. Similarly, the difference in acceptability between (193)a and (b) follows from an ARC source for ANP's since (216)a, which underlies (193)a, is perfectly acceptable but (216)b, which underlies (193)b is also awkward:

(216)a. Mrs. Jones is married to Mr. Jones, who is Harry the barber.

b. Mrs. Jones is married to Harry the barber, who is Mr. Jones.

Note that my analysis makes the claim, contrary to that of BR, that the appositive NP bears a grammatical relation (namely predication) to its antecedent and that that grammatical relation is one of the few kinds of grammatical relations implicit in tree configurations. BR wants to formalize in his deep structure the claim that the appositive NP does not bear a grammatical relation to its antecedent, therefore, it need not be expressed in terms of tree configurations. But in fact BR's derived constituent structure for ANP's suggests some new kind of grammatical relation. Thus his analysis fails here on two counts. First, it fails to express the predicative relation between ANP's and their antecedents. Second, it suggests some new kind of grammatical exists between two branches related by an APP node but otherwise having no constituency relation.

1.5.2.2.5 The truth values of (194)a-b follow from the analysis proposed here. Thus (194)a-b derive from (217)a-b respectively:

(217)a. Gerald Ford, who is the present king of France, is bald.

b. The present king of France, who is Gerald Ford, is bald.

(217)a, like (194)a, makes an assertion and the strangeness of (194)a reduces to the strangeness of (217)a. This strangeness comes from embedding an ARC which makes a false assertion in a main clause which makes a true assertion.

(217)b, like (194)b, fails to make an assertion altogether. This is because the main clause fails to make an assertion.[50]

1.5.2.2.6 BR's analysis does not account for the facts of (201). These follow from the analysis presented in chapter two. Un der that analysis the NP the boy that you met in the structure underlying (201)a is embedded in an ARC. But the relative clause that you met cannot be moved out of the ARC to the end of the topmost S, as the ungrammaticality of (201)a shows. Such a movement is disallowed.

The unacceptability of (201)b, on the other hand, follows from the general unacceptability of RRC after ARC. Thus (218) is also unacceptable:

(218)*The boy, Bill, tha you met, is coming.

1.5.2.2.7 Before turning to a discussion of the structure of the constructions under discussion in this thesis I would like to note that the ARC source for ANP*s accounts naturally for the observation of Quirk et al.noted above (1.3.4), namely, that the ANP plays a subordinate role with respect to its antecedent in the distribution of information.

1.5.3

1.5.3.1 I adopt here Ross's (1967) structure for relative clauses and sentential complements of nouns. This is the structure (219): [52]

(219) $(NP\ S)_{NP}$

The claim implicit in (219) is that the differences between appositive and restrictive clauses is represented at some level other than intermediate structure. This I believe to be the case, but the proposals of chapter two will remain unaffected should this assumption turn out to be false.

1.5.3.2 In section 1.4.3.2 it was shown that structures like (89)a, repeated here, cannot be appositive structures:

(89)a. we men

In 1.4.3.3 it was shown that the deep structure proposed by D&D is inadequate for (89)a. One might propose that (89)a have a RRC underlyingly just as appositive structures like (89)b have ARC's underlyingly. But if this were the case then we could not account for the difference in grammaticality

between the (a) and (b) sentences of (220)-(221):

(220)a. Us Tarryton smokers are delighted.

b.*Us who are Tarryton smokers are delighted.

(221)a. The apes are we humans' nearest cousins.

b.*The apes are we who are humans' nearest cousins.

Consider the fact that structures like (89)a behave like the demonstrative adjectives (to use the traditional terminology) this, these, etc. This was implicit in the observation above that (89)a is an appropriate substitution for the form which men in the question (103).

I propose that (89)a have the structure $(\text{Det N})_{NP}$. This is Postal's analysis, of course. However, I claim that the pronouns of structures like (89)a are not articles. They are, rather, demonstrative adjectives. Unlike articles in English, the pronouns we, you and they and the demonstratives have a pronominal as well as a determinative function.

The following supports this proposal. Consider the paradigm in (222):

(222) (this) / (that) man

{we / you / they / those / these} men

Pronouns in structures like (89)a pattern with demonstrative adjectives. Both may also be followed by adjectives, as in (223):

(223) { we / you / them / those } fat men

But neither can occur in the paradigm position for adjectives:

(224)*the { we / you / them / those } men

Pronouns in structures like (89)a and demonstratives can be preceded by all when functioning adjectivally, as in (225), but not when functioning pronominally,[53] as in (226):

(225) all { we / you / them / those } men

(226)*All { we / you / them / those } left.

Finally the pronouns in (89)a and demonstratives can modify epithets, as in (227):

(227) { we / you / them / those } { bastards / shitheads }[54]

The analysis of structures like (89)a proposed here resolves the problems raised by D&D's analysis. This has already been noted in 1.5.2. Note further that the fact that (89)a does not accept sentential adverbials, as in (99) follows from the fact that sentential adverbials cannot be placed bewteen a Det and its head N. Also (100) is a good

sentence because a Det + N sequence can take a possessive 's. Finally, since us is not a subject pronoun in (104)a, it's occurrance there does not violate the otherwise general fact that us does not occur as an unconjoined subject.

1.5.3.3 In 1.2.2 I showed that the structures in (228) are not appositive structures while those in (229) are:

(228)a. my friend John

b. the word of

c. Smith the barber

(229)a. my friend, John

b. the word, of

c. Smith, the barber

The following properties further distinguish (228) from (229). (228) can be modified by a RRC, (229) cannot. Witness (230) and (231) respectively:

(230)a. My friend John that you met last week

b. The word of that's on the board

c. The Smith the barber that I'm talking about

(231)a.*My friend, John, that you met last week [55]

b.*The word, of, that's on the board

c.*The Smith, the barber, that I'm talking about

Consider now (232):

(232) My son is smarter than my son.

The contradictoriness of (232) corresponds to the contradictoriness of (233), which resembles it except for the

substitution of an appositive structure for each occurrance of the NP my son in (232):

(233) My son, the doctor, is smarter than my son, the lawyer.

In both (232) and (233) the contradictory assertion is being made that some person is smarter than himself. The so-called"restrictive appositives"in (234) resemble (233) except that the former have no pauses. (234) is not contradictory. It makes the assertion that some person is smarter than some other person:

(234) My son the doctor is smarter than my son the lawyer.

"Restrictive appositives"that have identical antecedents can be conjoined,as in (235), but true appositive structures with identical antecedents cannot, as in (236):

(235) The color red and the color brown are warm colors.

(236)*The color, red, and the color, brown, are warm colors.

The ungrammaticality of (236) corresponds to that of (237):

(237)* The color and the color are warm colors.

Consider now the characteristics of (228) and (229). Constructions like (228)a-b consist of a class of nameable nouns which must be preceded by a definite determiner[56] and followed by a name. Thus (238)a-b are bad because the first noun in each is of the type that does not usually have a name. (239)a-b are bad because the first noun in each is not a name and (240) is bad because the first noun is indefinite:

(238)a.*the window Allen

b.*the table top Samson

(239)a.*The famous athlete the ex-New Yorker is here.

b.*The artist the teacher of dance died recently.

(240)a.*This book was given to me by a brother Bill.

b.*A word of is on the board.

Further, human "relational" nouns like friend in (228)a and son, brother, neighbor (but not atheist, baseball player, linguist, etc.) must be preceded by a possessive adjective[57] as in (241)-(242); and they may be followed by a definite noun,as in (243), but not by an indefinite noun,as in (244):

(241)a. My neighbor Mary is here.

b. My son Bill is here.

(242)a.*The neighbor Mary is here.

b.*The son Bill is taller.

(243)a. My friend the doctor will take care of it.

b. Your son the lawyer is a genius.

(244)a.*My friend a doctor will take care of it.

b.*Your son a lwayer is a genius.

Non-relational nouns do not have these properties:

(245)a.*My atheist Bill Smith is here.

b.*His linguist John Dore left.

c.*The atheist the doctor is here.

d.*The linguist the professor left.

Constructions like (228)c have the following characteristics. The first noun is a proper name and the second is a definite noun. Thus (246) is out because the second noun is indefinite:

(246)a.*Smith a barber is married to Jones.

b.*Fritz a cat is very famous.

Note that the second noun seems to function semantically like a title.[58] Thus a RRC on the second noun is strange unless the second noun and the RRC are taken together as the quasi-title of the first noun. Witness (247):

(247)a. Smith the barber died.

b.*Smith the barber that you met yesterday died.

In the second position of constructions like (228)c we also find "headless" adjectives, as in (248):

(248)a. Richard the Lionhearted

b. Peter the Great

c. Ethelred the Unready

d. Toronto the good

e. America the beautiful

These headless adjectives are not to be identified with ordinary headless adjective constructions in English. The latter always denote either plural numbers of people or an abstraction, as (249) shows:

(249)a. The poor (suffer) the most.
(*suffers)

b. The good (die) young.
(*dies)

c. Good is hard to find

The former apparently never function in these ways, as (250) shows:

(250)a.*Alexander and Peter the Great

b.*America and Canada the beautiful

c.*Truth the good

(in (a)-(b) the headless adjective qualifies both names)

The ANP's in (229) do not have the characteristics of the corresponding structures in (228). Unlike (228)a-b, structures like (229) permit nouns which are not names in the second position, as in (251) (corresponding to (239)):

(251)a. The famous athlete, the ex-New Yorker, is here.

b. The artist, the teacher of dance, died recently.

Structures like (229) may take an indefinite first noun, as in (252) (corresponding to (240)):

(252)a. This book was given to me by a brother, Bill.

b. A word, of, is on the board.

The first noun in these structures need not take a possessive adjective, as in (253) (corresponding to (242)):

(253)a. The neighbor, Mary, is here.

b. The son, Bill, is taller.

And the second noun need not be definite, either in structures like (229)a-c or in structures like (229)c, as in

(254) and (255) (corresponding to (243) and (246) respectively):

(254)a. My friend, a doctor, will take care of it.

b. Your son, a lawyer, is a genius.

(255)a. Smith, a barber, is married to Jones.

b. Fritz, a cat, is very famous.

