



CHAPTER III

NOMINAL MODIFICATION AS TREATED IN EARLY TRANSFORMATIONAL GENERATIVE GRAMMAR

Transformational generative grammar appears to be the most exciting kind of grammar to many people at the present time. The important figure who brought transformational theory into prominence in 1957 is Noam Chomsky,²⁰ professor at the Massachusetts Institute of Technology. This grammar tries to give the answers to questions about how a language works. It represents factual claims concerning the rules that underlie the data that have been collected about languages. This type of grammatical description can give a precise and explicit explanation of those facts of the language that its speakers know instinctively but are hardly conscious of and frequently fail to observe. These explanations replace the vague notional definitions of traditional grammar and the uncompleted explanations of structural grammar of the working systems of the language, especially on the level of syntax, where no traditional or structural grammar goes beyond the classification of generative rules on any significant scale.

It is called transformational grammar because it is a system of grammatical analysis that uses transformations, the process of

²⁰ Noam Chomsky, Syntactic Structure. (Mouton and Company, The Hague, 1957).

transforming, or changing one form to another, to express the relation between elements in a sentence, clause, phrase, or between different forms of words. But the term transformational is somewhat imprecise. We should call this type of grammatical explanation "transformational generative grammar" (T-G grammar). Briefly a generative grammar is one that contains a list of symbols and list of rules for combining by transformation those symbols in various ways to produce English sentences. Such a grammar is said to "generate" or to "enumerate" all the possible sentences in a language by using various rules.

The concepts of deep and surface structure are important in T-G grammar. Surface structure is the structure of the sentence we hear or speak, while deep structure includes everything we understand in a sentence even though it may not be visible or audible on the surface.

Recursiveness is a very important characteristic of grammatical rules in T-G grammar. For example, the relative clause rule is recursive in that it may be applied to the sentence more than one time.

The boys who attend the school that is located on the street on which we live have the mumps that they got from a visitor who works for a farmer who has children that get all the diseases that anyone ever heard of.

These relative clauses show that the sentences produced by the grammatical rules are theoretically infinite. But of course there are limits to how often we actually apply the recursive rules.

Transformational generative grammar tries to show that in a language there are not many basic patterns, but according to T-G grammar these few patterns of a language are transformed by many rules to serve the specific purposes of the speaker, and they appear again and again in different combinations. The result is the infinite number of sentences which come from a few roots of deep structures. Transformational generative grammar, therefore, gives us more insight than many other types of grammar because it explains much of what we know to be true about the language.

A structure of nominal modification (except determiners) is explained in T-G grammar as having more than one sentence embedded in a kernel sentence, such as an embedded relative clause, embedded adverb of place or location, embedded adjective, etc. The fundamental distinction between two kinds of sentences, kernel sentences and transforms, is that kernel sentences are the basic, elementary sentences of the language, the stuff from which all else is made while transforms are the "all else" structures drawn from the kernels to produce all the complication in English sentences. We will see how the transformations can change and expand the kernel sentences (which consist of two main parts: noun phrase and verb phrase) in many ways to create the great variety of sentences possible in English. Paul Roberts (1968)²¹ states that a kernel sentence is built into a

²¹ Paul Roberts, Modern Grammar, (Harcourt Brace and World, Inc., 1967, 1968) pp. 177-196.

complex sentence by having structures of various kinds attached to the determiner plus the common noun of the kernel. For example, the sentence: The boys who attend the nursery school are young. consists of two sentences.

1. The boys attend the nursery school. This is called the insert sentence. It is the sentence of which the relative clause is made. It provides the structure to be inserted.

2. The boys are young. This is called the matrix sentence. It is a mold that provides the fundamental form of the finished sentence.

The finished transformed sentence is called the result sentence. It results from the insertion of material from the insert sentence into the matrix.

Other examples:

insert: The boys attend the nursery school. }
 matrix: The nursery school burned down. } ⇒
 result: The nursery school that the boys attend
 burned down.

insert: Jack took the girl to the dance. }
 matrix: I argued with the girl. } ⇒
 result: I argued with the girl Jack took to
 the dance.

insert: The lilac is purple. (→ the purple lilac) }
 matrix: The lilac needs water. } ⇒
 result: The purple lilac needs water.

Various kinds of noun modifiers explained by transformationalists are as follows.

1. Determiners as Noun Modifiers

A determiner is classified as a noun modifier because it helps to give more meaning to the noun. Determiners are those words which regularly precede nouns. Most school grammars list the articles and other kinds of determiners as a special subclass of adjectives, but transformationalists prefer to introduce a separate category for determiners.

There always is a determiner before a noun when it appears in a sentence (Det + N), although the determiner may be zero (\emptyset), that is, nothing.

Noun phrases, accordingly, may contain determiners as well as embedded sentences as mentioned before: NP \rightarrow (Det) N (S)

The rule of nominal constructions that have determiners as modifiers is NP \rightarrow DP + N + N Ω

Examples of determiners

The boy was suffering.

A wave rolled in.

Some people had been watching.

Some of the boards were lost.

All of the surfers are coming in now.

Three of these boats are leaking.

A few of the ten boys dropped out.

null determiner (\emptyset) : Ice cream

Owen Thomas (1965)²² talks about determiners as having three major subclasses:

1. regular determiners
2. postdeterminers
3. predeterminers

A. Regular determiners as Noun Modifiers

There are three kinds of regular determiners.

Articles (Art)	Demonstratives (Dem)	Genitives (Gen)
a (an)	this	my
∅	that	our
the	these	your
any	those	his
every		her
each		its
some		their
		Nom + Z ₃

Examples: A boy, an ostrich, the girl, any house,
every man, these girls, my boy

No more than one regular determiner can precede a noun in a kernel sentence. Every noun in English must be preceded by one regular determiner, although certain nouns are generally preceded by the zero article, ∅

a boy, ∅ boys

²² Owen Thomas, Transformational Grammar and Teacher of English (Holt, Rhinehart and Winston, Inc., 1965) pp. 79-87.

Such mutual exclusiveness is one fact that distinguishes the regular determiners, as a class, from the adjectives. Theoretically there is no limit to the number of adjective that can precede a noun.

The following are examples of the sentence containing nominal constructions that have regular determiners as modifiers.

Det + N + N \bar{O} + Pas + V + Det + N + N \bar{O}

The man \emptyset saw the girl \emptyset

Dem + N + N \bar{O} + Pas + V + Gen + N + N \bar{O}

That man \emptyset saw your girl \emptyset

There is a very small class of word, called prearticles (Preart), which as their name suggests can precede articles (and demonstratives or genitives), including the zero article. The most importance of these prearticles are: all, only, both, just.

all the boys

just my speed

only that book

all \emptyset boys

both those girls

The zero article, of course, appears only in the deep structure of a sentence and not in the final or surface structure.

The phrase structure rule for regular determiners with or without prearticles are as follows

$$\text{Det} \longrightarrow (\text{Preart}) \left\{ \begin{array}{l} \text{Art} \\ \text{Dem} \\ \text{Gen} \end{array} \right\}$$

B. Postdeterminers as Noun Modifiers

Postdeterminers (Postdet) is another class of words that

follow the regular determiners in an underlying string and which precede the adjectives. They are different from postdeterminers explained by Sledd (See page 115) because here the postdeterminers are not adjectives.

There are three kinds of postdeterminers.

Ordinals (Ord)	Cardinals (Card)	Superlative and Comparative (Comp)
first	one	more
second	two	most
third	three	fewer
(etc.)	(etc.)	- er - est
next	several	less
last	many	least
final	few	

Examples of postdeterminers that can occur with determiners:

the first orange

those three statues

some more gravy

They can also co-occur with each other, but only in the order indicated

the first two items

the last several months

There are some restrictions. The ordinals and cardinals do not both occur with comparatives and superlatives and are rarely -- if ever -- preceded by either ordinals or cardinals. And there are also some apparent exceptions to the rules of invariable order.

the two second basemen

the four final examinations

Sometimes the postdeterminers are preceded by the zero article (\emptyset) as in one mule, many hands

The phrase structure rules of the postdeterminer are as follows.

$$\text{Det} \longrightarrow (\text{Preart}) \left\{ \begin{array}{l} \text{Art} \\ \text{Dem} \\ \text{Gen} \end{array} \right\} (\text{Postdet})$$

$$\text{Postdet} \dashrightarrow (\text{Ord}) \quad (\text{Card}) \quad (\text{Comp})$$

The parentheses indicate that the presence of postdeterminer, prearticle, etc. is optional.

$$1. \text{ Det} + \text{ N} + \text{ N}\underline{\text{O}} + \text{ Pas} + \text{ V} + \text{ Det} + \text{ N} + \text{ N}\underline{\text{O}}$$

That man \emptyset saw your girl \emptyset

$$2. \text{ Dem} + \text{ Card} + \text{ N} + \text{ N}\underline{\text{O}} + \text{ Pas} + \text{ V} + \text{ Gen} + \text{ Ord} + \text{ Card} + \text{ N} + \text{ N}\underline{\text{O}}$$

That last man \emptyset saw your first two girls \emptyset

C. Predeterminers as Noun Modifiers

Predeterminers can precede both the regular determiners and the postdeterminers, and they have an unique feature: They are invariably separated from the regular determiner by the word of, including most of the regular determiners and postdeterminers as well as certain nouns of quality (Nqu) (mile, barrel, quart, slice, wedge, price, gallon, peck, and so on).

all of the emperors

a quart of molasses

some of those owls

a mile of spaggetti

most of my freckles

only the first two barrel of all

each of my ships

the first of those three bubbles

Just the last two of my first five children

The phrase structure rules for the predeterminers are as follows:

$$\text{Det} \longrightarrow (\text{Predet}) (\text{Preart}) \left\{ \begin{array}{l} \text{Art} \\ \text{Dem} \\ \text{Gen} \end{array} \right\} (\text{Postdet})$$

$$\text{Predet} \longrightarrow (\text{Preart}) \left\{ \begin{array}{l} \text{Art} \\ \text{Dem} \\ \text{Gen} \end{array} \right\} (\text{Postdet}) + \text{of}$$

2. Adjectives as Noun Modifiers

The most characteristic position in which adjectives occur is the prenominal, that is, between the determiner and the noun.

the red balloon

an old man

these beautiful little flowers

the new building

In the above examples each construction contains both a determiner and an adjective before a noun, and the determiner and adjective seem somewhat alike, but they are different. The most important way in which they differ is that in the deep structure an adjective is a part of another sentence (the embedded sentence) but the determiner is not a part of an embedded sentence.

