

R E P O R T R E S U M E S

ED 010 830

24

TEACHER'S MANUAL FOR REVIEW, EXPANSION OF TRANSITIVE VERBS, DETERMINERS, MORE ABOUT QUESTIONS, AND THE NEGATIVE. LANGUAGE CURRICULUM III.

BY- KITZHABER, ALBERT R.

OREGON UNIV., EUGENE

REPORT NUMBER CRF-H-149-59

REPORT NUMBER DR-5-0366-59

EDRS PRICE MF-\$0.18 HC-\$4.52 113P.

DESCRIPTORS- GRADE 9, \*CURRICULUM GUIDES, \*GRAMMAR, ENGLISH CURRICULUM, ENGLISH INSTRUCTION, LINGUISTICS, LINGUISTIC PATTERNS, \*TEACHING GUIDES, \*ENGLISH, \*LANGUAGE GUIDES, SECONDARY EDUCATION, CURRICULUM RESEARCH, INSTRUCTIONAL MATERIALS, EUGENE, PROJECT ENGLISH, NEW GRAMMAR

SUGGESTIONS WERE OFFERED IN THIS TEACHER'S GUIDE FOR VARIOUS APPROACHES IN REVIEWING GRAMMAR PREVIOUSLY PRESENTED TO NINTH-GRADE STUDENTS. THE GRAMMAR REVIEW COVERED PHRASE STRUCTURE RULES, TRANSITIVE VERBS, DETERMINERS, INTERROGATIVES, AND NEGATIVES. WHILE THE EXERCISES IN THE STUDENT VERSION WERE MEANT TO BE WRITTEN, THE TEACHER'S GUIDE CONSISTENTLY SUGGESTED ORAL DISCUSSION AND VISUAL DEMONSTRATION BY THE TEACHER TO DETERMINE HOW MUCH STUDENTS REMEMBER FROM PREVIOUS COURSES AND WHERE THEY WOULD PROBABLY NEED HELP. THE PURPOSE OF THE REVIEW, AS WELL AS THE LEARNING EXERCISES, WAS NOT ONLY TO HAVE THE STUDENTS GAIN AN UNDERSTANDING AND AN APPRECIATION FOR THE COMPLEXITIES OF GRAMMAR, BUT TO HAVE THE STUDENTS REALIZE THAT UNDERNEATH THE COMPLEXITIES THERE ARE QUITE SIMPLE GENERALIZATIONS WHICH ACCOUNT FOR THEM. THE STUDENT VERSION IS ED 010 829. RELATED REPORTS ARE ED 010 129 THROUGH ED 010 160 AND ED 010 803 THROUGH ED 010 832. (FM)

ED010830

H-149 (59)  
5-0366 (59)

OREGON CURRICULUM STUDY CENTER

**TEACHER'S MANUAL**  
**FOR**  
**REVIEW**  
**EXPANSION OF TRANSITIVE VERBS**  
**DETERMINERS**  
**MORE ABOUT QUESTIONS**  
**THE NEGATIVE**

**Language Curriculum III**

The project reported herein was supported through  
the Cooperative Research Program of the Office of Education,  
U. S. Department of Health, Education, and Welfare.

**OREGON CURRICULUM STUDY CENTER**

**TEACHER'S MANUAL**

**FOR**

**REVIEW**

**EXPANSION OF TRANSITIVE VERBS,**

**DETERMINERS,**

**MORE ABOUT QUESTIONS, AND**

**THE NEGATIVE.**

**Language Curriculum III**

**U. S. DEPARTMENT OF HEALTH, EDUCATION AND WELFARE**  
Office of Education

This document has been reproduced exactly as received from the person or organization originating it. Points of view or opinions stated do not necessarily represent official Office of Education position or policy.

The project reported herein was supported through the Cooperative Research Program of the Office of Education, U. S. Department of Health, Education, and Welfare.

**LANGUAGE III**  
**TABLE OF CONTENTS**

<b>Review</b>	<b>1</b>
<b>Expansion of Transitive Verbs</b>	<b>13</b>
<b>Determiners</b>	<b>54</b>
<b>More About Questions</b>	<b>77</b>
<b>The Negative</b>	<b>98</b>



## Teacher Version

### REVIEW UNIT FOR LANGUAGE III

This is an interim unit which may be useful to teachers of classes which, having completed the material of Language I and II, are presumably ready to begin with Language III. The assumption is that the students have an understanding of the Phrase Structure Rules and of the Passive, Question, Conjunctive, and Adjective and Possessive embedding transformations. The diagnostic test at the beginning is designed to help teachers determine how much their students remember and what reviewing they need to do before progressing to the units of Language III. It should be particularly useful at the beginning of the school year, when students may have forgotten a good deal over the summer and when the students in a class may have varying backgrounds in the grammar.

Teachers who plan to begin Language III in the middle of the year may not need this unit, and if their students have a good grounding in the Phrase Structure Rules and the principles of transformation they should be able to go into the first unit of Language III--"Expansion of Transitive Verbs"--with no review. The teacher should decide whether the class needs some, all, or none of the unit, and should adapt it to the needs of the class.

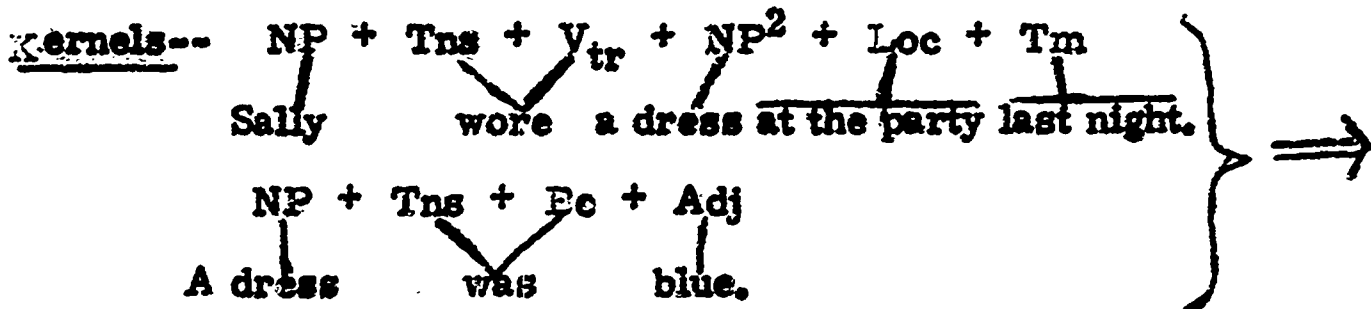
If it is used, it will be necessary for the teacher to have a copy of the material of Language II, and it would, of course, be ideal if students could also have access to the material since the review exercises to which they are referred are in the units of Language II.

#### Exercise 1: Review and Diagnostic Test, p. 1:

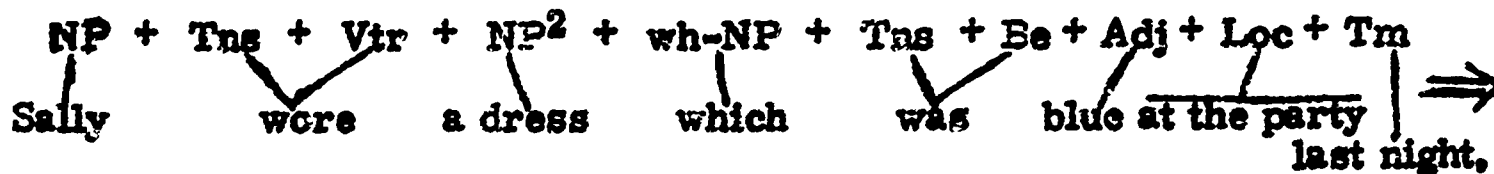
Probably the most useful way to use this exercise, perhaps after students have had an opportunity to look it over, is to work out each sentence with the class on the board (or overhead projector). This would be particularly true when it is being used with students who have had a long absence from the grammar or who may vary in their understanding and background. Left to themselves, such students may be frustrated by the exercise, but it could be an excellent teaching device if it were worked out slowly, and with discussion, with the teacher. Most of the concepts of the grammar of the earlier years are included in the sentences, and by working through each one with the class, the teacher will have an opportunity, not only to discuss each concept, but to determine from the discussion how much the students really do remember. She should also be able to evaluate the depth of their understanding and ability. For example, most students will probably be able to recognize rolled, in sentence 4, part A, as an intransitive verb, but whether they will also perceive that it is a special kind of intransitive--one which requires a directional adverb--can be determined by the discussion.

Working through the sentences in this way will probably take a number of class meetings, but if each sentence is thoroughly discussed, it should constitute a fairly comprehensive review.

A. 1. Sally wore a blue dress at the party last night.



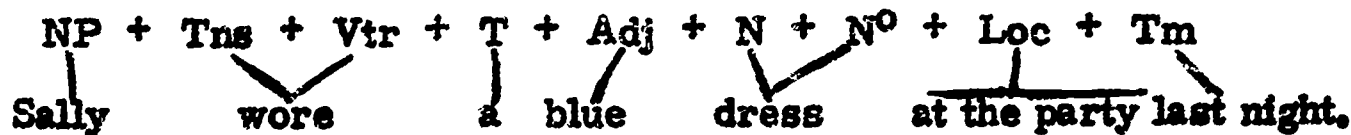
Embedded Adjective Clause



Deletion

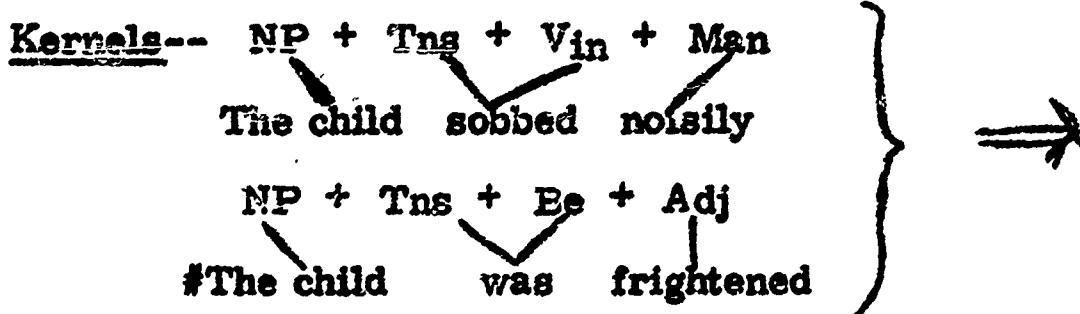


Repositioning the adjective

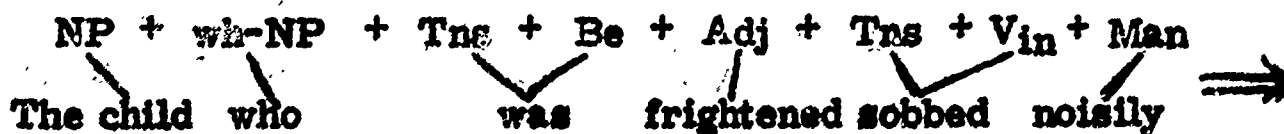


(# When the adjective is repositioned it enters the noun phrase between the determiner and the noun. Thus in this step it is necessary to write NP as T + N + N<sup>0</sup>).

2. The frightened child sobbed noisily.



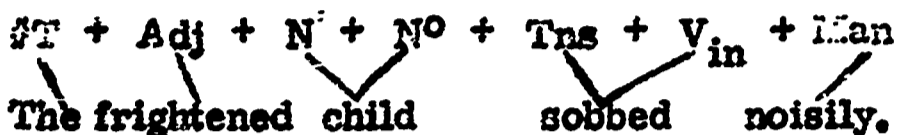
Embedded adjective clause



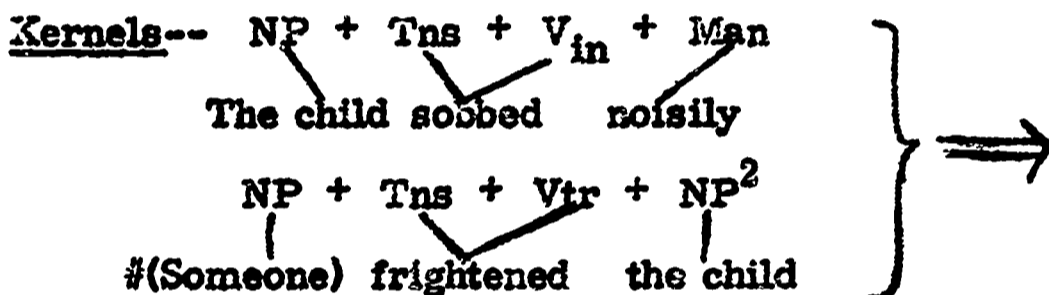
Deletion



Repositioning of adjective



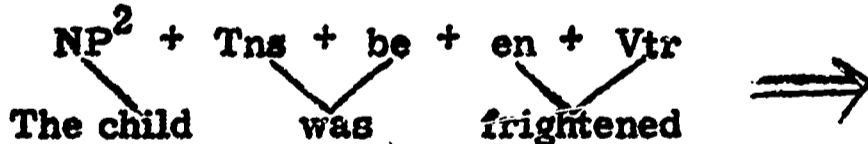
(# Frightened is an example of a derived adjective. That is, it really comes from the past participle of the verb frighten. In a later year we will treat such adjectives and account for the difference which obviously exists between an adjective like tall and one like frightened. For your own information, and in case you have some bright students who become curious about it, you may like to know that to derive it from the verb requires the following steps:



Passive transformation



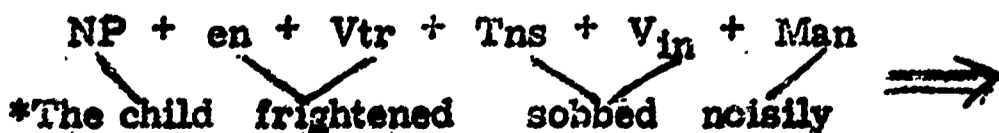
# Deletion



Embedded Adjective clause



Deletion





#T + en + Vtr + N + N<sup>o</sup> + Tns + Vin + Man  
 The frightened child sobbed noisily.

In the final step, when frightened is repositioned, it is necessary, of course, to place it between the determiner and the noun. See the explanation for sentence number 1. For a discussion of someone see the note to #6 below.

3. That accident was caused by the landslide.

Kernel-- NP + Tns + V<sub>tr</sub> + NP<sup>2</sup> ⇒  
 The landslide caused that accident

Passive transformation

NP<sup>2</sup> + Tns + be + en + Vtr + by + NP  
 That accident was caused by the landslide

4. The football rolled into the street.

Kernel-- NP + Tns + V<sub>id</sub> + Dir  
 The football rolled into the street

5. Mary's father became tired easily.

Kernels-- #NP + Tns + V<sub>lac</sub> + Man + Adj } ⇒  
 The father became easily tired  
 NP + Tns + have + NP  
 Mary had the father

#Embedding of a have clause

NP + wh-NP + NP + Tns + have + Tns + V<sub>lac</sub> + Man + Adj ⇒  
 The father whom Mary had became easily tired

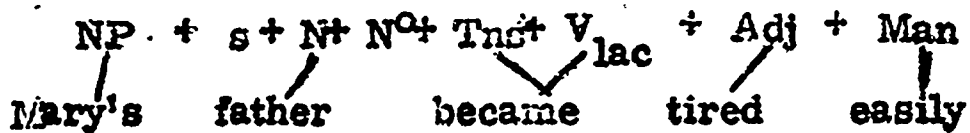
Deletion

NP + NP + Tns + have + Tns + V<sub>lac</sub> + Man + Adj ⇒  
 The father Mary had became easily tired

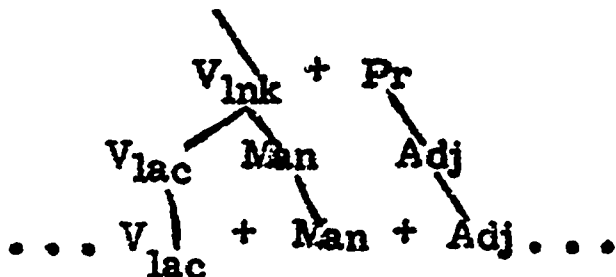
Formation of possessive

NP + s + N + N<sup>o</sup> + Tns + V<sub>lac</sub> + Man + Adj ⇒  
 Mary's father became easily tired

Repositioning the manner adverb



# This sentence, of course, contains one of the subclasses of linking verbs which can occur with manner adverbs. They were symbolized as V<sub>lac</sub> in Language II. Because the manner adverb occurs with the linking verb it appears in the kernel string right after it,



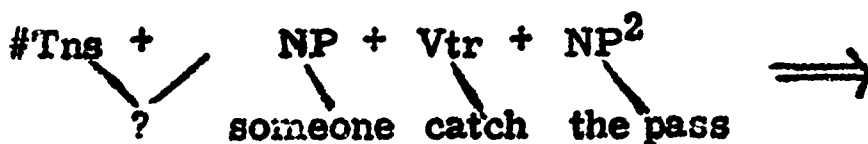
and the predicate adjective follows. This will be repositioned later.

Embedding of sentences of the form NP + Tns + have + NP was developed as the source of possessives in Language II. It is really a kind of embedding of an adjective clause, part of which then becomes the possessive. In so doing it takes the place of the determiner. (The father + Mary + has ⇒ Mary's father)

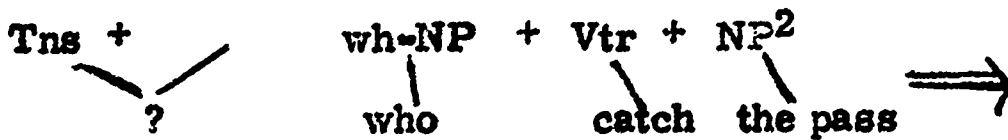
#6. Who caught the pass?



Yes-or-no question



wh-attachment



T<sub>wh</sub> (Subject question)



(#The unit on the question transformation in Language II left the subject question until the end and suggested that it might be an optional part of



the unit at that time. At first it seems to present certain problems if we are to treat it as an example of the general--and powerful-- rule which accounts for the derivation of all questions in the same way. But if the principle is valid that one rule is preferable to two, particularly when one rule can show a powerful relationship between many kinds of sentences, we must treat it this way.

Actually, the problem presented by the who (or subject) question is fairly simple when analyzed. It involves the fact that the do-support transformation must be applied after the other transformations. But since this involves working with the underlying structure in an abstract way, perhaps not many of your students have studied it. Perhaps this is the time to go back and teach the section on the subject question. You should use your own judgment of your students' abilities and their reaction to this sentence to decide whether you wish to discuss it at this time. The whole matter will be discussed again in the unit on questions which comes later in Language III.

This sentence again presents the necessity of supplying a word for the NP in the kernel. Since we don't know who caught the pass we can use someone (or your students may want to supply an optional noun.) Actually there is an advantage in their beginning to think of these elements as the indefinite someone or something, because this concept will be built on in material in later years.

In the yes-or-no question we have not supplied do, for the reason discussed above.

7. How did you like the dessert?

Kernel: -- NP + past + V<sub>tr</sub> + NP<sup>2</sup> + Man  
You liked the dessert (fine, or in some manner)

Yes-or-no question

#past + do + NP + V<sub>tr</sub> + NP<sup>2</sup> + Man  
Did you like the dessert (in some manner)

wh-attachment

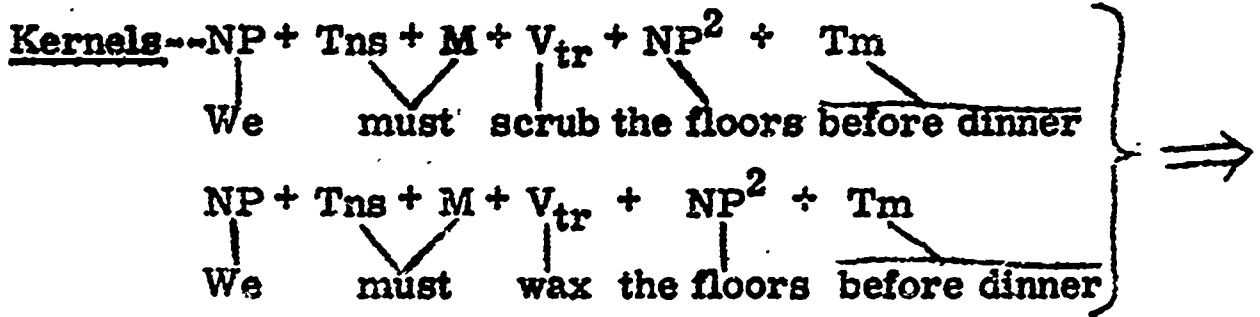
Past + do + NP + V<sub>tr</sub> + NP<sup>2</sup> + wh-Man  
Did you like the dessert how?

How-question (T<sub>wh</sub>)

wh-Man + past + do + NP + V<sub>tr</sub> + NP<sup>2</sup>  
How did you like the dessert?

(#In this sentence it doesn't make any difference when the do is added. It may be simpler to let students add it at this point. However, eventually they will have to be persuaded of the importance of adding it after all the other steps in the transformation have been carried out. Use your own judgment based on the ability of your class. If you have tackled it in sentence 6 it should present no problems here.)

8. #We must scrub and wax the floors before dinner.

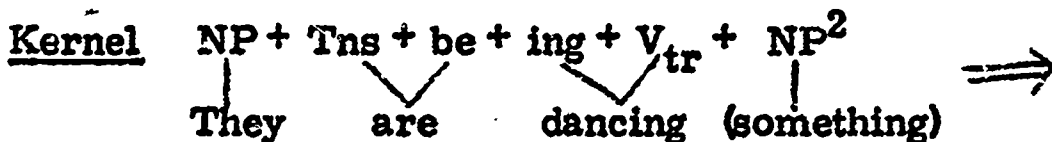


Verb conjunctions



(#When you are working out this sentence it might be a good time to review the conditions under which a conjunction can be made: when the elements which are joined derive from the same point in the diagram--for instance, V<sub>tr</sub> in this sentence--and the other parts of the two sentences are identical.)

9. What are they dancing?



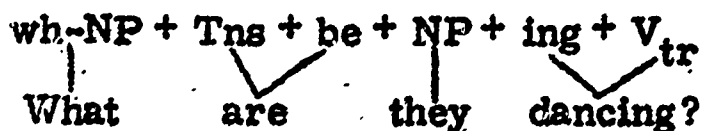
Yes-or-no question



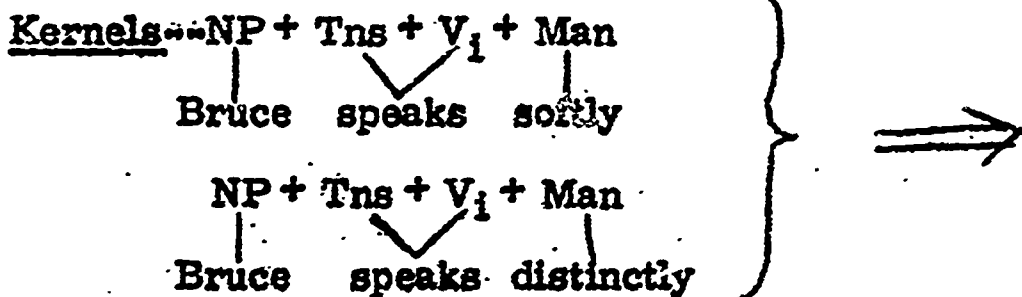
wh-attachment



Object question (T<sub>wh</sub>)



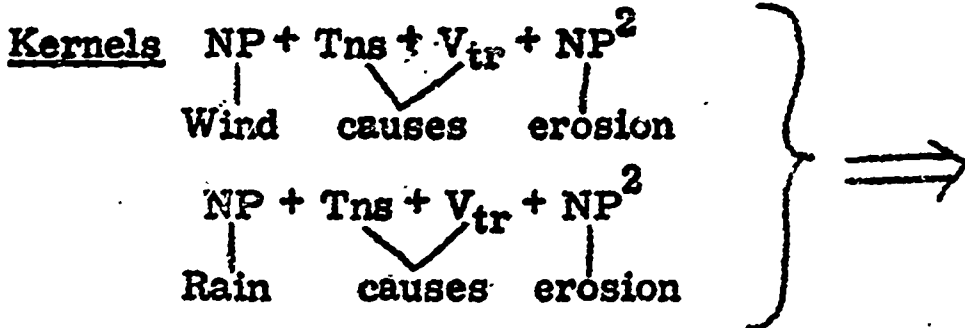
10. Bruce speaks softly but distinctly.



Manner adverb conjunction



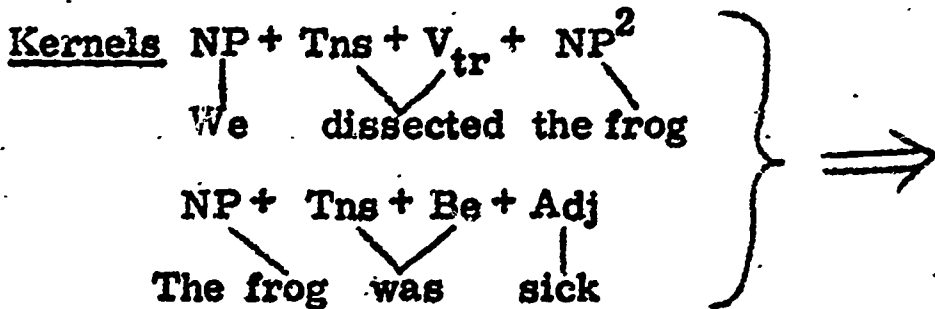
B. 1. Wind and rain cause erosion.



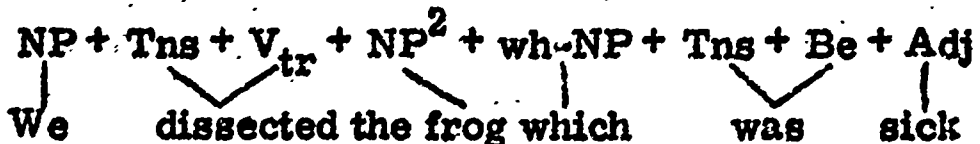
Subject conjunction



2. We dissected the frog which was sick.

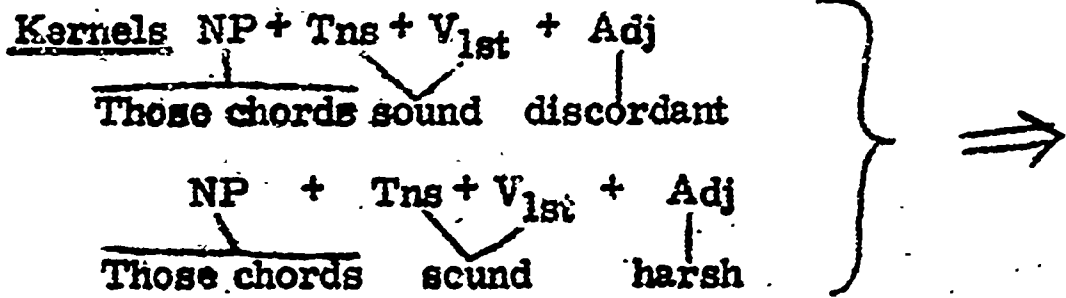


Adjective clause embedding

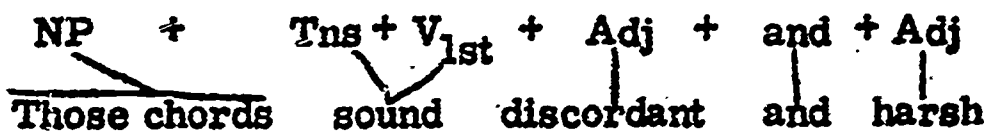


3. Those chords sound discordant and harsh.

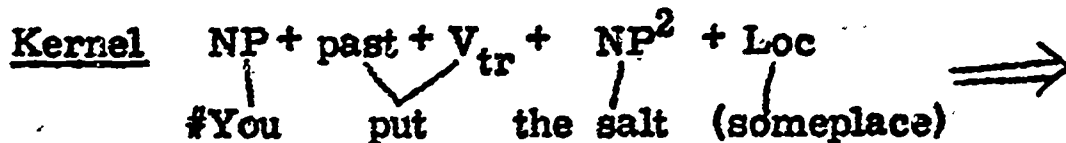




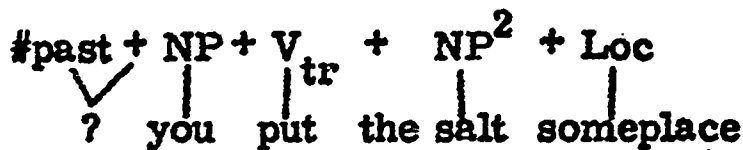
Predicate conjunction



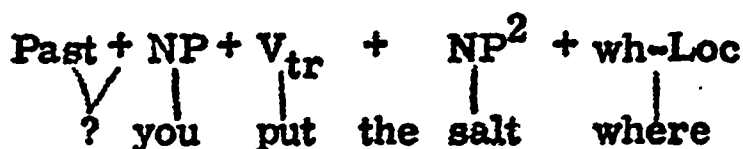
4. Where did you put the salt?



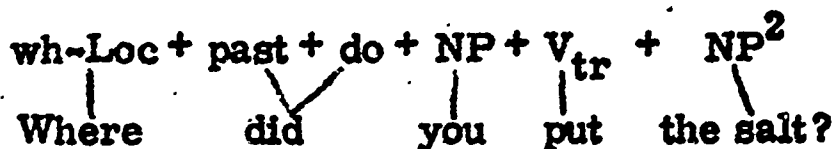
Yes-or-no question



wh-attachment



Where question (T<sub>wh</sub>)

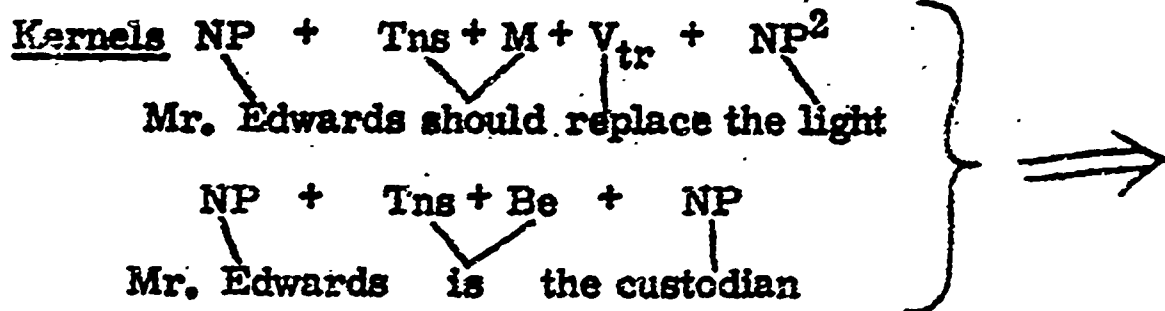


(#As in sentences 2, 6, 7, and 9 in part A, we have an element here for which we don't know the word in the underlying kernel. Where tells us that an adverb of place existed in the kernel. Some students may recognize that the verb put actually takes a special kind of place adverb known as the adverb of direction (Dir). In the next unit they will study the class of V<sub>tr</sub> that take Dir but at this time V<sub>tr</sub> + Loc is an acceptable classification for this sentence. We know that the salt was put someplace, but we don't know exactly which place. Therefore, in reconstructing the kernel you can use the indefinite someplace, or you can allow your students to supply an optional place, such as on the shelf.