Furthermore, the second noun in structures like (229)c need not function semantically like a title. Hence RRC's on the second noun do not make (229)c awkward, as in (256) (corresponding to (247)b):

(256) Smith, the barber that you met yesterday, died.

Finally, the headless adjectives that are unique to structures like (228)c are strange in structures like (229)c, as is shown in (257) (corresponding to (249)):

(257)a.*?Richard, the Lionhearted, was a Frankish king.

b.*?Peter, the Great, was a Russian czar.

c.*?Ethelred, the Unready, lived about 1000 years ago.

d.*?Toronto, the good, is a beautiful city.

e.*?America, the beautiful, is the world's wealthiest country.

The above facts support the distinction between appositive structures like (229) and non-appositive structures like (228). Note further that the analysis proposed in 1.5.1 is consistent with the properties of appositive structures like (229).

Before I propose a structure for my friend John consider the following. First, structures like (228) cannot derive from RRC's. Three facts support this. One, proper names like those in structures like (228)c cannot be modified by RRC's. Two, even if it is argued that (228)c derives from an RRC by way of "the Smith who is the barber", one is still left with the problem noted above that the headless adjectives in (248) are singular only in titles like (228)c. In all other positions they are plural or abstract, in particular in the predicate nominal position of RRC's. Hence (258) which corresponds to (248), is bad, but (259) is acceptable:

(258)a.*the Richard who is the lionhearted

b.*the Peter who is the great

c.*the Ethelred who is the unready

d.*the Toronto which is the good

e.*the America which is the beautiful

(259) those of us who claim to be { the lionhearted / the great / the unready / the good / the beautiful }

Three, the characterisitcs of structures like (228)a-b are not shared by the corresponding structures with RRC's.[52] Thus corrseponding to (239), (240)b, and (244) are (260)-(262) respectively:

(260)a. The famous athlete that is the ex-New Yorker is here.

b. The artist that is the teacher of dance died recently.

(261) A word that is either <u>of</u> or <u>to</u> is on the board.

(262)a. My friend who is a doctor will take care of it.

b. Your son that is a lawyer is a genius.

Next, contrary to D&D's claim, structures like (228) must be distinguished from structures like <u>we men</u>. Note the differences between these two structures in (263)-(265):

(263)a. we Joneses/Americans

b.*my friends Joneses/Americans

(264)a. we older students

b.*my friends older students

(265)a.*Joneses we

b. Bill and Mary my friends

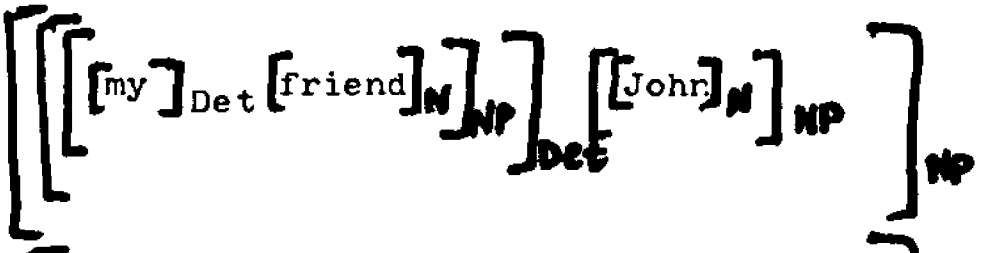
The facts of (263)-(265) are consistent with the characteristics of constructions like (228). Thus (263)b-(264)b are bad because the second noun is neither a definite noun nor a name.[60] The grammaticality of (263)a-(265)a follows from the analysis of <u>we</u> in these examples as demonstrative adjectives.

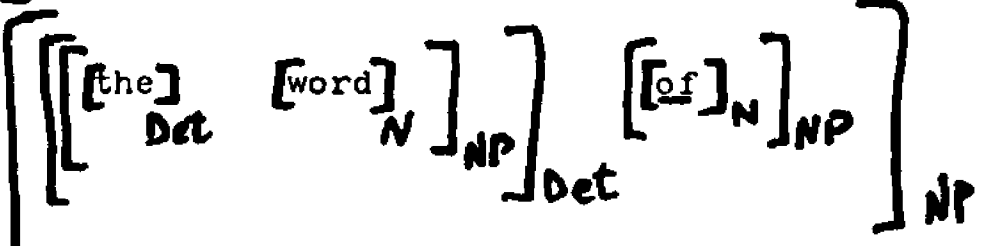
I propose that structures like (228) be directly generated by the phrase structure rules (266):

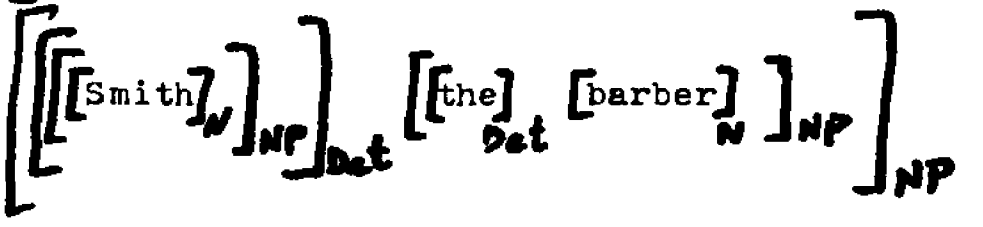
(266)a. NP ---> $\left\{ \begin{matrix} (\text{Det})\ \ N \\ \text{Det}\ \ \ \text{NP} \end{matrix} \right\}$

b. Det ---> NP

The NP's in (228)a-c have the structures of (267)a-c respectively:

(267)a. 

b. 

c. 

(266)a-b embody the claim that first nouns in structures like (228) are part of the class of English determiners. Clearly, not all determiners can occur in the environment $(\_\_\ NP)_{NP}$. Only the NP determiners generated by (266)b can occur in this environment while other determiners like articles, demonstratives, possessive pronouns, the pronouns we, you, they discussed in 1.5.2, and possessive NP's cannot. These have to be restricted to the environment $(\_\_\ N)_{NP}$ in order to prevent (268):

(268)* 

The recursiveness of the NP generated by (266) assures the generation of such complex variants of (228)a-c as those

in (269)-(270) respectively:

(269)a. my friend John the doctor

b. the word <u>of</u> the preposition

c. Smith the barber the Armenian

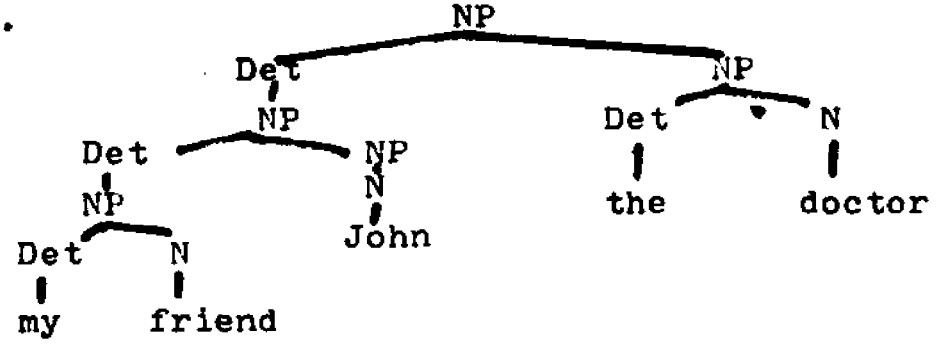
(270)a. my friend John the doctor the atheist

b. the word <u>of</u> the preposition the possessive indicator

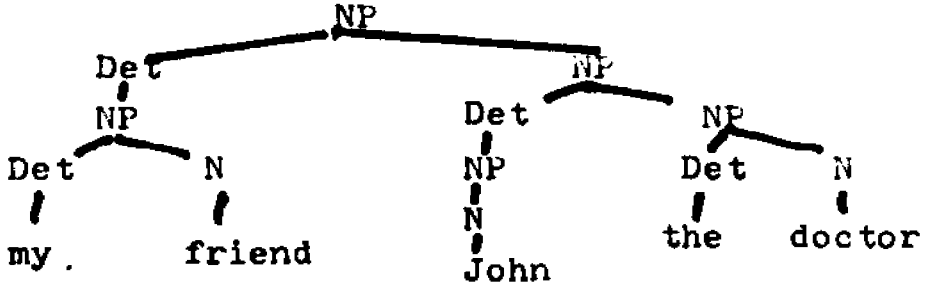
c. Smith the barber the Armenian the bachelor

(266), furthermore, embodies the claim that such sequences as (269)a will be structurally ambiguous between (271)a and (271)b:

(271)a.

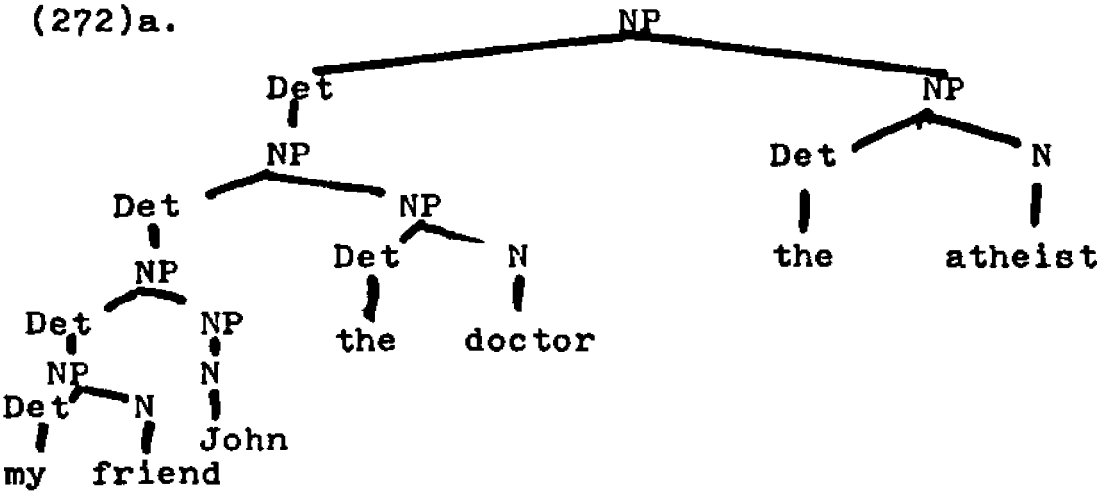


b.