Owen Thomas²³ explains the adjective modifiers of nouns in his book Transformational Grammar and The Teacher of English in the following way.

The phrase structure rule of such a construction can be stated as follows:

$$\text{Nom} \longrightarrow \left\{ \begin{array}{l} \text{Pro} \\ \text{Pron} \\ \text{Det} + \text{N} + \text{NO} \end{array} \right\} (+ \text{S})$$

A nominal construction (Nom) may be composed of a proper name (pro), or a pronoun (pron), or a noun in singular or plural form and a determiner. Any of these might have a sentence embedded in it.

Under certain conditions, this rule permits us to insert or embed one sentence into another. This embedding process is in transformational generative grammar the source of all adjective modifiers and also subordinate clauses in English. Embedding opens the door to the most powerful rule in English, the rule which gives the language its infinite variety.

Thomas illustrates this by using an example taken from Chomsky. Suppose there is a kernel sentence like:

God created the world.

In some derivational string, this sentence could also have the form:

²³ Thomas, op.cit., pp. 90-93.

God (+ S) created the world (+S).

Now suppose that we substitute two new sentences for the S symbols in the string, giving:

God (God is invisible) created the world (the world is visible).

An obligatory transformation would take a string of this sort, delete the repeated items, and give

Invisible God created the visible world.

According to Thomas, every adjective that occurs in a pre-nominal position is introduced into that position from an embedded sentence that has the form of the first kernel, Nom + be + Pred, where the symbol Pred stands, in this case, for Adj. Thus the underlying sentence is

God (God + is + Adj) created the world (the world + is + Adj)

The symbols used for describing this construction are

Det + N + N₀ (+ S)

or Det + N + N₀ (Det + N + N₀ + be + Adj)

That is, it consists of a noun in either singular or plural form and a determiner. It might contain an embedded sentence. The embedded sentence here consists of a noun and a determiner as subject, the verb to be, and an adjective.

If the noun of the matrix (the basic sentence) is identical to the noun of the constituent (embedded sentence) the adjective of the noun in the embedded sentence will be placed before the noun in the basic sentence. The string can be written as follows:

Det + N + N \underline{O}^1 (Det + N + N \underline{O}^2 + be + Adj)

Det + Adj + N + N \underline{O}

where N + N \underline{O}^1 = N + N \underline{O}^2

This transformation may be applied to a particular sentence a number of times.

One further illustration follows. Suppose we have a derivation with the following string:

1. Det + N + N \underline{O} (+ S) + Past + V + Det + N + N \underline{O}

This might lead to the following string.

2. the + man (+ S) + saw + the + girl

Suppose now we replace the optional S with a constituent sentence that has the same subject as the matrix sentence.

3. the + man (+ the + man + is + tall) + saw + the + girl

We can move the adjective of the constituent to a pre-nominal position in the matrix and then delete the repeated item in the constituent.

4. the + tall + man + saw + the + girl

The process of incorporating an optional S after every Nom in the deep structure of the grammar adds a property known as recursiveness to the grammar. It makes the grammar capable of producing an infinite number of sentences. It is the rule that enables us to trace our way through the grammar again and again.

Zeno Vendler (1968)²⁴ in Adjectives and Nominalization,

²⁴ Zeno Vendler, Adjectives and Nominalizations (Mouton & Co. N.V., Publishers, The Hague, 1968) pp. 86-87.

explains that there is another possibility of immediate derivation of adjective noun construction (AN). That is, in a great number of cases AN may arise from a restrictive relative clause (AN ← N wh... is A). Let's compare the two constructions.

1. I see three roses. The red one is lovely.
2. I see three roses. The one that is red is lovely.

The second sentence which consists of a restrictive relative clause is the paraphrase of the first one.

The sentence

I met the tall Mary.

Can be paraphrased by

I met the Mary that is tall.

The kernel sentence God created the world that was transformed to be Invisible God created the visible world might be derived from God who is invisible created the world which is visible. But nearly all single-word adjectives can--and in general, must--be inserted or embedded before a noun when we delete the subject and the verb of the relative clause (i.e., the Wh - and to be). Another example is:

He bought a car which is green.

He bought a green car.

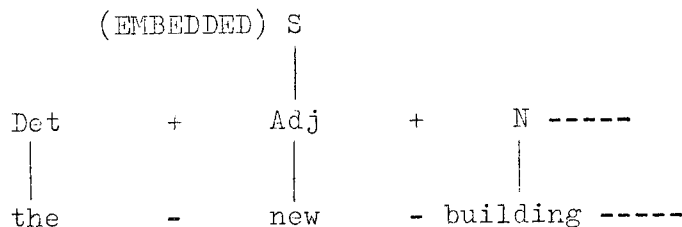
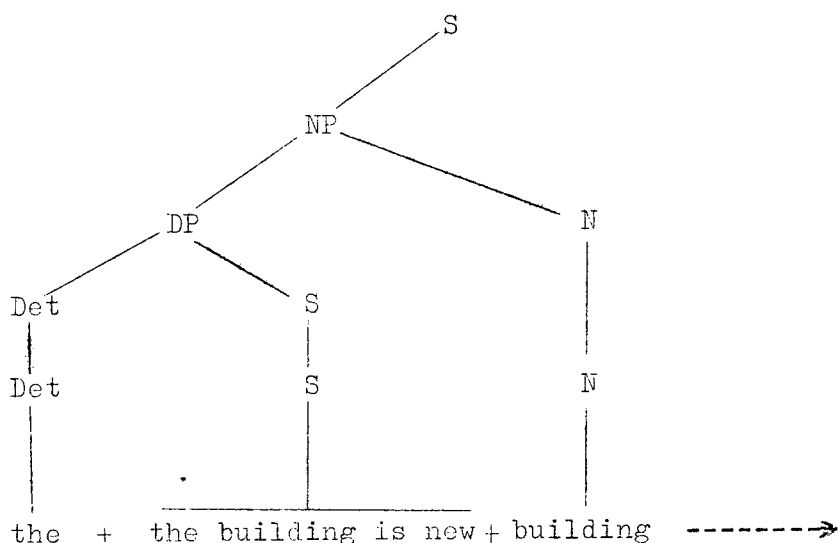
In Language/Rhetoric II: The Oregon Curriculum, A Sequential Program in English, (1968)²⁵ the authors explain a construction

²⁵ Albert R. Kitzhaber and Others, The Oregon Curriculum. A Sequential Program in English. Language and Rhetoric II. (Holt, Rinehart and Winston, Inc., 1968) pp. 76-83.

that contains an adjective modifier like a new building in this way. This noun phrase (NP) consists of determiner phrase (DP) which also consists of a determiner (Det) and an embedded sentence (S) containing an adjective (Adj), and a noun (N)

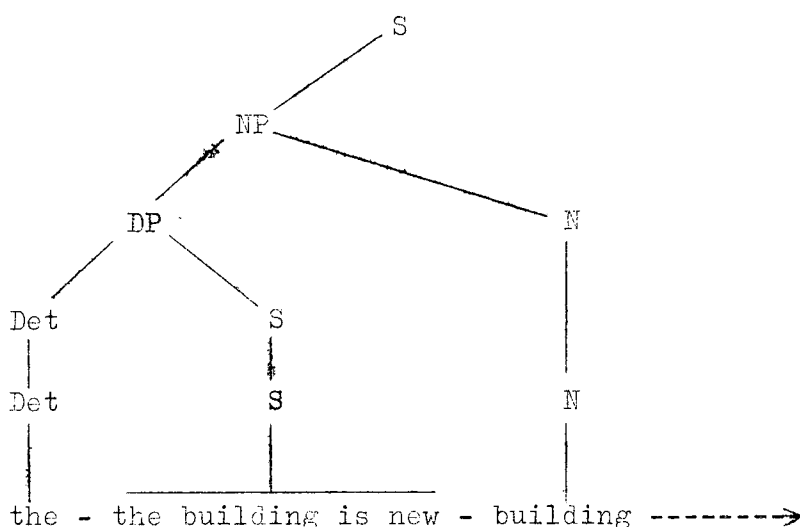
NP \longrightarrow DP + N

DP \longrightarrow Det + (S)

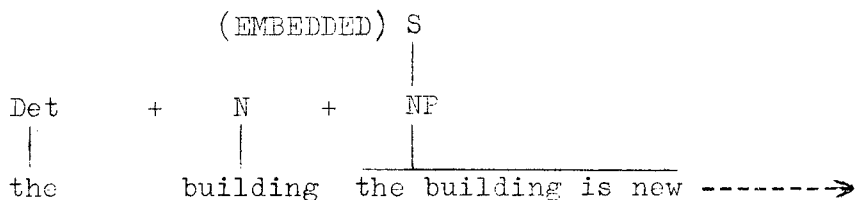


but in surface structures we also meet, besides constructions like a new building, constructions like the building which is new. These two structures have the same meaning. They look different,

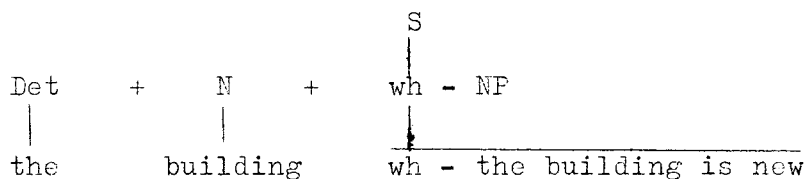
however. In the first one the adjective comes before the noun it modifies, but in the latter it comes after in the relative clause. These two constructions, in fact, have the same deep structure but their surface structures remain different, resulting from two different transformations. The transformation of the construction the building which is new is as follows:



The embedded sentence is moved to the position after the noun.