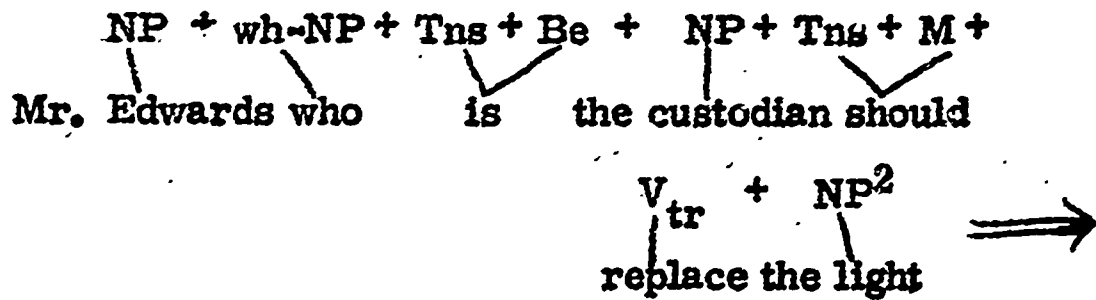
Again you must decide whether to add do in the yes-or-no transformation or wait until after completing the other transformations. In this sentence it doesn't make any difference, but you must be aware here, as in earlier questions of this exercise, that this is the final step in the process, and sometimes it does make a difference.

We have usually written Tns in this exercise rather than past or present, except where do was added; but you, of course, understand that it can be done either way.)

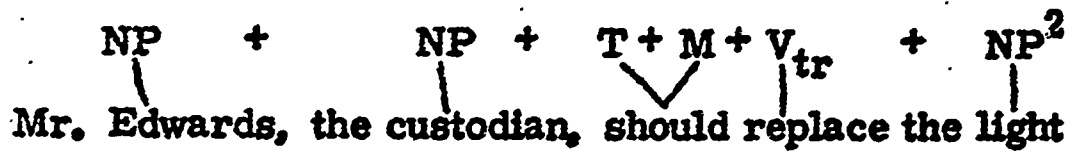
5. Mr. Edwards, the custodian, should replace the light.



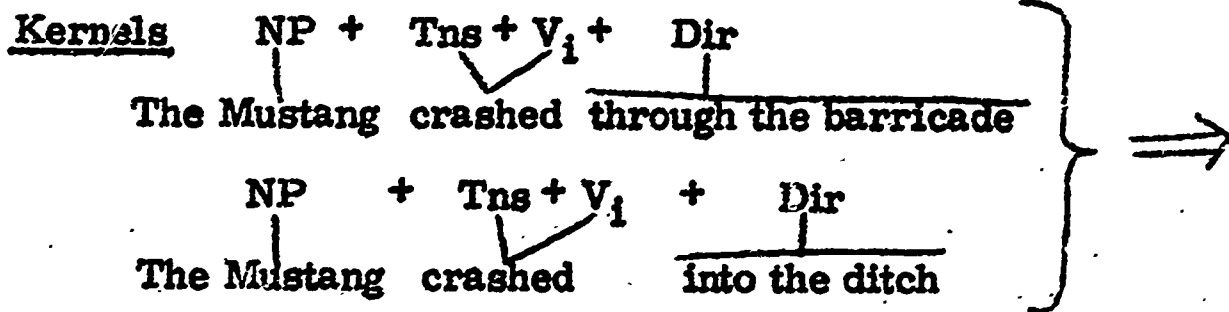
Adjective clause embedding



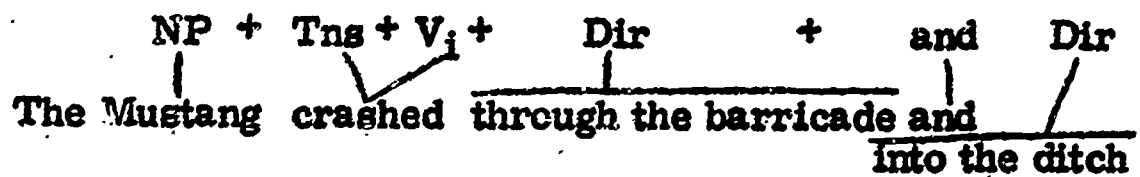
Deletion



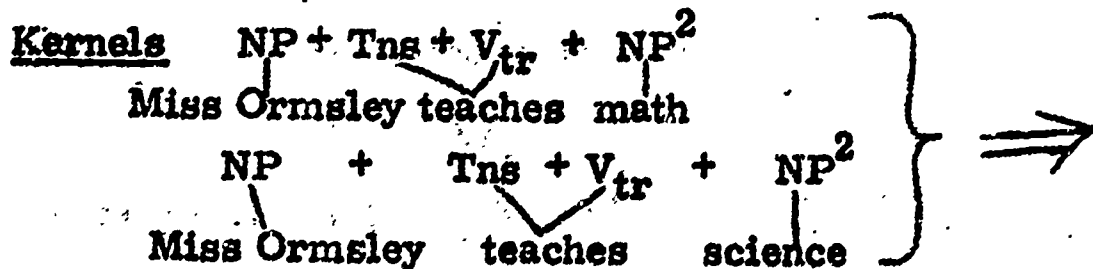
6. The Mustang crashed through the barricade and into the ditch.



Adverb conjunction

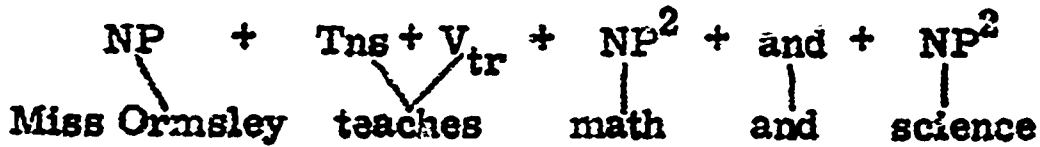


7. Miss Ormsley teaches math and science.





Object (NP<sup>2</sup>) embedding



The key to exercises 2-15 is found in the teacher's manuals to Expansion of Phrase Structure Rules and Single-Base Transformations and Double-Base Transformations. You will be assigning them as needed.

Exercise 16, p. 4:

Answers will vary for this exercise, but they could be like the following.

- A. 1.  $S_1$  and  $S_2$   
 'The rain fell all night' and 'the river crested at flood stage.'
2. . . . NP + which + NP<sup>S</sup> + Aux + have. . .  
 Gary drove the car which Father has.
3. . . . T + Adj + N + N<sup>OC</sup>  
 I own a blue car
4. NP<sub>1</sub> + who + Aux + Be + Pr . . .  
 The man who was the judge fell asleep.
5. . . . Tm<sub>1</sub> + and + Tm<sub>2</sub>  
 We will practice today and tomorrow.
6. . . . V<sub>tr1</sub> + NP<sup>2</sup> + V<sub>tr2</sub> + NP<sup>2</sup>  
 The halfback has grabbed the ball and made the touchdown.
7. . . . NP<sub>1</sub><sup>2</sup> + and + NP<sup>2</sup>  
 He was eating bread and cheese.
8. . . . + VP<sub>1</sub> + and + VP<sub>2</sub>  
 The girls rang the bell and walked into the house.
9. NP<sub>1</sub> + and + NP<sub>2</sub> . . .  
 Laurel and Hardy were famous comedians.
10. . . . Dir<sub>1</sub> and Dir<sub>2</sub>  
 The trackmen ran down the road and across the field.

- B. 1. . . . NP<sup>s</sup>+s + N + N<sup>o</sup>  
We will borrow Joe's guitar.
2. NP<sup>2</sup> Aux + be + en + V<sub>tr</sub> + by + NP<sup>1</sup>  
This picture was painted by an amateur.
3. wh-NP<sup>2</sup> + Tns + have + NP<sup>1</sup> . . .  
What have the boys left in the yard?
4. wh-NP<sup>1</sup> + Tns + M + . . .  
Who will feed the cat?
5. wh-Man + Tns + be + NP<sup>1</sup> . . .  
How was the dog behaving?

The six sentences on page 5 are included to arouse the student's curiosity. He will not, on the basis of information he now has, be able to write symbol strings for the sentences, for each contains elements which have not been discussed. We hope they will serve to isolate various constructions which will be developed in the units to follow.

## EXPANSION OF TRANSITIVE VERBS

The Phrase Structure Rules which were formulated in early years of the study of this grammar classified transitive verbs as one of the major classes of the English verb. The rules developed the notion that transitive verbs can be distinguished by the fact that they are followed by an NP (direct object), may be modified by a manner adverb, and can undergo the passive transformation. But no attempt was made to distinguish between a number of subclasses of the transitive verb, all of which share the common characteristics we have just pointed out, but differ in many other respects from each other.

We now return to a consideration of this verb class and will try in this unit and again in a unit in Language IV to distinguish some of the subclasses. Obviously not all transitive verbs are alike. How can we explain the differences? In teaching the unit you should be concerned with leading the students to discover the distinctions themselves whenever this is possible. The exercises are designed with that goal in mind, and the students should be encouraged to ask questions (and to try to answer them) about differences they note between the different classes. In this way they will hopefully gain some understanding of, and appreciation for, the complexities of a single class of verbs and also a growing realization that underneath the complexities there are quite simple generalizations which can account for them. Remember that the aim is not to make students memorize rules but to help them understand their language. If they do this the generalization (which are the rules) will become more and more obvious to them.

The verbs discussed in this unit are all composed of transitive verbs plus other elements without which they are incomplete. Specifically we will be concerned with those verbs which take indirect objects, those which occur with directional adverbs, those which have particles, and those which occur with prepositions. In the work for the following year we will add to the list of this kind of verb those transitive verbs which require complements. The symbols which are used for the various subclasses and examples of each follow:

V<sub>tio</sub> + IO                      Peter gave a necklace to his sister,  
(IO stands for indirect object)

V<sub>tdir</sub> + Dir                      The assassin drove the knife into the king,  
(Dir, of course, stands for directional adverb)

V<sub>tprt</sub> + Prt                      The man threw the coffee out,  
(Prt stands for particle)

V<sub>tprep</sub> + Prep                      They talked about rockets.  
(Prep stands for preposition)

V<sub>tC</sub> + Comp                      The public elected Johnson President,  
(Comp stands for complement)



A moment's reflection should prove that verbs like the ones used in these examples are incomplete without the additional element which is underlined. We don't give without giving something to someone. We don't throw something without throwing it someplace. We don't talk something; we talk about something. And if we elect someone we elect him to be something. Whether expressed or not the elements which occur with these particular kinds of transitive verbs are necessary to complete the verb. Our task is simply to try to define which verbs need these elements and to describe how they are generated.

For reasons of simplicity all sentences containing transitive verbs are described as  $NP^1 + Aux + V_{tr} + NP^2$ . There would be no point in using a more detailed description because this one is adequate to describe a great many facts, all those which we want to deal with at this time. For example, this very general description leads to a quite simple formulation of the passive transformation because it includes all the elements necessary for such a transformation. Moreover, this description allows us the intuitively satisfying opportunity to select structurally (and semantically) complementary items at the same point in the derivation of a sentence. That is, it makes it possible to account for each of the special subclasses of transitive verbs and the items which appear with them (those we listed above) in exactly the same way--as a rewrite of  $V_{tr}$ . Or to put it another way, we can say they all derive from  $V_{tr}$ . Thus a general principle can be found to account for a great many facts.

Let us illustrate.

There is no sentence  
\*They put a key

Put must have a structure to complete it, and the kind of structure which will complete it is an adverb of direction. This structure is most simply introduced as part of the rewrite of a single unit,  $V_{tr}$ .

$$V_{tr} \longrightarrow V_{tdir} + Dir$$

However, introducing it as a part of the rewrite of  $V_{tr}$  has the effect of producing an ungrammatical string, like \*They put into the lock the key.

To correct this situation we must invest in a simple transformation which inverts  $NP^2$  and into the lock (They put the key into the lock). But this transformation is a profitable one, because it can be shown to be a very general rule. With slight modification, it applies to the second

---

#You can discover for yourself why it is simpler to introduce the added structures of this class of verbs as part of the verb itself--that is as a rewrite of  $V_{tr}$ --rather than as a part of some other element in the sentence. If you were to try to account for it as part of  $NP^2$ , for instance, you would discover that you would need to write additional context sensitive rules to show why it occurs with some  $NP^2$ 's and not others. Actually it is the verb itself which determines the appearance of the element which completes it, even though that element is placed after the direct object.

part of each of the two-part rewrites of  $V_{tr}$  except  $V_{tprep} + Prep$ .  
For instance

\*I gave the bracelet

needs a structure to complete it as do

\*I asked a question

\*I baked a cake.

Though these added structures may often be deleted, they are present in the underlying sentence. The structures added to verbs of this kind are, of course, indirect objects and they include the prepositions of, to, or for, ( $IO \rightarrow prep + NP^3$ ). So if this structure is added to the verb as a rewrite of  $V_{tr}$  we will get sentences like

\*I gave to the girl the bracelet.

\*I asked of the teacher a question.

\*I baked for Jim a cake.

which are ungrammatical. The option then exists of going through a simple transformation which inverts  $NP^2$  and the added element or, if the sentences do not go through the transformation, of deleting the prepositions. So the sentences become either

I gave the bracelet to the girl.  
I asked a question of the teacher.  
I baked a cake for Jim.

or

I gave the girl the bracelet.  
I asked the teacher a question.  
I baked Jim a cake.

Sentences with particle verbs ( $V_{tprt} + Prt$ ) emerge from the P.S. rules in a grammatical order, but may be rearranged by the transformation which inverts  $NP^2$  and the added element.

He threw out the coffee

or

He threw the coffee out.

Sentences with verbs requiring prepositions ( $V_{tprep} + Prep$ ) emerge in a grammatical order but may not be rearranged.

He looked at the pictures.

but not

\*He looked the pictures at.

So by considering all of these subclasses of transitive verbs as two-part rewrites of the verb we can make use of a single transformation

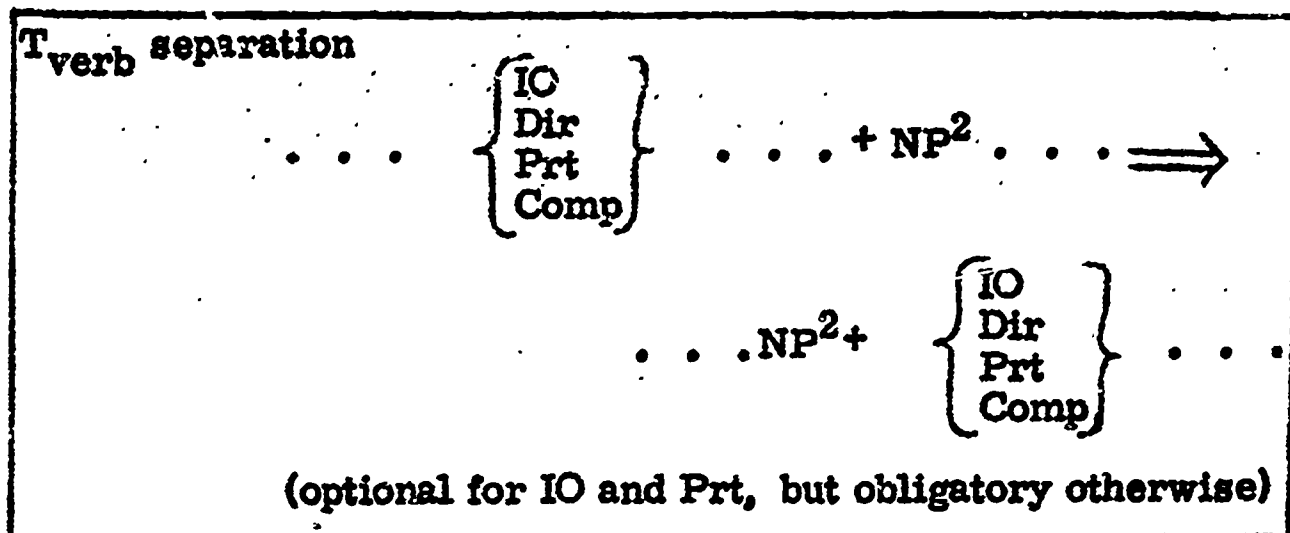
---

# $NP^3$  is simply a device to distinguish  $NP^2$ 's which are indirect objects from those which are subjects or direct objects.



to produce grammatical sentences. In each case but one the complementary element and NP<sup>2</sup> are inverted.

In its general form the rule would look like this:



As you see, the various two-part expansions of the V<sub>tr</sub> can be partly distinguished in their relationship of this verb separation transformation.

V<sub>tprep</sub> + Prep does not go through it at all.

V<sub>tio</sub> + IO and V<sub>tprt</sub> + Prt may go through it.

V<sub>tdir</sub> + Dir and V<sub>tC</sub> + Comp<sup>#</sup> must go through it.

V<sub>tr</sub> + Prep or V<sub>in</sub> + Prep?

A problem may arise in deciding whether to consider certain combinations of "verb" + prep as two-word transitive verbs or as intransitives + prep. The determining factor is again simplicity. This to do with the difficulty of limiting the selection of prepositions, among other things. Flirt, for example, may be followed only by one preposition, with. That limitation is most easily accomplished if with is simply selected as an indispensable part of a V<sub>tr</sub>, along with flirt. The verb does require with for completeness. Similarly with on and depend, to and object. The restrictions are not always this narrow, but they are always narrow.

The verbs in this unit, and the simple rules used to explain them, illustrate a fundamental criterion of language theory--that the explanations be simple and that they be adequate. A great many sentences which might appear unrelated have been shown to be very closely related structurally by the use of two rules, one a phrase structure rule, one a transformation.

Because each of the verb classes discussed in this unit has a limited

#V<sub>tC</sub> + Comp falls in this class also. It will not be discussed, however, until a later time, because an additional element is involved in complement verbs: an embedded source sentence.)

number of verbs, the possibilities for sentences in exercises is limited. However, we have attempted to include an ample number. Feel free to use what you need--which may not be all of them.

ANSWERS TO EXERCISES

Exercise 1, page 6:

Sentences 1, 2, 3, 4, and 7 can be made passive, and each contains a transitive verb. Sentence 5 contains  $V_{mid}$ , sentence 6 contains be, and sentence 8 is discussed fully in the text.

Exercise 2, page 6-7:

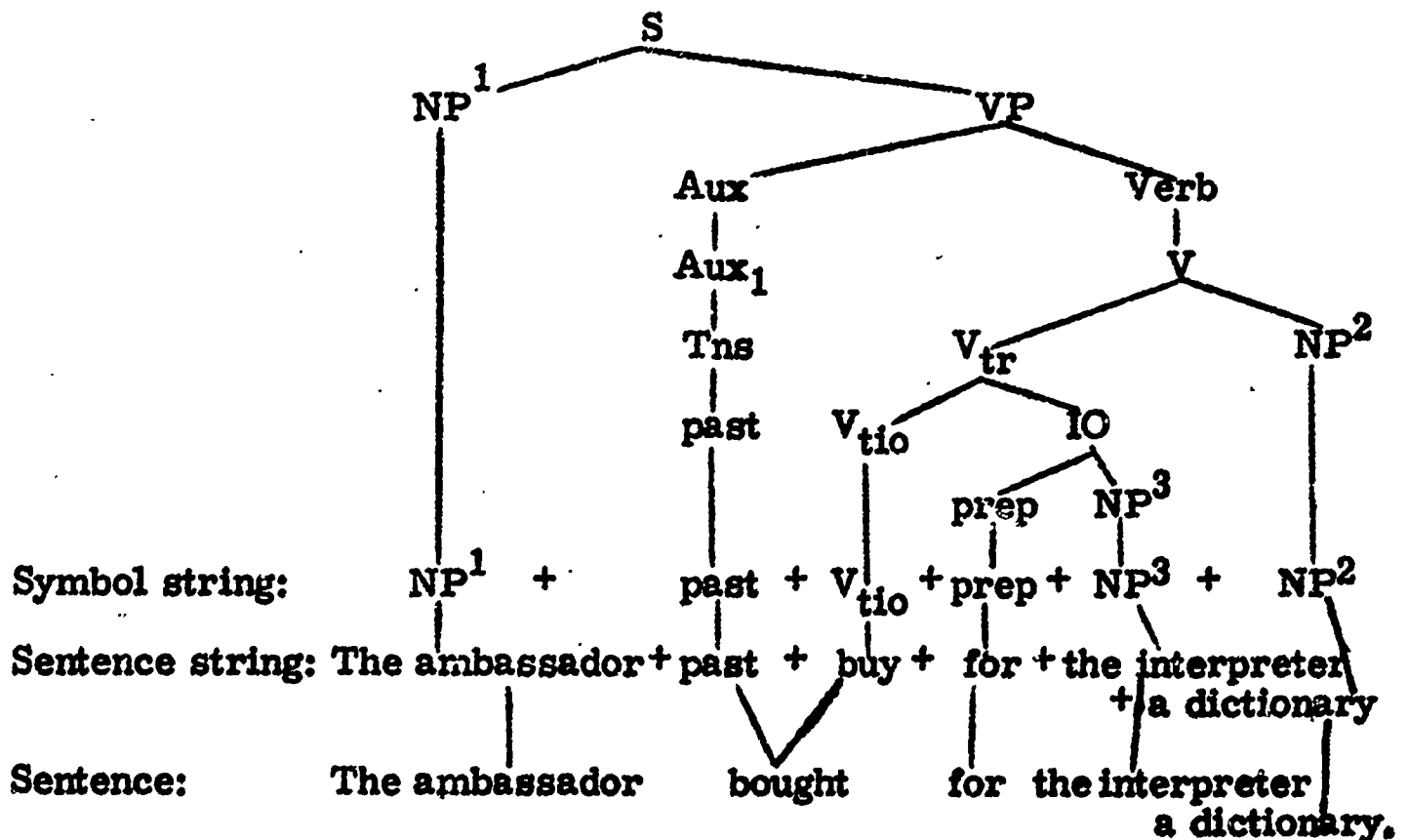
All ten sentences can be made passive, and each contains a transitive verb. Sentences 1, 3, 4, 8, 9, and 10 are different in that they may be made passive in two different ways. That is, these sentences have two objects following the verb. For example, sentence #1 has these two possible passive constructions:

- The team was awarded a trophy by the superintendent.
- A trophy was awarded the team by the superintendent.

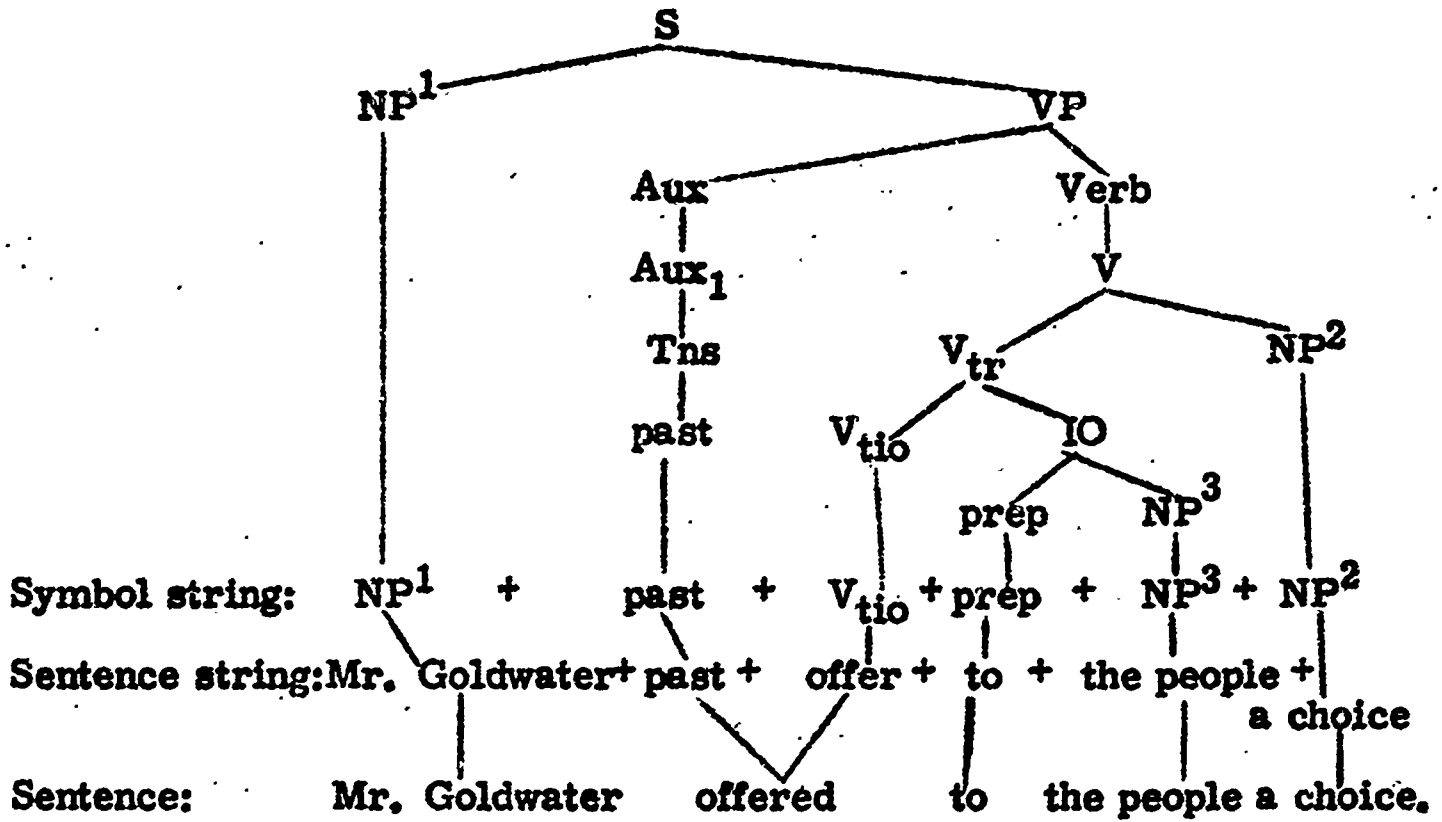
Exercise 3, page 10:

Part A: In this set, the phrase structure rules produce ungrammatical kernel sentences which are transformed into grammatical ones in Parts B and C of this exercise. You should use your own judgment about allowing students to skip from Verb to VP. By this time many students will understand that some intervening steps have been left out, but if they have trouble identifying transitive verbs perhaps you should require them to work through the steps Vrb and Vb.

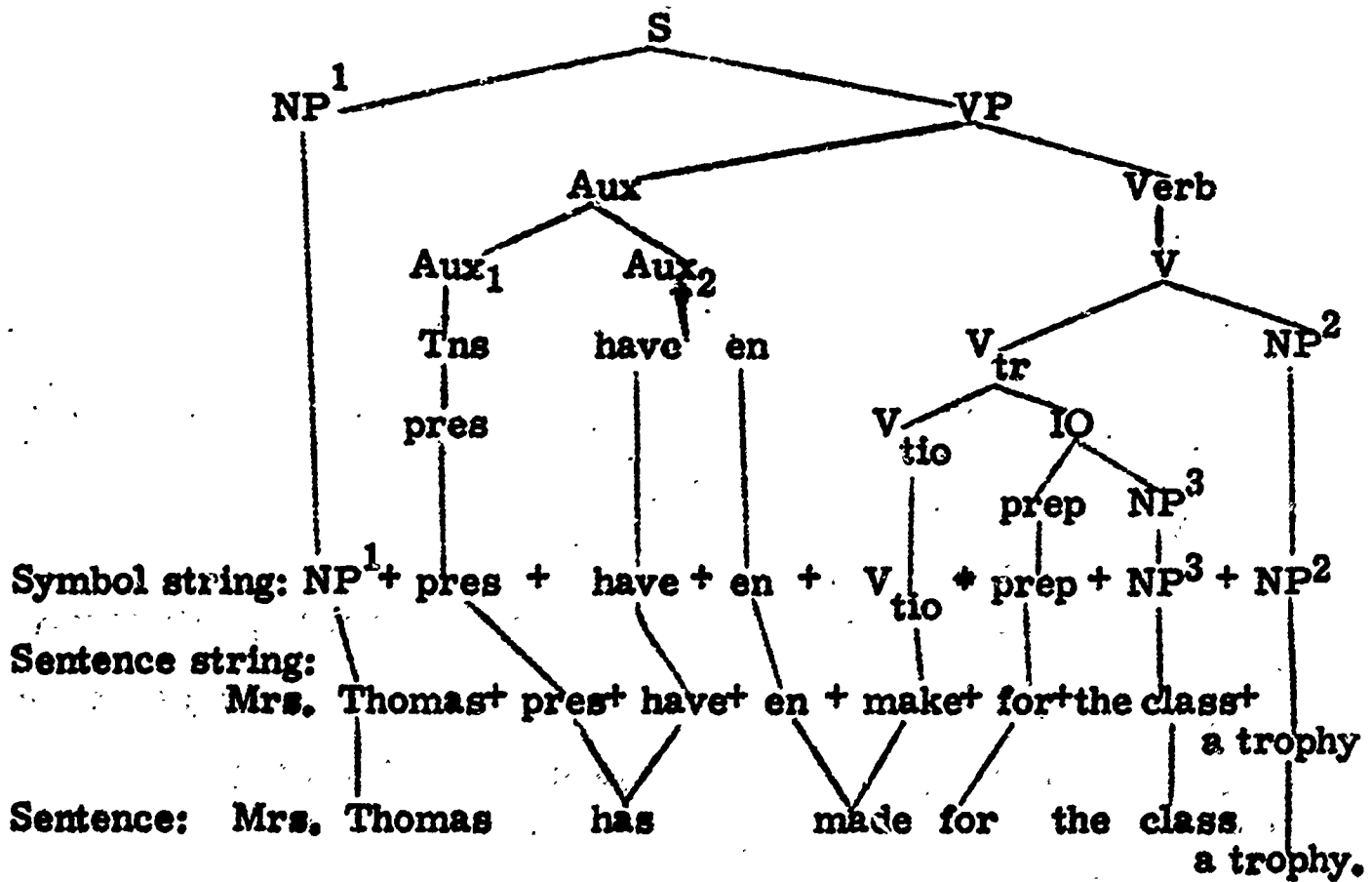
- The ambassador bought the interpreter a dictionary.