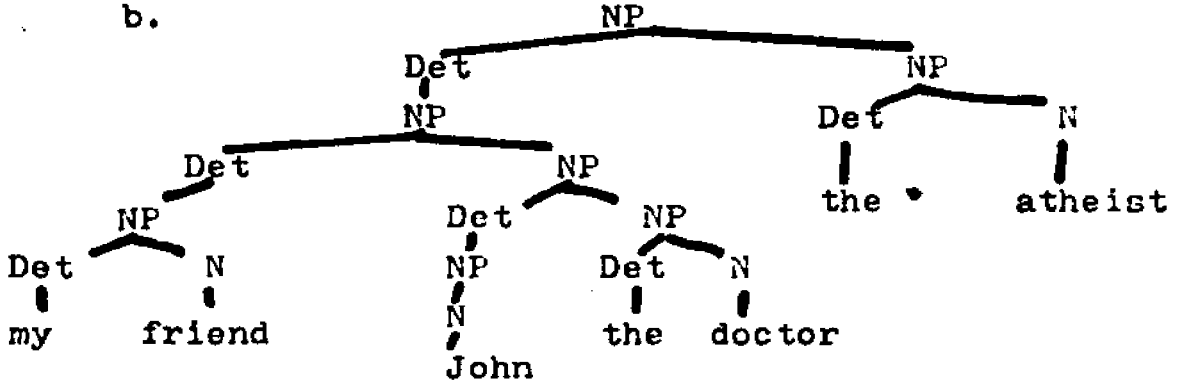


and that (270)a is structurally ambiguous between (272)a and (272)b:

(272)a.

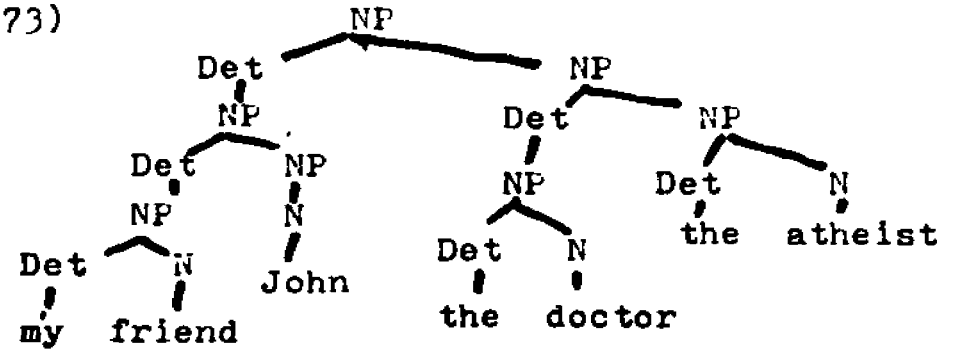


b.



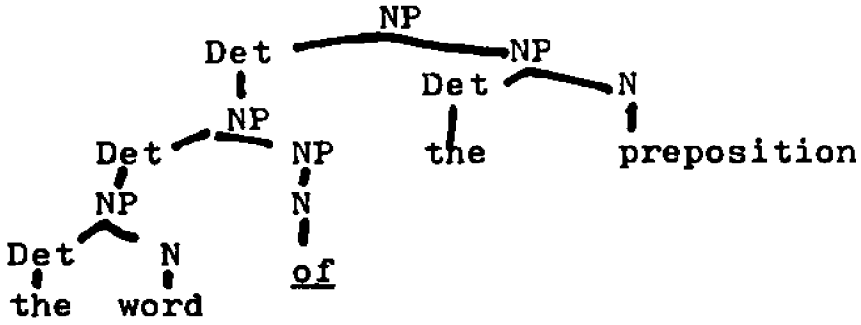
Note that a third possible structure for (270)a, *namely* (273), is blocked by the restrictions on the NP <u>the doctor the atheist</u> discussed above:

(273)

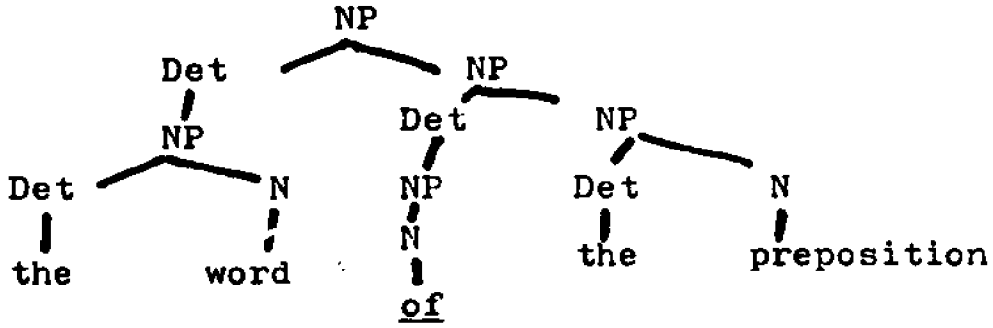


Similar remarks obtain for (269)b,c-(270)b,c. Thus in (274), which corresponds to (269)b, only (274)a is a possible structure. (274)b is blocked by the restriction that the NP which follows <u>the word</u> must be a name:

(274)a.

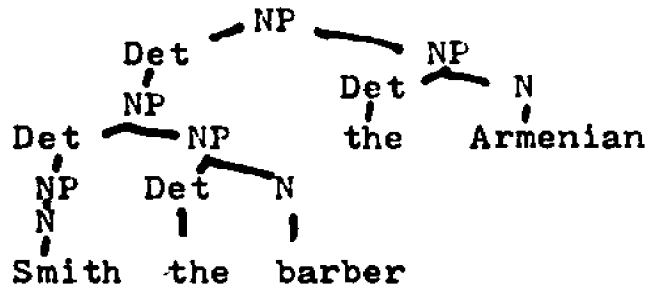


b.

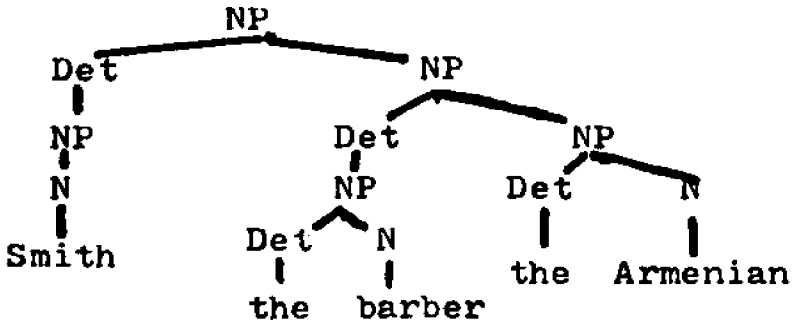


And in (275), which corresponds to (269)c, only (275)a is a possible structure. (275)b is blocked by the restriction on such NP's as *<u>the barber the Armenian</u>:

(275)a.



b.


NP
Det
NP
NP
N
Smith
Det
NP
Det
N
the
barber
NP
Det
N
the
Armenian

FOOTNOTES TO CHAPTER ONE

1. The following underlined sequences are often considered to be instances of apposition but in which the constituents are not NP's. Whether or not these can be reduced to the class of appositives mentioned above is not considered in this thesis:

   (i)a. She's fatter, much fatter, than I thought.
   b. This corpulent, i.e. fat, person is annoying her.

   (ii)a. He explained it to his family, to his Mom and Dad.
   b. It's hard to live in New York City, in the most exciting city in the world.
   c. It's to us, to his legal heirs, that the estate should be left.

   (iii)a. Unfortunately, regrettably, he was evicted.
   b. She wrote yesterday, Monday, that she couldn't come.

2. To be distinguished from (i):

   (i) Smith the famous architect died yesterday

   which has no pause after Smith and before died.

3. Haugen (1953) mentions also a characteristic stress and rate of speech.

4. A definition of the class of sentential adverbs is provided by Greenbaum (1969) pp.18-22. He discusses only the category of adverbs but his criteria can be extended to cover other adverbials such as the infinitives and prepositional phrases above.

   I believe the intuitive distinction between sentence modifying adverbials and VP modifying adverbials will suffice for the present discussion but for the benefit of the reader I note the following two properties of sentential adverbials:

   (a) they cannot occur in focus position in cleft sentences;
   (b) they cannot be under the scope of only, NEG (in negations), and Q (in questions).

5. Quirk et al. p. 638; Lee (1952).

FOOTNOTES TO CHAPTER ONE (cont.)

6. Andrews (1975),p.28, gives examples of embedded imperatives as well. These are claimed to occur in appositive but not restrictive relative clauses.

7. The phenomenon is actually more widespread than I imply here. If the clause is appositive then the antecedent noun may be modified by a certain class of adjectives which Quirk et al.call "restrictive" (875). If the clause is restrictive then its head noun may be modified by "non-restrictive" adjectives.

8. Restrictive clauses may be preceded by the following + N if there is a contrast, as in (i):

   (i) The following report that he was shot contradicts the previous report that he was shot.

9. See Sopher (1970) p.403 or Quirk et al. p.621.

10. Sopher p.410.

11. Sopher proposes that NP's like owner of the corner drugstore in (45)a are "sentence adjuncts", that is, roughly, sentence adverbials. While this may be correct for his example (15):

    (15) She lay dying at Malines, an exile for her faith.

    it is counterintuitive for the appositive NP in (45)a or for the NP a butcher in Sopher's example:

    (i) Mr. Sanders, a butcher, has a sharp tongue.

12. Sopher p. 411.

13. Jespersen (1965) v.2 p.85; Quirk et al. p.639.

14. One exception is Postal's (1971) analysis, in which we men is claimed to be a sequence of the structure $(\text{Det} + \text{N})_{\text{NP}}$.

15. In section 1.4.3.2 it will be shown that the corresponding construction with pause, i.e. we, men, has different syntactic properties from the construction under consideration here and that the form is,in fact, an appositive structure.

16. Quirk et al.p.623. Hockett (1955) claims that both antecedent and appositive are heads.

FOOTNOTES TO CHAPTER ONE (cont.)

17. On a reading in which the examples in (53) are acceptable they are not dvandva construction but true appositive structures.