The subject of the embedded sentence is replaced by a relative pronoun that is signified by the symbol wh.



wh - the building will be replaced by the appropriate relative pronoun.

wh - the building \rightarrow that

Other examples: Some hungry dogs roamed about, compared with some dogs that are hungry roamed about.

(1). Det + (Embedded) S + NP + VP
 | | | | |
 some - some dogs were hungry - dogs (roamed about)

Everything but the adjective is deleted from the embedded sentence.

(Embedded) S
 |
 Det + Adj + NP + VP
 | | | | |
 Some hungry dogs (roamed about)

(2). Det + (Embedded) S + NP + VP
 | | | | |
 Some - some dogs were hungry - dogs (roamed about)

The embedded sentence is moved to a position following the noun.

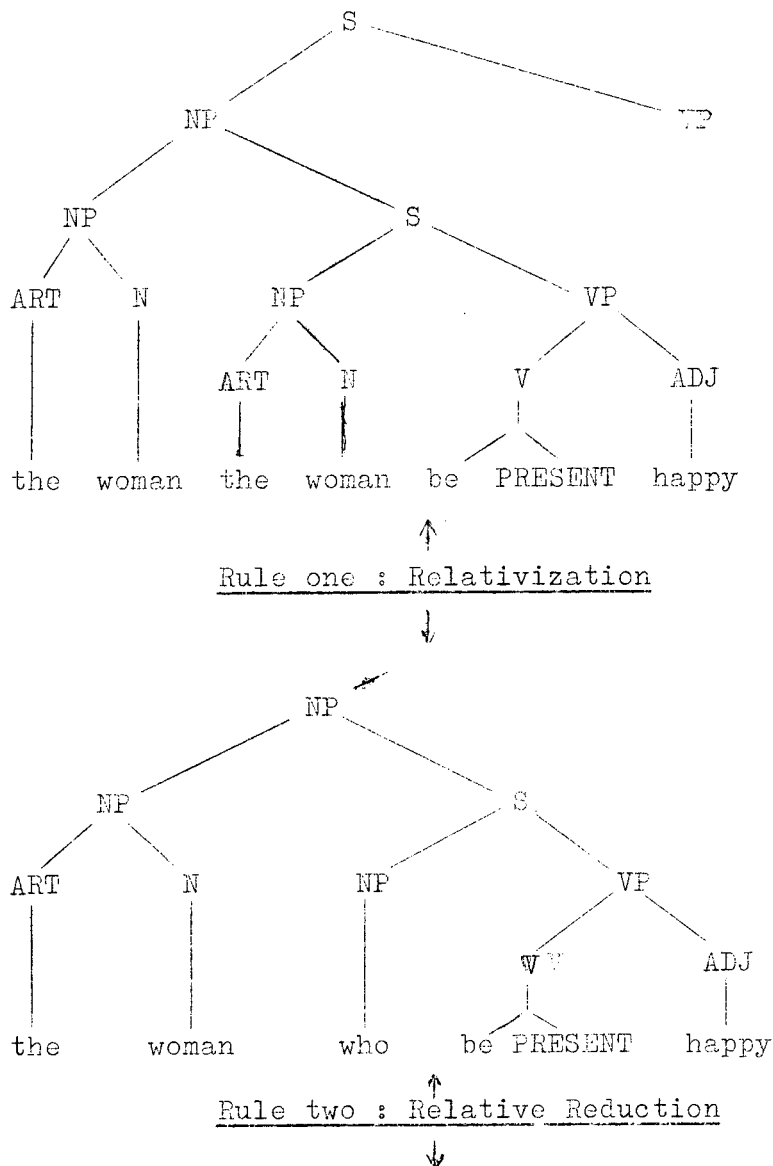
Det + NP + (Embedded) S + VP
 | | | | |
 Some dogs - some dogs were hungry - (roamed about)

Then the subject of the embedded sentence is replaced by a relative pronoun.

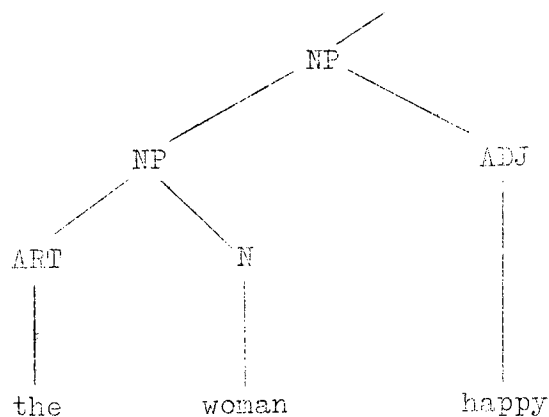
Det + N + S + NP + VP
 | | | | |
 some dogs - wh - some dogs were hungry - roamed about.

wh. - NP or wh - some dogs is replaced by that and we get
Some dogs that were hungry roamed about.

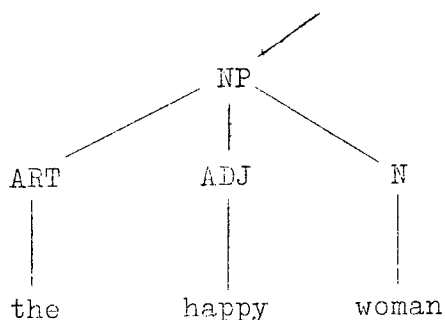
Ronald W. Langacker (1967, 1968)²⁶ explains a construction like the happy woman by a series of rules.



²⁶ Ronald W. Langacker, Language and Its Structure.
 (Harcourt, Brace & World, Inc., 1967, 1968) p. 133.



Rule three : Adjective Inversion



According to Langacker's diagram, the embedded sentence the woman be PRESENT happy is transformed by Rule One to a relative clause who be PRESENT happy. Then the whole clause becomes only one adjective happy. Lastly according to Rule Three the adjective is moved from the position after the noun woman to the position in front. So by these transformations we get the resulting construction the happy woman.

3. Relative Clauses as Noun Modifiers.

The relative clause is only a part of a sentence. It looks very much like a sentence except that it is often introduced by the relative pronouns who, whom, that or which.

Thomas (1965)²⁷ explains the derivation of a relative clause as noun modifier by the use of the following example:

If we have a sentence like The man came from Calcutta, and have a matrix sentence such as the following:

The + man + (S) + came + from + Calcutta.

We may use the optional S to embed a subordinate clause into the matrix. We might, then, enlarge the sentence as follows:

The + man (+ Det + man + likes + balloons) + came
+ from + Calcutta.

If the noun in the matrix is identical to the noun in the constituent we may embed the constituent as a subordinate clause.

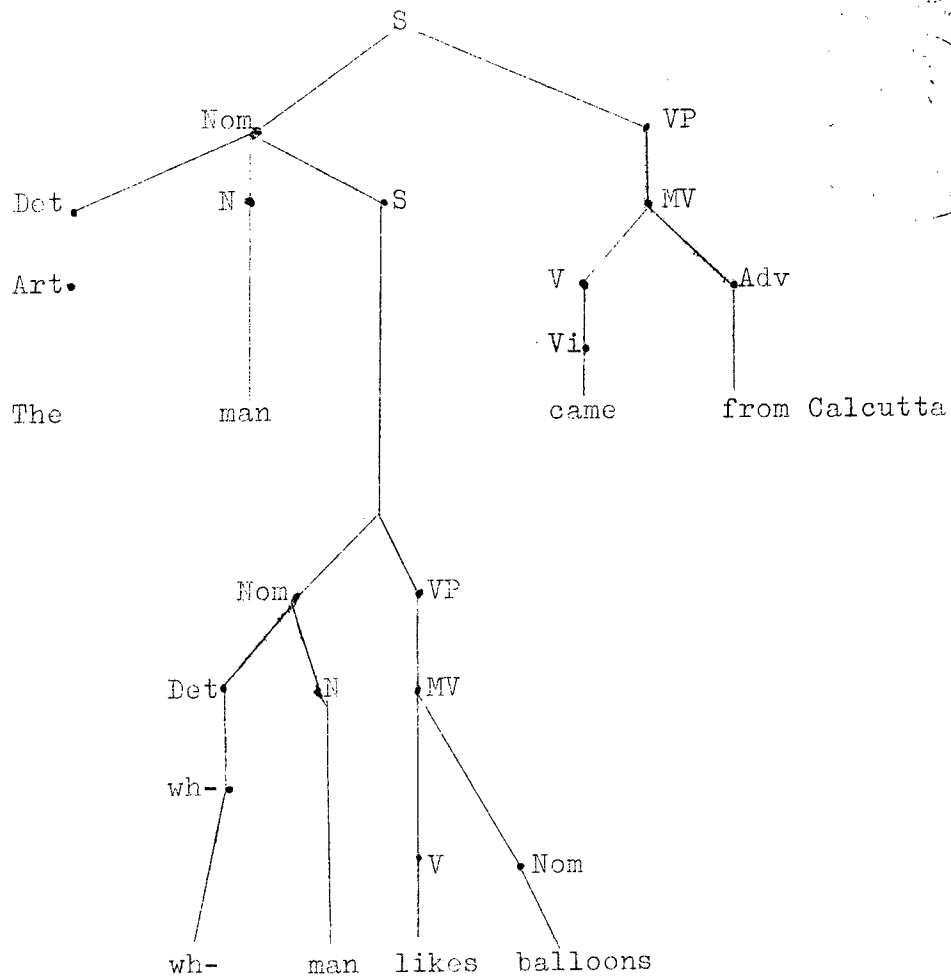
The + man (+wh + man + likes + balloons) + came
+ from + Calcutta.

Since the identical nouns are animate, and since the noun in the constituent is the subject of its sentence we combine wh-man to give who.

The + man + who + like + balloons + came + from
+ Calcutta.

²⁷ Thomas, op. cit., p. 94.

This sentence, of course, can also be shown in a branching tree diagram:



Similar to the case of embedding adjectives, we can only embed a subordinate clause if the nouns in the matrix and constituent sentences are identical.

Other examples:

If we have the sentence:

Those + witches (+ S) + will + become + hungry.