2. Mr. Goldwater offered the people a choice.

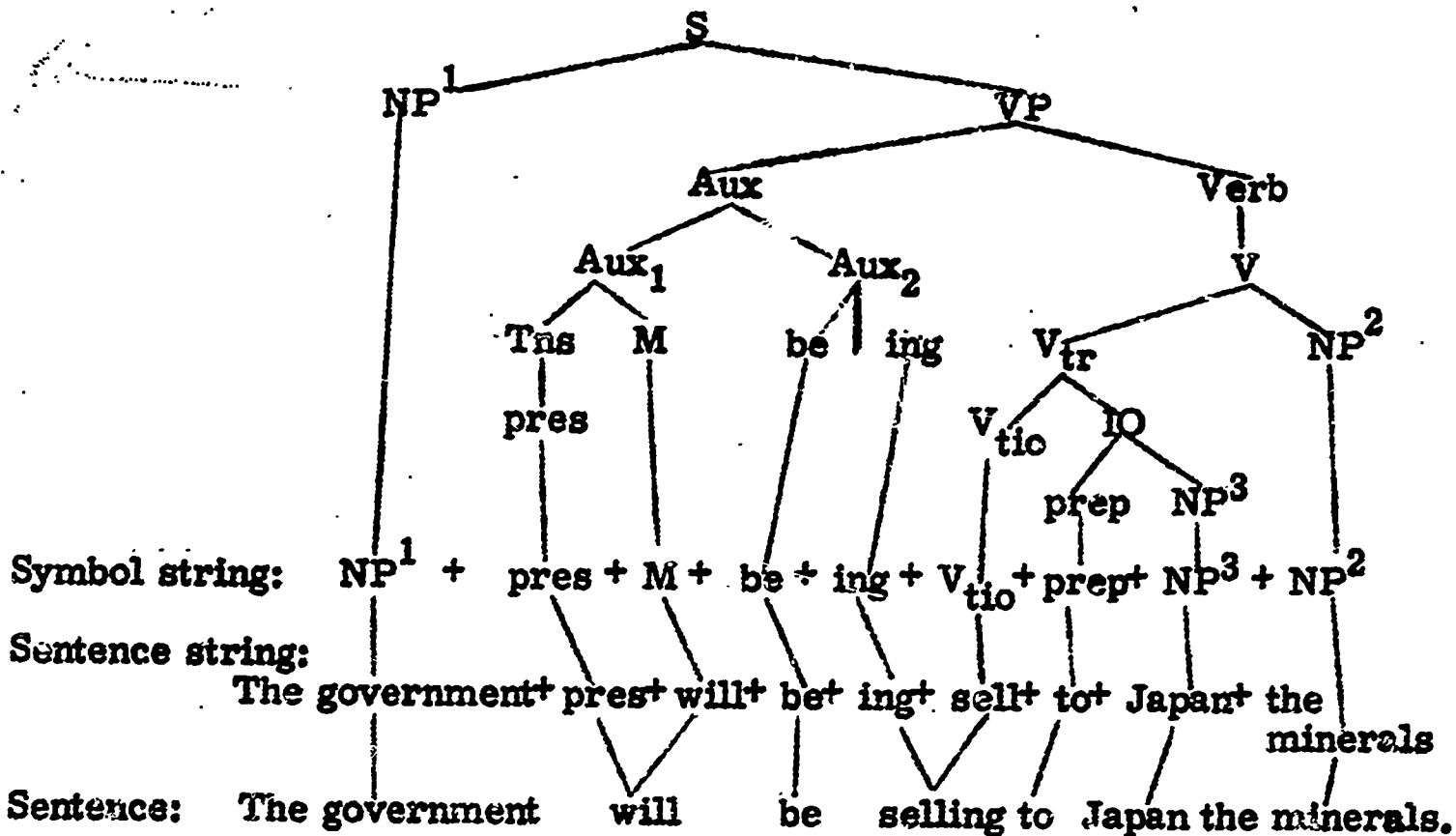


3. Mrs. Thomas has made the class a trophy.

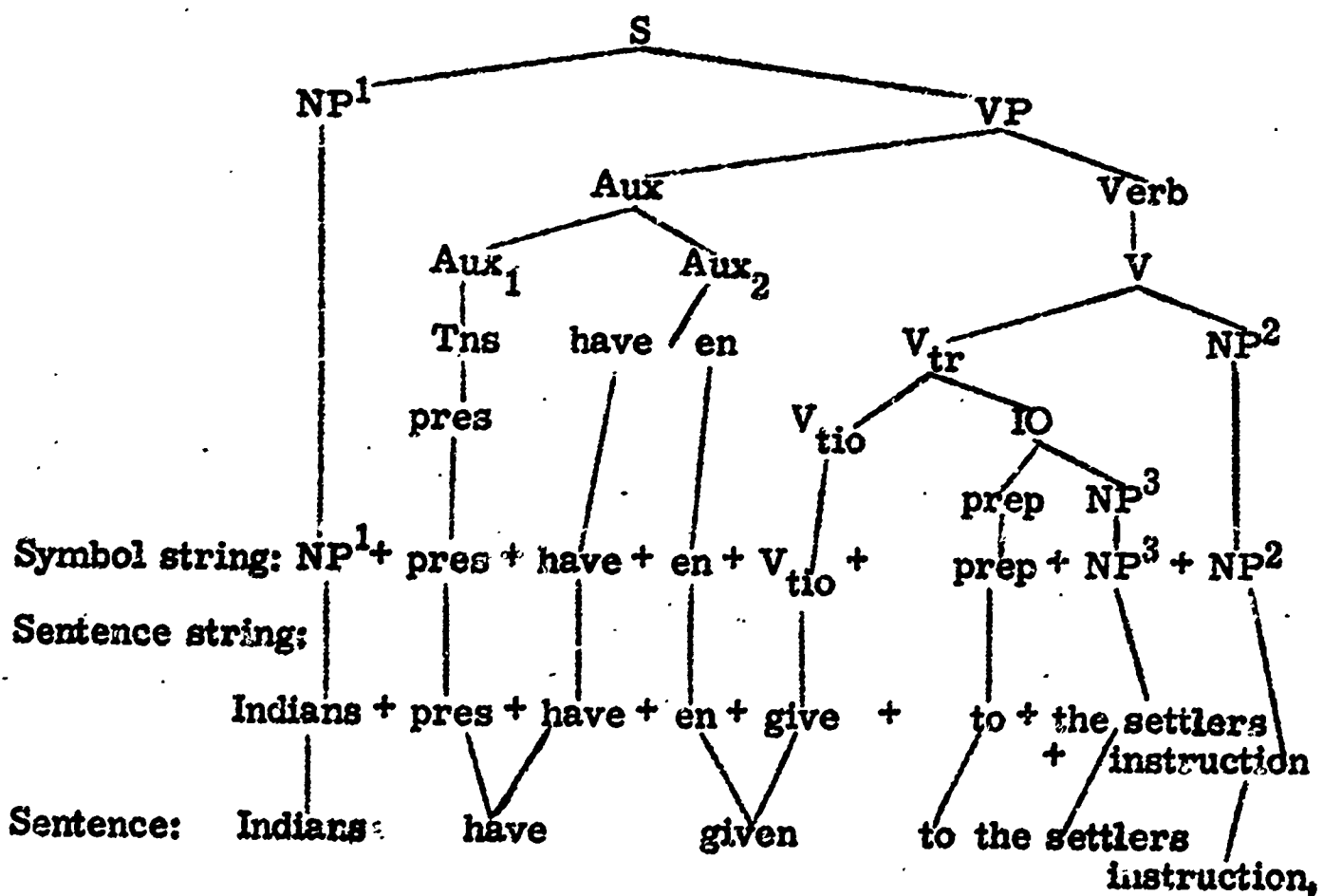




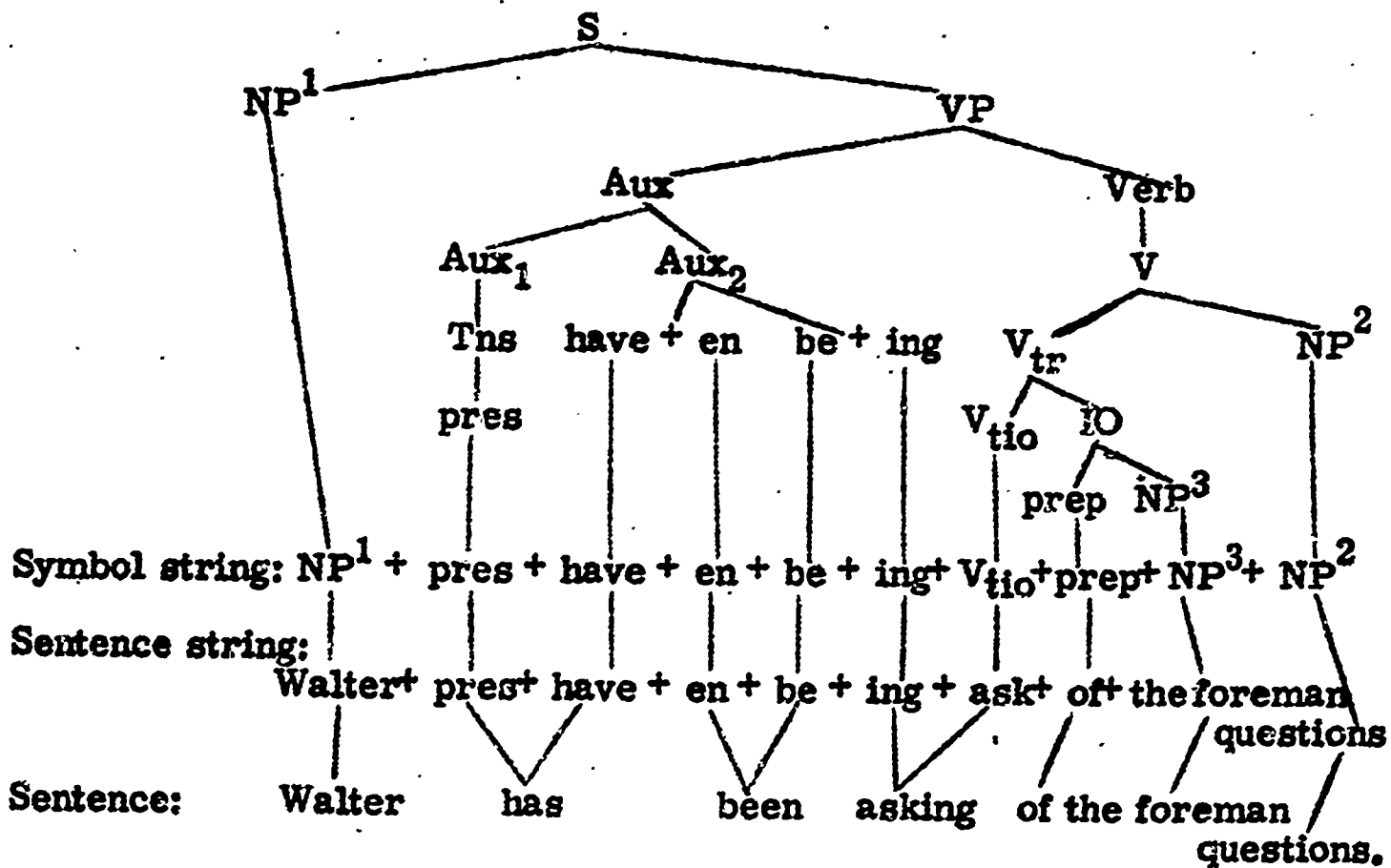
4. The government will be selling Japan the minerals.



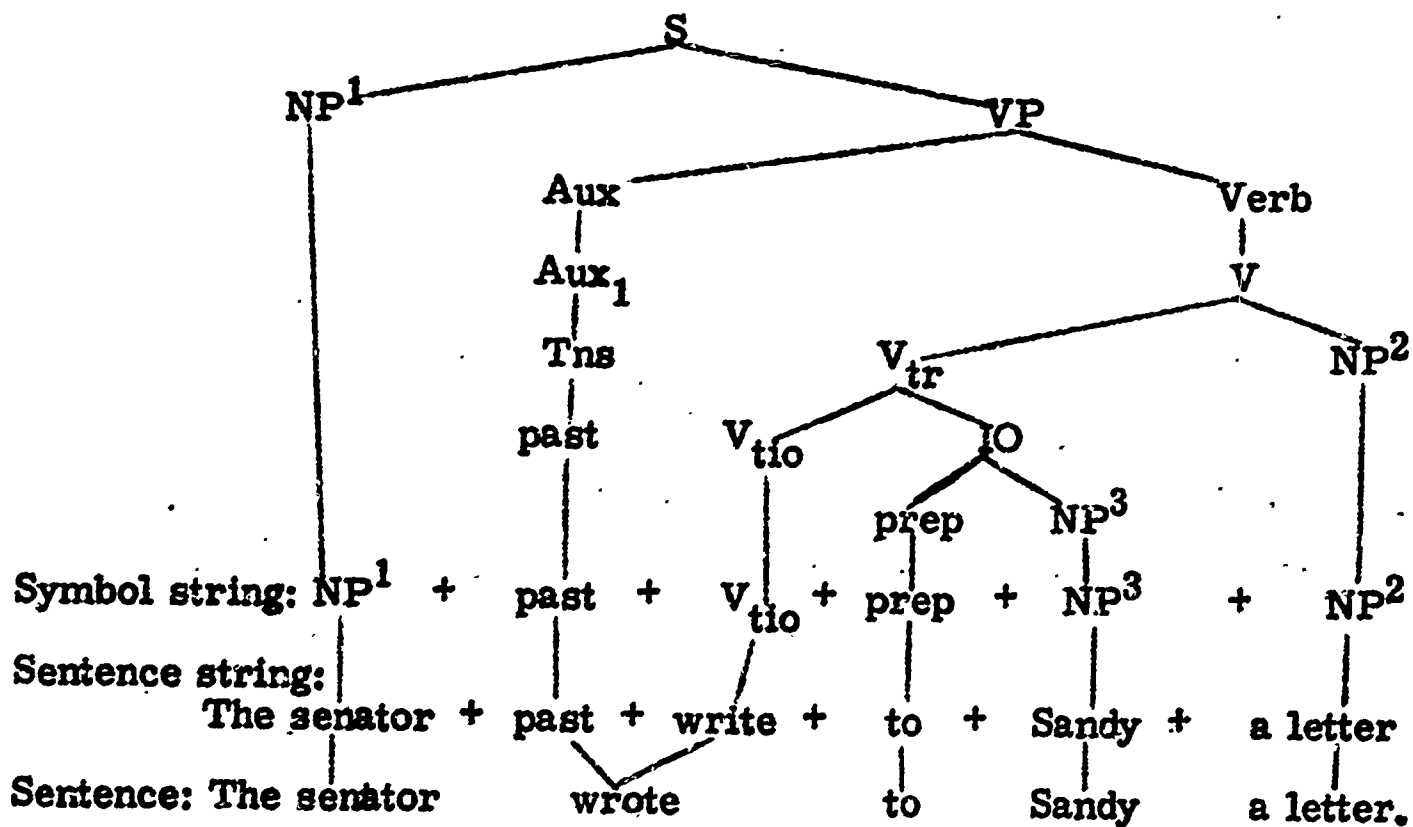
5. Indians have given the settlers instruction.



6. Walter has been asking the foreman questions.



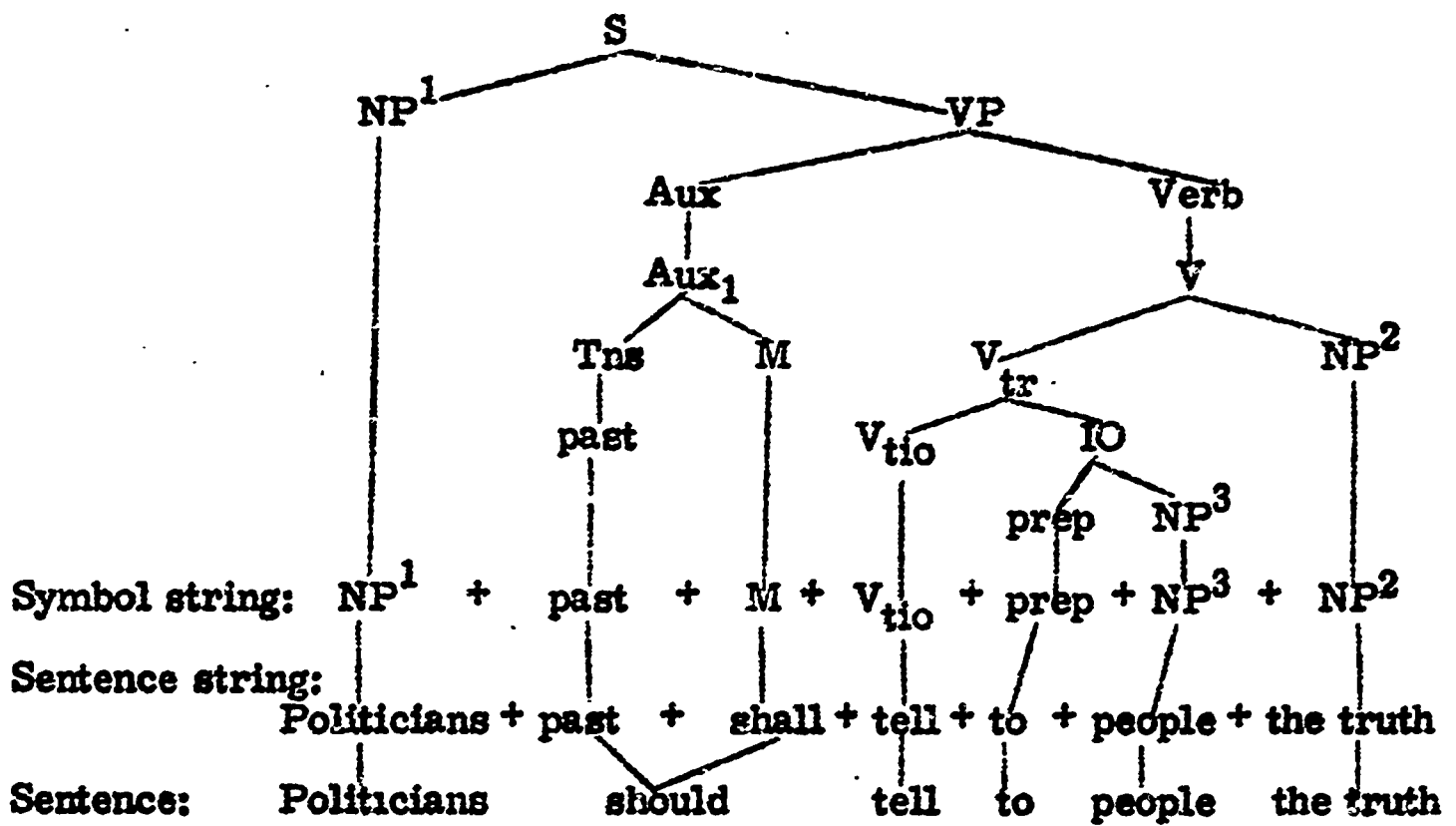
7. The senator wrote Sandy a letter.



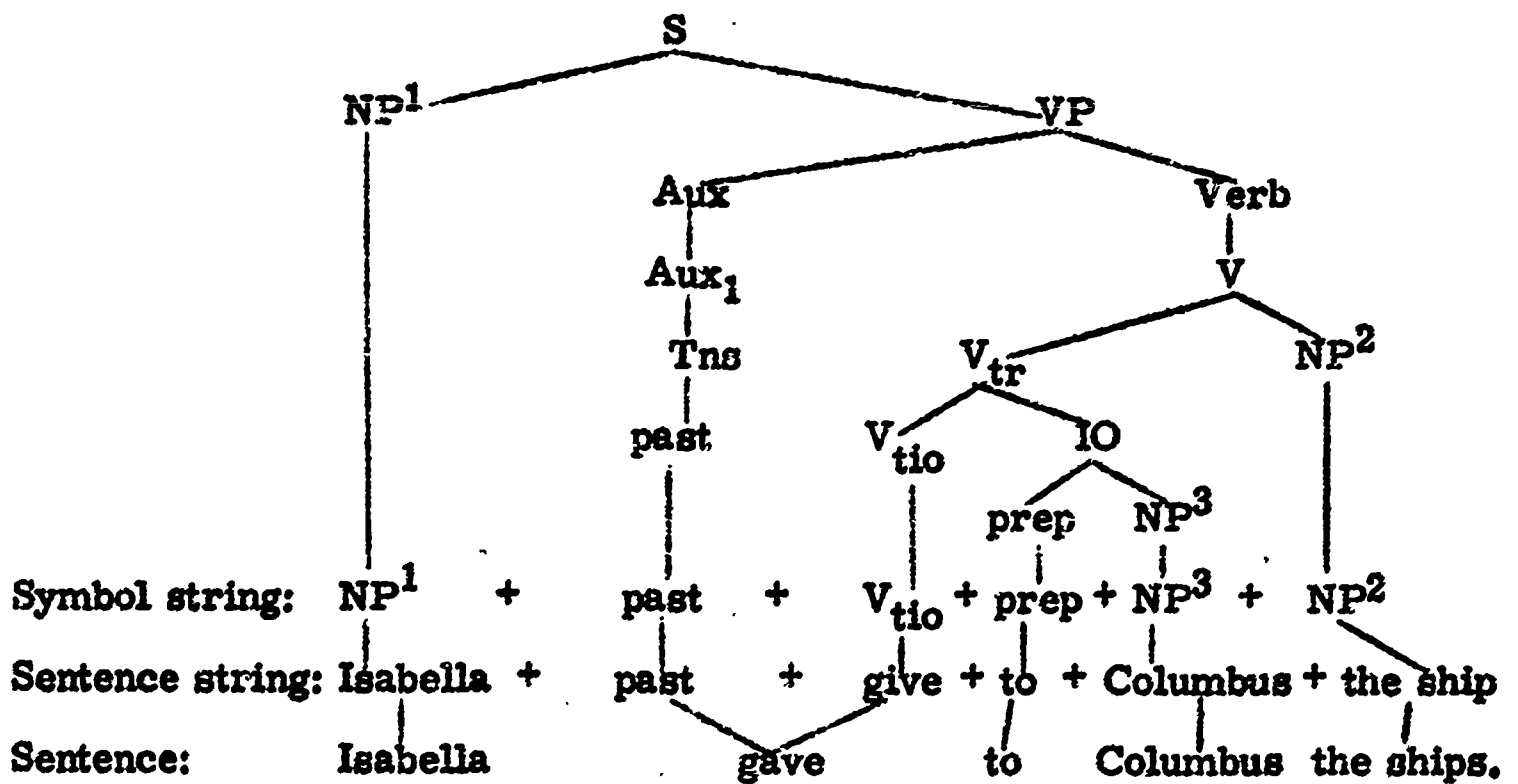
(The verb write can also be followed by for.)



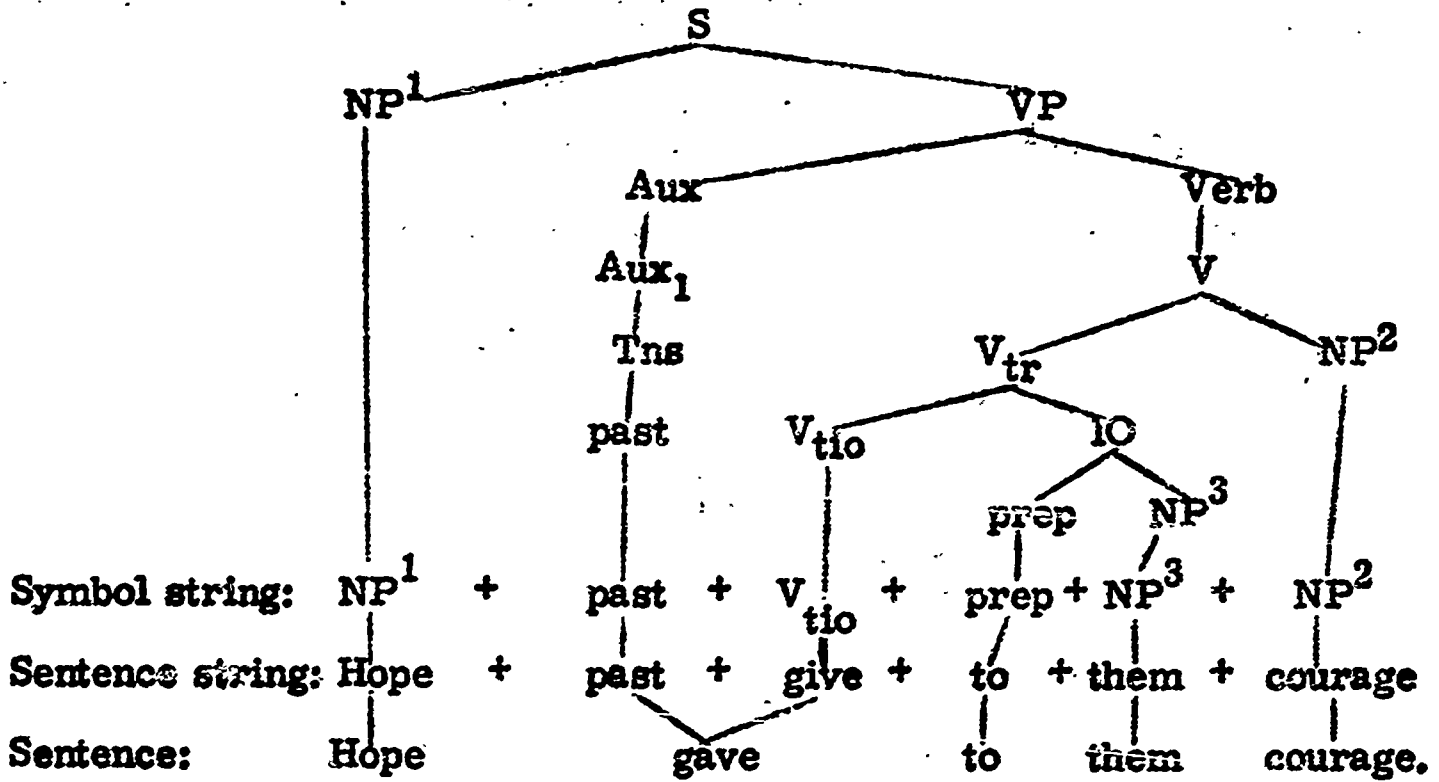
8. Politicians should tell people the truth.



9. Isabella gave Columbus the ships.



10. Hope gave them courage.



Exercise 3, p. 10, cont.

Part B: In the second string in each pair, the word to, of, or for has been deleted.

1. The ambassador + past + buy + for + the interpreter + a dictionary. ⇒

The ambassalor + past + buy + the interpreter + a dictionary.

bought

2. Mr. Goldwater + past + offer + to + the people + a choice ⇒⇒

Mr. Goldwater + past + offer + the people + a choice

offered

3. Mrs. Thomas + pres + have + en + make + for + the class + a trophy ⇒⇒

Mrs. Thomas + pres + have + en + make + the class + a trophy

has

made

4. The government + pres + will + be + ing + sell + to + Japan + the minerals ⇒⇒

The government + pres + will + be + ing + sell + Japan + the minerals

will

be

selling

5. Indians + pres + have + en + give + to + the settlers + instruction ⇒⇒

Indians + pres + have + en + give + the settlers + instruction.

have

given

6. Walter + pres + have + en + be + ing + ask + of + the foreman + questions ⇒⇒

Walter + pres + have + en + be + ing + ask + the foreman + questions

has

been

asking

7. The senator + past + write + to + Sandy + a letter ⇒⇒

The senator + past + write + Sandy + a letter

wrote

8. Politicians + past + shall + tell + to + people + the truth ⇒⇒

Politicians + past + shall + tell + people + the truth

should

tell

9. Isabella + past + give + to + Columbus + the ships ⇒⇒

Isabella + past + give + Columbus + the ships

gave

10. Hope + past + give + to + them + courage ⇒⇒

Hope + past + give + them + courage

gave



Part C: In the second string in each pair, the IO (the preposition + the NP<sup>3</sup>) has been moved to the end of the string.

1. The ambassador + past + buy + for + the interpreter + a dictionary ⇒  
The ambassador + past + buy + a dictionary + for + the interpreter  
bought

2. Mr. Goldwater + past + offer + to + the people + a choice ⇒  
Mr. Goldwater + past + offer + a choice + to + the people  
offered

3. Mrs. Thomas + pres + have + en + make + for + the class + a trophy ⇒  
Mrs. Thomas + pres + have + en + make + a trophy + for + the class  
has made

4. The government + pres + will + be + ing + sell + to + Japan +  
the minerals ⇒  
The government + pres + will + be + ing + sell + the minerals +  
to + Japan  
will be selling

5. Indians + pres + have + en + give + to + the settlers + instruction ⇒  
Indians + pres + have + en + give + instruction + to + the settlers  
have given

6. Walter + pres + have + en + be + ing + ask + of + the foreman +  
questions ⇒  
Walter + pres + have + en + be + ing + ask + questions + of + the foreman  
has been asking

7. The senator + past + write + to + Sandy + a letter ⇒  
The senator + past + write + a letter + to + Sandy  
wrote

8. Politicians + past + shall + tell + to + people + the truth ⇒  
Politicians + past + shall + tell + the truth + to + people  
should tell

9. Isabella + past + give + to + Columbus + the ships ==>

Isabella + past + give + the ships + to + Columbus

gave

10. Hope + past + give + to + them + courage ==>

Hope + past + give + courage + to + them

gave

Exercise 4, page 10:

Answers will vary. The tests for  $V_{tio}$  are the following:

1. The verb must be followed by to, of, or for and two NP's. The words to, of, and for must be deleted, or the IO must exchange positions with NP<sup>2</sup>.

2. The sentences containing  $V_{tio}$  verbs can be made passive in two different ways.

Exercise 5, page 10:

1. Father brought some roses to Mother. (Sentence)  
NP + Aux +  $V_{tio}$  + prep + NP<sup>3</sup> + NP<sup>2</sup> (Underlying string)

Father brought to Mother some roses.

2. The swindler made Jim a proposition.  
NP + Aux +  $V_{tio}$  + prep + NP<sup>3</sup> + NP<sup>2</sup>

The swindler made to Jim a proposition.

3. The officer asked Jeff some questions.  
NP + Aux +  $V_{tio}$  + prep + NP<sup>3</sup> + NP<sup>2</sup>

The officer asked of Jeff some questions.

4. Frank built a playhouse for the children.  
NP + Aux +  $V_{tio}$  + prep + NP<sup>3</sup> + NP<sup>2</sup>

Frank built for the children a playhouse.

5. The cook baked the man a cake.  
NP + Aux +  $V_{tio}$  + prep + NP<sup>3</sup> + NP<sup>2</sup>

The cook baked for the man a cake.

Exercise 1, page 12:

This exercise reviews the indirect object verb. Some transitive verbs can take two object NP's: one--the direct object--is a rewrite of V (10.  $v \rightarrow \left\{ \begin{array}{l} V_{tr} + NP^2 \\ V_{in} \end{array} \right\}$ ); the other is a part of the indirect

object (IO, 3 IO → prep + NP<sup>3</sup>). IO, of course, occurs with that subclass of transitive verbs which take indirect objects. The choice of a V<sub>tio</sub> verb requires the choice of a compatible preposition in the IO. In a fuller presentation, the preposition would be specified; in this unit the pupil is simply asked to choose a preposition that is grammatical with the particular V<sub>tio</sub> verb (e.g., give to, bake for, ask of). The preposition is later deleted unless the IO is moved to the other side of NP<sup>2</sup>.

A sentence with a V<sub>tio</sub> verb in it can be made passive in two different ways. For example:

- The coach gave (to) the swimmer a demonstration
- The swimmer was given a demonstration by the coach.
  - A demonstration was given the swimmer by the coach.