18. In Analytic Syntax ch.12.

19. Otherwise the vocative is an instance of what Jespersen calls "extraposition".

20. I am indebted to Mark Liberman for clarifying this difference for me.

21. Appositives which are not adjacent to their antecedent, like that in (67)b, will be discussed in chapter two.

22. The problem is compounded because elsewhere an instance of pre-position, as in (i), is considered "extraposition", which, as I shoe below, Jespersen claims is distinct from apposition:

    (i) The rain it raineth every day (AS ch.12)

    Furthermore, compare (66)n, an instance of apposition, to (ii), which for Jespersen is an instance of extrapoisiton:

    (ii) As to the Abyssinian victory, that is out of the question.

23. Extraposition for Jespersen is defined as "a word or group which is often placed by itself outside the sentence proper in which it is represented by a pronoun" (Jespersen (1966) p. 95).

    In MEG v.7 p.224 he adds "Sometimes no corrective pronoun follows." However, the following examples of extraposition (from AS ch.12) do not conform to this definition:

    (i) What the devil do you want?

    (ii) It is the wife that decides.

    (the underlined elements are "extraposed")

24. But, Curme adds, only noun complements are felt to be appositional today (p.89). This is apparently because relative clauses are not loosely connected with the head word in the way noun complements supposedly are.

25. Appositives "serve the purpose of establishing identity... rather than giving incidental information."(p.228)

FOOTNOTES TO CHAPTER ONE (cont.)

26. I am not exactly sure what is meant by "subordinate" in "the distribution of information" but I agree with the basic observation that the second NP is "subordinate" in some sense.

27. One problem that this analysis raises, Ross notes, is that appositive relative clauses can occur in questions but their source, in which a declarative is conjoined to a question, is purportedly out. His now famous example is (i)a, which must derive from the ungrammatical (i)b:

(i)a. Is even Clarence, who is wearing Mauve socks, a swinger?
b.*Is even Clarence a swinger and he's wearing mauve socks?

Ross reluctantly offers the solution of letting (i)a derive from two separate S's, like those in (ii):

(ii)Is even Clarence a swinger? Clarence is wearing mauve socks.

Presumably this would have to be done by reviving the mechanism of generalized transformations.

Thompson handles the ungrammaticality of (i)b by claiming that a rule which deletes connectives between questions and declaratives must obligatorily apply in (i)b to give a string like (ii) (except that it would be dominated by a single S). The rule is also needed, according to Thompson, for the deletion of connectives between imperatives and declaratives, as in (iii)(=Thompson (39)):

(iii)a.*Tell your father that supper is ready and he is outside.
b. Tell your father that supper is ready; he's outside.

But note that Ross's observation is not general since the following questions and declaratives can conjoin:

(iv) Can I have the car this once and I'll never bother you again?

(v) How many tokens do you want and we don't give change for twenty?

(vi) My name's Bill and what's yours?

The same is true of imperatives and declaratives:

(vii) Get down here and I'm not kidding!

FOOTNOTES TO CHAPTER ONE (cont.)

(viii) Take your money and I hope I never see you again.

(ix) Buy Mary some ice cream and she hates chocolate.

(x) There's ice cream in the fridge and keep your havds off of it.

To the extent that (i)b is bad at all the problem is not conjunction of questions and declaratives, as the grammaticality of (iv)-(x) show, rather, the problem has to do with the semantic representation of and. Note that there is a relation of causality between the statement in (xi) and the asking of the question in (xii):

(xi) He's wearing mauve socks.

(xii) Is even Clarence a swinger?

that is, (xi) is the cause of the speaker's asking (xii). This relationship holds between the relative and the matrix clauses of (i) and also between the two S's in (ii). In fact, (ii) could be replaced by the discourse (xiii):

(xiii) I'm asking you whether Clarence is even a swinger. My reason for asking is that he wears mauve socks.

But this causal relation can be made explicit in (xiv):

(xiv) Is even Clarence a swinger, because he is wearing mauve socks?

(where (xiv) is to be taken in the sense of (xiii), not where the because clause modifies the predicate of the matrix clause)

The point is that and does not connect two S's in which the second is the cause of the first. If the two S's are causally related by and then the cause must be the first S. Consider (xv):

(xv)a. I yelled at Bill and he got a heart attack.
b. Bill got a heart attack and I yelled at him.

In both sentences of (xv) the first conjunct can be interpreted as the cause of the second but never the reverse. The problem with (i)b, then, is that the cause clause, which is connected to the result clause by and is in second position.

28. D&D use the term "natural class" without explicitly defining it. It occurs in the following statement:

FOOTNOTES TO CHAPTER ONE (cont.)

> "(structures like (89)-(90)) are in a natural class... with respect to constituent structure and derivation..." (p.4)

I will therefore assume that by "naturalclass" they mean "a set of constructions having the same constituent structure and deriving from the same source".

29. D&D do not discuss it at all.

30. Some speakers find (111)b-(112)b unacceptable. Apparently the presence of we doesn't permit reflexivization from women. The non-occurrance of these, then, is another distinction between structures like (89)a and (89)b.

31. Note that (114)a is acceptable although not on a reading in which the appositive relative clause modifies both preceding NP's, rather, on a reading in which it modifies just the first NP.

32. For example, they cannot take restrictive relative clauses, etc.

33. (130)b is acceptable as an echo question.

34. The reason a mural in (86)c is not presupposed to exist is because it occurs in a "non-referential" position (Katz (1972) p. 167; Katz (MS) p. 121 f.). The object of paint, like other "resultative" objects are in a non-referential position. The subject position is generally"referential". If an NP is in a non-referential position there is no presupposition of its existence.

Another way of stating the difficulty with (86)c is as follows. In the main clause of (86)c there is no presuppodition of existence associated with the occurrance of a mural. Thus the appositive relative clause fails to make any assertion at all. Then the unacceptability of (86)c results from the embedding of an appositive relative clause which fails to make an assertion into a main clause which asks a question. (86)c is unacceptable then for the same reason that (i) is unacceptable:

(i)*Is Gerald Ford the present king of France, who is bald?

(where the appositive relative clause modifies the predicate nominal)

Similarly, (137) below is unacceptable because an apposi-

FOOTNOTES TO CHAPTER ONE (cont.)

tive relative clause which fails to make an assertion is embedded in a matrix clause which succeeds in making an assertion. (137) is unacceptable for the same reason that (ii) is unacceptable:

(ii)*Gerald Ford is the present king of France, who is bald.

(where the appositive relative clause modifies the predicate nominal)

35. For Postal, furthermore, the ungrammaticality of (142)b is conclusive proof that structures like (89)a cannot derive from appositive relative clauses.

36. (143)c, while marginal, is not as blatantly contradictory as (143)a,b. It has a meaning close to (i)(contrary to D&D's claim):(grammaticality judgement is mine)

(i)(=D&D (63)) Those of us who are men think that those of us who are women should go.

37. I am indebted to Bob Fiengo for helping me clarify this point to myself.

38. In fact BR proposes that appositive marker acceptance be a crucial test of apposition (p. 416). See footnote (42).

39. Note that these NP's also have "the same function with respect to the same constituents" in one sense of this expression.

40. BR's claim is based on Strawson's analysis of predicate nominals in Introduction to Logical Theory (1952).

41. It is interesting to note that certain cannot occur in (171)a-b and perhaps only marginally in (171)c.

42. "We can rely on the APP-marker acceptance test, then, to exclude any sequence of NP's that is not in apposition, for whatever reason it is not." (p.416)

43. Note the awkwardness of (160) cannot be due to some extralinguistic factors like knowing or not knowing that the evening star and the morning star are identical, since you need to know nothing about soccer to find BR's sentence (i) acceptable:

(i) Manchester United, the Champions, play today.

FOOTNOTES TO CHAPTER ONE (cont.)

44. (191)b might underlie (i):

(i) Your friend the butcher lives in Brooklyn, your butcher friend does.

45. I am indebted to Terry Langendoen for bringing this point to my attention and helping me to understand the subtleties involved.

46. Jespersen (1965)v.7 p. 85; Poutsma p.279, see above pp.21-22.

47. An interesting property of the'ANP's in (204) is that they can also occur with the possessive 's, as in (i):

(i)a. These promises were Carter's, the president-elect's.
b. He's a good friend of that director's, Ingmar Bergman's.

Apparently the rule which assigns the possessive 's to an NP can optionally spread the 's to an ANP. This rule will have to follow the reduction of an ANP from an ARC since ARC's cannot take possessive 's. Witness (ii):

(ii)a.*These promises were Carter's, who is the president-elect's.
b.*He's a good friend of that director's, who is Ingmar Bergman's.

However in premodifier position the identical sequence of NP's must occur with possessive 's, as in (iii)-(iv):

(iii)a. Carter's, the president-elect's, promises are said to be worth peanuts.
b.*Carter's, the president-elect, promises are said to be worth peanuts.

(iv)a. That director's, Ingmar Bergman's, friends are nice.
b.*That director's, Ingmar Bergman, friends are nice.

This is because in (iii)-(iv) the NP sequences are not appositive structures at all. They are instances of determiners "in apposition" to determiners. As such they behave like other instances of determiners in apposition to determiners:

(v)a. His, Bill's, book is old.
b.*His, Bill, book is old.

FOOTNOTES TO CHAPTER ONE (cont.)

(vi)a. Our, mine and Mary's, book is old.
b.*Our, mine and Mary, book is old.

The fact that the NP sequence in (iii)-(iv) is a sequence of determiners accounts for the non-occurrance of (vii):

(vii)a.*Carter's, who is the president-elect, promises are said to be worth peanuts.
b.*That director's, who is Ingmar Bergman, friends are nice.

This is because determiners are not modified by relative clauses. The non-occurrance of (vii) accounts for the non-occurrance of (iii)b-(iv)b.

48. There is a certain awkwardness in many ARC's with pronouns in the predicate nominal position. I have no account for this. Note, significantly that pronominal ANP's are also often awkward. Nonetheless, many pronominal appositive structures are completely unobjectionable:

(i)a. The referee, me today, has the final say.
b. The referee, who is me today, has the final say.

49. Compare (131) to (i), in which the one in New York is an NP:

(i) The two robberies, the one in New York and the one in Rochester, were obviously well planned.