We now need to embed a sentence that has the shape:

wh - witches dance at midnight.

We now embed this constituent sentence into the matrix

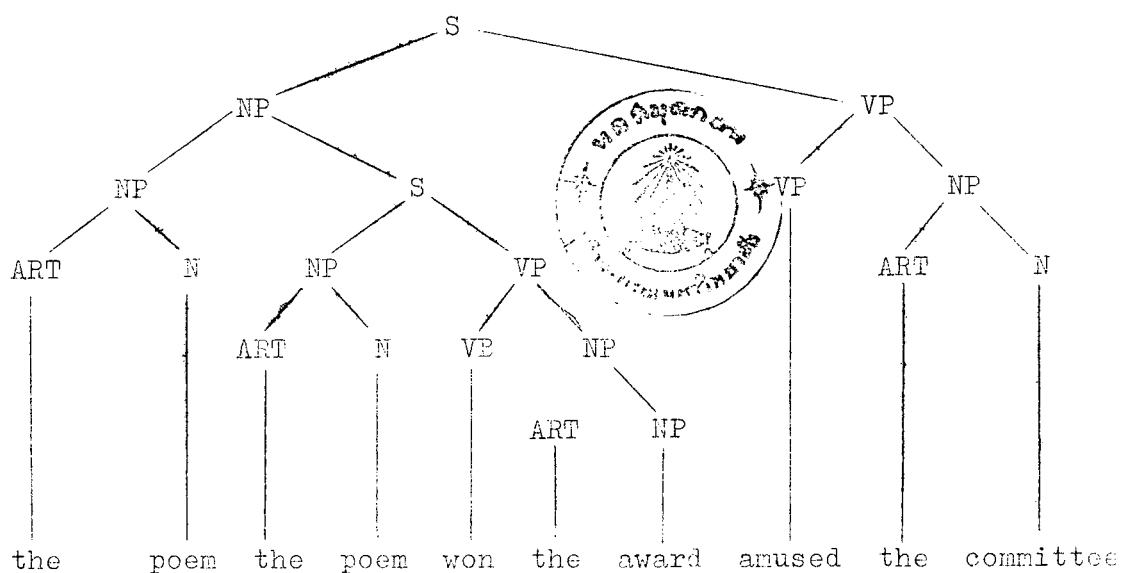
Those + witches (+ who + witches + dance + at + midnight)
+ will + become + hungry.

The terminal string is

Those + witches + who + dance + at + midnight + will
+ become + hungry.

Jacobs and Rosenbaum (1968)²⁸ also explain with a tree diagram the deep structure of the sentence which contains a relative clause as noun modifier.

The poem which won the award amused the committee.



²⁸ Roderick A. Jacobs and Peter S. Rosenbaum, English Transformational Grammar. (Blaisdell Publishing Company, 1968) p. 48.

This sentence is composed of two shorter sentences, one embedded in the other.

1. The poem won the award.
2. The poem amused the committee.

The first sentence is changed into a relative clause, then inserted in the second sentence as the modifier of its subject.

Because of the recursive relative clause rules, there might be many relative clauses in a sentence. For example:

Several of those thirty little boys who attend the nursery school which is located at the end of the street on which we live...

This seems like a sentence but it is not. It is just a noun phrase containing a noun plus its modifiers.

The structure of nominal modification with relative clauses as noun modifiers can occur in many functions.

Subject: - The boys attend the nursery school. ⇒

The boys who attend the nursery school...

- The school is located at the end of the street. ⇒

The school which was located at the end of the street...

Object of a verb:

- The man collected the garbage yesterday. ⇒

The garbage that the man collected yesterday. ⇒

(The relative pronoun can be omitted)

The garbage the man collected yesterday...

- He saw the boy. ⇒
the boy (whom) he saw...
- He bought a house ⇒
A house (which) he bought...

Object of preposition:

- John spoke to the girl yesterday. ⇒
The girl that John spoke to...
The girl to whom John spoke...

There are two types of relative clauses acting as noun modifiers: restrictive and nonrestrictive. The restrictive clause is not separated by punctuation from the noun it modifies, while the nonrestrictive is the clause that does not identify the meaning of the noun.

Compare the following two sentences. Marge, who paints well, makes her own cards and Any man who likes George Eliot is a connoisseur. In the first sentence the relative clause just helps to give information about Marge. The relative clause here can be left out without changing the meaning of the basic sentence. But in the second sentence the clause states that those men who like George Eliot form a limited class of people. The relative clause here can not be left out without changing the meaning of the sentence it is embedded in.

Restrictive Relative Clause

- | | | |
|---------|-------------------------------------|-----|
| insert: | I met the girl. | } ⇒ |
| matrix: | The girl spoke German. | |
| result: | The girl (whom) I met spoke German. | |

Nonrestrictive Relative Clause

insert: I met Mabel. }
 matrix: Mabel spoke German. } ⇒
 result: Mabel, whom I met, spoke German.

insert: Chicago was the site of the convention. }
 matrix: Chicago had been preparing for months. } ⇒
 result: Chicago, which was the site of the convention,
 had been preparing for months.

insert: You know better. }
 matrix: You are most to blame. } ⇒
 result: You, who know better, are most to blame.

Sometimes the relative clause can be both restrictive or nonrestrictive depending on the meaning of the noun phrase and the passage as a whole.

insert: The girl sat on Ronald's left. }
 matrix: The girl borrowed his pen. } ⇒
 result: 1. The girl who sat on Ronald's left borrowed his pen. (This is restrictive because it implies that there are two girls. One sat on Ronald's left, another sat on Ronald's right. The one who borrowed his pen was the one on his left.)
 2. The girl, who sat on Ronald's left, borrowed his pen. (This is nonrestrictive. It just gives information on where she sat.)

The deletion transformation is an important rule in early T-G grammar. Paul Roberts (1968)²⁹ explains that in most of the other types of noun modifier derived from the structure of relative clauses, especially the ones whose main verb is in the form of the be or seen types, the relative pronoun (Wh) and the verb be can be deleted and have following postnominal modifiers:

prepositional phrase: He married a girl (who is)
from Texas.

sentence: I know a man (whom) George knows.

He saw a man (who was) walking in the park.

Adjective and complement: He climbed a mountain
(that is) higher than Everest.

Adjective and intermediate form: I heard something
(that was) odd.

Moreover, in case of the single word noun modifier, for example, an ing verb or participle, or an adjective, there is an obligatory type of rule such that the modifier can be shifted to the position between the determiner and noun.

I have a hat (that is) green. (Here we can change the
position of the adjective
to the prenominal position)

I have a green hat.

²⁹ Roberts, op. cit., pp. 177-196.

Other examples:

Det + N + Mod	→	Det + Mod + N
the + man + bad	→	the + bad + man
the + dog + walking	→	the + walking + dog
the + person + educated	→	the + educated + person

In other cases, for example, when a single word adverbial of place is a noun modifier, this rule is optional. We can use either the paragraph above or the above paragraph.

According to S.-Y. Kurada (1969),³⁰ not all relative clauses accept deletion. A restrictive clause of the form Wh + is + adjective + complement is available for the deletion transformation only if the determiner in the containing noun phrase is not definite, for example, It is an article (which is) good enough to win the prize. And also the deletion transformation cannot apply when a restrictive clause has the form of Wh + is Noun Phrase (who is a chemist) or Wh + Verb (who knows George). The deletion rule structures must be excluded to avoid ungrammatical sentences like these:

* I know a man a chemist.

* I know a man knows George.

Wh is may be deleted from certain nonrestrictive clauses. For example, those of the form Wh + is + Noun Phrase and Wh + is +

³⁰ S.-Y. Kurada, "English Relativization and Certain Related Problems." Modern Studies in English, Readings in Transformational Grammar, Edited by David A. Reibel and Sanford A. Schane. (Prentice Hall, Inc., Englewood Cliffs, New Jersey, 1969), pp. 264-287.

+ Adjective + Complement. These are just the forms that are not available for deletion in restrictive clauses as mentioned above.

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

The girl, (who was) bored with her sister's action, yawned delicately.

The deletion rule correctly allows that more than one restrictive clause may directly follow a noun. Or, a restrictive clause may be embedded in a noun phrase already having a restrictive clause, and in a noun phrase having prenominal or postnominal modifiers that have been produced by the embedding rule. For example, here is a sentence with two restrictive clauses:

John met a man who was from New York who had never been to the top of the Empire State Building.

A restrictive clause and postnominal modifier:

John met a man from New York who had never been to the top of the Empire State Building.

A restrictive clause and a prenominal modifier:

I caught a white rabbit that had escaped from its cage.

The relative (which is usually associated with definiteness) is not embedded if the noun phrase contains the indefinite determiner, as the following sentences show.

He is an anthropologist, who studies Indian tribes.

He is an anthropologist, whom I met at a party last week.

that can follow the verb to be in the kernel sentence: nominals and adverbs of location.

The animal is an aardvark (nominal). The aardvark may be happy (adjective). The aardvark has been there (adverb of location).

According to Thomas (1965),³¹ adjectives are introduced from a constituent sentence into a position immediately preceding a noun in the matrix sentence while the adverbs of location and nouns are in the noun-modifying position that follows the noun they modify. Nominals that are introduced in this fashion are called nouns in apposition. They will be discussed later.

The following are examples of constructions that have locative adverbs as noun modifiers.

the room upstairs

the flower on the table

the building on the corner

For Paul Roberts (1968)³² the room upstairs comes from

The room is upstairs. \Rightarrow (by T-relative)

The room that is upstairs \Rightarrow (by T-relative, deletion)

The room upstairs

The following are examples of sentences that have relative clauses as noun modifiers.

³¹ Thomas, op. cit., pp. 90-96.

³² Roberts, Modern Grammar, op. cit., p. 229.

The sentence The boy outside was shouting comes from

insert: A boy is outside. \Rightarrow (by T-relative)

A boy that is outside \Rightarrow (by T-relative, deletion)

A boy outside

matrix: A boy is shouting.

result: A boy outside is shouting.