1. V<sub>tio</sub> -- give
2. Not a V<sub>tio</sub> verb, since it cannot be made passive in two different ways
3. V<sub>tio</sub> -- give
4. V<sub>tio</sub> -- write (Either "wrote to" or "wrote for" would be possible here.)
5. V<sub>tio</sub> -- give
6. V<sub>tio</sub> -- build
7. V<sub>tio</sub> -- ask
8. V<sub>tio</sub> -- design
9. V<sub>tio</sub> -- give
10. V<sub>tio</sub> -- send

Exercise 2, Page 13:

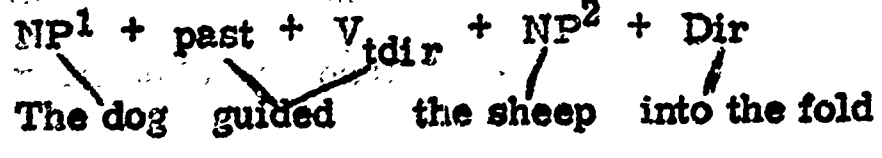
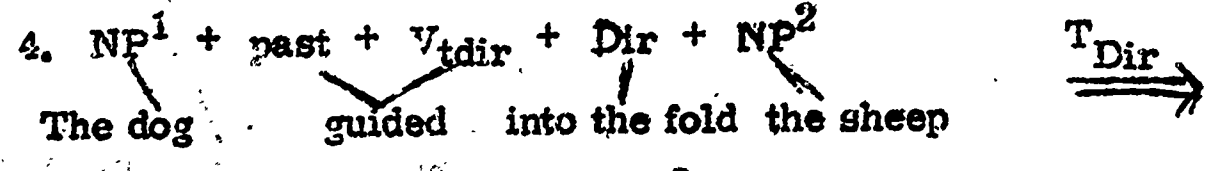
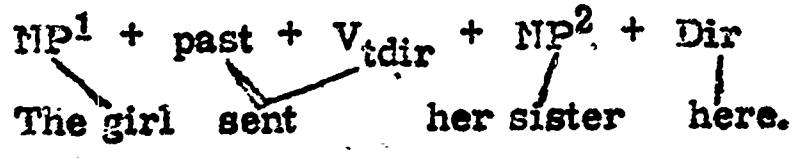
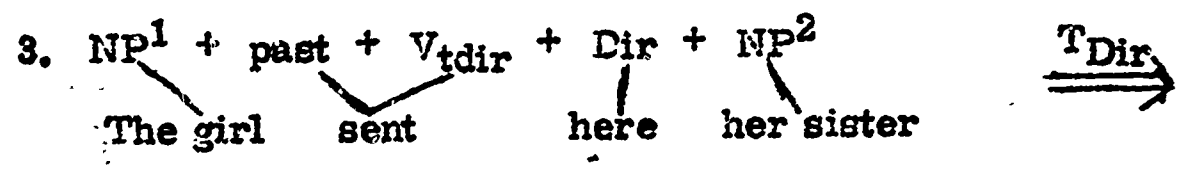
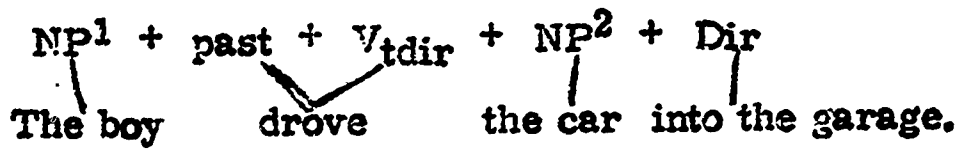
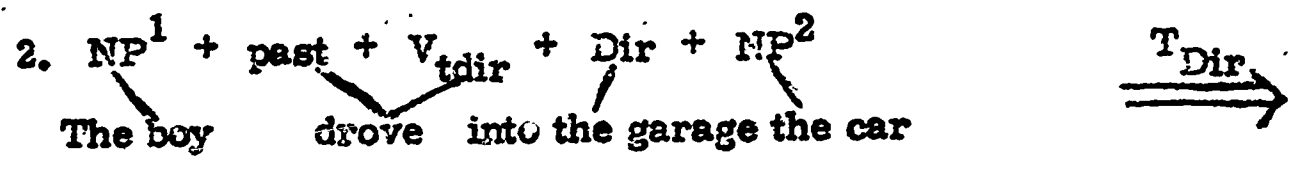
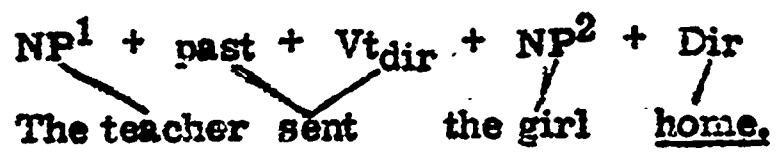
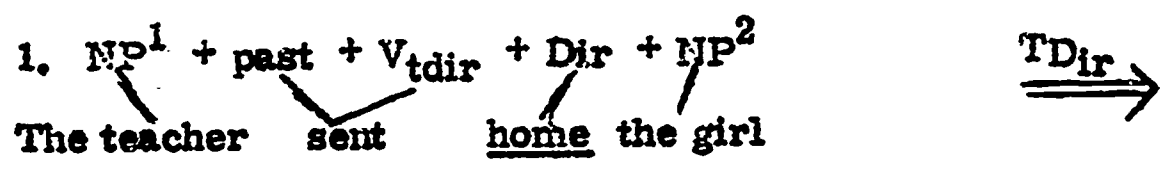
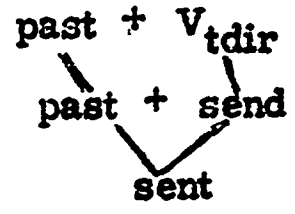
1. The boy <sup>V<sub>tio</sub></sup> gave <sup>IO</sup> the apple <sup>Dir</sup> to <sup>Dir</sup> the teacher.
2. The hawk <sup>V<sub>id</sub></sup> dived <sup>Dir</sup> at <sup>Dir</sup> the chicken.
3. The teacher <sup>V<sub>tdir</sub></sup> sent <sup>Dir</sup> the girl <sup>Dir</sup> home.
4. Water <sup>V<sub>id</sub></sup> has been trickling <sup>Dir</sup> into <sup>Dir</sup> the basement.
5. We <sup>V<sub>tdir</sub></sup> drove <sup>Dir</sup> the car <sup>Dir</sup> into <sup>Dir</sup> the garage.
6. The conductor <sup>V<sub>id</sub></sup> ran <sup>Dir</sup> toward <sup>Dir</sup> the station.
7. The man <sup>V<sub>tdir</sub></sup> directed <sup>Dir</sup> the boys <sup>Dir</sup> to <sup>Dir</sup> the exit.



- 8. Jim <sup>V<sub>tdir</sub></sup> led the donkey <sup>Dir</sup> toward the gate.
- 9. She <sup>V<sub>tdir</sub></sup> drove the car <sup>Dir</sup> away.
- 10. Jack <sup>V<sub>tdir</sub></sup> guided the ball <sup>Dir</sup> into the basket.

Exercise 3, pp. 15-16 :

We have left out the sentence string, thinking that 9th graders can make the change from symbol to final sentence fairly automatically. That is, in the first sentence, they can probably see that past + V<sub>tdir</sub> => sent. If they have trouble you may want to have them write out the intervening step.



5. NP<sup>1</sup> + past + V<sub>tdir</sub> + Dir + NP<sup>2</sup> ⇒  
 He drove into the field the horses

NP<sup>1</sup> + past + V<sub>tdir</sub> + NP<sup>2</sup> + Dir  
 He drove the horses into the field

6. NP<sup>1</sup> + past + V<sub>tdir</sub> + Dir + NP<sup>2</sup> ⇒  
 He guided toward the exit the boys

NP<sup>1</sup> + past + V<sub>tdir</sub> + NP<sup>2</sup> + Dir  
 He guided the boys toward the exit

7. NP<sup>1</sup> + past + V<sub>tdir</sub> + Dir + NP<sup>2</sup> ⇒  
 The farmer sent to town the grain

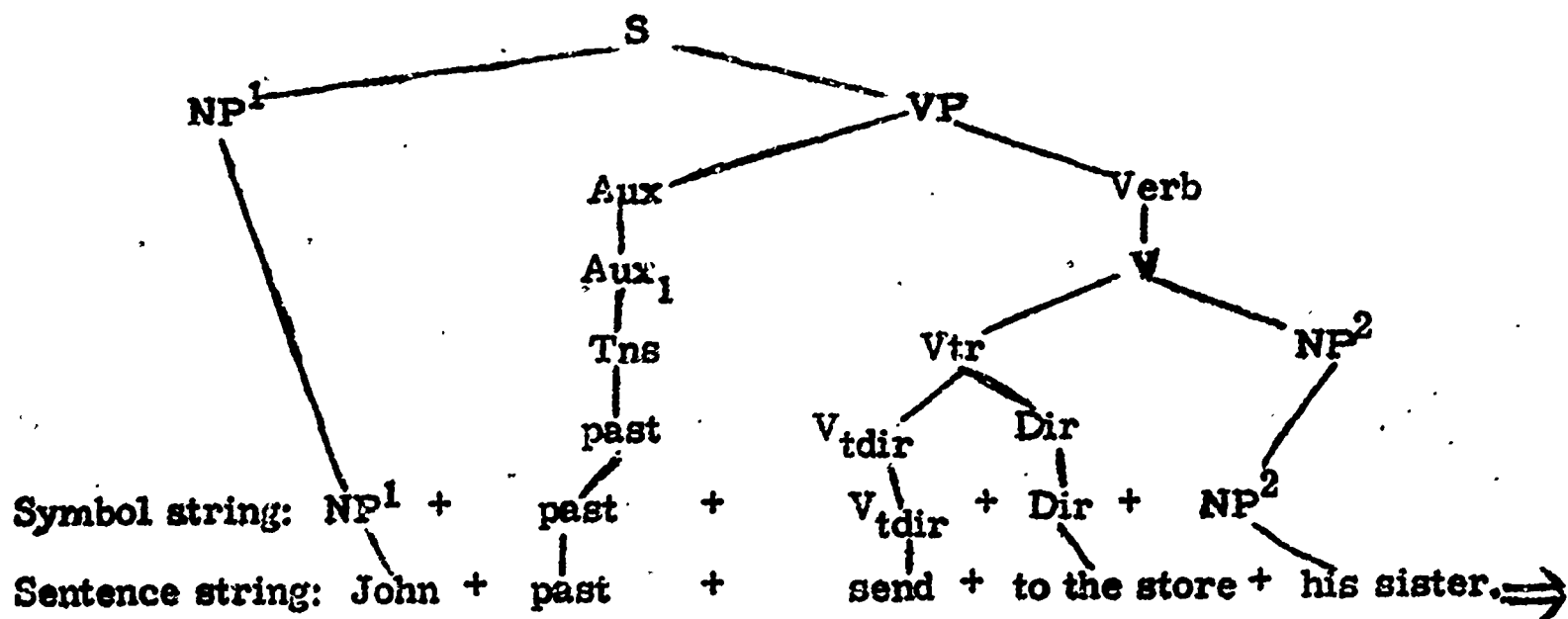
NP<sup>1</sup> + past + V<sub>tdir</sub> + NP<sup>2</sup> + Dir  
 The farmer sent the grain to town

8. NP<sup>1</sup> + past + V<sub>tdir</sub> + Dir + NP<sup>2</sup> ⇒  
 The farmer drove toward the market his cattle

NP<sup>1</sup> + past + V<sub>tdir</sub> + NP<sup>2</sup> + Dir  
 The farmer drove his cattle toward the market.

Part B

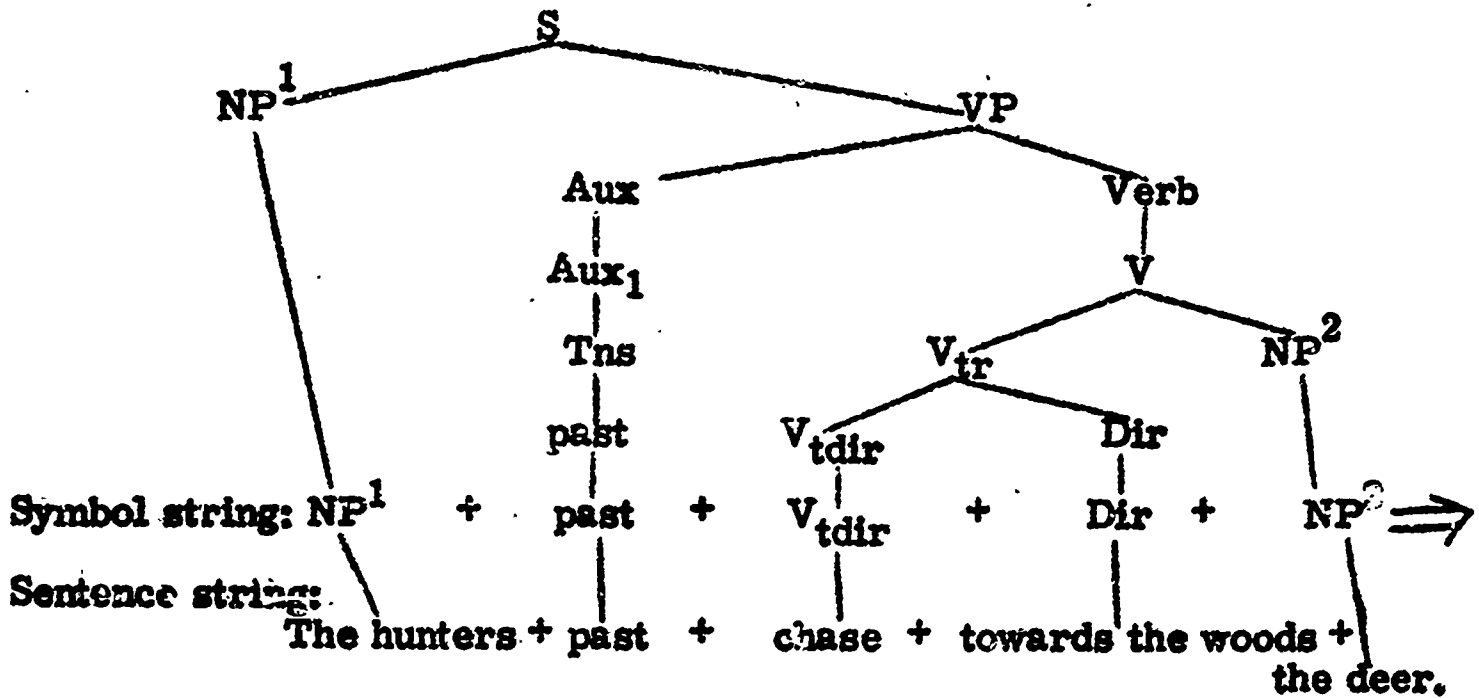
1. John sent his sister to the store.



transformed string:

NP + past + V<sub>tdir</sub> + NP<sup>2</sup> + Dir  
 John + past + send + his sister + to the store  
 John sent his sister to the store.

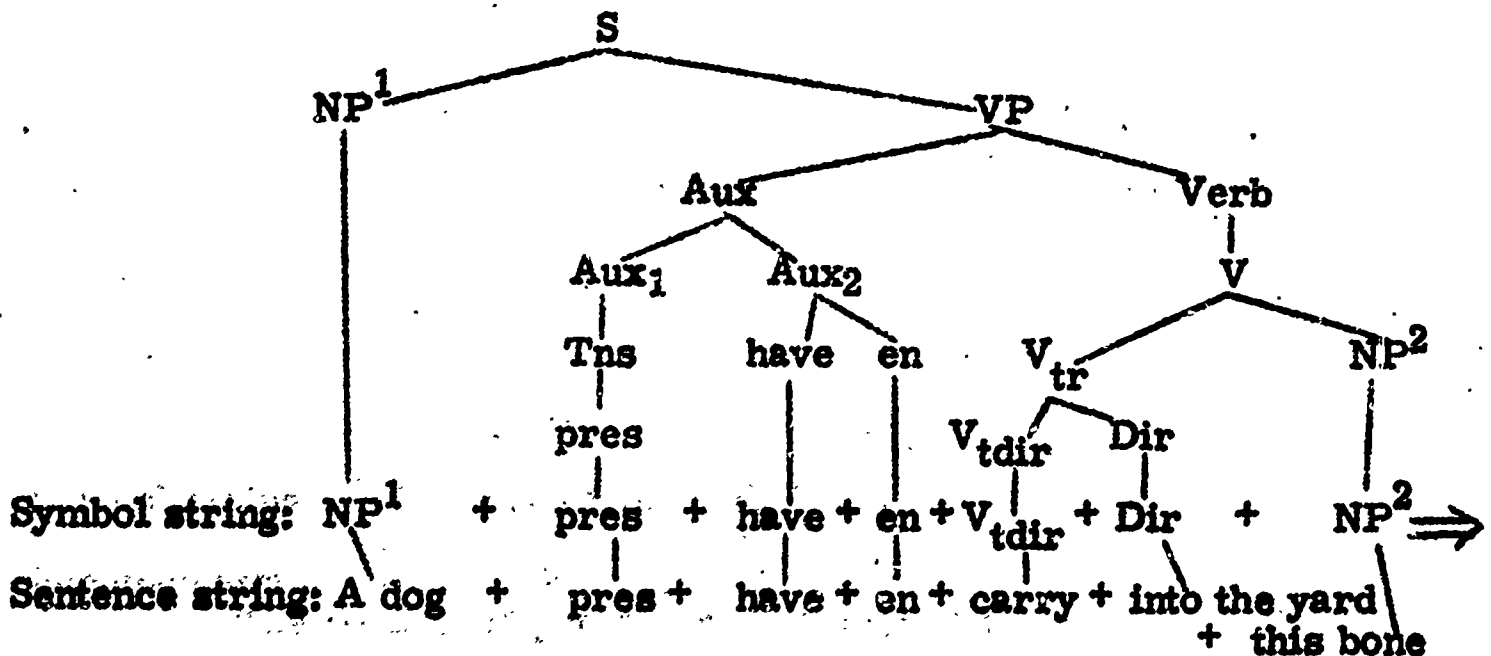
2. The hunters chased the deer toward the woods.



transformed string:

NP<sup>1</sup> + past + V<sub>tdir</sub> + NP<sup>2</sup> + Dir  
 The hunters + past + chase + the deer + toward the woods  
 The hunters chased the deer toward the woods.

3. A dog has carried this bone into the yard.

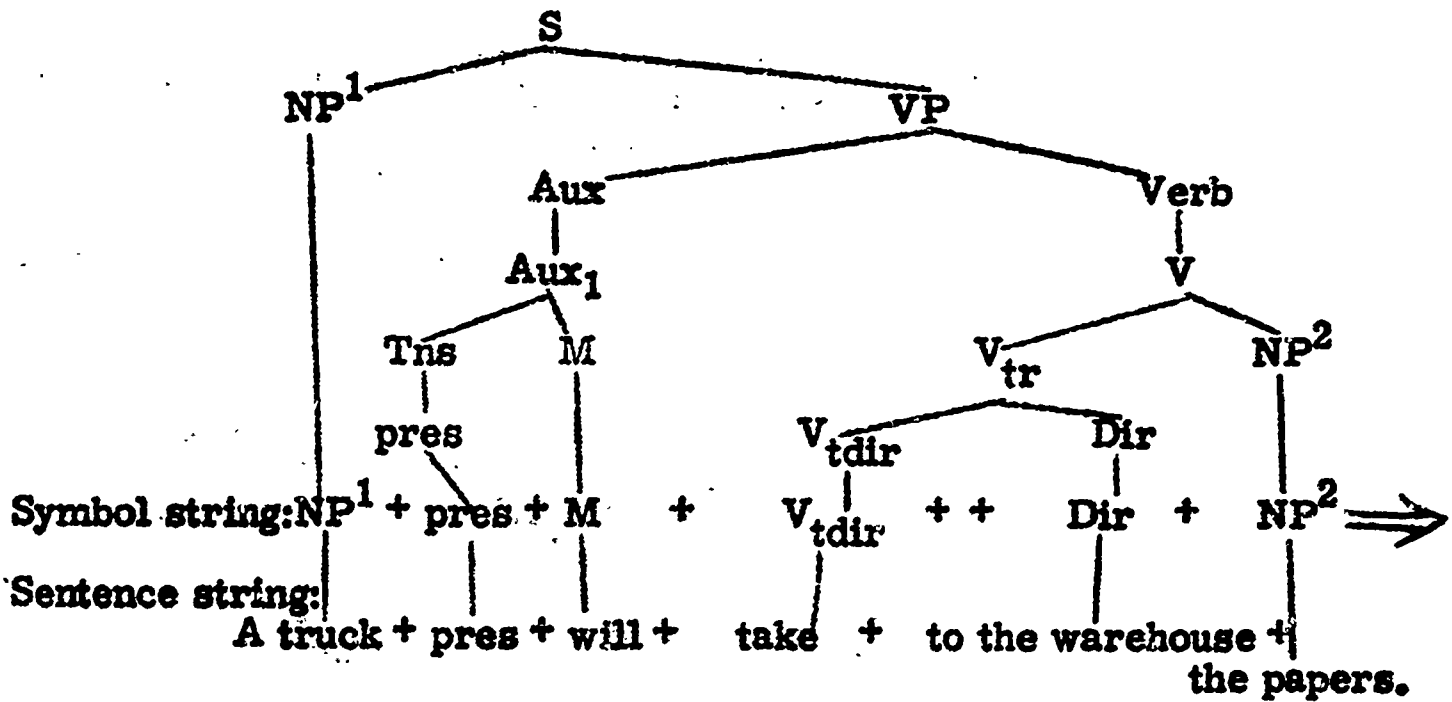




transformed string:

NP<sup>1</sup> + pres + have + en + V<sub>tdir</sub> + NP<sup>2</sup> + Dir  
 A dog + pres + have + en + carry + this bone + into the yard  
 A dog            has            carried            this bone    into the yard.

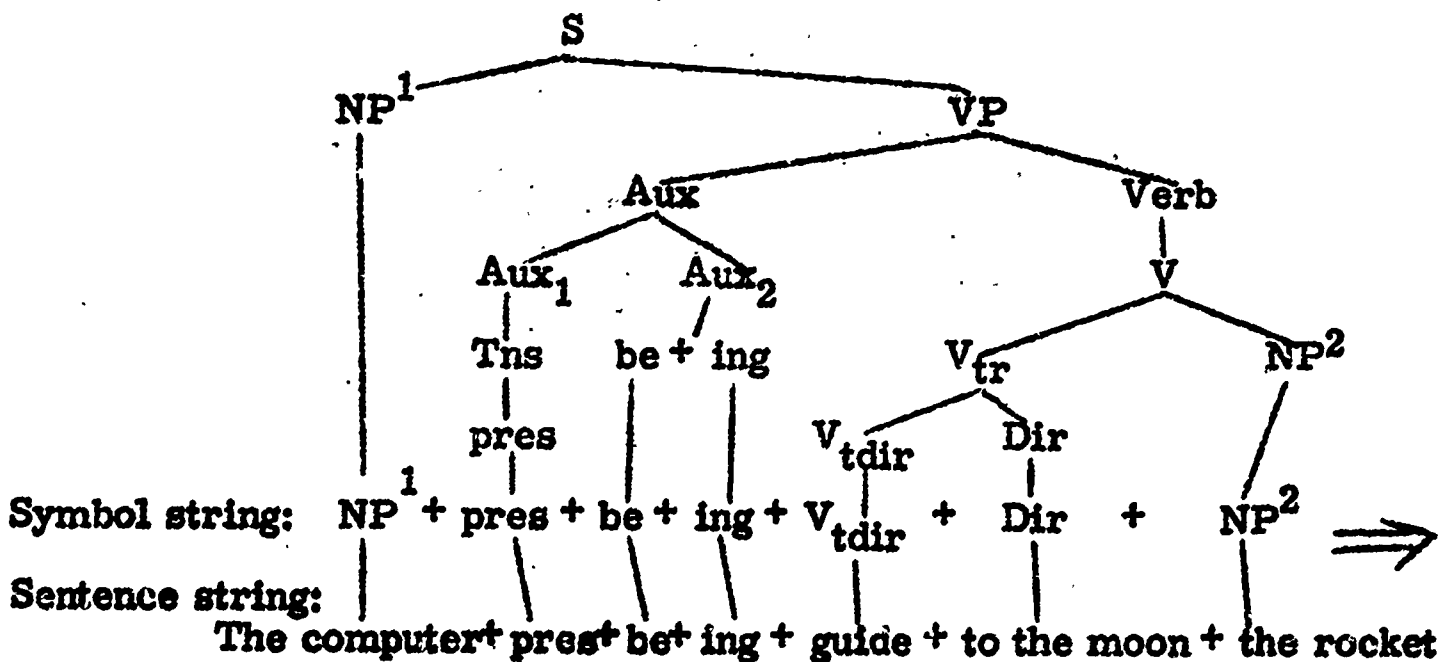
4. A truck will take the papers to the warehouse.



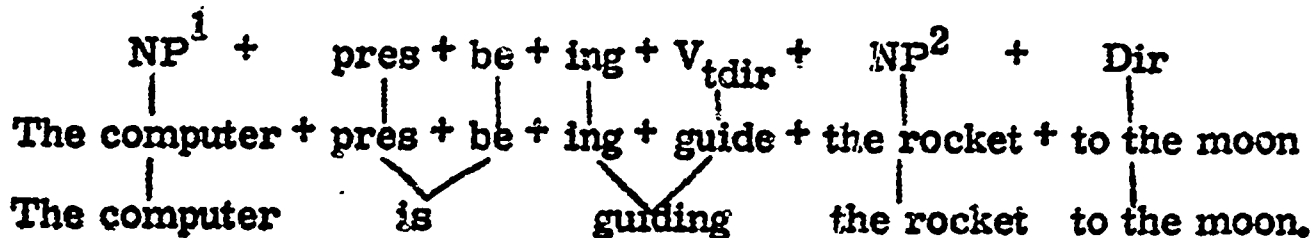
transformed string:

NP<sup>1</sup> + pres + M + V<sub>tdir</sub> + NP<sup>2</sup> + Dir  
 A truck + pres + will + take + the papers + to the warehouse.  
 A truck            will            take    the papers    to the warehouse.

5. The computer is guiding the rocket to the moon.



Transformed string:



Exercise 1, page 17:

Part A

1. drive--V<sub>tdir</sub> (The verb is followed by both an NP<sup>2</sup> and a directional adverb. The Dir is made up of a preposition and another NP. The Dir converts to the question where to?)
2. send--V<sub>tio</sub> (The verb is followed by two NP's and the sentence may be made passive in two different ways.)
3. bake--V<sub>tio</sub> (Same reasons as #2)
4. receive--V<sub>tr</sub> (This is a simple transitive verb followed by one NP.)
5. drive--V<sub>tdir</sub> (Same reasons as #1)
6. build--V<sub>tr</sub> (This is a transitive verb followed by an adverb of location [Loc]. This would be a good place to once again point up the difference between locative and directional adverbials.)
7. ask--V<sub>tio</sub> (Same reasons as #2)
8. send--V<sub>tdir</sub> (Same reasons as #1)
9. type--V<sub>tr</sub> (Same reasons as #4)
10. give--V<sub>tio</sub> (This sentence differs from #2, 3, and 7 in that the word to, generated as part of the verb, has not been deleted but simply moved [with its accompanying NP<sup>3</sup>] to the end of the sentence. The sentence can be made passive in two different ways.)

Part B

1. NP<sup>1</sup> + past + V<sub>tdir</sub> + NP<sup>2</sup> + Dir  
 He drove the car into the garage.

This is a string transformed from  
 NP<sup>1</sup> + past + V<sub>tdir</sub> + Dir + NP<sup>2</sup>  
 He drove into the garage the car.

2. NP<sup>1</sup> + past + V<sub>tio</sub> + NP<sup>3</sup> + NP<sup>2</sup>  
 John sent Sally a letter.

This is a string transformed from  
 NP<sup>1</sup> + past + V<sub>tio</sub> + prep + NP<sup>3</sup> + NP<sup>2</sup>  
 John sent to Sally a letter.

3. NP<sup>1</sup> + past + V<sub>tio</sub> + NP<sup>3</sup> + NP<sup>2</sup>  
 John baked Jill a cake.

transformed from:  
 NP<sup>1</sup> + past + V<sub>tio</sub> + prep + NP<sup>3</sup> + NP<sup>2</sup>  
 John baked for Jill a cake.

4. NP<sup>1</sup> + past + V<sub>tr</sub> + NP<sup>2</sup>  
 Gerry received the award.

5. NP<sup>1</sup> + past + V<sub>tdir</sub> + NP<sup>2</sup> + Dir  
 The man drove his car home.

This is a string transformed from  
 NP<sup>1</sup> + past + V<sub>tdir</sub> + Dir + NP<sup>2</sup>  
 The man drove home his car.

6. NP<sup>1</sup> + pres + have + en + V<sub>tr</sub> + NP<sup>2</sup> + Loc  
 The oriole has built a nest in the cherry tree.



7. NP<sup>1</sup> + past + V<sub>tio</sub> + NP<sup>3</sup> + NP<sup>2</sup>  
 The boy asked the teacher a question.

transformed from:  
 NP<sup>1</sup> + past + V<sub>tio</sub> + prep + NP<sup>3</sup> + NP<sup>2</sup>  
 The boy asked of the teacher a question.

8. NP<sup>1</sup> + past + V<sub>tdir</sub> + NP<sup>2</sup> + Dir  
 We sent a rocket toward the moon.

transformed from:  
 NP<sup>1</sup> + past + V<sub>tdir</sub> + Dir + NP<sup>2</sup>  
 We sent toward the moon a rocket.

9. NP<sup>1</sup> + pres + be + ing + V<sub>tr</sub> + NP<sup>2</sup>  
 He is typing his exam.

10. NP<sup>1</sup> + past + V<sub>tio</sub> + NP<sup>2</sup> + to + NP<sup>3</sup>  
 She gave some cheese to the mouse.

This is a string transformed from  
 NP<sup>1</sup> + past + V<sub>tio</sub> + prep + NP<sup>3</sup> + NP<sup>2</sup>  
 She gave to the mouse some cheese.

Sentences 2, 3, and 7 contain indirect objects. They differ in the preposition which occurs with the indirect object. (. . . baked for Jill. . .; . . . sent to Sally. . .; . . . asked of the teacher. . .). Sentences 1, 5, and 8 contain directional adverbs. In the cherry tree is, of course, an adverb of location.

Exercise 2, page 18:

1. NP<sup>1</sup> + past + V<sub>tdir</sub> + NP<sup>2</sup> + Dir  
 Mick rowed the boat to shore.

- 2. NP<sup>1</sup> + past + V<sub>t dir</sub> + NP<sup>2</sup> + Dir  
 Father plunged the knife into the roast.
- 3. NP<sup>1</sup> + past + V<sub>t dir</sub> + NP<sup>2</sup> + Dir  
 The librarian put the books on the shelf.
- 4. NP<sup>1</sup> + past + V<sub>t dir</sub> + NP<sup>2</sup> + Dir  
 I stuck the key into the lock.
- 5. NP<sup>1</sup> + pres + have + en + V<sub>t dir</sub> + NP<sup>2</sup> + Dir  
 Jerry has taken his work home.
- 6. NP<sup>1</sup> + past + V<sub>t dir</sub> + NP<sup>2</sup> + Dir  
 The pitcher threw the ball to the umpire.
- 7. NP<sup>1</sup> + past + be + ing + V<sub>t dir</sub> + NP<sup>2</sup> + Dir  
 A monkey was hurling coconuts to the ground.
- #8. NP<sup>1</sup> + past + V<sub>t dir</sub> + NP<sup>2</sup> + ?  
 Joan threw the coffee out.

(The discerning student will probably feel that there is something different about out particularly after he has worked through Exercise 3. This "intuition" should lead into the discussion of the particle.)

Exercise 3, page 19:

- 1. NP<sup>1</sup> + past + V<sub>t dir</sub> + Dir + NP<sup>2</sup>  
 Mick rowed to shore the boat.
- 2. NP<sup>1</sup> + past + V<sub>t dir</sub> + Dir + NP<sup>2</sup>  
 Father plunged into the roast the knife.
- 3. NP<sup>1</sup> + past + V<sub>t dir</sub> + Dir + NP<sup>2</sup>  
 The librarian put on the shelf the books
- 4. NP<sup>1</sup> + past + V<sub>t dir</sub> + Dir + NP<sup>2</sup>  
 I stuck into the lock the key
- #5. NP<sup>1</sup> + pres + have + en + V<sub>t dir</sub> + Dir + NP<sup>2</sup>  
 Jerry has taken home his work

(For some people #5 is also grammatical before transformation: Jerry has taken home his work.)