Predictably, a sentential adverbial placed in the NP will yield the ungrammatical (ii):

(ii)*The two robberies, the one to be precise in New York and the other one in Rochester, were obviously well planned.

50. Apparently this is so whether or not the ARC makes an assertion. Thus (i), which contains an ARC that makes a true assertion still fails to make an assertion:

(i) The present king of France, who doesn't really exist, is bald.

51. (201)b and (218) can be accounted for in an analysis like that proposed by Chomsky (1973), in which NP's are cyclic nodes and the "Subjacency Condition" obtains.

52. I do not consider whether (219) is also the origin of relative clauses and sentential complements of nouns,

FOOTNOTES TO CHAPTER ONE (cont.)

either appositive or restrictive. The proposals of chapter two are neutral with respect to a conjoined S or embedded S source for these clauses.

53. Apparently when they demonstratives have non-human referents they may be preceded by all:

(i)a. All these are torn.
b. All that is mine.

Compare the following:

(ii)a. These are my students.
b.*?All these are my students.
c. All these kids are my students.

54. Note these plural epithets are different from the singular epithet you bastard. The former can occur in any grammatical function in a sentence that ordinary NP's can. The latter cannot. Witness (i)-(ii):

(i)*You bastard will be leaving soon.

(ii)*I saw you bastard at the movies yesterday.

55. That-clauses in this position are unacceptable in my dialect and that of others I have questioned but are apparently acceptable in other dialects.

56. There appear to be some cases of this class with an indefinite first noun, as in (i)-(ii):

(i)a. A friend of mine John is coming for dinner.
b. A neighbor of yours Mary Smith is at the door.

(ii)a. Do you have a friend John?
b. I know a woman Mary Smith.

(i)a-b might be argued to contain definite first nouns since they correspond to (iii)a-b respectively:

(iii)a. My friend John is coming for dinner.
b. Your neighbor Mary Smith is at the door.

(ii) might be argued to be reduced from the RRC in (iv):

(iv)a. Do you have a friend named John?
b. I know a woman named Mary Smith.

As such they cannot be in the same class as (228)a-b because, it is argued below, the latter cannot derive from RRC's.

FOOTNOTES TO CHAPTER TWO (cont.)

57. This is so unless the noun is followed by a RRC, as in (i):

(i) The neighbor Mary that you were talking about left.

Thus (ii)a-c are out:

(ii)a.*the friend the doctor
b.*the neighbor the lawyer
c.*the son the professor

Note that (ii) are acceptable in some dialects (as Yiddishisms). Also acceptable in these same dialects are (iii):

(iii)a. I have a son a doctor.
b. Is he a doctor a doctor or a doctor a dentist?

(iii)b means, roughly, "Is he a doctor doctor or a dentist doctor?" Not surprisingly, constructions like (iii)b are very frequent in Yiddish.

58. Titles and names seem to be very close in semantic function. Thus the similarity between structures like (228)c in (i) and the family names in (ii) is probably not accidental:

(i)a. Bill the barber
b. John the smith
c. Bob the brown
d. Fred the friendly

(ii)a. Bill Barber
b. John Smith
c. Bob Brown
d. Fred Friendly

59. (240)a and (242) have awkward relative clause counterparts. But I think this due to the general awkwardness of proper names in predicate nominal position in RRC's. However the relevant sentences can be constructed which are perfectly acceptable, as in (i)-(ii), which correspond to (240)a and (242) respectively:

(i) A brother who is Kojak in the well know TV series lives in Chicago.

(ii)a. The neighbor that is Mary in "Mary Hartman" is here.
b. The son that is Bill in "Mary Hartman is taller.

60. Note the plural Joneses is not a definite noun as the singular Jones is. The former can occur in the postcopular position after there-insertion, which is reserved for indefinites, the latter cannot:

(i) There are many Joneses in New York.

(ii)*There is Jones in New York.

Chapter Two

2.0 Introduction

In this chapter it is proposed that there is a rule called right movement which moves certain constituents called missiles in specific structures called launching pads to S-final position. In 2.1 I examine several rules that have the property of moving some element to the right. Some of these rules are sufficiently similar to enable a general statement of the process involved to be made. In 2.2 I discuss problems that arise on the assumption that the postposing rules of 2.1 exist as distinct rules, thereby providing independent motivation for collapsing them into right movement. In 2.3 I discuss the claims about right movement and launching pads made in 2.1.

2.1 Postposing Rules and Right Movement

Ross (1967) proposes several rules which have the effect of moving some constituent to S-final position. One of these is called by him right dislocation (RD). RD derives (1)b-(3)b from (1)a-(3)a respectively:

(1)a. John's a creep.

b. He's a creep, John.

(2)a. Alice told me she can't stand Bill and Mary.

b. Alice told me she can't stand them, Bill and Mary.

(3)a. Relaxing after a good meal is supposed to be good for you.

b. That's supposed to be good for you, relaxing after a meal.

Ross formulates RD as follows:

(4) $$X - \underset{[-pro]}{NP} - Y \Longrightarrow [1 \quad 2 \quad 3]\#2 \quad (2 = [+pro])$$

(4) states that RD adjoins an NP to the end of its S and leaves a pronoun copy in its place.

Another rule Ross proposes is extraposition from NP (XNP). XNP derives (5)b-(6)b from (5)a-(6)a:

(5)a. That girl who I told you about is here,

b. That girl is here who I told you about.

(6)a. A rumor that he's quitting is spreading.

b. A rumor is spreading that he's quitting.

The effect of this rule is to adjoin the sentential constituent of an NP to the end of its S.

A third rule Ross proposes is extraposition of PP (XPP). XPP derives (7)b-(8)b from (7)a-(8)a:

(7)a. A picture of Jessica was on your desk.

b. A picture was on your desk of Jessica.

(8)a. A house in the woods would be great fun.

b. A house would be great fun in the woods.

XPP adjoins the PP of a complex NP to the end of its S.

Rosenbaum (1967) proposes the rule of extraposition (Xtrap), which derives (9)b-(10)b from (9)a-(10)a:

(9)a. That Bill left early is obvious.

b. It is obvious that Bill left early.

(10)a. You better believe that the world is finally ending.

b. You better believe it that the world is finally ending.

This rule, like XNP, has the effect of adjoining the sentential constituent[1] of an NP to the end of its S.

Akmajian (1970) proposes a rule of cleft extraposition (Cleft), which derives (11)b from the structure that underlies (11)a:

(11)a. What Bill wants is a box of candies.

b. It's a box of candies that Bill wants.

the effect of Cleft, like that of Xtrap and XNP, is to adjoin the sentential constituent of an NP to the end of its S.

The salient features of all of these rules, call them "postposing" rules,are that in each case the rule operates on an NP (in the case of RD an NP is moved, in the other cases a constituent of NP is moved) and that the rules all postpose to S-final position. This is significant because, on the one hand, many rules have been proposed which move constituents to the right but other than the ones so far discussed[2] none require an S-final destination of the moved constituent; and, on the other hand, many rules have been proposed which operate on NP's but which make no mention of S-final position in their structural change. Examples of rules of the first kind are NEG placement, affix hopping, degree adjective postposing, article movement , each movement

which have been proposed by various linguists to derive respectively the (b) sentences of (12)-(16) from roughly the structures in the (a) sentences:

(12)a. NEG I am going

b. I am not going.

(13)a. He [[-ed]$_{tense}$] AUX walk

b. He walked

(14)a. You are enough heavy

b. You are heavy enough.

(15)a. A how young man is he

b. How young a man is he?

(16)a. Each of the boys gave a contribution.

b. The boys each gave a contribution.

Examples of rules of rules of the second kind are particle movement, indirect object movement, passive, there- insertion, subject-auxiliary inversion. These are well known enough not to require illustration.

Now if RD could either be shown not to be a rule or reformulated so as to operate on a constituent of NP rather than on a whole NP all the postposing rules could be seen to involove the movement of the right branch of an NP to S-final position. In fact, as I will show below, RD can be reformulated in just the desired way. Thus by maintaining the independent existence of RD; XNP, XPP, Xtrap and Cleft this generalization is missed. Furthermore, unless these

independent rules are stated as a single process it is an accidental fact that English has just these five rules and not some subset of them.

I therefore propose that there are no independent rules of RD, XNP, XPP, Xtrap, Cleft and that these rules are all instances of a single process (probably universal) called <u>right movement</u> (RM), which moves only the right branch of an NP of the structure (17) to the end of its S:

(17) $(\text{NP } X)_{\text{NP}}$

(where X is any constituent)

I refer to an NP of the structure (17) as a <u>launching pad</u>.[3] And, in line with the metaphor, I refer to the X in (17) as a <u>missile</u> and the embedded NP as a <u>launcher</u>.

RM need not be thought of as a specific rule of English. It seems entirely reasonable to suppose that RM is a major transformation (in the sense of Bach (1971)) which is available to any language. Under such an assumption, one way to capture the generalizations that right moved constituents are always missiles and that missiles can move only to S-final position is in terms of the following condition on rule application:

(18) Given an application relating X and Y in
...X...YZ
X is a missile if and only if Z is null.

On the assumption that either rightward movement is upward bounded or the metatheoretical condition that conditions

like (18) take as their domain the S immediately dominating the sequence of variables mentioned in the condition (18) will assure that RM will move a missile (and only a missile) to S-final position (and only S-final position).[4]

Consider further the following claims:

(19) No rule[5] other than RM can affect missiles.

(20) No rule can delete or reorder a launcher.

Missiles and launchers appear to be highly restricted constituents. The effect of (19) and (20) is acheived in part by such conditions as the Complex NP Constraint and the A-over-A principle but no conditions or conventions so far proposed have the effect of (19) and (20).(18)-(20) will be discussed in more detail in 2.3.

2.2 Problems with Maintaining Distinct Postposing Rules

In this section I discuss problems that arise by maintaining that the postposing rules are independent rules. The arguments presented will motivate the collapse of these rules into the single process of right movement.