The sentence The frost on the pumpkin is lovely. comes from

insert: The frost is on the pumpkin. \Rightarrow (by T-relative)

The frost which is on the pumpkin \Rightarrow (by T-relative,
deletion)

matrix: The frost is lovely. $\left. \begin{array}{l} \text{The frost on the pumpkin} \\ \text{The frost is lovely.} \end{array} \right\} \Rightarrow$

result: The frost on the pumpkin is lovely.

Thomas (1965)³³ gives a different transformation for locative modifiers. For example, the phrase The frost on the pumpkin comes from

Nom (S)

or $\text{Nom}_{\text{matrix}} (+ \text{Nom} + \text{be} + \text{Loc})_{\text{constituent}} \rightarrow \text{Nom} + \text{Loc}_{\text{matrix}}$

where $\text{Nom}_{\text{matrix}} = \text{Nom}_{\text{constituent}}$

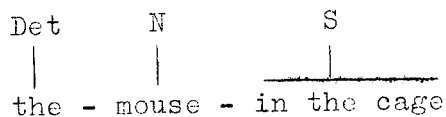
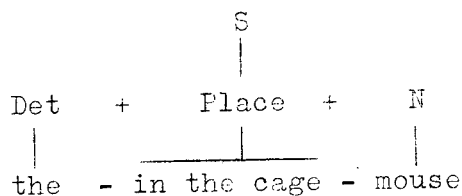
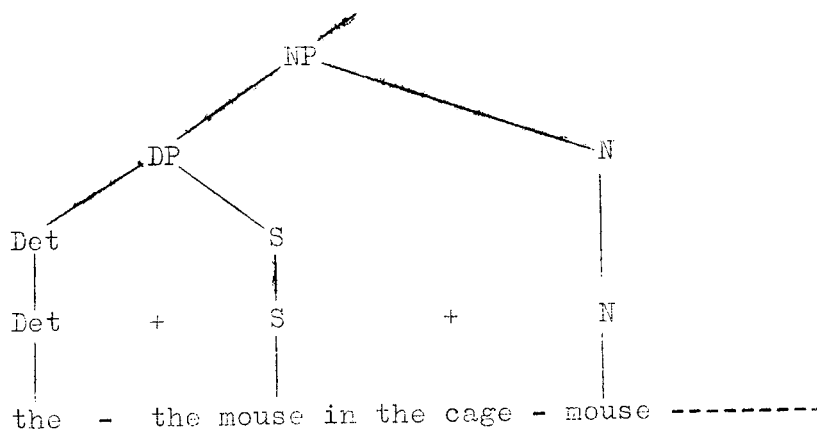
That is, such an example as that above is derived from a construction that contains a nominal with an embedded sentence that has a nominal as subject, a verb to be and a locative adverb. If

³³ Thomas, op. cit., p. 96.

the nominal in the matrix (basic) sentence is the same as that in the constituent (embedded) sentence the subject and verb of the embedded sentence are deleted.

The frost (+The frost is on the pumpkin) → The frost
+ on the pumpkin.

In Language/Rhetoric II (1968)³⁴ a construction like the mouse in the cage is explained as follows:



³⁴ Kitzhaber and Others, op. cit., p. 122.

The single word adverbial of place sometimes can be shifted to the position before the noun it modifies. For example, we can use the room upstairs or the upstairs room, the paragraph above or the above paragraph. But in a sentence like the men there knew about it, the adverb there cannot be put in front of men like *the there men.

Sometimes we can use both an inside man or a man inside but the meanings are different.

5. Nouns Modifying Other Nouns.

This type of modifier conveys quite a variety of grammatical meanings. That is, it is derived from a variety of insert sentences. For example:

a picture gallery ← A gallery displays pictures.
 a coffee cup ← A cup holds coffee.
 a necktie salesman ← Someone sells neckties.

Other examples are:

a country boy ← A boy grew up in the country.
 a drugstore clerk ← Someone is a clerk in a drugstore.
 a ceiling light ← A light is attached to the ceiling.
 a theatre aisle ← There is an aisle in the theatre.
 a steam engine ← An engine is worked by steam.
 a floor lamp ← A lamp stands on the floor.
 a supermarket cart ← A cart is used in the supermarket.
 a college professor ← A professor teaches in the college.

a flower girl ← A girl sells flowers.

an insect exterminator ← Someone exterminates insects.

Generally the heavier pronunciation stress falls on the modifying noun.

An explanation of the derivation of a noun modifying another noun like a woman doctor is as follows:

the + doctor + be + a + woman. ⇒ (by T-relative)

the + doctor + who + be + a + woman ⇒ (by T-relative,
deletion)

the + doctor + woman → (by adjective inversion)

the + woman + doctor

The following is an example of the sentence that contains such a construction.

insert: The doctor is a woman. ⇒ (by T-relative)

The doctor who is a woman ⇒ (by T-relative,
deletion)

The doctor woman → (by adjective inversion)

The woman doctor

matrix: The doctor is walking towards him. } ⇒

result: The woman doctor is walking towards him.

6. Appositives as Noun Modifiers

An appositive is derived from a kernel sentence in which a noun appears as the predicate nominal after the verb to be, and it is introduced from a constituent sentence into a noun-

modifying position in a matrix. It follows the noun it modifies.

Suppose we have two sentences, a matrix and a constituent.

My mother-in-law likes roses. (matrix)

My mother-in-law is a telephone operator. (constituent)

The subjects of the two sentences are identical. Consequently we may embed the predicate nominal of the constituent after the subject of the matrix sentence. The resulting construction is known as a noun in apposition.

My mother-in-law, a telephone operator, likes roses.

The following is the derivational process of a noun in apposition as explained by Thomas (1965).³⁵

Art + N + \emptyset (+ S) + Past + be + Adj + Tm

This is the terminal string of the phrase-structure derivation of the kernel (matrix) sentence. By substituting words from the lexicon we get:

the + creature + \emptyset (+ S) + Past + be + angry + today

By a transformational rule Past + be will be changed to be + Past and then can be written as was.

the + creature + \emptyset_2 (+ S) + was + angry + today

There is one morphographemic rule which applies:

creature + \emptyset \longrightarrow creature (That is a singular noun)

This rule gives:

the + creature (+ S) + was + angry + today.

³⁵ Thomas, op. cit., pp. 102-103.

This is the surface structure of the matrix sentence. We must now embed a sentence that has the shape The creature is a dragon. The terminal string of this constituent sentence has the shape:

Art + N + \emptyset + Pres + be + Art + N + \emptyset

After substituting words from the lexicon and applying the appropriate morphographemic rules and transformations, we get:

the + creature + is + a dragon.

We now embed this constituent sentence into the matrix sentence:

the + creature (+ the + creature + is + a + dragon)
+ was + angry + today.

Then we may apply a transformational rule to get the final string.

the + creature + a + dragon + was + angry + today.

By removing the plus signs and applying the appropriate rules of punctuation we get:

The creature, a dragon, was angry today.

Roberts (1968)³⁶ explains the sentence John, the leader, made the decision as the following:

insert: John was the leader. \Rightarrow (by T-relative)
John, who was the leader. \Rightarrow (by T-relative, deletion)
John, the leader, ----- }
matrix: John made the decision. } \Rightarrow

³⁶ Roberts, Modern Grammar, op.cit., p. 249.

to appositives: the reflexive and intensifying pronouns. An intensifying pronoun indicates that the constituent sentence is identical to the entire matrix sentence.

Rupert (Rupert drank the coffee) drank the coffee.

In this case the entire constituent sentence is replaced by the intensifier itself. (The repeated items must either be deleted or replaced by a pronoun.)

Rupert himself drank the coffee.

As since the intensifying pronoun serves to intensify the meaning of the entire sentence, it moves about more freely than regular appositive.

Rupert drank the coffee himself.

In the case of intensifiers, the bound morpheme $\{- \text{self}\}$ actually represents everything else in the sentence exclusive of the nominal. In such cases wh is represented by the pronoun (him).

Reflexives are less movable. In a reflexive phrase self only indicates that the nominal for which the pronoun is substituting is identical to the nominal which is the subject of the sentence.

I did the work by myself.

Possessive and genitive constructions

According to Carlota S. Smith (1969)³⁹ all genitive constructions can be derived from a basic genitive transformation (T-genitive) and certain variations on the embedding rules. The constructions to be accounted for are

- (1) The hat is John's.
- (2) The hat which is John's...
- (3) The hat of John's...
- (4) John's hat...**

The genitive transformation produces sentences like (1) from source sentences with have. It operates in roughly the following manner:

T-genitive

Structure: Noun phrase have Determiner Substantive

1. 2. 3. 4.

Change: The 4 is 1's

The source of The hat is John's according to this derivation is thus John has a hat (→ The hat is John's).

The relative transformation, applied to a sentence resulting from T-genitive and a sentence with which it shares a noun phrase,

³⁹ Carlota S. Smith, "Determiner and Relative Clauses in a Generative Grammar of English." Modern Studies in English, Readings in Transformational Grammar. Edited by David A. Reibel and Sanford A. Schane, (Prentice-Hall, Inc., Englewood Cliffs, New Jersey, 1959) pp. 254-256.

will produce genitive relative clauses.

The hat is John's... → the hat which is John's...

The postnominal modifiers are formed by deletion of Wh or Wh is from a relative clause.