6. NP<sup>1</sup> + past + V<sub>t,dir</sub> + Dir + NP<sup>2</sup>  
The pitcher threw to the umpire the ball

7. NP<sup>1</sup> + past + be + ing + V<sub>t,dir</sub> + Dir + NP<sup>2</sup>  
A monkey was hurling to the ground coconuts

8. NP<sup>1</sup> + past + V<sub>t,dir</sub> + Dir + NP<sup>2</sup>  
Joan threw out the coffee.

(Throw can also be a V<sub>t,dir</sub> verb as in "He threw the rock at the window.")

Exercise 4, page 21:

1. give -- V<sub>tio</sub>
2. read -- V<sub>tio</sub>
3. throw away -- V<sub>tprt</sub> + Prt
4. put away -- V<sub>tprt</sub> + Prt
5. bring up -- V<sub>tprt</sub> + Prt
6. take over -- V<sub>tprt</sub> + Prt
7. take -- V<sub>t,dir</sub>
8. blow up -- V<sub>tprt</sub> + Prt
9. lead -- V<sub>t,dir</sub>
10. turn on -- V<sub>tprt</sub> + Prt

Exercise 5, page 22:

1. \*Jill put away it.  
Jill put it away.
2. \*Susy brought in them.  
Susy brought them in.
3. \*Jane brought up it.  
Jane brought it up.
4. \*The Communists will take over it.  
The Communists will take it over.
5. \*The men blew up it.  
The men blew it up.



6. \*The coach pointed out him.  
The coach pointed him out.

7. \*The men pitched in it.  
The men pitched it in.

8. \*He called over her.  
He called her over.

1. When the NP<sup>2</sup> following a V<sub>tprt</sub> verb is a noun the transformation is optional.
2. When the NP<sup>2</sup> is a pronoun the transformation is obligatory.

Exercise 6, pages 22-23:

The transformation moving the particle to the end of the sentence is obligatory in sentences #4, 7, 9, and 10. It is optional in #1, 2, 3, 5, 6, and 8.

Exercise 7, page 23:

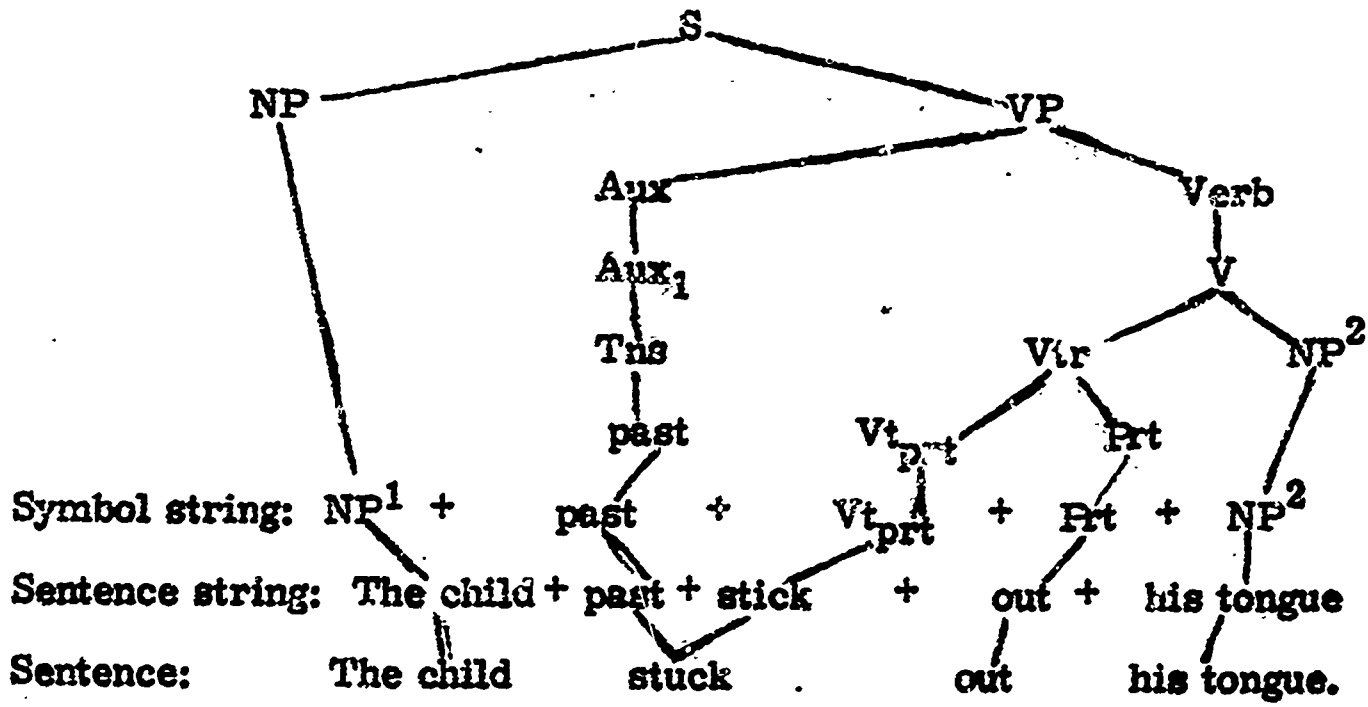
Part A

1. stick out--V<sub>tprt</sub> + Prt
2. make--V<sub>tio</sub>
3. take in--V<sub>tprt</sub> + Prt
4. take--V<sub>tdir</sub>
5. ask--V<sub>tio</sub>
6. drag--V<sub>tdir</sub>
7. build--V<sub>tio</sub>
8. give--V<sub>tio</sub>
9. push open--V<sub>tprt</sub> + Prt
10. run--V<sub>tdir</sub>

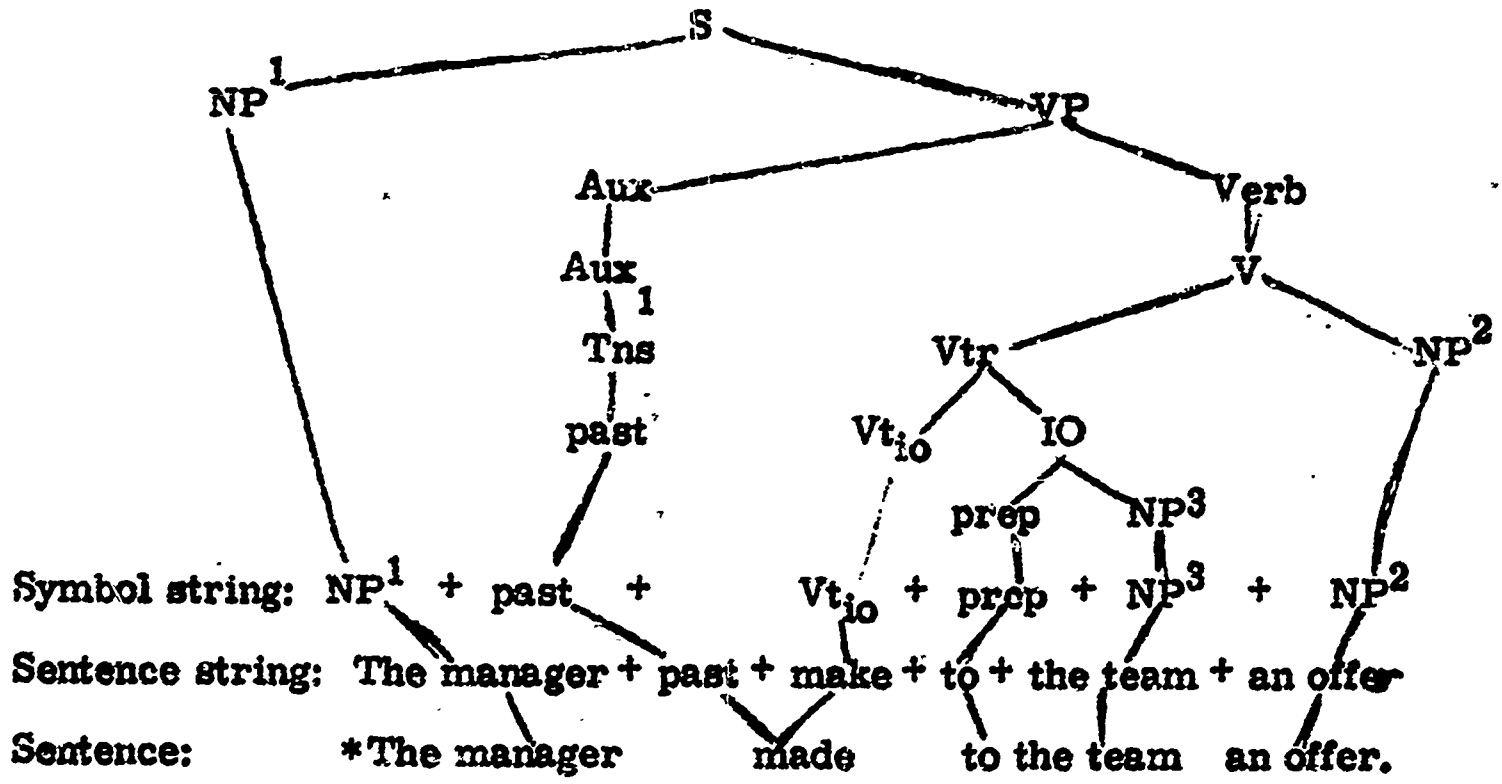
Part B

(With the exception of #1 and 9, all of the sentences in this exercise are the results of transformations. Thus, the sentences which are produced by the diagrams are ungrammatical. They require one more step.

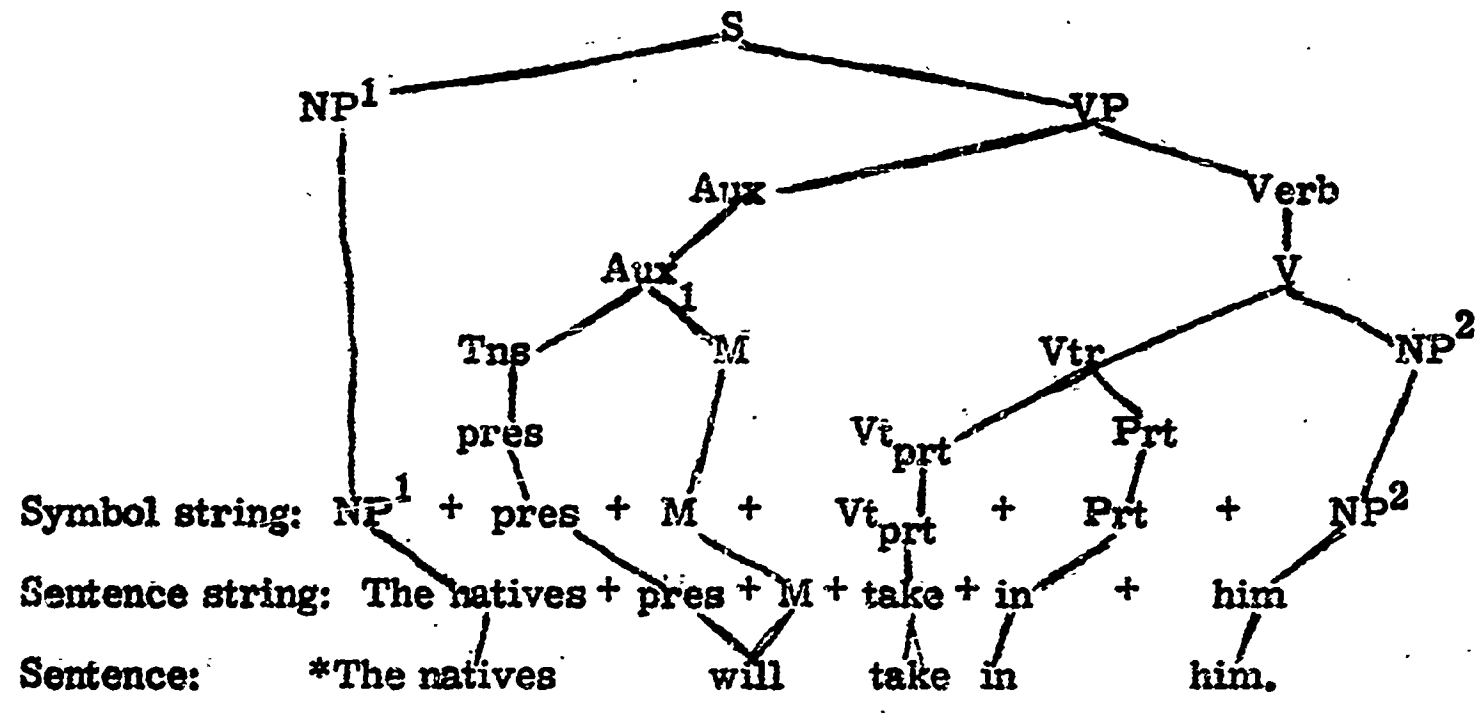
1. The child stuck out his tongue.



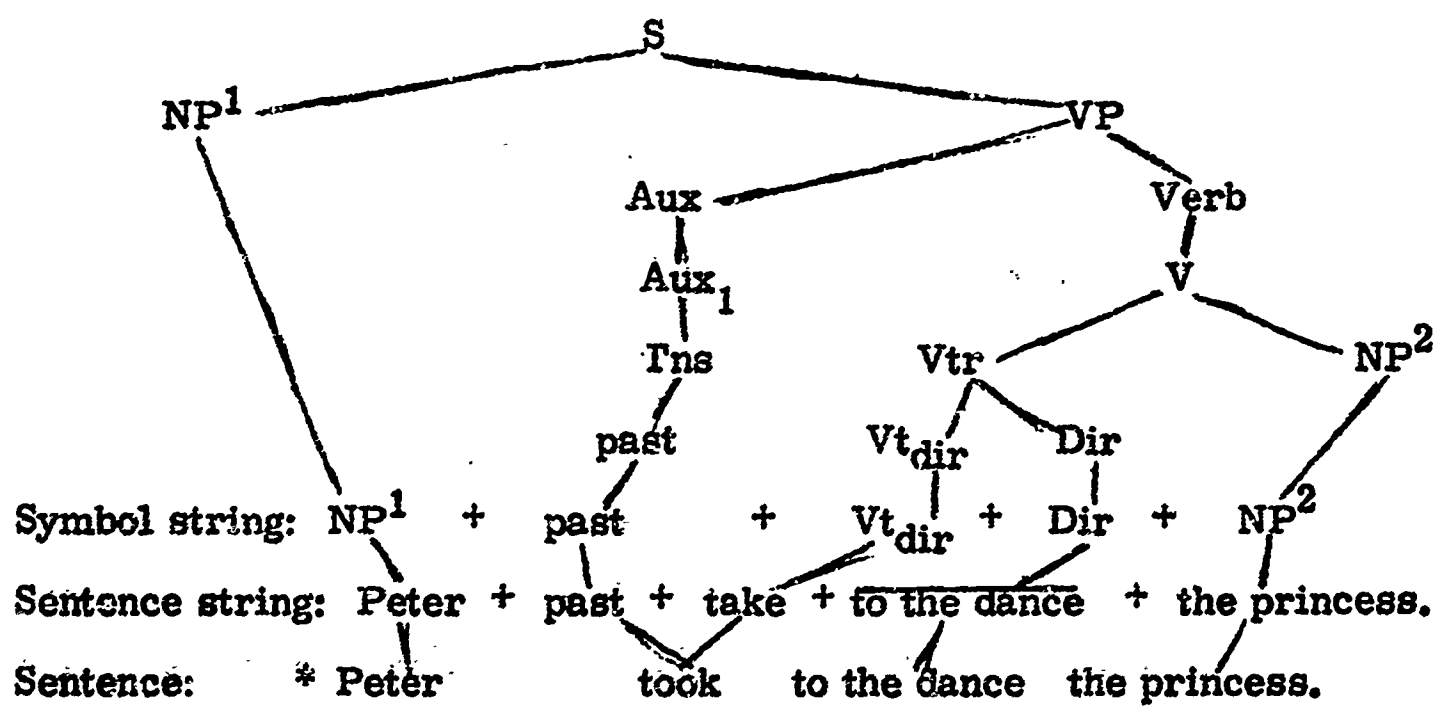
2. The manager made the team an offer.



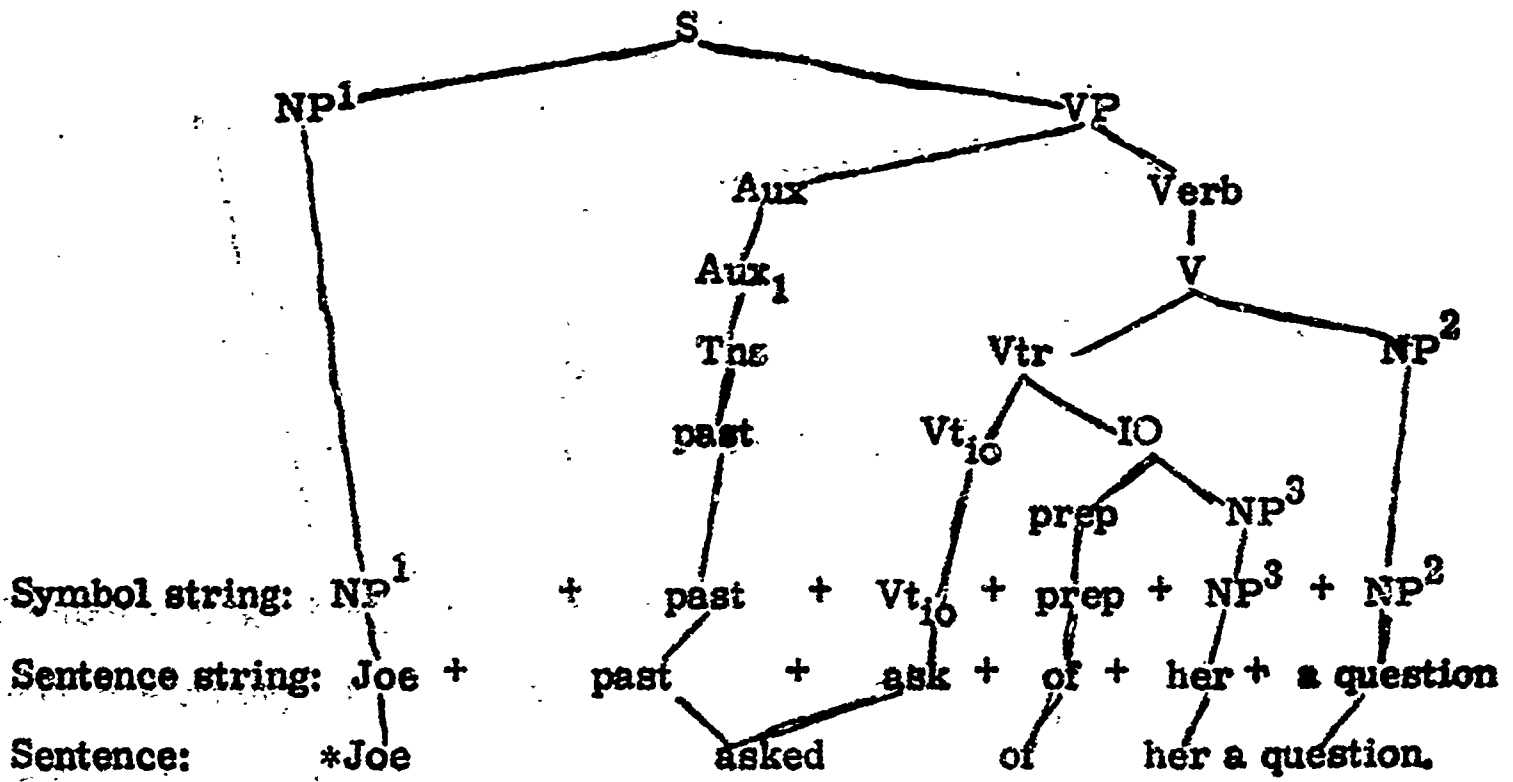
3. The natives will take him in.



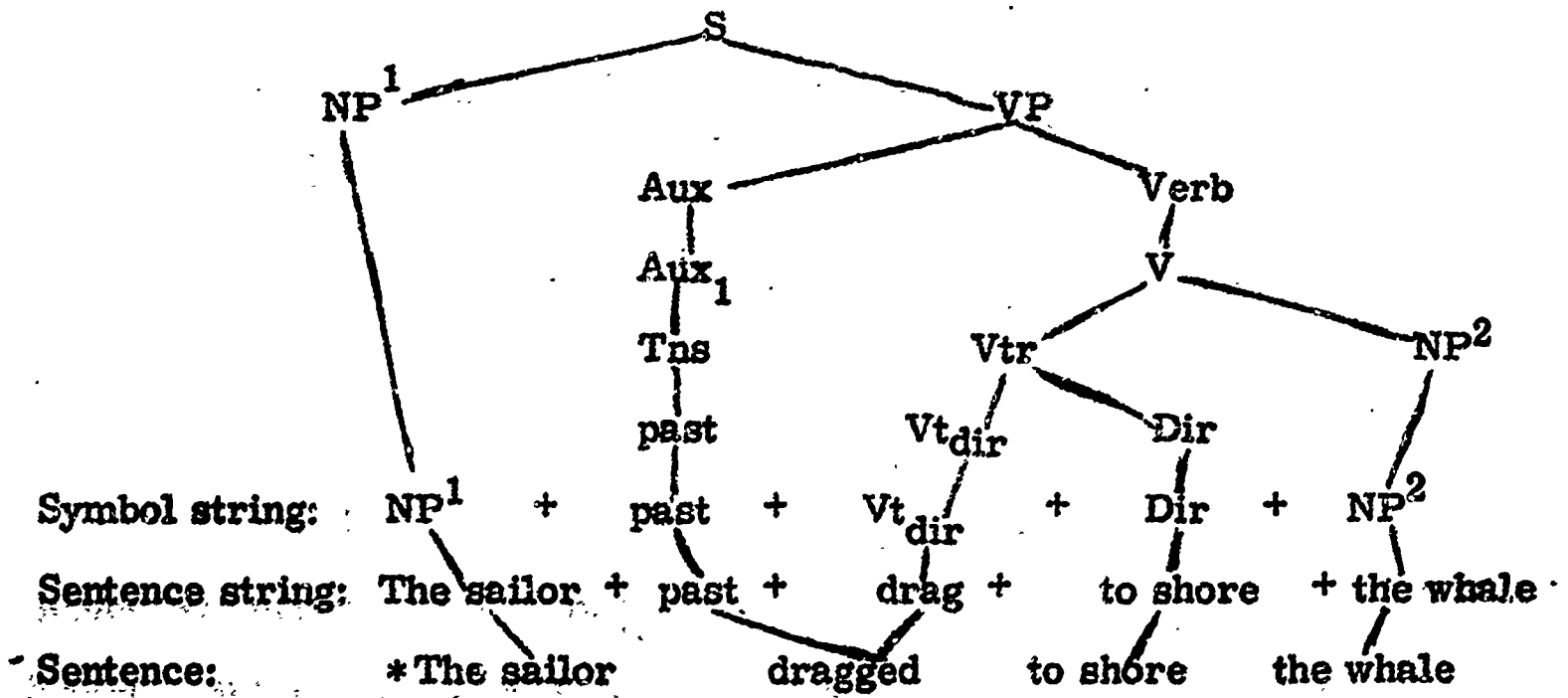
4. Peter took the princess to the dance.



5. Joe asked her a question.

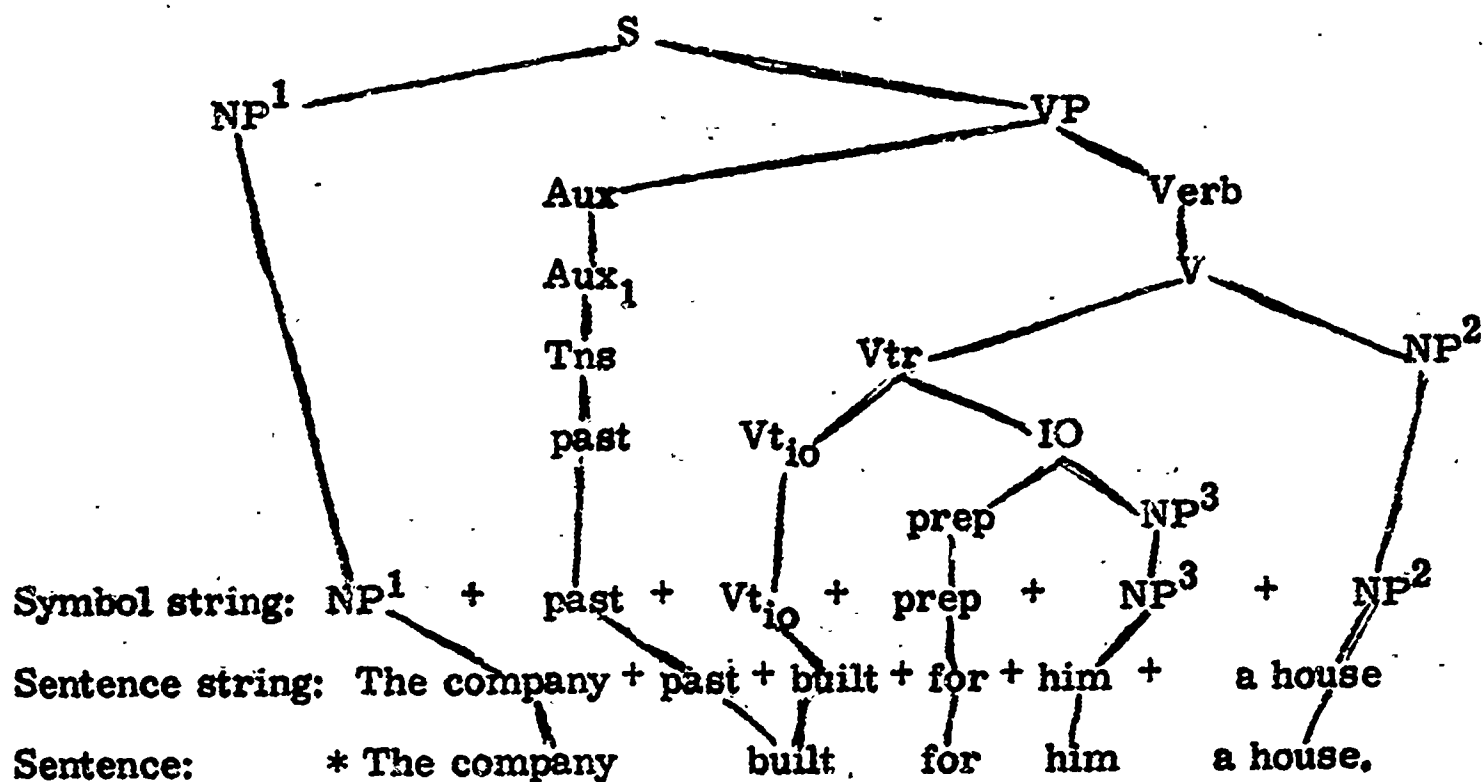


6. The sailor dragged the whale to shore.

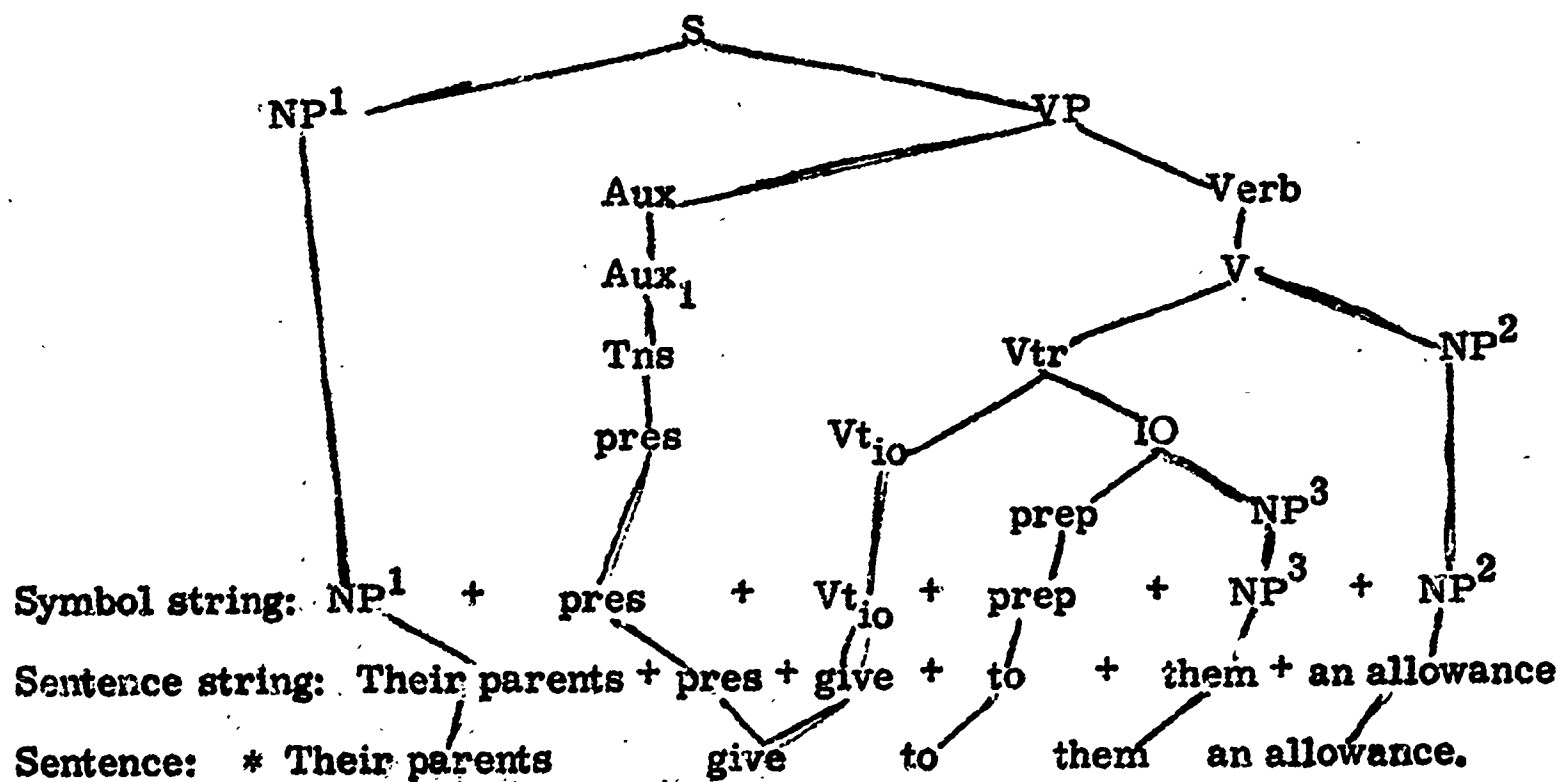




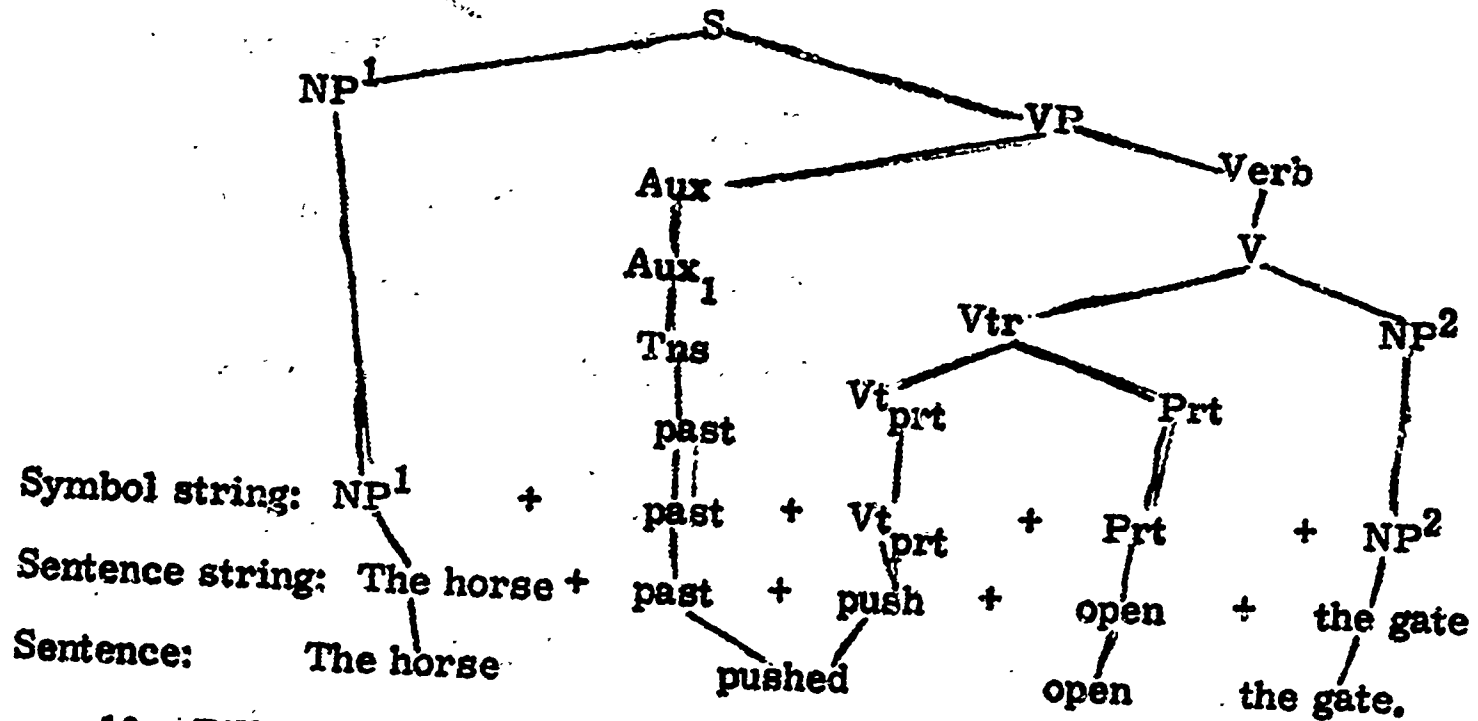
7. The company built him a house.