2.2.1 Consider first the distinction between RD and Xtrap. Postal (1974) argues that the difference in pause between (21)a + b can be accounted for if (21)a is derived by Xtrap and (21)b by RD:

(21)a. It bothers me that she's so flirtatious.

b. It bothers me, her being so flirtatious,

(21)a contains no internal pause. This is characteristic of extraposed clauses. (21)b contains a pause before the postposed element. This is characteristic of the output of RD, as we see also from (1)b-(3)b above.[6]

This distinction is implicit in Rosenbaum's original statement of Xtrap, which was so formulated as to exclude its application to gerundives like those in (21)b. However Rosenbaum and Postal and others have noticed that many postposed gerundives are not preceded by pause, as in (22):

(22)a. It's no use talking to him.

b. It's no fun sleeping alone.

c. It's hard working at Baskin-Robbins.

d. You'll hate it having to visit her relatives.

e. Alice can't stand it living in New York.

Similarly, postposed <u>that</u>-clauses may be preceded by pause, as in (23):

(23)a. It's surprising, that he didn't come.

b. It's obvious enough for me, that Bill did it.

c. Alice resents it, that Bill is rich.

Since both gerundives and <u>that</u>-clauses may or may not be preceded by pause the motivation for distinguishing RD and Xtrap disappears. One might still argue that all cases of postposed gerundives and <u>that</u>-clauses which are preceded by pause are derived by RD while those not preceded by pause are derived by Xtrap. I consider the problems that this proposal leads to next.

<u>2.2.2</u> The existence of the postposing rules as distinct rules implies that more than one of these can apply on a given cycle. It is thus surprising that in fact no postposing rule can apply to the output of another postposing rule, that is, there appears to be a restriction on the "coapplication" of these rules. This section demonstrates this restriction on postposing rules.

It was suggested above that RD might be extended to apply to <u>that</u>-clauses so as to account for the sentences in (23). There are two ways this can be done. One way is to extend RD so that it can apply to S's. If RD is now ordered before Xtrap then it can apply to the structure $(\underline{it} - S)_{NP}$

leaving a pronoun copy behind after it moves this S to the right. The base generated *it* can then be erased by *it-deletion*. But we must now prevent Xtrap from applying to the output of RD, otherwise we will get the following derivation

(24)a. it that Bill left is obvious ===⇒ (RD)

b. it it is obvious, that Bill left ===⇒ (Xtrap)

c.*It is obvious it, that Bill left.

If RD is ordered after Xtrap it must be prevented from applying to the output of Xtrap, that is, to extraposed S's, otherwise we get the following derivation:

(25)a. it that Bill left is obvious===⇒ (Xtrap)

b. it is obvious that Bill left===⇒ (RD)

c.*It is obvious it, that Bill left.

Thus either ordering of this version of RD and Xtrap requires the addition of *ad hoc* restrictions.

The other way of extending RD to *that*-clauses is by maintaining the original formulation of RD (by which it applies only to NP's). In this case RD applies to the NP dominating the *it*-S sequence. If RD precedes Xtrap and *it-deletion* then we get the following derivation:

(26)a. it that Bill left is obvious ===⇒ (RD)

b. it is obvious, it that Bill left (Xtrap + *it*-deletion)

c. It is obvious, that Bill left.

This gives us the right result in this case but such an

analysis creates problems for verbs like believe, on the one hand, and verbs like resent and prepositions on the other. The first do not require it-deletion, the second block it-deletion. The problem arises because after RD applies to structures with these verbs, it-deletion must apply. Witness (27):

(27)a. Bill (believes) it that John left ==== (RD)
(resents)
(booked on)

b. Bill (believes) it, it that John left ====
(resents) (it-del)
(booked on)

c. Bill (believes) it, that John left.
(resents)
(booked on)

Thus as ad hoc condition on it-deletion has to be added to the lexical entries of these verbs and prepositions just in case RD has applied. If RD follows Xtrap and it-deletion then we are forced to derive (28) in case Xtrap has not applied:

(28)*Bill (believes) it, it that John left.
(resents)
(booked on)

If RD is ordered after Xtrap but before it-deletion then (28) can be avoided but the problem of the ad hoc restrictions on it-deletion in the lexical entry of the verbs in (27) remains.

In addition to the problems involved in the fomulation

of this version of RD and its ordering with respect to Xtrap, RD must never be allowed to apply to the it-sister of the that-clause.[8]

Thus extending RD to that-clauses permits RD and Xtrap to coapply to the same constituent; and the above discussion shows that this must be prevented. The same arguments can be made against the coapplication of RD and Cleft since Akmajian's underlying structure for cleft constructions is very similar to that of Rosenbaum's for that-clauses.

Similarly, RD cannot apply to structures to which XNP or XPP have applied, as in (29) and (30). The subject in (29)a-(30)a meets the structural description of XNP and XPP respectively and the rules apply to derive (29)b-(30)b. The subject NP in (29)b-(30)b now meets the structural description of RD which applies and derives the ungrammatical (29)c-(30)c:

(29)a. The student who wrote the paper is here.

b. The student is here who wrote the paper.

c.*He's here who wrote the paper, the student.

(30)a. An article on sex education was just published.

b. An article was just published on sex education.

c.*It was just published on sex education, an article.

XNP and XPP cannot coapply to the same constituent, as in (31). (31)b derives from (31)a by XNP. (31)c derives from (31)b by XPP:

(31)a. The appraisal of John which included a statement from his adviser wasn't very complimentary.

b. The appraisal of John wasn't very complimentary which included a statement from his adviser.

c.*The appraisal wasn't very complimentary which included a statement from his adviser of John.

Consider now instances in which the postposing rules apply to different NP's in a cycle. In these cases too we find that the application of a postposing rule to one NP in an S precludes the application of another postposing rule to a different NP in that S. Thus (32)b-(33)b are ungrammatical because RD has applied to the output of Xtrap and Cleft in (32)a-(33)a respectively:

(32)a. It was obvious to Bill from the start that this won't work.

b.*It was obvious to him from the start that this won't work, Bill.

(33)a. It's Bill that I saw.
b.*It's him that I saw, Bill.

Similarly, (34)b-(37)b are ungrammatical. In (34)b RD has applied to the output of XNP in (34)a. In (35)b RD has applied to the output of XPP in (35)a. In (36)b XPP has applied to the output of XNP in (36)a. In (37)b XNP has applied to the output of Xtrap in (37)a:

(34)a. That man wrote this book who you were introduced to before.

b.*That man wrote it who you were introduced to before, this book.

(35)a. This picture was on my dresser of Nancy.

b.*This picture was on it of Nancy, my dresser.

(36)a. My teacher wrote a review of this book who I told you about.

b.*My teacher wrote a review who I told you about of this book.

(37)a. It occurred to the man who wrote the book that the royalties weren't high enough.

b.*It occurred to the man that the royalties weren't high enough who wrote the book.

The fact that postposing rules cannot coapply in a cycle is unaccounted for in a grammar in which these rules are distinct. However, this follows naturally from the assumption that the postposing rules are in fact a single rule RM and from the assumption that a rule applies only once on a cycle.[9]

One problem remains in reducing the postposing rules to RM. This is the fact noted above that all the rules except RD move a constituent of NP but RD moves the whole NP and leaves a copy behind. Consider the fact that sentences with right dislocated NP's like (38)a are paraphrased by sentences like (38)b in which the right dislocated NP corresponds to an ANP:

(38)a. He's dead, John.

b. He,John,is dead .

Thus it seems quite reasonable to derive right dislocated NP's from ANP's. In chapter one ANP's were claimed to reduce from

ARC's. Hence the phenomena which have been handled by the rule of RD turn out to be instances of right moving from an NP (= XNP).

Furthermore, I would like to propose that rules of the form of RD be disallowed f om linguistic theory; that is, I propose that no rule can"create" a new node. (This does not apply to nodes created by Chomsky-adjunction but it suggests that perhaps some research in this area may support the conclusion that this kind of adjunction is unnecessary.)

The effect of such a condition on rules is achieved by a constraint recently proposed bv Cattell(1976):

> "The NP Ecology Constraint: The number and identity of argument NP's within a syntactic configuration must remain constant under the operation of movement rules." (p.27)

I believe the constraint might be stated even more strongly so that it is a constraint on all rules not only movement rules. Support for this comes from sentences like (39):

(39)a. He,Bill, can't stand her, Alice.

b. Bill can't stand Alice.

One might propose that (39)a derives from (39)b by means of a node-creating copying rule identical to RD except for the fact that the new rule does not postpose the original NP to the end of the S. However, such a rule would need to apply twice[10] on a cycle thereby violating this otherwise general constraint on syntactic rule application.[11]

To sum up, the interaction of the postposing rules with each other and the spuriousness of the rule of RD provide independent evidence for the proposal presented in 2.1 that all postposing rules are reducible to RM.

2.3 Consider now condition (18) on RM. It provides that only missiles will be right moved. This means that structures like (89)a and (228) of chapter one will not be subject to RM. This is borne out by the examples in (40)-(43). In (40)b-(41)b RM has applied to structures like (89)a of chapter one. In (42)b-(43)b RM has applied to structures like (228) of chapter one:

(40)a. We men quit.

b.*We quit men.

(41)a. They Tarryton smoker would rather fight.

b.*They would rather fight Tarryton Smokers.

(42)a. Jack the Ripper is on the loose again.

b.*Jack is on the loose again the Ripper.

(43)a. The movie Gone with the Wind was just on TV.

b.*The movie was just on TV Gone with the Wind.

Thus the applicability of RM is another property which distinguishes these constructions from ANP's.

Note too that dvandva constructions like those in (44-(45) are distinguishable from ANP's, like those in (46)-(47),on the basis of the applicability of RM:

(44)a. A philosopher shoe salesman lives upstairs.

b.*A philosopher lives upstairs shoe salesman.

(45)a. His student confidante is leaving school.

b.*His student is leaving school confidante.

(46)a. Alice, my friend, bakes a mean brownie.

b. Alice bakes a mean brownie, my friend.

(47)a. Dustin Hoffman, a good actor, stars in Marathon Man.

b. Dustin Hoffman stars in Marathon Man, a good actor.

The behavior of dvavndva constructions under RM indicates that whatever their correct structure they are not launching pads.[12]

One implication of (18) is as follows. Note that nouns in the structure $(\text{Det} + \text{Adj} + \text{N})_{NP}$ are not missiles. RM cannot move the N in these structures. Witness (48)-(49):

(48)a. That happy man just won the lottery.

b.*That happy jsut won the lottery man.