T-deletion

Structure:	X	<u>Determiner Y noun</u>		Genitive	Z
	1	2		3	4

Change: 1 2 of 3 4

S: ...the hat which is John's → the hat of John's

As a prenominal, the genitive has two unique characteristics. It behaves as a determiner, and it does not allow further embedding of restrictive relative clauses. An addition to the order-change transformation, applicable only to genitives, will replace the determiner of a noun phrase by a genitive. It will also delete both the relative marker and the constant of. Note that although restrictive relatives do not occur in noun phrases with a prenominal genitive, prenominal genitives occur with appositive genitives and with nouns that have prenominal modifiers.

the man's old car

the man's car which he bought last year

the man's car that he bought last year

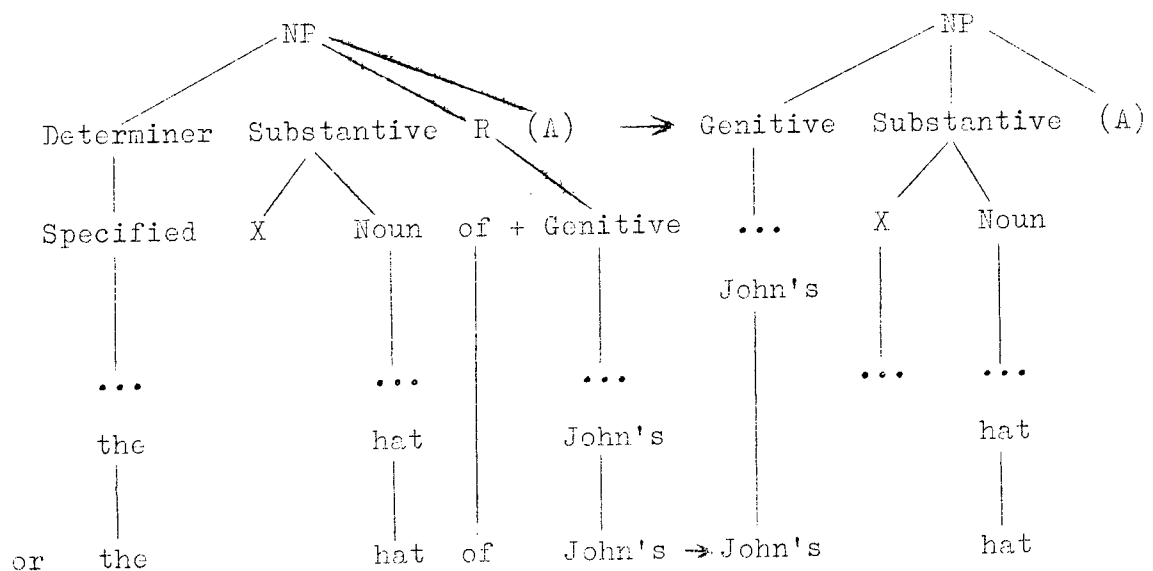
The second genitive transformation has the following form.

T-Genitive order change

Structure: X Determiner Y Noun of Genitive R (A) Z

1 2 3 4 5 6 7 8

Change: 1 5 3 7 8



This account of the possessive genitive construction is based directly on the phrase structure and embedding rules set up previously. The rules allow the embedding of genitives to a shared but not necessarily identical noun phrase, and the simple blocking of restrictive relatives (R) after pronominal modifiers and a pronominal genitive have been formed. Both of these are crucial steps in the production of genitives.

Roberts (1968)⁴⁰ explains that the most common meaning of

⁴⁰ Roberts, Modern Grammar, op. cit., pp. 279-289.

the possessive is "having" and it can be presented by deriving the possessive from insert sentences containing the verb have. The subject of such a sentence takes the possessive morpheme and replaces a definite article in matrix sentence:

insert: Mr. Smith had a problem.
 matrix: The problem was using will and shall.
 result: Mr.Smiths' problem was using will and shall.

Here is another example written in morpheme strings. The morpheme possessive is abbreviated poss.

insert: Jack + present + have + a + bride .
 matrix: the + bride + present + be + Lydia .
 result: Jack + poss. + bride + present + be + Lydia .
 Jack's bride was Lydia.

The definite article (the) to be replaced can occur anywhere in the matrix sentence:

insert: Jack + present + have + a + bride .
 matrix: Lydia + present + be + the + bride .
 result: Lydia + present + be + Jack + poss. + bride .
 Lydia is Jack's bride.

insert: Mr. White had a geranium.
 matrix: The painter dropped the geranium.
 result: The painter dropped Mr. White's geranium.

insert: The son is his.
 matrix: The son came.
 result: His son came.

T-possessive (the possessive transformation rule) is recursive. It can keep occurring in the same sentence as long as there is a definite article for the subject of the insert and the possessive morpheme to replace. Suppose we start with the following development.

insert: the + boy + present + have + an + uncle.
 matrix: the + uncle + present + be + Mr. Williams.
 result: the + boy + poss. + uncle + present + be
 + Mr. Williams.

The boy's uncle is Mr. Williams.

The result sentence has a new definite article in the noun phrase the + boy. This result sentence can therefore become the matrix of a new transformation.

insert: she + present + have + a + boy.
 matrix: the + boy + poss. + uncle + present + be
 + Mr. Williams.
 result: she + poss. + boy + poss. + uncle + present
 + be + Mr. Williams.

Her boy's uncle is Mr. Williams.

This cannot become a new matrix for still another possessive transformation, because we did not put in the word the.

Roberts explains that the possessive morpheme is mostly used when the subject of the have sentence is animate. When the is inanimate, it is most common to use a variation in which the morpheme of appears before the noun phrase from the insert and

both come after a noun phrase in the matrix.

insert: the + table + present + have + a + top.

matrix: the + top + present + be + dirty.

result: the + top + of + the + table + present
+ be + dirty.

The top of the table is dirty.

The rule that the possessive morpheme is used with animate noun phrases and of with inanimate ones is not very rigid. The possessive is used sometimes with inanimate noun phrases.

The course's requirements were severe.

And sometimes the of form is used with animate noun phrases.

The hind leg of the cat had to be amputated.

But ordinarily the rule is adhered to: John's leg not
* the leg of John, and the leg of the table not * the table's leg.

A construction like Sheridan's plays is not derived from have inserts (Sheridan had plays) unless we mean something like Shakespeare's plays that Sheridan owned. If we mean plays that Sheridan wrote, we must derive the noun phrases follows:

insert: Sheridan wrote plays.

matrix: The plays are interesting.

result: Sheridan's plays are interesting.

For the construction like a week's delay, obviously the insert sentence cannot be * the week has a day but must be something like the delay lasted week.

Sometimes the word taking the possessive morpheme is the object of a transitive verb in the insert sentence.

insert: someone + pa t + humiliate + Don.

matrix: the + humiliate + ion + past + be + complete.

result: Don + poss. + humiliate + ion + past + be + complete.

Don's humiliation was complete.

Roberts also gives further explanation of the fact that when a plural noun modifies another noun, as in a teachers'college, there is a tendency to drop the apostrophe and treat teachers not as a possessive noun but simple as a noun modifying another noun: a teachers college. This is possible because it is very common in English for nouns, apart from possessive nouns, to modify other nouns. For example, in a book cover, the noun book modifies cover. The modifier is derived from sentence like A cover is for a book or A cover is that of a book where book is clearly seen to be a noun. The stress contrast between a girl's school and a girls'school appears here. When an adjective modifies a noun, the first stress is normally on the modified noun: an old cover. But when a noun modifies another, the first stress is normally on the modifying noun: a book cover.

6. Verb-ing (ing phrases) as Noun Modifiers

Thomas (1965)⁴¹ explains that the large group of intransitive

⁴¹ Thomas, op. cit., p. 98.

verbs that do not require a following adverb of location generally have present participles that can function as pronominal modifiers.

The baby may have slept. The sleeping baby
 The secretary was dancing. The dancing secretary
 The instructor has fainted. The fainting instructor

According to Paul Roberts (1968)⁴² this kind of modifier is mostly derived from progressive sentences.

The boy is standing in front of the class.

This sentence is transformed to be a relative clause and then the relative pronoun and verb to be are deleted.

The boy who is standing in front of the class

The boy standing in front of the class

This can be inserted in a matrix sentence like

The boy is the best student.

The result sentence is

The boy standing in front of the class is the best student.

The following are examples of the sentences that have ing phrases as noun modifiers.

Those were the men waiting for us.

The girl sitting over there is Mary Helen.

The book lying there was a dictionary.



⁴² Roberts, Modern Grammar, op. cit., pp. 225-230.

The girl sweeping the porch glanced at the planes
that were flying overhead.

insert: The men were waiting for us. \Rightarrow (by T-relative)
The men who were waiting for us. \Rightarrow (by T-relative,
deletion)

The men waiting for us } \Rightarrow
matrix: Those were the men.
result: Those were the men waiting for us.

In the case where the verb-ing modifier is a single word
modifier, it is always placed before the noun it modifies.

Det + N + modifier \Rightarrow Det + Modifier + N

insert: A snake was swimming. \Rightarrow (by T-relative)
A snake that was swimming \Rightarrow (by T-relative,
deletion)

A snake swimming \rightarrow (Adj. inversion)

A swimming snake

matrix: A snake startled Leroy. } \Rightarrow
result: A swimming snake startled Leroy.

If ing modifier does not appear as a single word but also
has other elements following, the modifier cannot be shifted to
the position in front of the noun it modifies.

insert: The man is thinking about what he has
done. \Rightarrow (by T-relative)
The man who is thinking about what he
has done. \Rightarrow (by T-relative, deletion)

The man thinking about what he has done } \Rightarrow
 matrix: The man can not walk.
 result: The man thinking about what he has done
 cannot walk.

Compare A swimming snake startled Leroy with A snake swimming in the pool startled Leroy.

insert: A snake was swimming in the pool. \Rightarrow (by T-
 relative)
 A snake that was swimming in the pool \Rightarrow
 (by T-relative, deletion)
 A snake swimming in the pool } \Rightarrow
 matrix: A snake startled Leroy.
 result: A snake swimming in the pool startled Leroy.

The present participles of verbs that require animate objects can also be used as prenominal modifiers.

her pleasing smile
 the interesting book
 an amusing film

insert: The book is interesting. \Rightarrow (by T-relative)
 The book which is interesting \Rightarrow (by T-relative,
 Deletion)
 The book interesting \rightarrow (Adj. inversion)
 The interesting book } \Rightarrow
 matrix: The book is on the shelf.
 result: The interesting book is on the shelf.

7. Verb-ed (participial phrases) as Noun Modifiers

Roberts (1968)⁴³ also explains that this type of modifier is derived from a passive sentence form. For example, The glass was broken by the servant is transformed to be a relative clause, then the relative pronoun and verb to be are deleted.

The glass which was broken by the servant

The glass broken by the servant

This sentence can be inserted in a matrix sentence like

The glass was expensive.