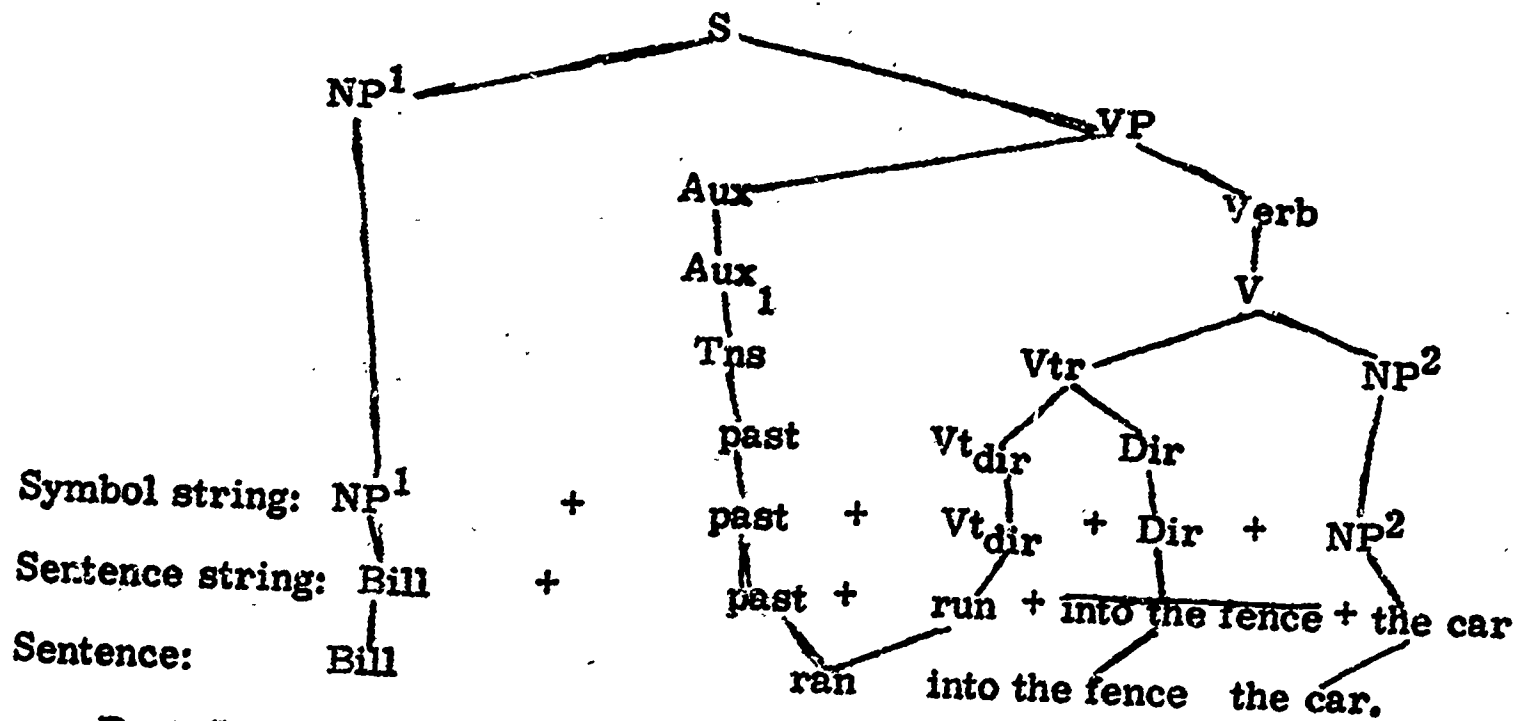
8. Their parents give them an allowance.



9. The horse pushed open the gate.

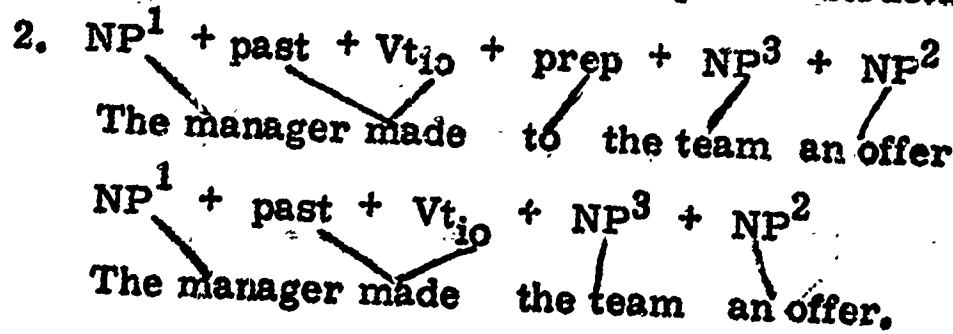


10. Bill ran the car into the fence.



Part C

1. The sentence produced by the phrase structure rules is grammatical.



3. NP<sup>1</sup> + pres + M + Vt<sub>p<sub>rt</sub></sub> + Prt + NP<sup>2</sup> ⇒  
 The natives will take in him

NP<sup>1</sup> + pres + M + Vt<sub>p<sub>rt</sub></sub> + NP<sup>2</sup> + Prt  
 The natives will take him in.

4. NP<sup>1</sup> + past + Vt<sub>dir</sub> + Dir + NP<sup>2</sup> ⇒⇒  
 Peter took to the dance the princess

NP<sup>1</sup> + past + Vt<sub>dir</sub> + NP<sup>2</sup> + Dir  
 Peter took the princess to the dance.

5. NP<sup>1</sup> + past + Vt<sub>io</sub> + prep + NP<sup>3</sup> + NP<sup>2</sup> ⇒⇒  
 Joe asked of her a question

NP<sup>1</sup> + past + Vt<sub>io</sub> + NP<sup>3</sup> + NP<sup>2</sup>  
 Joe asked her a question.

6. NP<sup>1</sup> + past + Vt<sub>dir</sub> + Dir + NP<sup>2</sup> ⇒⇒  
 The sailor dragged to the shore the whale'

NP<sup>1</sup> + past + Vt<sub>dir</sub> + NP<sup>2</sup> + Dir  
 The sailor dragged the whale to the shore.

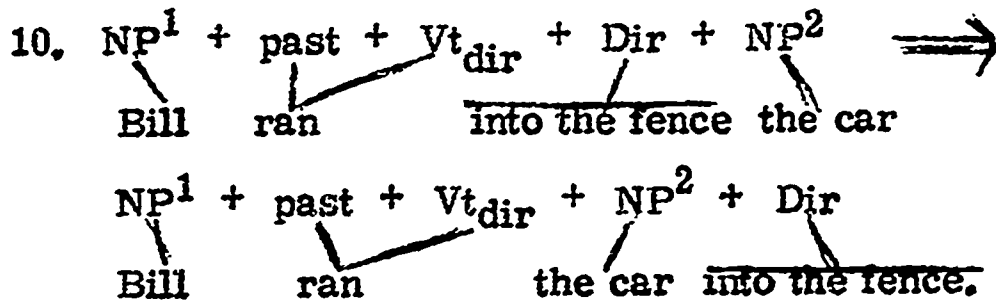
7. NP<sup>1</sup> + past + Vt<sub>io</sub> + prep + NP<sup>3</sup> + NP<sup>2</sup> ⇒⇒  
 The company built for him a house

NP<sup>1</sup> + past + Vt<sub>io</sub> + NP<sup>3</sup> + NP<sup>2</sup>  
 The company built him a house.

8. NP<sup>1</sup> + pres + Vt<sub>io</sub> + prep + NP<sup>3</sup> + NP<sup>2</sup> ⇒⇒  
 Their parents give to them an allowance

NP<sup>1</sup> + pres + Vt<sub>io</sub> + NP<sup>3</sup> + NP<sup>2</sup>  
 Their parents give them an allowance.

9. The sentence produced by the phrase structure rules is grammatical.



Exercise 1, page 25: (In the 4th line of the directions, have should be has.)

1. Vt<sub>prt</sub> + Prt,      John threw away the towel  
John threw the towel away.
2. Vt<sub>dir</sub> + Dir,      We drove into the garage the car  
We drove the car into the garage.
3. (look at is the Vt<sub>prep</sub> + Prep which this unit introduces.  
Students probably will recognize that there is something different  
about the verb and the element attached.)
4. Vt<sub>io</sub> + IO,      Many people give to the Red Cross contributions  
Many people give contributions to the Red Cross.
5. Vt<sub>dir</sub> + Dir,      We headed toward the island the boat  
We headed the boat toward the island.
6. (talk about is the new verb class Vt<sub>prep</sub> + Prep.)
7. (paid for is also Vt<sub>prep</sub> + Prep.)
8. Vt<sub>prt</sub> + Prt,      Mary made up the story.  
Mary made the story up.
9. Vt<sub>dir</sub> + Dir,      Laura took to the store her mother  
Laura took her mother to the store.
10. Vt<sub>prt</sub> + Prt,      They tried on coats.  
They tried coats on.

Exercise 2, pages 27-28:

Part A

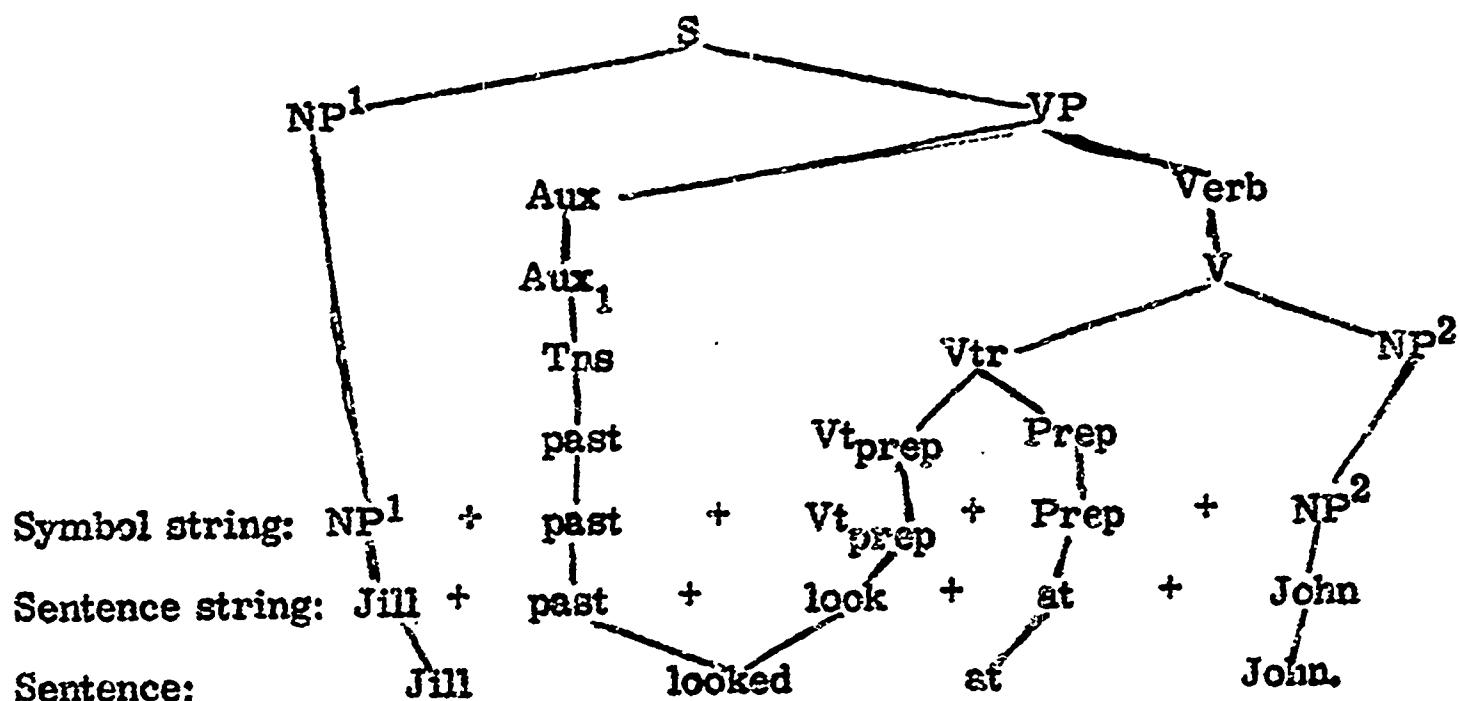
1. Vt<sub>prep</sub> + Prep, Jill looked at John. (Reason: The preposition  
at cannot be shifted out beyond the NP<sup>2</sup>.)
2. Vt<sub>dir</sub> + Dir,      Neil threw the ball into the basket. (Reasons:  
throw is a transitive verb, and into the  
basket converts to the question where to?)
3. Vt<sub>prep</sub> + Prep,      The girls flirted with the boys. (Reason: with  
cannot be shifted out beyond the NP<sup>2</sup>.)



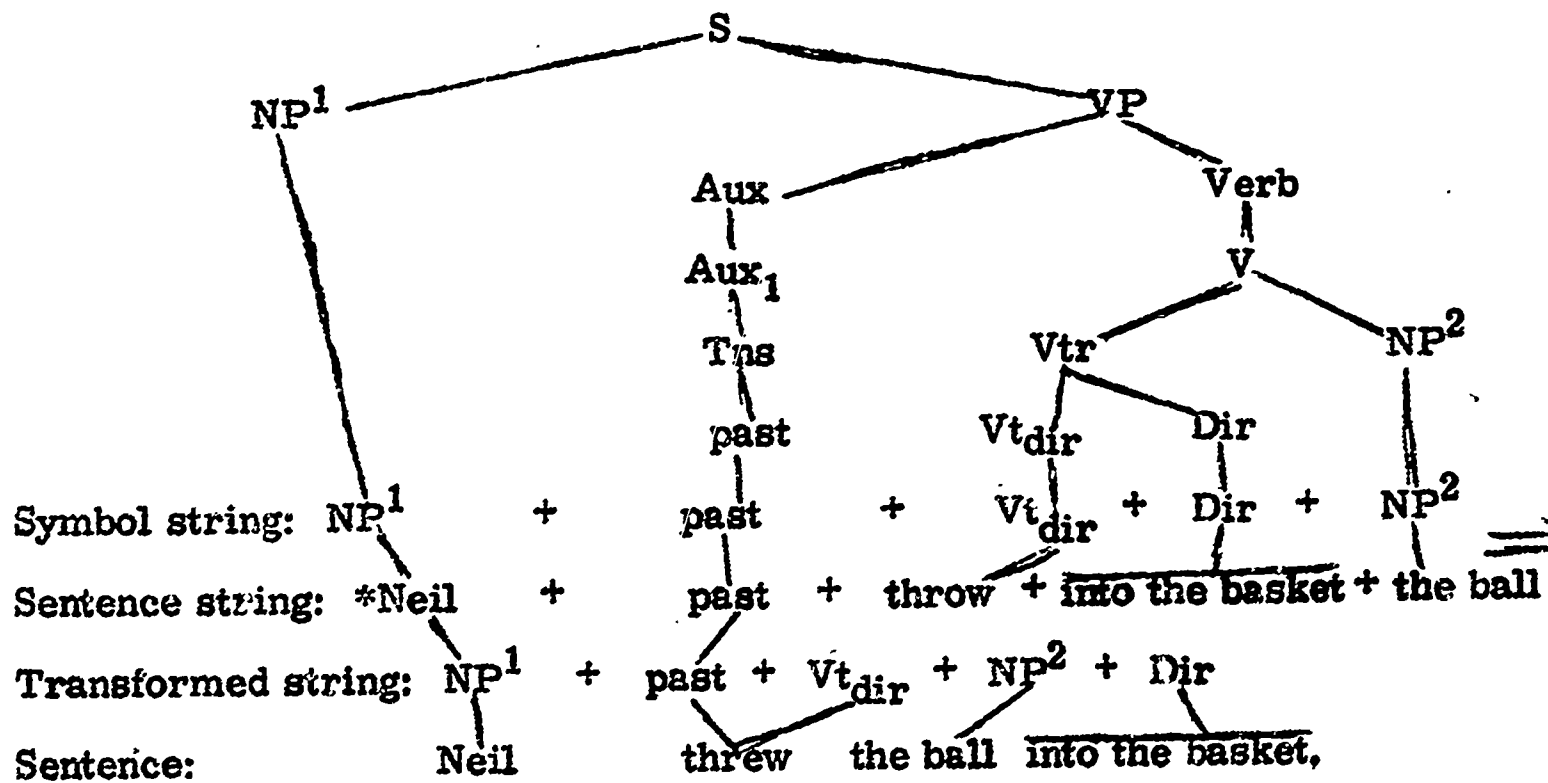
4. Vt<sub>prep</sub> + Prep, The boys kicked at the door. (Reason: Same as #1, 3. There are other possibilities: at the door could be a Loc answering at what place the kicking was done, in which case kick would be an intransitive verb.)
5. Vt<sub>pvt</sub> + Prt, The boys kicked the door out. (Reason: Out is separable from the verb. The word out does not, in this sentence, seem convertible to the question where to.)
6. Vt<sub>prep</sub> + Prep, The teacher objected to the noise. (Reason: Same as #1.)
7. Vt<sub>prep</sub> + Prep, The women gossiped with their neighbors. (Same as #1.)
8. Vt<sub>prep</sub> + Prep, The women talked about the movie. (Same as #1.)
9. Vt<sub>prep</sub> + Prep, The boys depend on their leader. (Same as #1)
10. Vt<sub>prep</sub> + Prep, The deer struggled against the lion. (Same as #1.)
11. Vt<sub>pvt</sub> + Prt, The old lady slipped on her coat. (Reason: The particle on can shift outside the NP<sup>2</sup>, and it does not convert to the question where to.)
12. Vt<sub>prep</sub> + Prep, The old lady slipped on a banana peel. (Reason: Same as #1.)
13. Vt<sub>pvt</sub> + Prt, Little Jack Horner put in his thumb. (Reason: Same as #5 and #11.)
14. Vt<sub>pvt</sub> + Prt, Jack Horner pulled out a plum. (Same as #5 and #11.)

**Part B** (As in previous exercises, students should have no trouble going from Verb to V, but if they do you may want them to go through Phrase Structure Rules 7, 8 and 9.)

1. Jill looked at John.

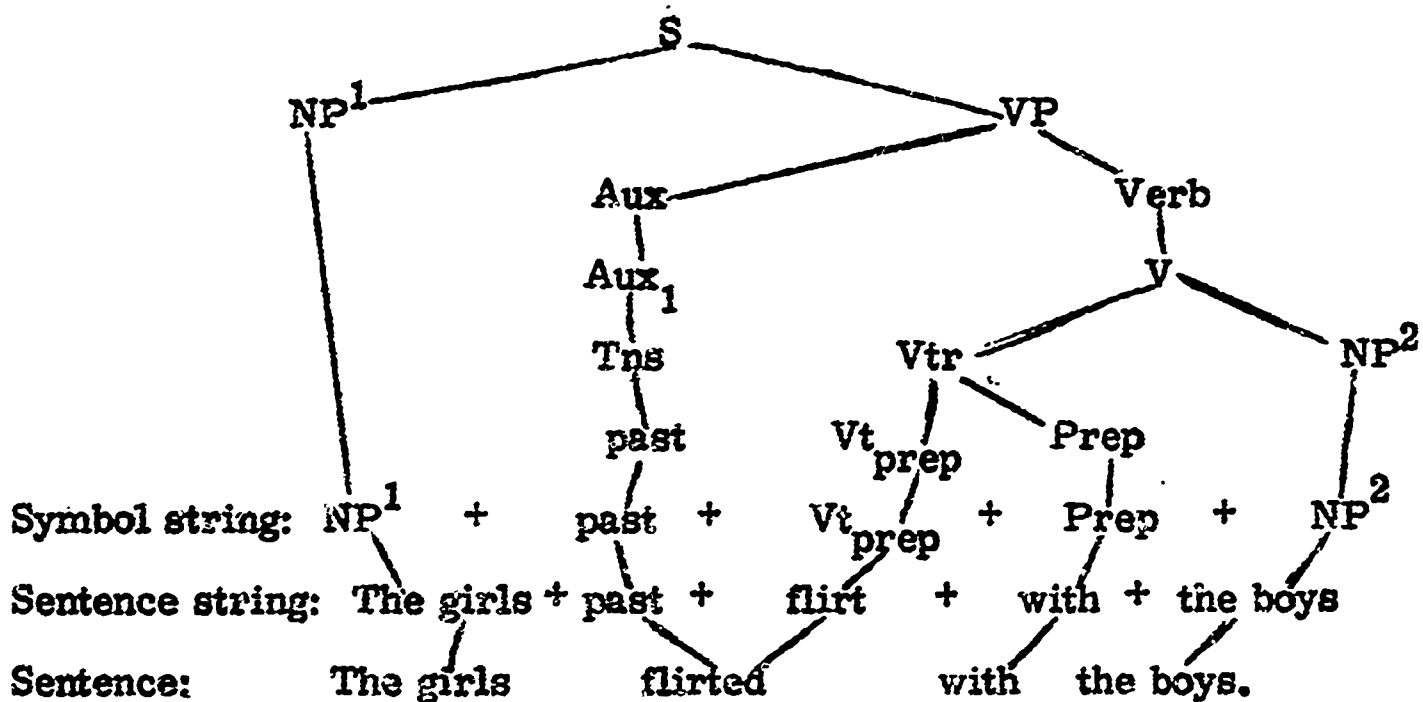


2. Neil threw the ball into the basket.

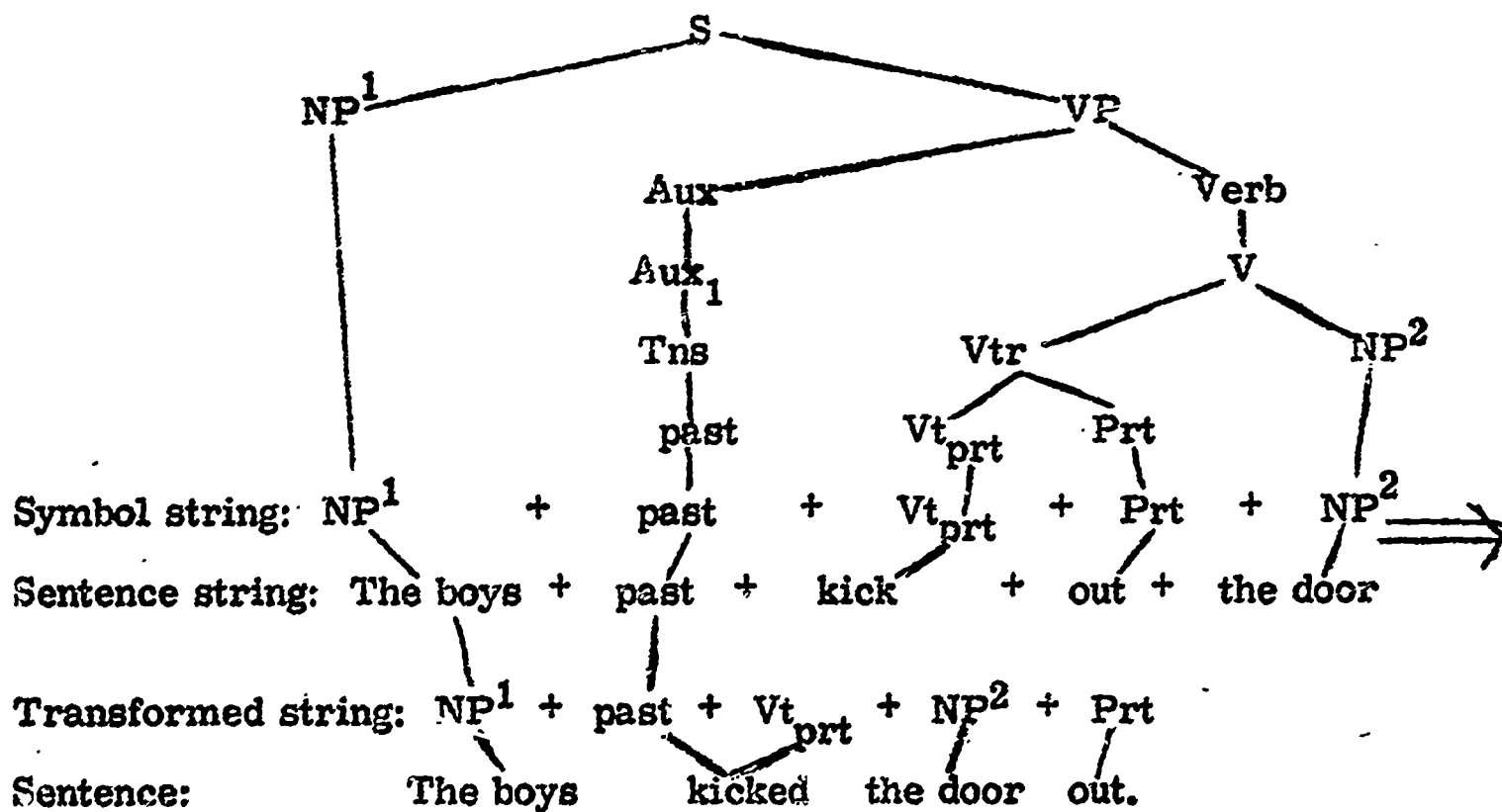


\*Not grammatical

3. The girls flirted with the boys.

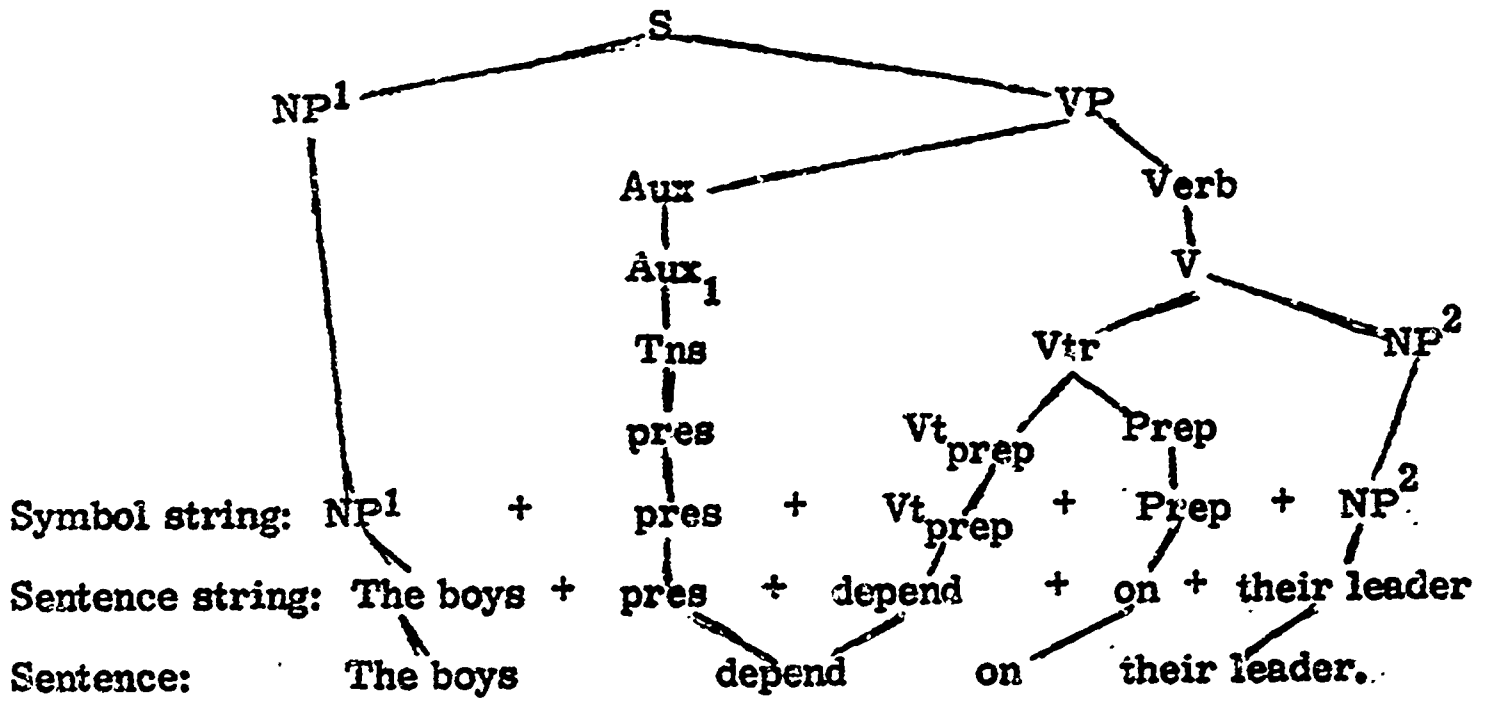


5. The boys kicked the door out.



(In this case, of course, the transformation is optional.)