(49)a. Chubby kids don't need so much food.

b.*Chubby don't need so much food kids.

However, it might be supposed that the postnominal adjective in structures like $(\text{someone/thing} + \text{Adj})_{NP}$ is a missile. But RM fails to apply in these structures, as (50)-(51) show. This again indicates that these structures are not launching pads:

(50)a. Something extraordinary just happened.

b.*Something just happened extraordinary.

(51)a. Someone special gave me this book.

b.*Someone gave me this book special.

An apparent counterexample to (18) is Ross's rule of complex NP shift, which optionally moves a complex NP to the end of the first sentence up. This rule is claimed to derive (52)b-(54)b from (52)a-(54)a: (the (b) sentences are from Ross (1967) p. 30)

(52)a. He threw the letters which he had not decoded into the wastebasket.

b. He threw into the wastebasket the letters which he had not decoded.

(53)a. We elected my father, who had just turned sixty, president.

b. We elected president my father, who had just turned sixty.

(54)a. I consider the problem of keeping the house warm in the winter unsolvable.

b. I consider unsolvable the problem of keeping the house warm in the winter.

If this rule could be reduced to RM then it would violate (18) since RM applies only to missiles and complex NP shift moves non-missiles to the end of an S.

In fact several considerations indicate that complex NP shift is not a rule. First, note that the rule generates the ungrammatical (55)a-d (= Ross's (3.20)a-d):

(55)a.*I {forced / wanted} to eat hot soup all the children who were swimming.

b.*I told that we were in trouble a man who had a kin d face.

c.*I watched talk(ing) all the children who had never seen the sea.

d.*He restrained from attempting to bend the bars a cellmate he had known on the outside.

Second, the rule will derive (56)b-(57)b but not the perfectly acceptable (56)a-(57)a:

(56)a. He mailed early the present that he bought because of the holiday rush.

b.??He mailed early because of the holiday rush the present that he bought.

(57)a. He made impossible the job she was to do out of maliciousness.

b.*He made impossible out of maliciousness the job she was to do.

Third the rule has in many cases an output identical to that of the independently needed rule of adverb preposing. Thus (58)b might be derived by complex NP shift or by adverb preposing from (58)a. But this derivational ambiguity does not correspond to any real ambiguity:

(58)a. He saw the student you know in New York.

b. He saw in New York the student you know.

The similarity of the outputs of adverb preposing and complex NP shift suggests that in fact these are the same rule. If we examine the structures which appear to the left of the complex NP's after the application of complex NP shift we note that they are of two kinds: adverbials and predicate complements. If a predicate complement fronting rule can be

independently motivated then it is clear that a rule of complex NP shift is unmotivated. But a rule of predicate complement fronting is necessary to account for the relationship of the (a) and (b) sentences of (59)-(62):

(59)a. I consider the avocado heavenly.

b. I consider heavenly the avocado.

(60)a. I consider Vice-president Rockefeller a fool.

b. I consider a fool Vice-president Rockefeller.

(61)a. Mr. Newhouse will be speaking first.

b. Speaking first will be Mr. Newhouse.

(62)a. Buddy Hackett is fat, not me.

b. Fat is Buddy Hackett, not me.

Thus I claim that there is no such rule as complex NP shift and further that such rules must be excluded in principle. The analysis proposed accounts for the ungrammaticality of (55)-(57), which Ross must block in an ad hoc fashion,[13] as well as the ungrammaticality of (63)a-b[14] (=Ross's (3.35)b-(3.36)b) and (64) (=Ross's (3.24)a):

(63)a.*I loaned my binoculars a man who was watching the race.

b.*She asked whether it looked like rain a man who was near the window.

(64)*I consider to be a fool the senator who made the opening speech.

Another apparent counterexample to (18) is the putative parathetical*ization* process that relates the (a) and (b) sentences of (65)-(67), which Bolinger (1968) calls main phrase postposing: (examples are Bolinger's)

(65)a. I believe they're ready.

b. They're ready, I believe.

(66)a. Don't forget I'm coming back.

b. I'm coming back, don't forget.

(67)a. I imagine you'd like me to believe it was all over.

b. It was all over, I imagine you'd like me to believe

I am not sure how or whether the (a) and (b) sentences of (65)-(67) are related. The relevant point for this discussion is that if there is a rule relating them the rule does not require an S-final destination of the postposed constituent since (68)-(70), which correspond to (65)-(67), must also be derives by this rule:

(68)a. They, I believe, are ready.
b. They are, I believe, ready.

(69)a. I, don't forget, am coming back.

b. I am, don't forget, coming back.

(70)a. It, I imagine you'd like me to believe, was all over.

b. It was, I imagine you'd like me to believe, all over.

Consider claim (19). The analysis of (50)-(51) is relevant to it. (19) states that no rules can affect missiles other than RM. An apparent counterexample to this claim is the adjective shift rule which moves adjectives in postnominal position to prenominal position. But as (50)-(51) show postnominal adjectives are not missiles.

(19) is further borne out by the fact that such rules as topicalization and left dislocation cannot apply to certain constituents when they are missiles but can when they are not. Thus topicalization can front NP's, PP's, headless relative clauses and that-clauses, and infinitives, as in the following S's:

(71)a. I saw Smith.

b. Smith, I saw.

(72)a. Noodles taste best in cheese sauce

b. In cheese sauce, noodles taste best.

(73)a. You'll get what comes first.

b. What comes first, you'll get.

(74)a. I already heard that he's quitting.

b. That he's quitting, I already heard.

(75)a. Richard said to cheat the people would be simple.

b. To cheat the people, Richard said would be simple.

However, when these constituents are embedded as missiles in an NP they cannot topicalize . Compare (71)-(75) with the corresponding (76)-(80):

(76)a. I just saw Smith, a barber.

b.*A barber, I just saw Smith.

(77)a. Her favorite dish is noodles in cheese sauce.

b.*In cheese sauce, her favorite dish is noodles.

(78)a. You'll get that which comes first.

b.*Which comes first, you'll get that.

(79)a. I already heard that rumor, that he's quitting.

b.*That he's quitting, I already heard that rumor.

(80)a. They foiled Richard's attempt to cheat the people.

b.*To cheat the people, they foiled Richard's attempt.

Similar facts obtain for <u>left dislocation</u>. Thus <u>left dislocation</u> may apply to (71)a-(75)a to derive (81)a-(85)a respectively, but it cannot apply to (76)a-(80)a to derive (81)b- (85)b:

(81)a. Smith, I just saw him.

b.*A barber, I just saw Smith, him.

(82)a. In cheese sauce, noodles taste best (that way / there).

b.*In cheese sauce, her favorite dish is noodles (that way / there).

(83)a. What comes first, you'll get it.

b.*Which comes first, you'll get that (? it / ? such).

(84)a. That he's quitting, I already heard it.

b.*That he's quitting, I already heard that rumor (?it / ?such).

(85)a. To cheat the people, Richard said it would be simple.

b.*To cheat the people, they foiled Richard's attempt (? it).
(? such).

One might argue that topicalization and left dislocation can be prevented from applying to missiles by the Complex NP Constraint if missiles are domin ated by S at the point these rules apply. But such a stipulation will also block RM from applying to missiles. Furthermore, if Chomsky (1970) is correct in claiming that certain NP PP sequences like noodles in cheese sauce in (77) are base generated then the Complex NP Constraint could not block these rules from applying in these structures.

Note that the inability to topicalize or left dislocate is not only a property of missiles. Simple NP's and structures like (228) of chapter one also have this property. Apparently, then, launching pads are enough like these structures to prevent their missiles from being moved by these rules. On the other hand missiles seem to differ from simple NP's and structures like (228) of chapter one in their behavior in echo questions. The simple NP's in (86)a-(88)a have correesponding echo forms in (86)b-(88)b. But the missiles in (89)a-(91)a do not have corresponding echo forms, as in (89)b-(91)b:

(86)a. I met his friend John.

b. You met his friend who?

(87)a. I met Smith the barber.

b. You met Smith who?

(88)a. I met his junior high school friend.

b. You met his which friend?

(89)a. I met his friend, a senior at Queens.

b.*You met his friend, who/what?

(90)a. I met Smith, a barber.

b.*You met Smith, who/what?

(91)a. He caught the kid in the red shirt cheating.

b.*He caught the kid which cheating?

Note furthermore that the simple NP's in (86)b-(88)b have wh-fronted counterparts, as in (92)a-(94)a. But the launching pads of (89)b-(91)b do not, as in (92)b-(94)b:

(92)a. His friend who did you meet?

b.*His friend, who/what, did you meet?

(93)a. Smith who did you meet?

b.*Smith, who/what, did you meet?

(94)a. His which friend did you meet?

b.*The kid which did he catch cheating?

Another rule which supports (19) is adverb preposing which preposes adverbials like the PP in (95)a to the positions in (95)b-d:

(95)a. I spoke to John softly in the lobby.

b. I spoke to John in the lobby softly

c. I spoke in the lobby to John softly.

d. In the lobby I spoke to John softly.

As formulated by Ross the rule can apply to any PP. But (96)-(98) show this rule cannot move missiles:

(96)a. This is our house in the woods.

b.*This is in the woods our house

c.*In the woods this is our house.

(97)a. A bird in the ahand is better than two in the bush.

b.*A bird in the hand is better than in the bush two.

c.*In the bush a bird in the hand is better than two.

(98)a. This house is nicer than the one in New York.

b.*This house is nicer than in New York the one.

c.*In New York this house is nicer than the one.

(19) embodies the claim that no rule can delete a missile. This means that there can be no rule which relates the (a) and (b) sentences of (99)-(100):

(99)a. The boy in the back is fatter than the girl in the back.

b. The boy in the back is fatter than the girl.

(100)a. Bill gave John a book that he wrote and Alice an article that he wrote.

b. Bill gave John a book that he wrote and Alice an article.

This is the right result since it cannot be claimed that the last NP in (99)b-(100)b must be a paraphrase of the

corresponding NP in the (a) sentences.

Another entailment of (19) is that no rule will reorder a missile within its NP. This was shown in (96)b-(98)b to be the case.