The result sentence is

The glass broken by the servant was expensive.

Most of the milk delivered by Mr. Williams is sweet.

insert: Mr. Williams delivers most of the milk. \Rightarrow

(by T-passive)

Most of the milk is delivered by Mr. Williams. \Rightarrow

(by T-relative)

Most of the milk that is delivered by

Mr. Williams \Rightarrow (by T-relative, deletion)

Most of the milk delivered by Mr. Williams

matrix: Most of the milk is sweet. \Rightarrow

result: Most of the milk delivered by Mr. Williams
is sweet.

⁴³ Roberts, Modern Grammar, loc. cit.

Like the verb-ing modifier, transformational rules can be applied here. That is, if the verb-ed modifier is a single verb, it can be shifted to the prenominal position.

The past participles of most verbs that relate to cooking can be used as modifying words that describe food which is ready to be served.

She may bake some beans. → The baked beans...

She is frying chicken. → The fried chicken...

She burned the toast. → The burnt toast...

The hunted man stood near the river.

insert: Someone hunted the man. ⇒ (by T-passive)

The man was hunted. ⇒ (by T-relative)

The man who was hunted ⇒ (by T-relative,
deletion)

The man hunted → (Adj. inversion)

matrix: The man stood near the river. } ⇒
The hunted man

result: The hunted man stood near the river.

The past participles of verbs that require animate objects can also be used as prenominal modifier:

the terrified boy...

his astonished glance...

their surprised parents...

Some transformationalists, for example, Zeno Vendler⁴⁴ in his book Adjectives and Nominalizations, tries to make an analysis of the meaning of the adjectives and other prenominal modifiers that occur in the adjective position.

The followings are probable meanings of the constructions that have nouns with prenominal modifiers.

<u>A</u> <u>N</u>	--	<u>N wh... is A</u>
red balloon	--	the balloon which is red
running water	--	the water which is running
broken pot	--	the pot which is broken
sad face	--	the face which is sad

<u>A</u> <u>N_v</u>	--	<u>N_v who... V D_a</u>
fast runner	--	the runner who runs fast
slow speaker	--	the speaker who speaks slowly
good dancer	--	the dancer who dances well

The meaning of the phrase beautiful dancer is ambiguous because it might be dancer who is beautiful or dancer who dances beautifully. This is due to the fact that the different meanings are caused by the different derivations. The phrase can be derived from 1) the $\boxed{AN - N \text{ wh... is } A}$ rule, or 2) the $\boxed{AN_v - N_v \text{ wh ... V } D_a}$ rule.

⁴⁴ Vendler, op. cit., pp. 85-108.

$\underline{N_1 \text{ is A } N_2}$ $\underline{N_1 \text{ is A as } N_2}$

Nashua is a fast horse. -- Nashua is fast as a horse.

Fido is a good watch dog. -- Fido is good as a watch dog.

My Ford is a slow car. -- My Ford is slow as a car.

He is a good father. -- He is good as a father.

He is a weak king. -- He is weak as a king.

He is a good thief. -- He is good as a thief.

Some AN constructions mean $\boxed{N \text{ wh... is A for } N}$ as the following sentences illustrate.

Jumbo is a small elephant. -- Jumbo is small for an elephant.

Razah is a short python. -- Razah is short for a python.

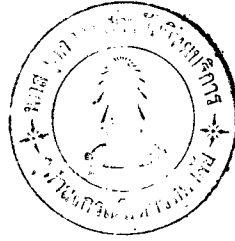
Some AN construction mean $\boxed{N \text{ wh... is A to (V)}}$. For example; "comfortable chair" -- a chair that is comfortable to sit on, or chair on which one sits comfortably.

A sentence like $\boxed{N_1 \text{ is A } N_2}$ means $\boxed{N_1 \text{ -- A } N_2}$

He is a nuclear scientist. -- scientist who studies
nuclear phenomena

It is yellow fever. -- fever that causes
yellow discoloration

It is an infrared lamp. -- lamp that emits infrared
rays



The Order of Adjectives

Nouns may take more than one adjective at a time as in the following constructions:

That is a big and beautiful house.

That is a big beautiful house.

I have a house, big and beautiful.

Such combinations are not restricted to two adjectives. Three or even more can be combined. For example, "a long, narrow but straight road." and so forth.

In producing AA ... AN strings, the language requires as more or less definite order of succession. A big beautiful white wooden house, for example, is not a ^{*}white wooden beautiful big house. Similarly, a comfortable red chair is not ^{*}a red comfortable chair.

In joining words by and or or, we are influenced by a simple phonetic rule, that is, the shorter comes first.

black and white

up and down

fields and meadows

odds and ends

nuts and bolts

But for the sentence She is a blonde and fast dancer this rule fails because one deleted part of the ingredient sentence is She is blonde. That is, the adjectives are not coordinate.

Some principles for determining the order of adjectives

are pointed out by Vendler (1968).⁴⁵ Look at these examples:

- * Long and Polish word
- * wooden and comfortable chair
- * green and broken vase

These are not acceptable because the prenominal modifiers involved here have a different transformational nexus to the subject. But long and narrow road has the prenominal modifiers in a correct sequence. Here the adjectives are coordinated. The following are perfectly acceptable without the word and because each is a case of subordination.

long Polish word
 comfortable wooden chair
 broken green vase
 big beautiful red Chinese rug
 long winding asphalt road
 tall dark overhanging volcanic rocks
 good washable white cotton shirt
 small frightened yellow face
 huge scintillating luminous blue star
 tiny rectangular yellow spots
 easy short mathematical demonstration

If it is a mixed string, that is, if some of the prenominal modifiers belong to some classes but others to different ones,

⁴⁵ Vendler, Ibid., pp. 121-134.

as in the following examples, the and is obligatory.

big beautiful sparkling and smiling blue eyes

broad and deep blue river

If and is left out, the utterance sounds unnatural.

*big beautiful sparking smiling blue eyes

*broad deep blue river

There is a rule that two or more adjectives belonging to the same class require a connective in prenominal position even if inserted into an otherwise unbroken string. Conversely, truly unbroken strings cannot contain two adjectives of the same class. The connective need not be explicit. A comma in writing, and an intonation breaks in speech suffices. Compare long, wide road with long paved road.

Inversion of the natural order of prenominal modifiers is not absolutely ungrammatical. In that case, however, the modifiers involved have to be taken as belonging not to one but to two nouns, one of them deleted. Compare the following two sentences.

He drove out in his new yellow car.

and He drove out in his yellow new car.

The first is of the natural order. It means that he drove out in his car which is yellow and which is new. The second sentence has different meaning. It means that he drove out in the yellow one of his new cars.

Such inverted phrases usually are uttered with a strong emphasis on the first modifier. It is also used to indicate selective sense as well.

I mean the yellow tall building (the yellow one of
the tall buildings).

There is a troublesome groups of words, old, young,
little, big, etc., whose order is fixed by convention.

beautiful little house (not little beautiful house)

charming little girl

gray old man

brave young man

good little girl

considerate young lady

dirty old pig

These modifiers can be used with specific nouns and occur
in specific places, as shown in the examples above.

But the following examples

long horrible play

small awful insect

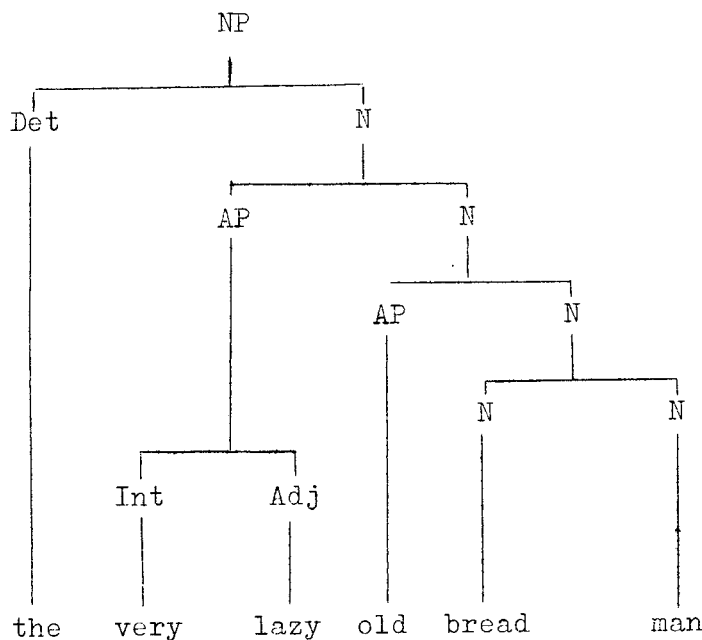
are as good as

horrible long play

awful small insect

In the nominal constructions that contain many prenominal
modifiers like the very lazy old bread man the derivational process
is rather complicated because there are at least three simple
sentences that are transformed to be single word modifiers and
embedded in the the man construction.

H.A. Gleason, Jr., (1965)⁴⁶ explains this phrase in an algebra-like notation and a tree diagram which is generally used in complex T-G grammar. This notation is difficult to understand without a chapter of explanation; as a result only a simplified tree diagram is presented here.



The basic construction the ----- man (det N) contains three prenominal modifiers. These modifier might be derived from sentences like 1) the man sells bread, 2) the man is old, 3) the man is lazy. These three sentences become prenominal modifier of the Det..... N construction by a series of transformation rules.

⁴⁶ Gleason, op. cit., p. 230.

take advantage of this, a T-G grammar should be designed so that there is only one derivation for any one sentence unless it is, in fact, ambiguous.

As for an ambiguous construction like the rabbit in the hutch that Jack was washing that has two possible meanings, Roberts (1968)⁴⁸ explains that it has two base sentences:

Jack was washing the rabbit in the hutch.

Jack was washing the hutch.