9. The boys depend on their leader.



Exercise 3, page 28:

Answers will vary, but they will be somewhat like the following examples:

1. NP<sup>1</sup> + past + Vt<sub>prep</sub> + Prep + NP<sup>2</sup>  
His reputation depended upon his work.
2. NP<sup>1</sup> + past + Vt<sub>prt</sub> + NP<sup>2</sup> + Prt  
The robber held him up.
3. NP<sup>1</sup> + pres + Vt<sub>prep</sub> + Prep + NP<sup>2</sup>  
The class argues with the teacher.
4. NP<sup>1</sup> + past + Vt<sub>prt</sub> + Prt + NP<sup>2</sup>  
The girls packed up the toys.
5. NP<sup>1</sup> + past + Vt<sub>dir</sub> + NP<sup>2</sup> + Dir  
A monkey tossed a banana peel toward the crowd.

Exercise 4, page 28:

1. NP<sup>1</sup> + pres + M + Vt<sub>prep</sub> + Prep + NP<sup>2</sup>  
We will subscribe to the magazine.



2. NP<sup>1</sup> + pres + be + ing + Vt<sub>prt</sub> + Prt + NP<sup>2</sup>  
 The lawyer is looking over the evidence.
3. NP<sup>1</sup> + pres + M + Vt<sub>io</sub> + NP<sup>3</sup> + NP<sup>2</sup>  
 The manager will make you an offer.
4. NP<sup>1</sup> + past + Vt<sub>prt</sub> + Prt + NP<sup>2</sup>  
 The President called out the National Guard.
5. NP<sup>1</sup> + past + M + have + en + Vt<sub>dir</sub> + NP<sup>2</sup> + Dir  
 Keith should have advanced the bishop to that square.
6. NP<sup>1</sup> + past + Vt<sub>prep</sub> + prep + NP<sup>2</sup> + Tm  
 The tractor ran over the log yesterday.
- #7. NP<sup>1</sup> + past + Vt<sub>dir</sub> + NP<sup>2</sup> + Dir  
 The teacher extended the deadline to Tuesday.

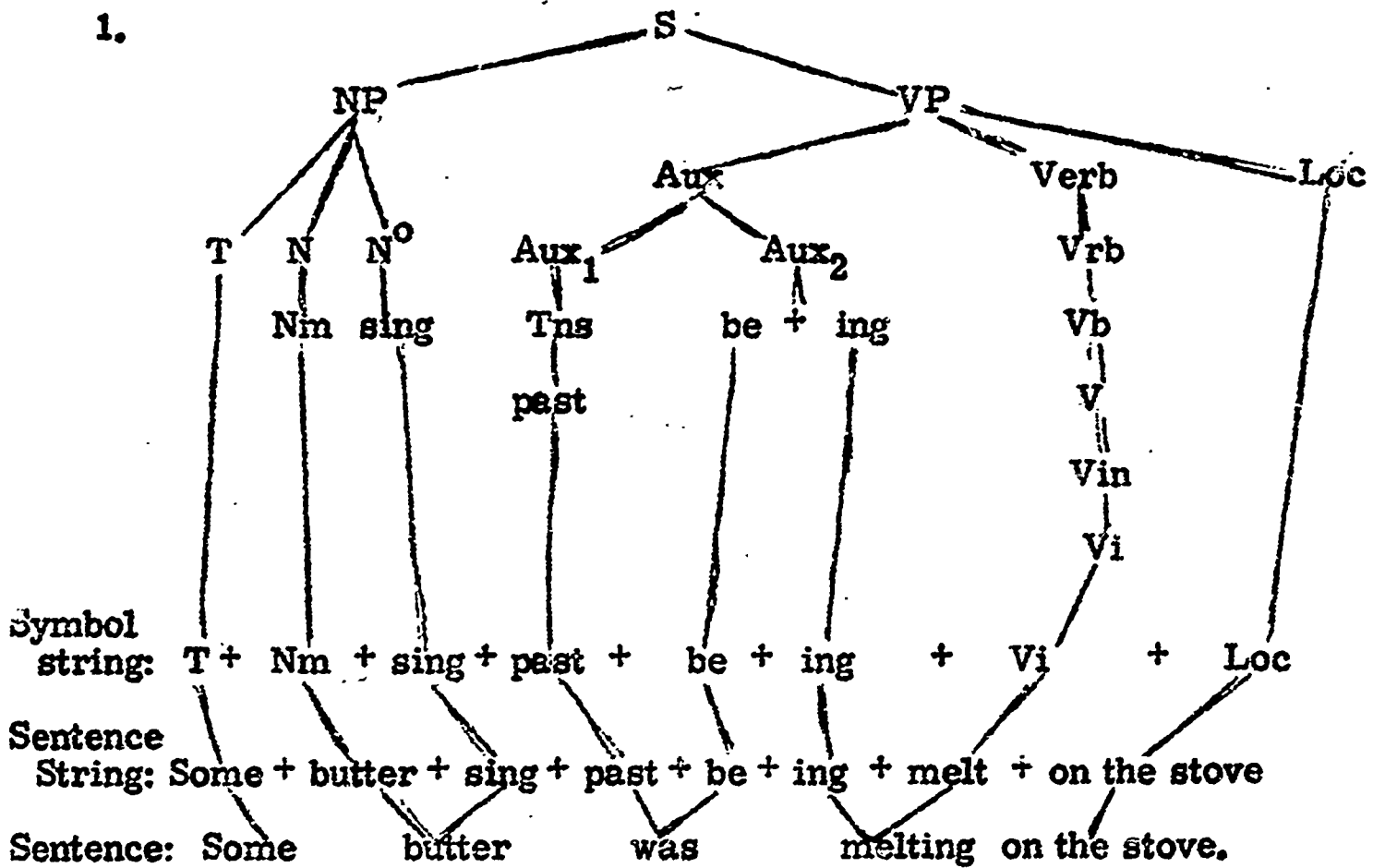
# (Though some may wish to claim that to Tuesday is a time adverbial, a good case can be made for its being directional, especially when we think of it as answering the question "to what point?" It doesn't answer the question "When did the teacher extend the deadline.")

8. NP<sup>1</sup> + pres + have + en + Vt<sub>io</sub> + NP<sup>3</sup> + NP<sup>2</sup>  
 Maria has sung her father a song.
9. NP<sup>1</sup> + past + have + en + Vt<sub>prt</sub> + NP<sup>2</sup> + Prt + Man  
 The cat had lapped the milk up quickly.
10. NP<sup>1</sup> + past + Vt<sub>prep</sub> + Prep + NP<sup>2</sup>  
 The cousins carried on a correspondence.

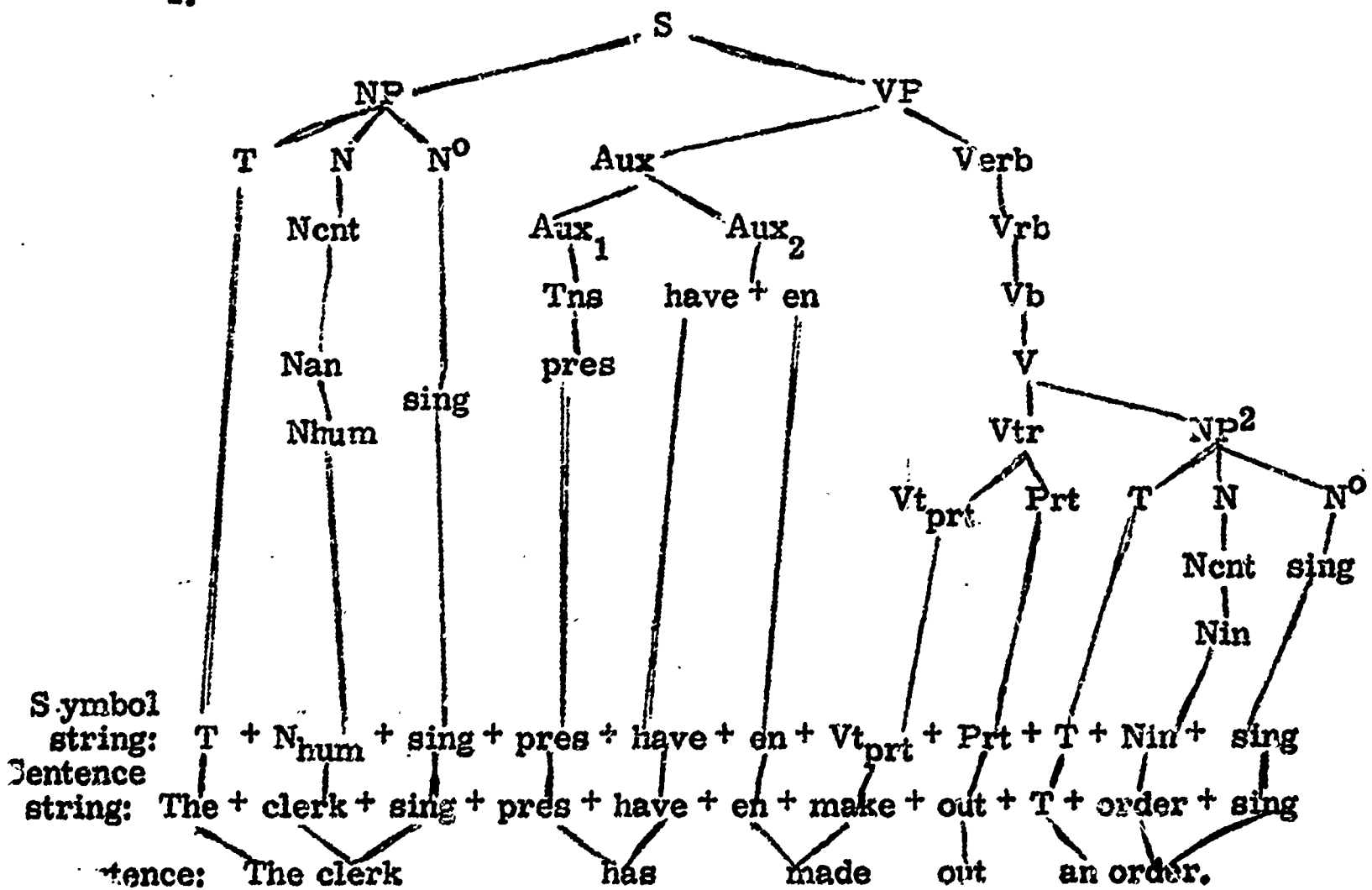
p. 29:  
Cumulative Review, (The diagrams will have to be of the underlying kernels, since your students won't know how to diagram a transformed sentence. This will be a problem only for #4, in which the sentence produced by the diagram requires a transformation.)

Part A

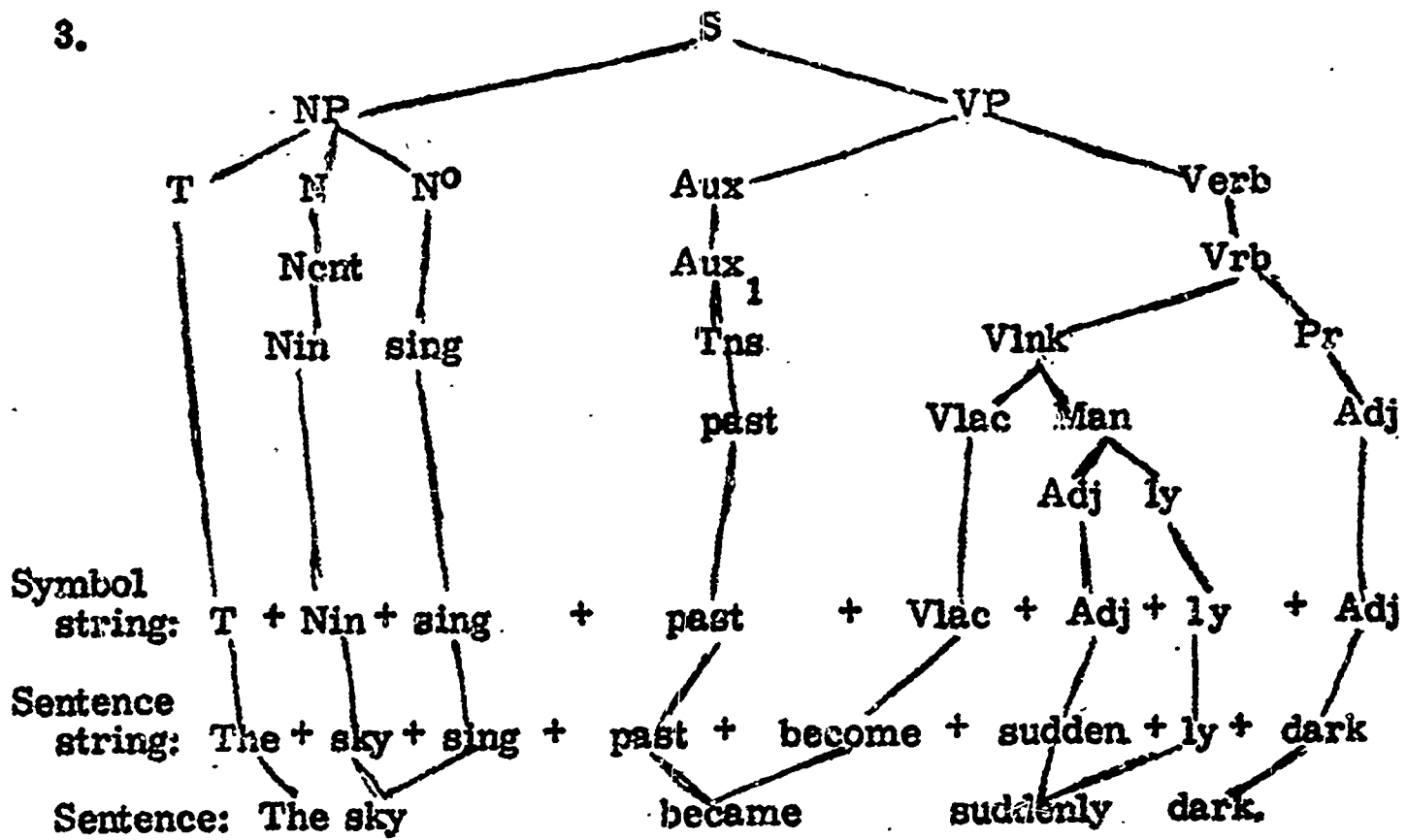
1.



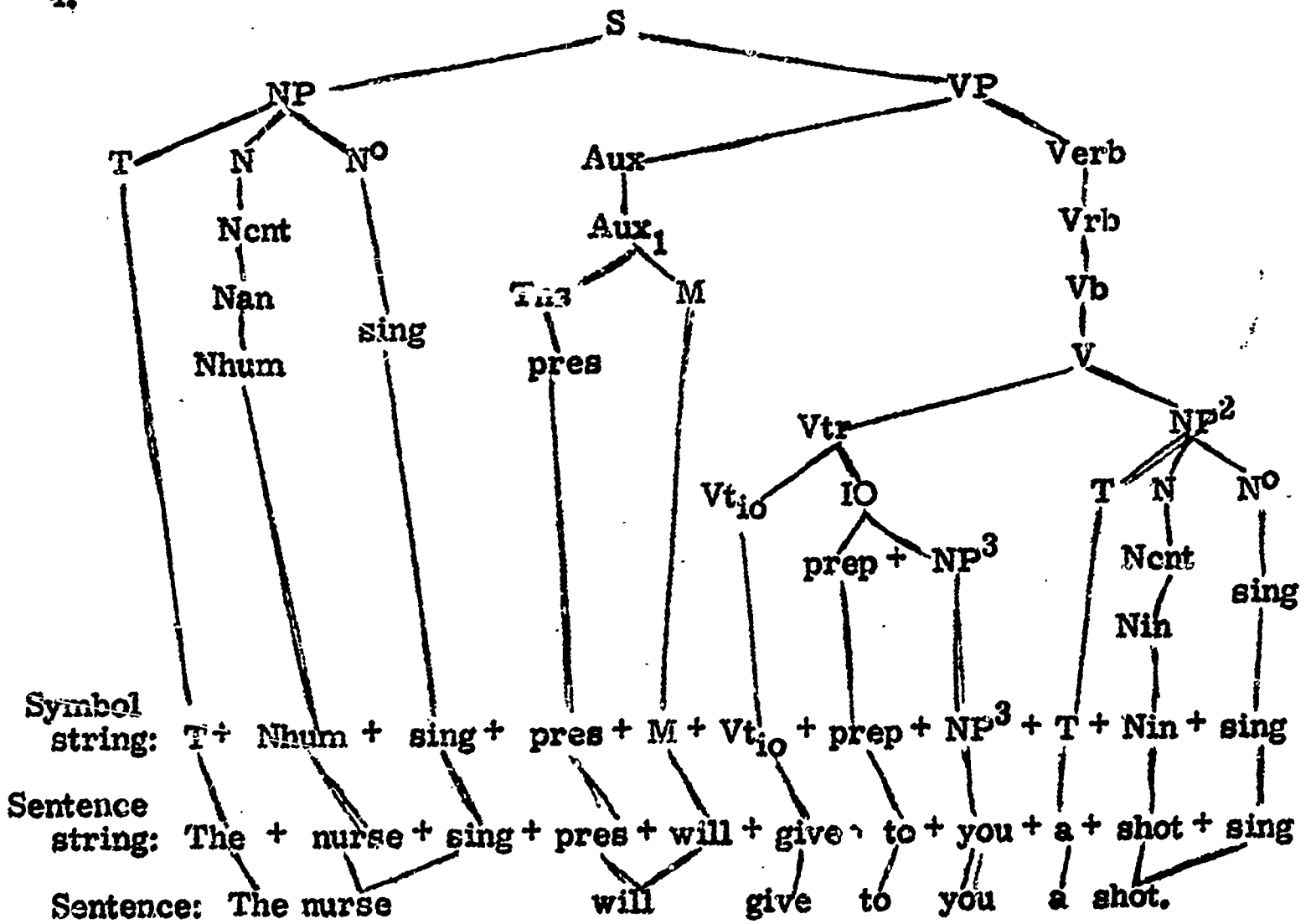
2.



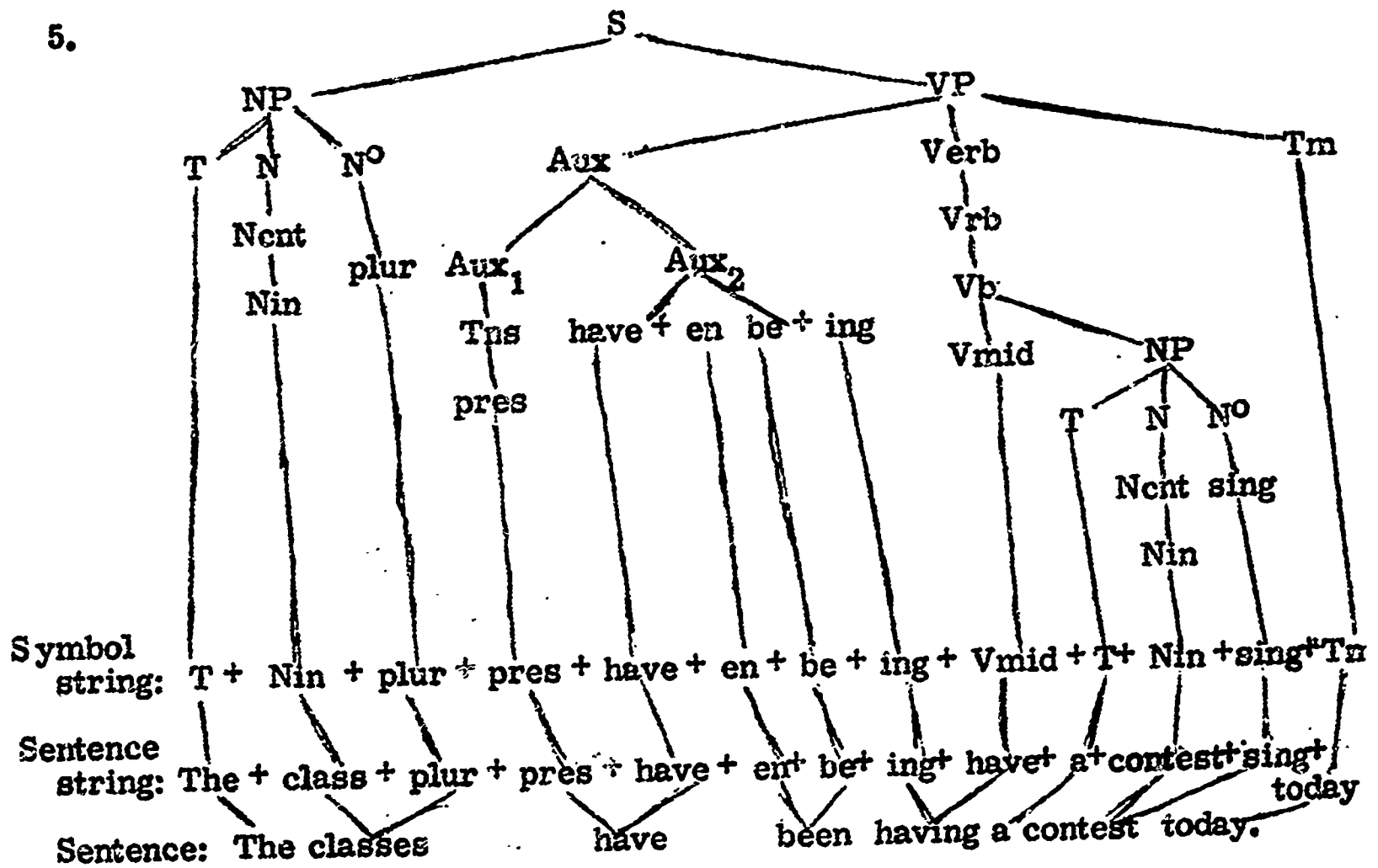
3.



4.



5.



B and C, page 29:

This exercise should give the student an opportunity to check his knowledge of basic sentence structure. Because it is important for him to see the relation of the various parts to each other, it is probably not desirable to break down the NP's into their component parts in the symbol strings (C). That is, his knowledge of what is meant by NP<sup>1</sup> and NP<sup>2</sup> as far as their function in the sentence is concerned can better be shown if he writes the symbol NP rather than T + N + N.

1. NP + past + Vi + Man + Loc

The children sneaked carefully through the house.

- NP + past + Be + Adj

The house was haunted.

(Some students will recognize that haunted is a derived form. See page 3 of this manual for additional explanation.)

2. NP + pres + have + en + Vtr + NP<sup>2</sup>

Insecticides have killed some birds.

- #3. NP + pres + M + Vmid + NP<sup>2</sup> + Tm

You will have the exam at some time.

(Students may have difficulty with your. It can, of course, be shown to be an example of possessive embedding.)



NP + pres + Vmid + NP  
 You have the exam.

... the exam which you have. . .  
 ... the exam you have. . .  
 ... your exam. . .

NP + pres + Be + Adj  
 The exam is big.

4. NP + pres + be + ing + Vtr + NP<sup>2</sup> + Tm  
 The juniors are attending school this week.

NP + pres + be + ing + Vtr + NP<sup>2</sup> + Tm  
 The seniors are attending school this week.

5. NP + past + Vtprt + Prt + NP<sup>2</sup>  
 The father called up the teacher.

NP + pres + Vmid + NP  
 The girl has a father.

#6. NP + pres + be + ing + Vtprt + Prt + NP<sup>2</sup> + Tm  
 Someone is picking up the donations on Monday.

7. NP + past + Vt<sub>dir</sub> + Dir + NP<sup>2</sup>  
 Crawford brought to the party bread.

NP + past + Vt<sub>dir</sub> + Dir + NP<sup>2</sup>  
 Crawford brought to the party pickles.

8. NP + past + Vt<sub>prep</sub> + Prep + NP<sup>2</sup>  
 The experiment called for sulfuric acid.

NP + past + Vt<sub>prep</sub> + Prep + NP<sup>2</sup>  
 The experiment called for sodium chloride.

(Good students may wish to indicate that underlying sulfuric acid is The acid is sulfuric; and that The chloride is sodium underlies sodium chloride. If they think of the whole as a kind of compound noun you should accept it. In more advanced courses the derivation of these terms will be discussed.)

9. NP + past + Vid + Dir  
 The mouse crawled into the hole.

NP + past + Be + Adj  
 The mouse was small.

NP + past + V<sub>mid</sub> + NP  
 The snake had a hole.

10. NP + past + V<sub>t<sub>dir</sub></sub> + Dir + NP<sup>2</sup>  
 Snorky dragged into the house the bone.

11. NP + past + V<sub>t<sub>io</sub></sub> + IO + NP<sup>2</sup> (To would also be accurate as the preposition.)  
 Gerry brought for her mother a plant

NP + pres + V<sub>mid</sub> + NP  
 She has a mother.

12. NP + past + V<sub>tr</sub> + NP<sup>2</sup>  
 I gave the report.

(Her is derived in the same way as your in #3 by possessive embedding:

. . . the mother which she has. . .  
 . . . the mother she has. . .  
 . . . her mother. . .)

Some people treat possessive pronouns as kinds of determiners. There has been no discussion of this so far in this grammar, however.)

NP + past + be + ing + V<sub>tr</sub> + NP<sup>2</sup> + Loc  
 I was preparing the report in the library.

(# In #3 it is not possible to reconstruct the time element which has become when in the question. But the fact that it is a when question tells us that there was a time element in the underlying kernel. You may allow your students to supply some arbitrary time element (e. g. tomorrow, or at ten o'clock, etc.) or to simply write the indefinite at some time. In #6 the same situation exists with regard to the subject NP of the original kernel. It has gone through the passive transformation and then the agent has been deleted. Therefore, we can most accurately supply an indefinite someone. However, if your students supply an arbitrary element (the man, the committee, the Salvation Army, etc) accept their answers. The important thing is to recognize that some element which existed in the underlying kernel is not in the surface sentence.)

Introduction to the Teacher

The study of determiners could very easily provide the basis for several years of study for our students. The material which precedes and follows nouns in English sentences is structured in a very complex fashion, the parts interacting in a way which puts the largest single stumbling block in the path of those speakers of other languages who try to learn ours. The unit at hand is a very simple first step into a fascinating part of English structure.

Rule 13 rewrites NP as T + N + NO: Rule 19 rewrites T as Art. Art will work itself into more complex structures in later units, but in the interest of simplicity we will not introduce everything at once.

The four items the, a, an, and some divide themselves quite naturally into the, on the one hand, and the others, on the other.

The occurs in contrast to the other three as is shown, by reading row A against row B:

	1	2	3	4
A.	A car---	an apple---	some rice---	some apples.
B.	The car---	the apple---	the rice---	the apples.

But the three items a, an, some are mutually exclusive; where one can occur the other two cannot, as can be seen by trying to substitute one for the other in the four columns of row A, above.

The simplest deduction to be made from these facts is that a, an, and some are different pronunciations of the same meaningful element, just as the -im of cherubim, seraphim; the -en of oxen; and the -s of cats represent different and mutually exclusive pronunciations of the same meaningful element, which we call plural, Pl. The meaningful element which is variously realized as a, an, or some we have called (very traditionally) the indefinite article, Art. indef. The definite article we have called Art def.

The problem of two kinds of some can be attacked in various ways. The two kinds contrast in the usual readings of

- (1) Some girls have blue eyes.
- (2) Some girls are having a party.

The noun phrase of (1) could be followed by but not all. (1) contains a demonstrative some. Of course (2) can be read in such a way that but not all could follow the NP, but the change of the accentuation and pronunciation of some is obvious when this is done. Perhaps one of the most convincing demonstrations of the difference between the two some's is a list of sentences like the following:

- (3) I found some rice in the kitchen
- (4) paint
- (5) garbage
- (6) boy

The accentuation and pronunciation of some must be changed in (6) from what it was in (3), (4), and (5); otherwise boy will seem to be a mass noun, perhaps the name of some material like wood or paint.

Only the demonstrative some is grammatical in (1). However, the rules we present in this unit are not sufficiently detailed to exclude the ungrammatical occurrences of some as an indefinite article. Your students may not recognize this kind of ungrammaticality, unless it is pointed out to them. They will probably give the ungrammatical strings grammatical readings. The rules they have will generate strings which look just like (1) above. But they don't have the rules which will generate the string which can have but not all added to it. That is, they don't have the rules for demonstratives yet. Your students will probably reject such ungrammatical strings as

(7) \*Some secretaries are some philosophers

where no reading is grammatical.

The rules which prevent such sentences as (7) are context-sensitive ones and are best saved for later units since they draw attention away from the points we wish to make in this unit. But if the question should arise you can talk about the differences between some which is demonstrative and the some which is an indefinite article.

We have not made use of pronunciation rules explicitly before this unit. What the pronunciation rules for Art indef say is

a) that the indefinite article is some before mass nouns and plural countable ones, but an elsewhere.

and b) that an loses its n before consonants.

There will inevitably be questions about sentences like

A rice that grows well . . . , etc.

where the mass noun (rice) follows a, a form which the pronunciation rules above indicate can occur only with singular count nouns. This can very simply be explained as a matter of deletion. Words like type, kind, species, etc., sometimes occur with of between the article and a mass noun. We find

a kind of rice  
a type of blood  
a species of wheat

The indefinite articles in these cases are the ones which we select before count nouns. They are, in other words, selected because they precede the count nouns kind, type, species. But kind of, type of, species of can be deleted leaving the indefinite article a before the mass nouns rice, blood, wheat, etc. We can write a transformational rule for the deletion that occurs in these cases. We will assign the symbol X to



nouns of the class which includes type, kind, etc. Then the rule could be written in this way:

optionally:  $\text{Art} + X + \text{of} + N_m \Rightarrow \text{Art} + N_m$

The order of the application of transformational rules of this type is just as critical as the ordering of the Phrase Structure rules. If this deletion rule should be applied before the rule which gives the article its proper form, the article, which would then be right before the mass noun, would take the form some.

$\text{Art}_{\text{indef}} + N_m \Rightarrow \text{some} + N_m$

Thus it is obvious that the rule which gives the article its proper form must be applied before the deletion in order to account for such phrases as a rice, a blood, etc. These phrases contain the meaning of the deleted part. They invariably mean some thing like a kind of, . . . , a variety of . . . , etc.

We suggest that you read the entire unit and the Teacher's Manual before teaching the unit so that you can see where it is going.