A final entailment of (19) is that there is no rule which moves a missile to some non-S-final position. Thus a missile-auxiliary inversion rule like that which might relate (101)a+b is impossible:

(101)a. Smith, a barber, is quitting.

b.*Smith is, a barber, quitting.

Consider now claim (20), namely, that no rule can delete or reorder a launcher. This claim is a stronger form of Ross's Left Branch Condition, which states:

> "No NP which is the leftmost branch of a larger NP can be reordered out of this NP by a transformational rule." (Ross:114)

Grosu (1974) argues against the validity of the Left Branch Condition as a universal constraint and proposes in its place:

> "the freezing of the heads of complex NP's seems to be a linguistic universal"

(20) is stronger than this as well as the A-over-A principle. (20) makes the claim that no rule will delete or reorder the launcher regardless of what structure it is in at a given point in a derivation.[15]

Thus rules that move NP's will be blocked by (20) from applying to launchers as well as by the A-over-A principle and the Left Branch Condition. The following S's,

however, appear to be counterexamples. (102)b appears to be derived by topicalization from (102)a while (103)b appears appears to derive by wh-fronting from (103)a:

(102)a. We can do without that guy, (the bank robber / who robbed the bank).

b. That guy, we can do without, (the bank robber / who robbed the bank).

(103)a. You know someone who speaks Circassian.

b. Who do you know who speaks Circassian?

But it is easy to show that (102)b-(103)b derive by topicalization and wh-fronting respectively of the whole NP in question and RM subsequently postposes the missile. Consider (104)-(105). The ungrammatical (104)b derives by topicalization from (104)a. The ungrammatical (105)b derives by wh-fronting from (105)a:

(104)a. They gave that guy, (the bank robber / who robbed the bank), only three years in prison.

b.*That guy, they gave, (the bank robber / who robbed the bank), only three years in prison.

(105)a. You sold someone who speaks Circassian an English-Greek dictionary.

b.*Who did you sell who speaks Circassian an English-Greek dictionary?

Consider now (106):

(106)a. Russell claims he who laughed last laughed best in his latest editorial.

b. Russell claims he laughed best who laughed last in his latest editorial.

(106)b derives from (106)a by RM. Note now that the A-over A principle and the Left Branch Condition, but not (20), predict that the launcher he in (106)b can be fronted by wh-fronting. However (107)a shows that it cannot althou if the whole launching pad of (106)a is fronted then the missile who laughs last can be right moved, as in (107)b:

(107)a.*Who does Russell claim laughed best who laughed last in his latest editorial?

b. Who does Russell claim laughed best in his latest editorial who laughed last?

The claim that no rule can delete a launcher is supported by the following, which neither the Left Branch Condition nor the A-over-A principle can account for. Note the rule of you-deletion applies optionally in imperative sentences deriving (108)b from (108)a:

(108)a. You get out!

b. Get out!

But if the you is a launcher it cannot be deleted. Witness (109)-(111) in which you is followed by a missile PP, relative clause and AMP respectively:

(109)a. You in the back get out!

b.*In the back get out!

(110)a. You who came late get out!

b.*Who came late get out!

(111)a. You, a senior, get out!

b.*A senior, get out!

Note in particular that it is the fact that you is a launcher that prevents its deletion and not the fact that material intervenes between you and the verb since, on the one hand, if material intervenes between a non-launcher you and the verb, then you can delete, as in (112); and, on the other hand, if RM applies to (109)-(111), thereby leaving no intervening material between the you and the verb, the you is not deletable, as in (113)-(115), which correspond to (109)-(111) respectively:

(112)a. You, (damn it), get out!
(I said)

b. Damn it), get out!
I said)

(113)a. You get out in the back.

b.*Get out in the back.

(114)a. You get out who came late!

b.*Get out who came late!

(115)a. You get out, a senior!

b.*Get out, a senior!

Finally, (20) predicts that there is no rule which can delete a launcher under identity with a previous launcher, as (116) and (117) show:

(116)a. Bill gave Mary a book that he bought and
Bill gave Alice a book that he wrote.

b.*Bill gave Mary a book that he bought and
Alice that he wrote.

(117)a. He's for the emancipation of women and for the emancipation of children.

b.*He's for the emancipation of women and for of children.

Compare these with the deletability of the non-launcher in (118)b-(119)b, which derive from (118)a-(119)a respectively:

(118)a. I have a copy of John's book and a copy of Mary's book.

b. I have a copy of John's book and a copy of Mary's.

(119)a. Bill washed the dishes while Mary dried the dishes.

b. Bill washed the dishes while Mary dried.

The A-over-A principle will account for the ungrammaticality of (116)b-(117)b but only (20) predicts the ungrammaticality of (120)b and (121)d:

(120)a. It was clear that he left and it is certain that he won't return.

b.*It was clear that he left and is certain that he won't return.

(121)a. The man who you called lazy is here and the man who you called lazy is ready to work.

b. The man who you called lazy is here and is ready to work.

c. The man who you called lazy is here and the man is ready to work who you called lazy.

d.*The man who you called lazy is here and is ready to work who you called lazy.

The non-deletability of *it* in (120) cannot be reduced to the non-deletability of an element before the verb *be*. Witness (122):

(122)a. Bill is swimming now but he was dancing before.

b. Bill is swimming now but was dancing before.

Furthermore, the ungrammaticality of (120)b cannot reduce to the non-deletability of expletive *it* since the expletive *it* in (123) can delete:

(123)a. It rained yesterday and it will rain again today.

b. It rained yesterday and will rain again today.

FOOTNOTES TO CHAPTER TWO

1. Under traditional analyses of extraposition the that-clause occurs in deep structure as a complement to it.

2. One exception, complex NP shift, is discussed below.

3. I am indebted to Bob Fiengo for this expressive term.

4. Note that this formulation requires that RM (hence extraposition) be a cyclic rule, contrary to Ross's (1967) claim.

5. By rule, I mean syntactic rule. Such phenomena as contrastive stressing can affect missiles:

   (i) I saw the man who Bill knows not the man who Alex met.

6. Postal further argues that RD and Xtrap must be distinct because the former applies only in main clauses and only the right dislocated structure is an island.

   The first claim is false. (i), in which RD has applied in an embedded S, is perfectly acceptable:

   (i)a. The fact that he left early, Bill, upset Mary.

   b. That she's so bright, Mary, is quite apparent.

   The second claim seems to be correct, as Postal's examples (ii)a-b indicate, in which topicalization has applied in a right dislocated NP and an extraposed clause respectively:

   (ii)a.*Charley, it bothers me, Mary's loving.

   b. Charley, it bothers me that Mary loves.

   But the correctness of this claim does not require that (ii)a+b be derived by two distinct rules since the islandhood of the postposed gerund probably follows from its being an NP. The non-islandhood of the extraposed clause in (ii)b follows from its not being an NP in that position. (Arguments to the effect that extraposed that-clauses are not NP's have been presented by Higgins (1973).)

   Support for this conjecture comes from (iii)a-b, in which topicalization has applied in a gerundive and that-clause respectively when they are in subject position. In this position that-clauses are NP's:

   (iii)a.*Charley, Mary's loving bothers me.

   b.*Charley, that Mary loves bothers me.

FOOTNOTES TO CHAPTER TWO (cont.)

7. One might deal with this problem by ordering it-deletion before Xtrap. This ordering requires that it-deletion be optional. However, an ad hoc condition will have to be placed on it-deletion to make it obligatory just in case RD has applied in order to avoid (24)c.

8. One might suppose that this problem does not arise on Ross's formulation of RD since it does not apply to pronouns (see (4)). But as Ross himself notes RD must be able to apply to pronouns, as in (i)(=Ross (6.149)):

   (i)a. We'll do it together you and (I / me).

   b. They can't stand each other, (he and she / him and her).

   Furthermore, some of the sentences Ross adduces to justify his restriction on RD are acceptable for me. All the following cases with the objective forms of the pronouns are OK: ((ii)=Ross (*.148))

   (ii)a.*They let him go yesterday, (he / him).

   b. I like beer (*I / ?me).

   c.*We'll go together, (us / we).

   d.*They can't stand each other, (they / them).

9. The second assumption is further supported by the fact that none of the distinct potposing rules can apply twice on a cycle, as in (i)a-d, in which Xtrap, RD, XNP, and XPP respectively have applied more than once:

   (i)a.*It proves it that Bill tolerates Alice that he loves her.

   b.*He gave it to her, Bill, the book, Mary.

   c.*That guy is in the office, who was here yesterday, where John sits.

   d.*The leaders spread the rumors, of this group, about the CIA.

10. In the case of (i) the rule would have to apply three times:

   (i) He, Bill, gave them, the new books, to her, Mary.

FOOTNOTES TO CHAPTER TWO (cont.)

11. I am indebted to Bob Fiengo for this observation.

12. Similarly, compound nominals like jack-in-the-box, sister-in-law, attorney-general can be shown not to contain missiles by the RM test.

13. Note also that (55)b cannot be blocked, as Ross claims, by a proposed output condition which throws out internal S's exhaustively dominated ny NP. This is because interndl S's of this sort can, in fact, occur, as in:

    (i)a. I said that I was coming yesterday to Bill

    b. Bill thought that John left because that's what Harry told him.

In fact, such S's must internally in order to derive (ii), in which an internal has been relativized:

    (ii) Bill is happy that he owns a car, which is easy in the U.S.

14. The analysis proposed here is an improvement over Ross's in two other respects. First, Ross proposes (p.35) that the usual restrictions on such rules as particle movement and indirect object movement not be placed on the rules themselves, rather, that they be part be part of an output condition on postverbal constituents. Thus no rule, except for complex NP shift, will have any condition on it having to do with complexity. But under the analysis proposed here this general condition can be stated without exception.

Second, with the abandonment of complex NP shift there is no need to posit Ross's ad hoc condition (4.231) on prepositional objects:

    "No NP may be moved to the right out of the environment $(P\_\_)_{NP}$." (p.125)

This condition is false anyway since the ANP New York in (i)a can right move, as in (i)b:

    (i)a. He lived in that city, New York, for years.

    b. He lived in that city for years, New York.

15. Such a claim implies that launchers are always so marked throughout a derivation, as are missiles.

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