He explains that whenever a construction can be derived from either of two different base sentences it will be ambiguous. One can avoid this in his writing by being aware that when a nominal construction builds up through a series of transformation one has to be careful that the meaning still comes through unambiguously. Roberts points out that there are some signals that might prevent ambiguity. The use of the relative pronoun who (or whom) for persons and not for nonpersons, which for nonpersons and not for persons, can keep the construction clear and unambiguous. But that may be used for either a person or nonperson and thus cannot clarify the construction. For a construction like a dress on a model that we all admired, we might rewrite it to a dress on a model who we all admired (who refers to "model"), or a dress on a model which we all admired ("which" refers to "dress"). The construction a teacher with patience that seemed unusual can be

⁴⁸ Roberts, Modern Grammar, op. cit., pp.222-225.

written as a teacher with patience which seemed unusual or a teacher with patience who seemed unusual. Another signal that may dissolve ambiguities is agreement of just one of the noun phrases with the tense-bearing word in the relative clause. The following is unambiguous.

Some trees in an orchard that were in full bloom.
 There is no such grammatical sentence as *An orchard were in full bloom, so the base sentence must be Some trees in an orchard were in full bloom. As for the following construction:

Some trees in the orchard that was in full bloom.
 the base sentence is An orchard was in full bloom.

In a construction like a passenger in a limousine that was sleek and gaudy, though we might be sure that the limousine, not the passenger, was sleek and gaudy, but the other, more ludicrous, possibility might occur to us. It would be better to avoid the trap by changing it into constructions like these:

a passenger in a limousine which was sleek and gaudy
 a passenger in a sleek and gaudy limousine

An Example to Summarize Derivation of Modifiers

For the sentence The three old ladies upstairs own a boxer dog with a mean temper, H.A. Gleason (1965)⁴⁹ explains that the derivational process involves putting parts from five different sentences together. One sentence provides the over-all framework.

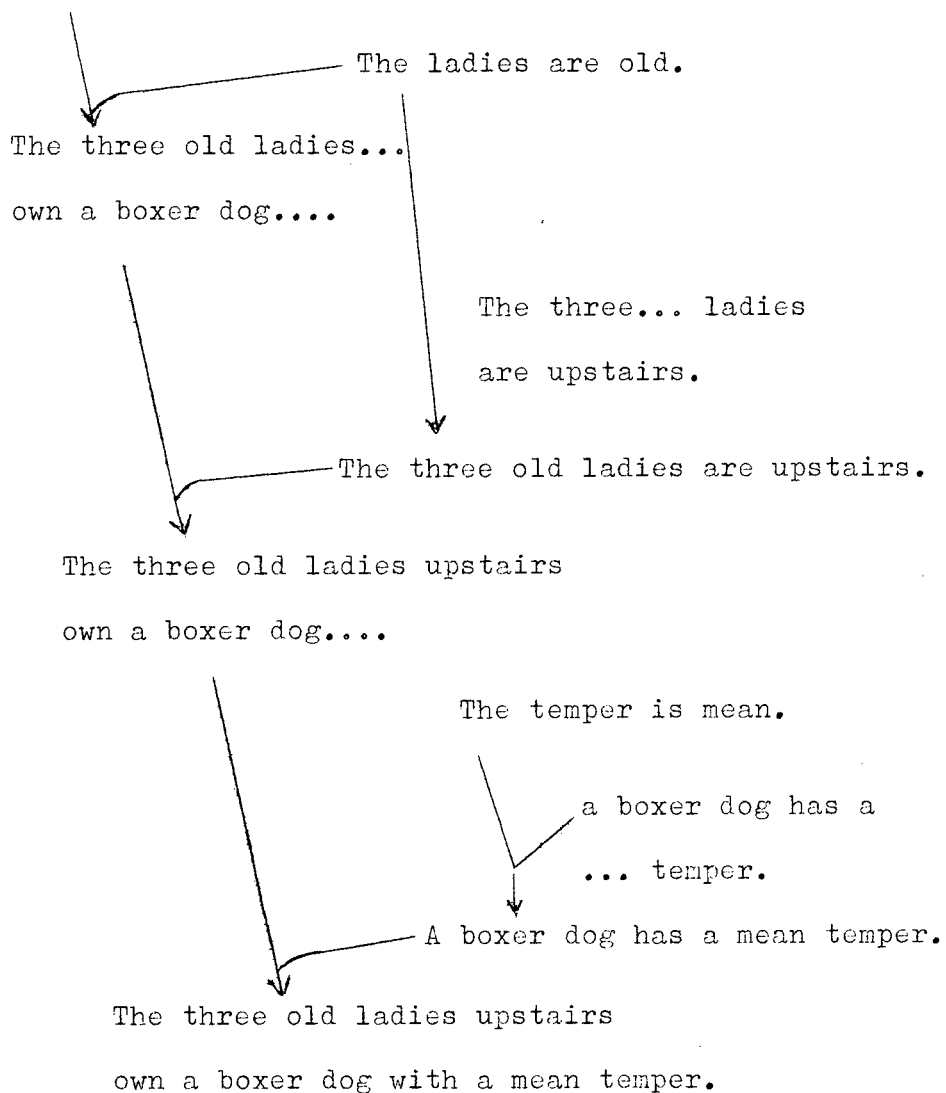
⁴⁹ Gleason, op. cit., pp. 282.

Three contribute only a word apiece. One provides one phrase and its internal structure.

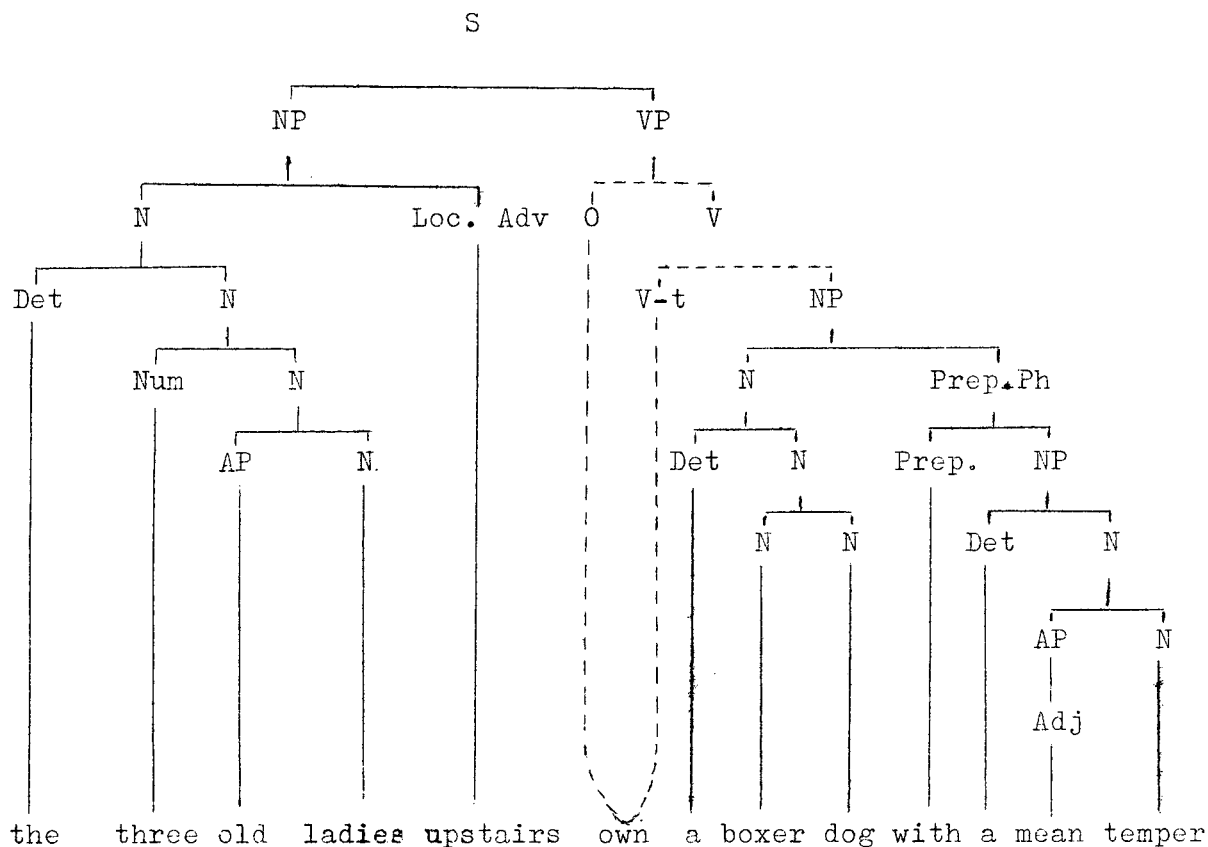
The derivation must be given in a series of diagrams. It is a little difficult to see exactly how every separate operation fits into the whole. The following flow chart will give the general picture.

The three... ladies...

own a boxer dog....



The sentence The three old ladies upstairs own a boxer dog with a mean temper is explained by the simplified diagram below.



Transformational generative grammar seems to be able to give a rather clear explanation of the nominal constructions in English, even of the invisible part of the grammar that neither traditional nor structural grammar pays attention to. Most people accept T-G grammar as the best type of grammatical description at the present time. Many of its rules are very practical for language analysis, such as the sentence embedding rules, deletion rules, recursive rules, and many others. The explanations make

structural ambiguities clear. The diagrams and symbols are not too difficult to understand and they help make clear the structures of English nominal modification in a very brief manner. The explanation of the derivation of many types of noun modifier as a part of another sentence that is embedded in the basic (matrix) sentence is logical. This makes us understand the structure of complicated noun phrases and sentences that are in fact derived from many simple sentences. As a result it enables us to understand the meaning of most complicated nominal constructions.

The method of explanation of T-G grammar is opposite to that of structural grammar. It starts from the basic abstract deep structure in English, and then generates the surface patterns from them. This makes clear to us many English constructions, and enables us to apply the rules ourselves. On the other hand, a structuralist explanation takes a complicated sentence and cuts it into pieces. What is clear to our understanding in structuralist grammar is the relationship of words and nothing more. We can see clearly how each nominal modification construction is composed of such and such type of word but we do not know where they come from and what the basic meanings underneath are. As a result, we can understand clearly only the visible nominal constructions, but the meaning of each part might not be clear. This lack does not allow us a real understanding of complicated English constructions, and so transformational generative grammar is more helpful than structural grammar.