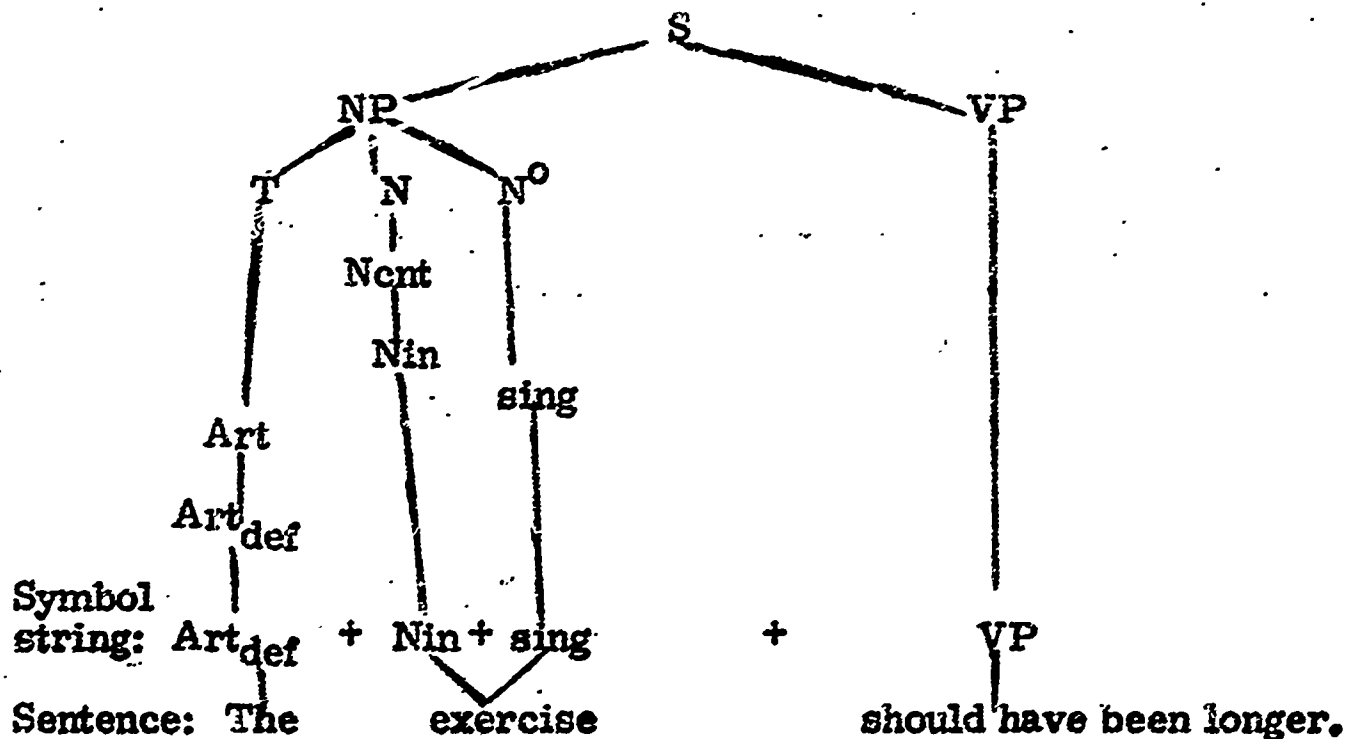
Exercise 1, Page 30:

Obviously no key is necessary for this exercise. Its purpose is simply to illustrate the importance of determiners and to arouse some questions which the unit will try to answer.

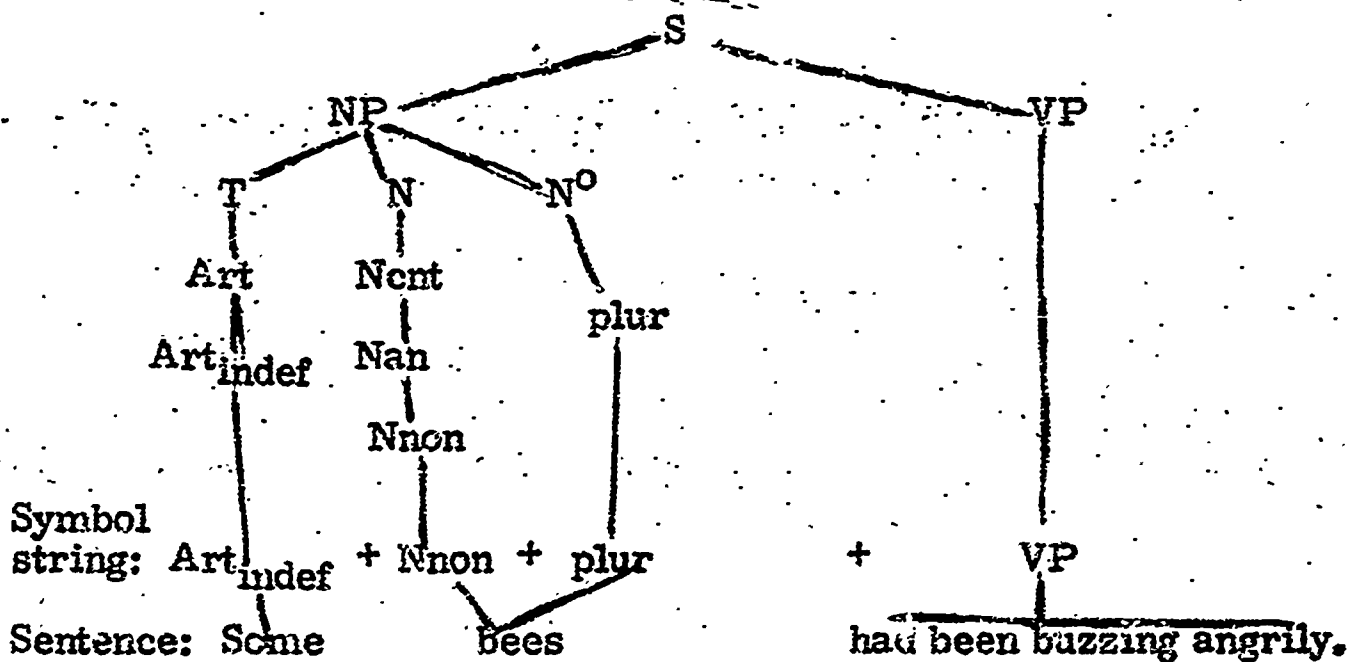
Exercise 2, Page 34:

(The VP's haven't been developed.)

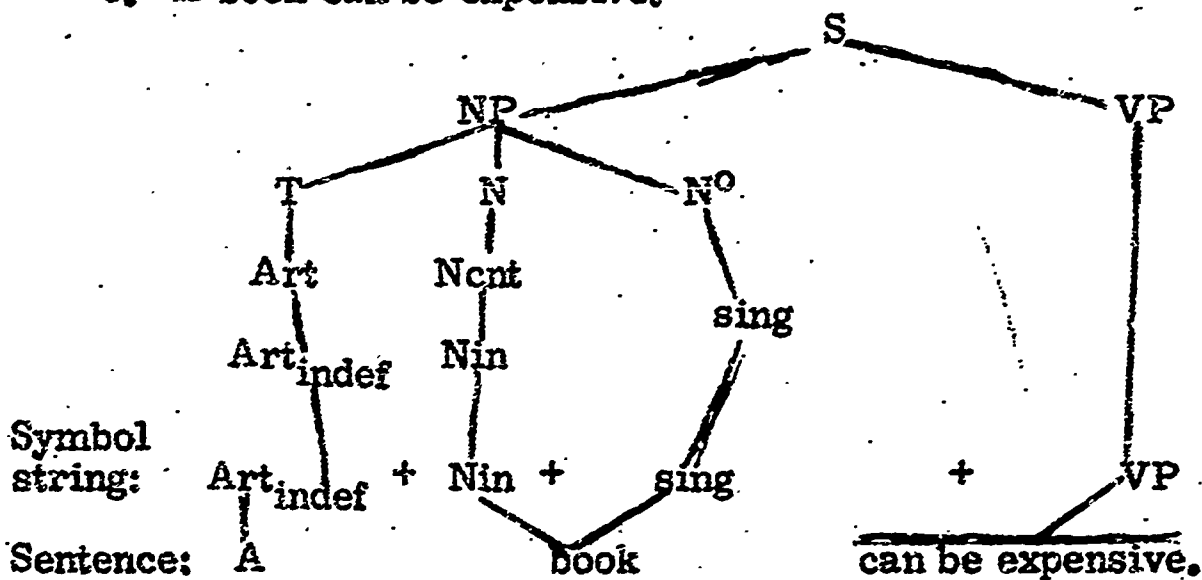
1. The exercise should have been longer.



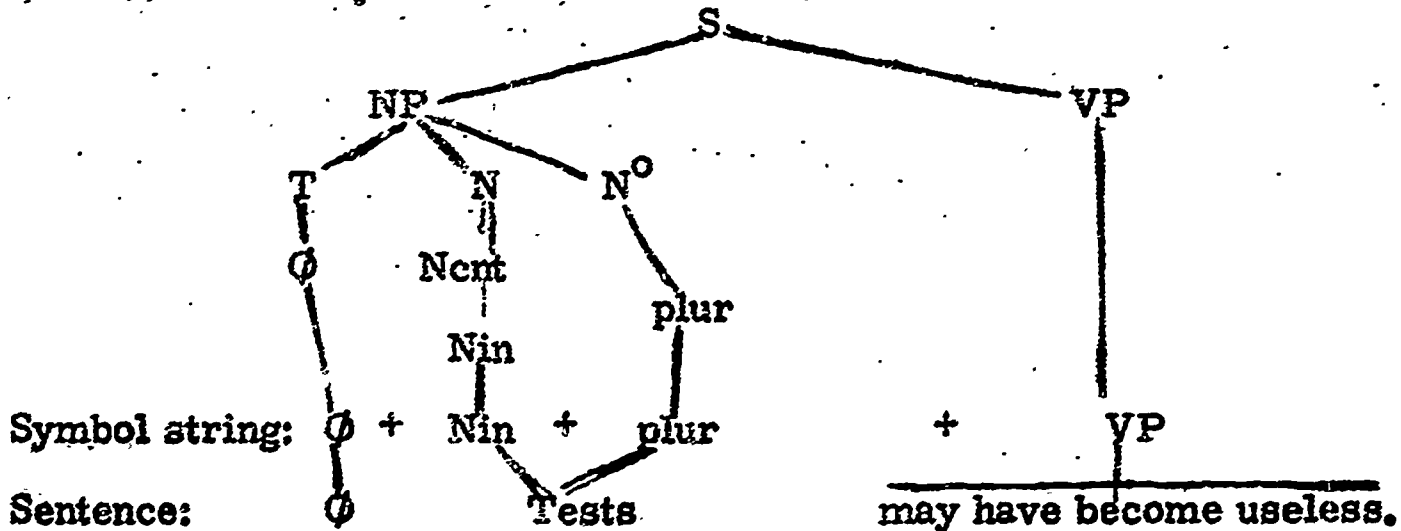
2. Some bees had been buzzing angrily.



3. A book can be expensive.

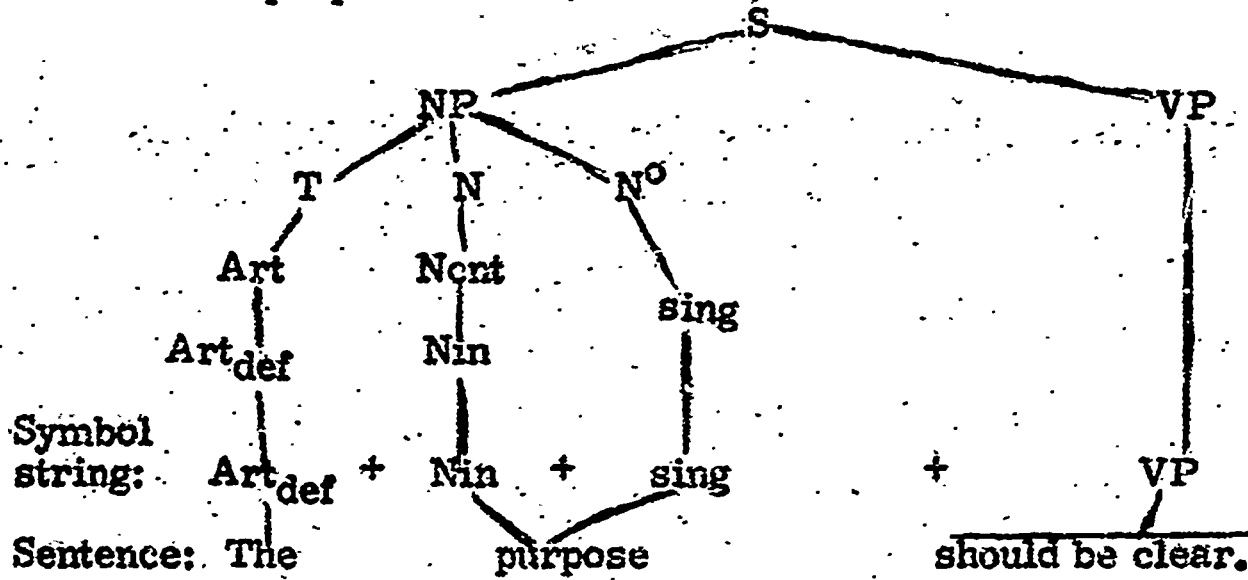


4. Tests may have become useless.

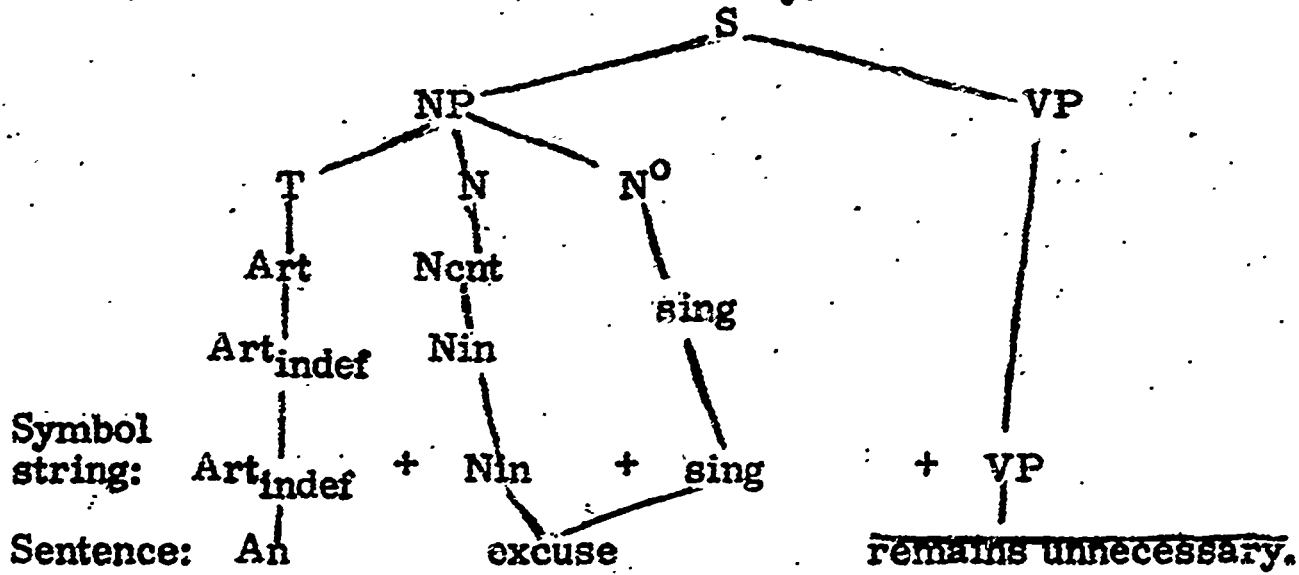


Since the empty set of determiners is used in this sentence, use the null sign (∅) to indicate this selection.

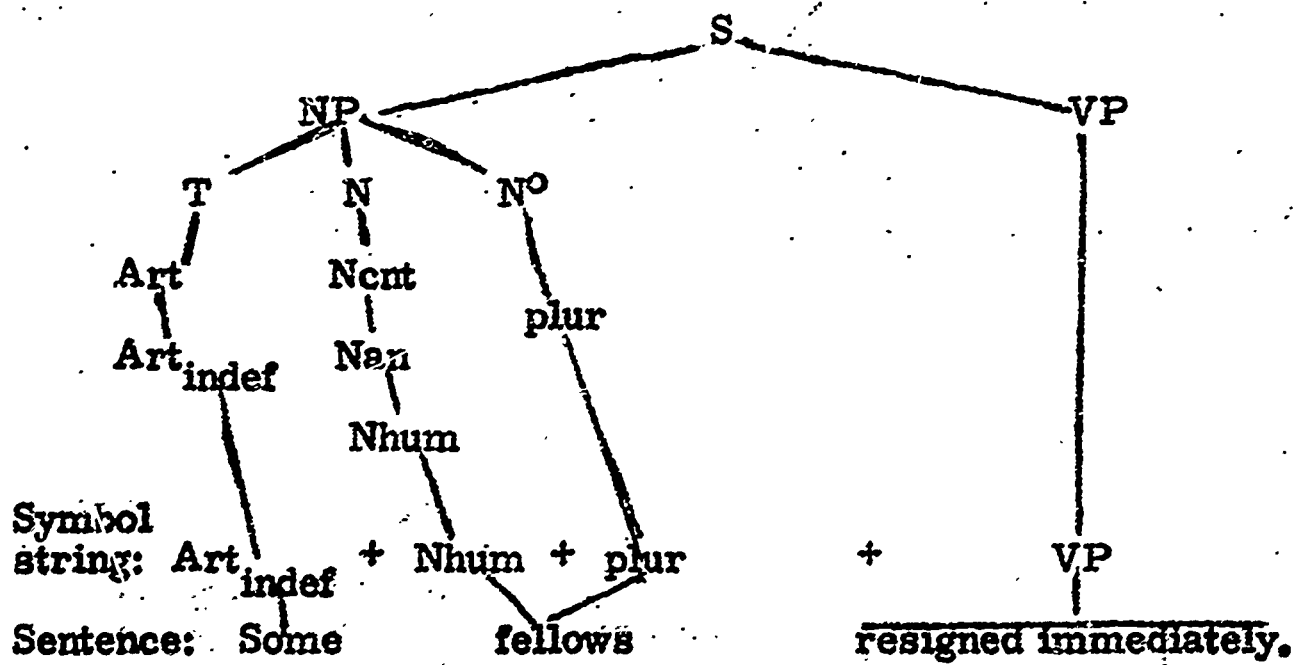
5. The purpose should be clear.



6. An excuse remains unnecessary.

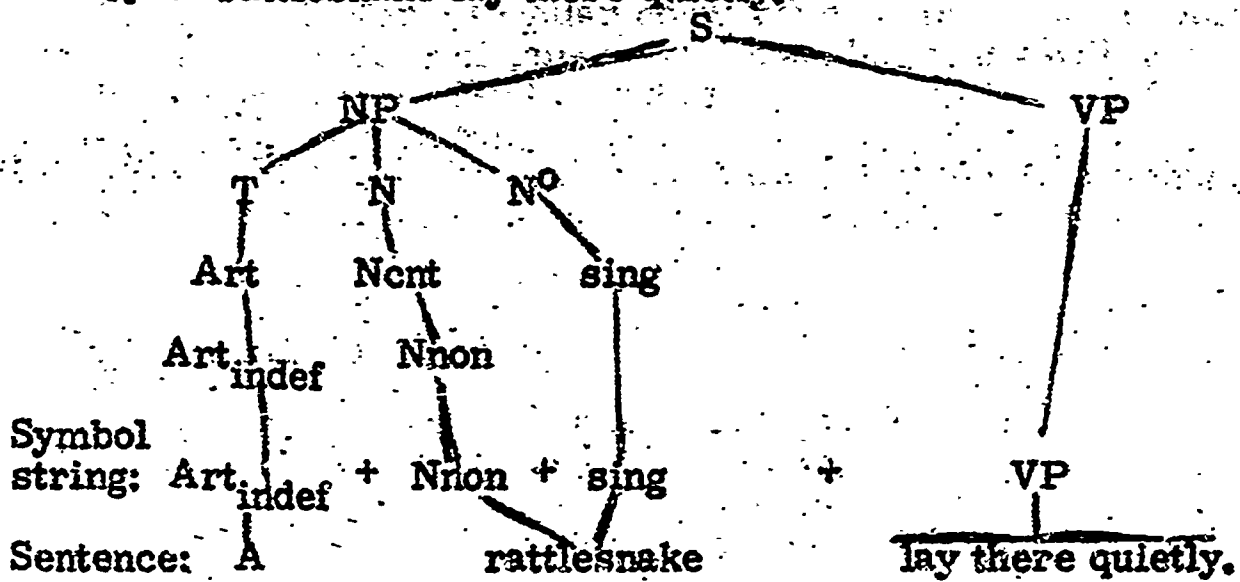


7. Some fellows resigned immediately.

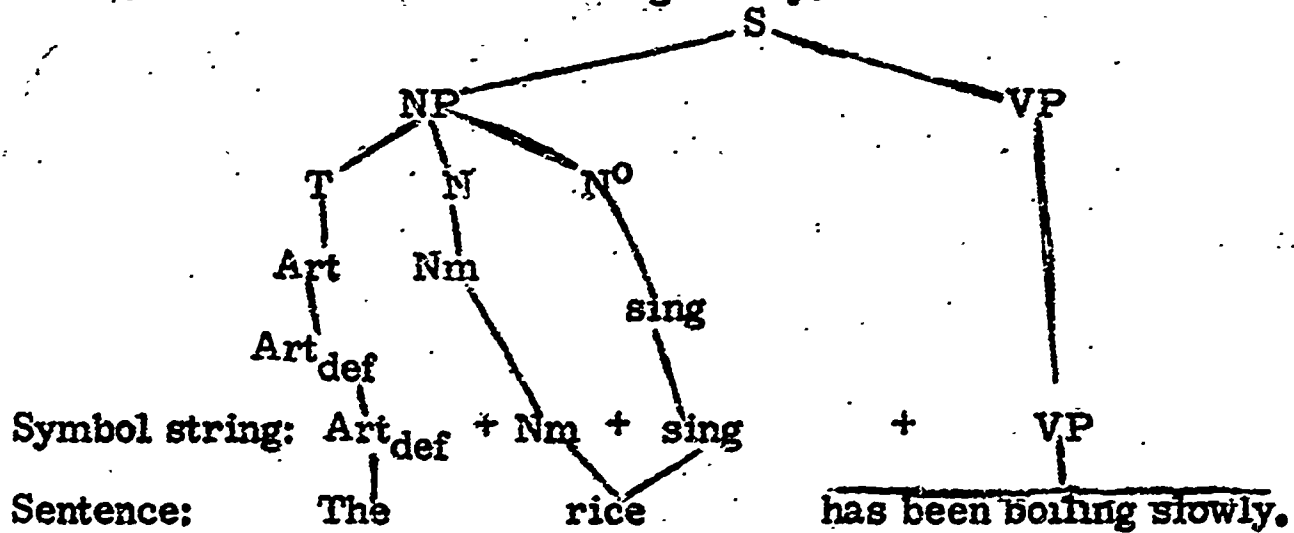




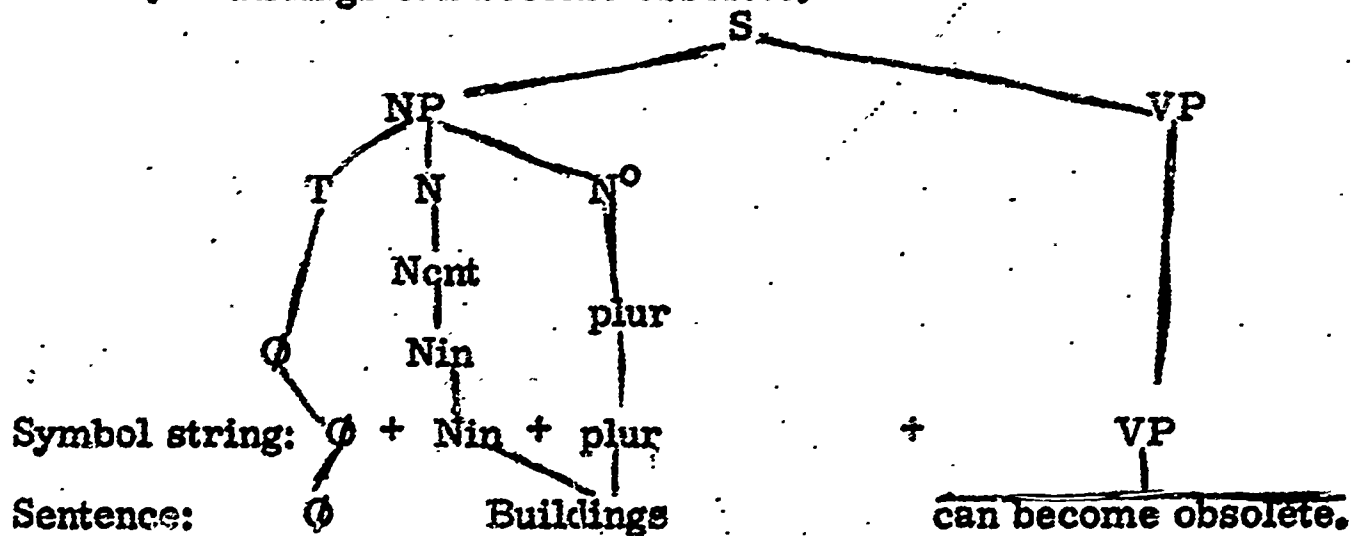
8. A rattlesnake lay there quietly.



9. The rice has been boiling slowly.



10. Buildings can become obsolete.



Exercise 3: Page 35:

1. Some (before N<sub>mass</sub>)
2. an (before singular count noun beginning with a vowel)
3. an (before singular count noun beginning with a vowel)
4. some (before N<sub>cnt</sub> + plur)
5. some (before N<sub>mass</sub>)



6. some (before N<sub>cnt</sub> + plur)
7. a (before singular count noun beginning with consonant)
8. a (before singular count noun beginning with consonant)
9. some (before N<sub>cnt</sub> + plur)
10. some (before N<sub>cnt</sub> + plur)
11. a (before singular count noun beginning with consonant)
12. an (before singular count noun beginning with vowel)
13. some (before N<sub>mass</sub>)

Exercise 4: Page 38:

A.

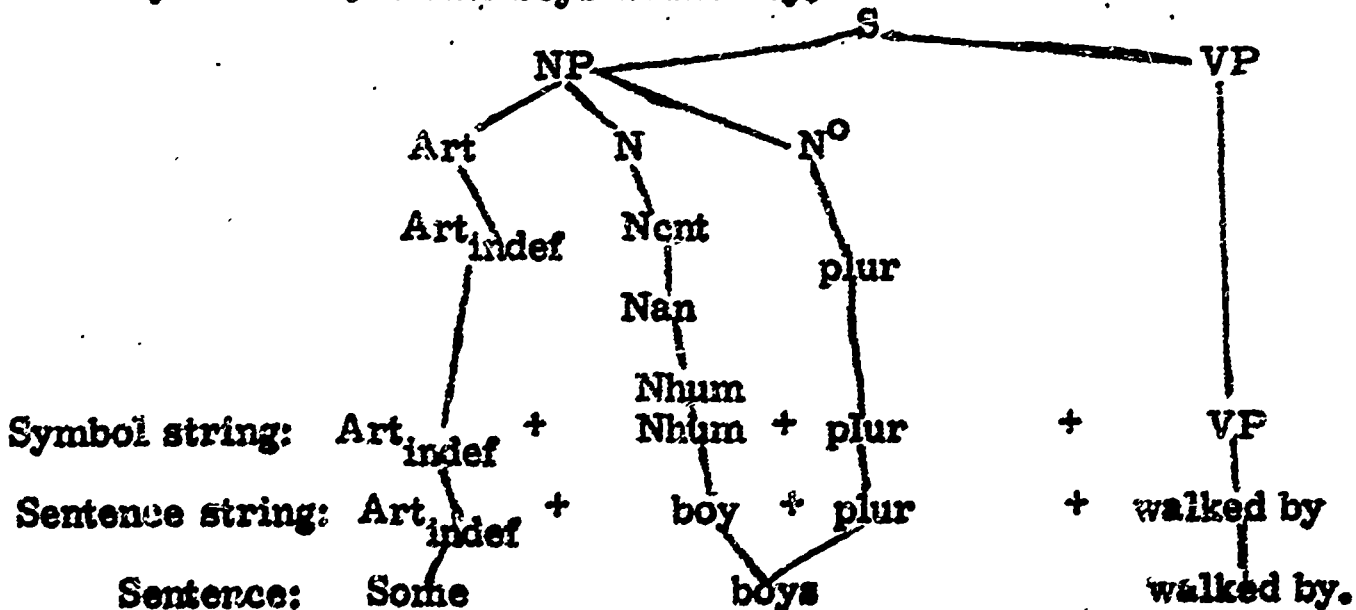
1. A cyclone tore the roofs from some houses.  
 Art<sub>indef</sub>                  Art<sub>def</sub>                  Art<sub>indef</sub>
2. The girls in class like dances better than the boys do.  
 Art<sub>def</sub>                  Ø                  Ø                  Art<sub>def</sub>
3. The sink held some water and leftovers from the meal.  
 Art<sub>def</sub>                  Art<sub>indef</sub>                  Ø                  Art<sub>def</sub>
4. Some rice was thrown into the car by a guest.  
 Art<sub>indef</sub>                  Art<sub>def</sub>                  Art<sub>indef</sub>
5. An axle broke and the car rolled into a ditch.  
 Art<sub>indef</sub>                  Art<sub>def</sub>                  Art<sub>indef</sub>

B.

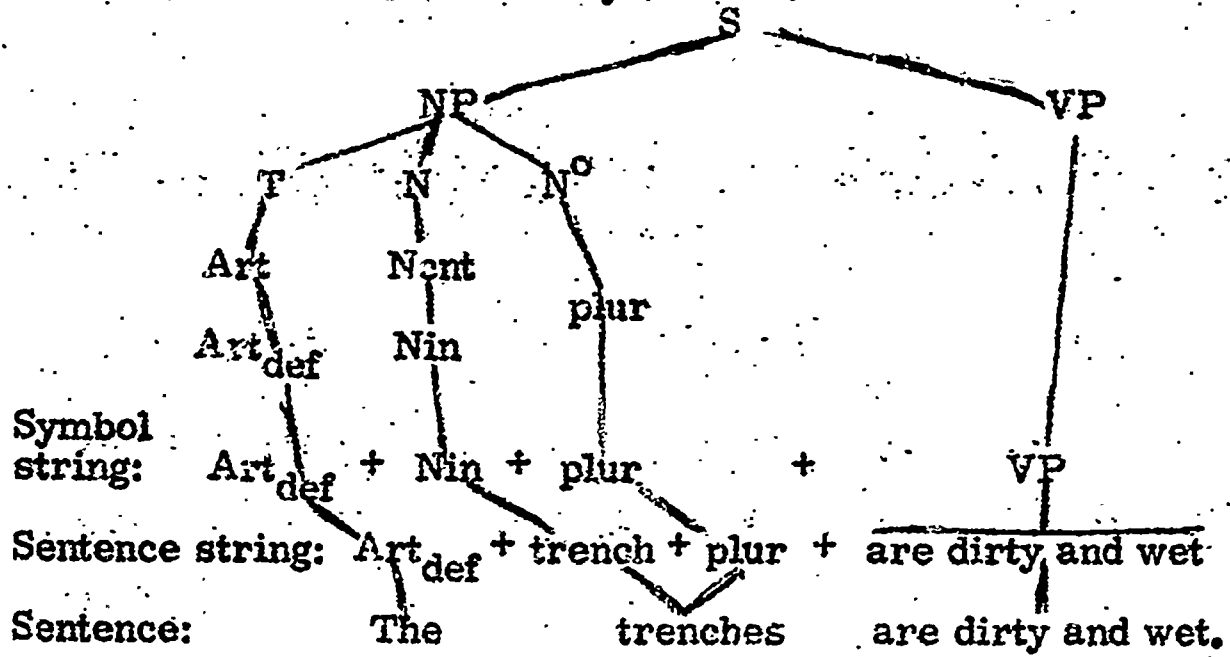
1. The librarian gave me a card and I took the book.
2. It was a book about dinosaurs.
3. The cook brought us some apples.
4. An apple a day keeps the doctor away.
5. The voters rejected the ballot measure.
6. Some flowers were left on the table.
7. I had some money left.
8. An avalanche destroyed the village.
9. Some officers were standing on the corner.
10. The school is giving an award.

Exercise 5: Pages 38-39:

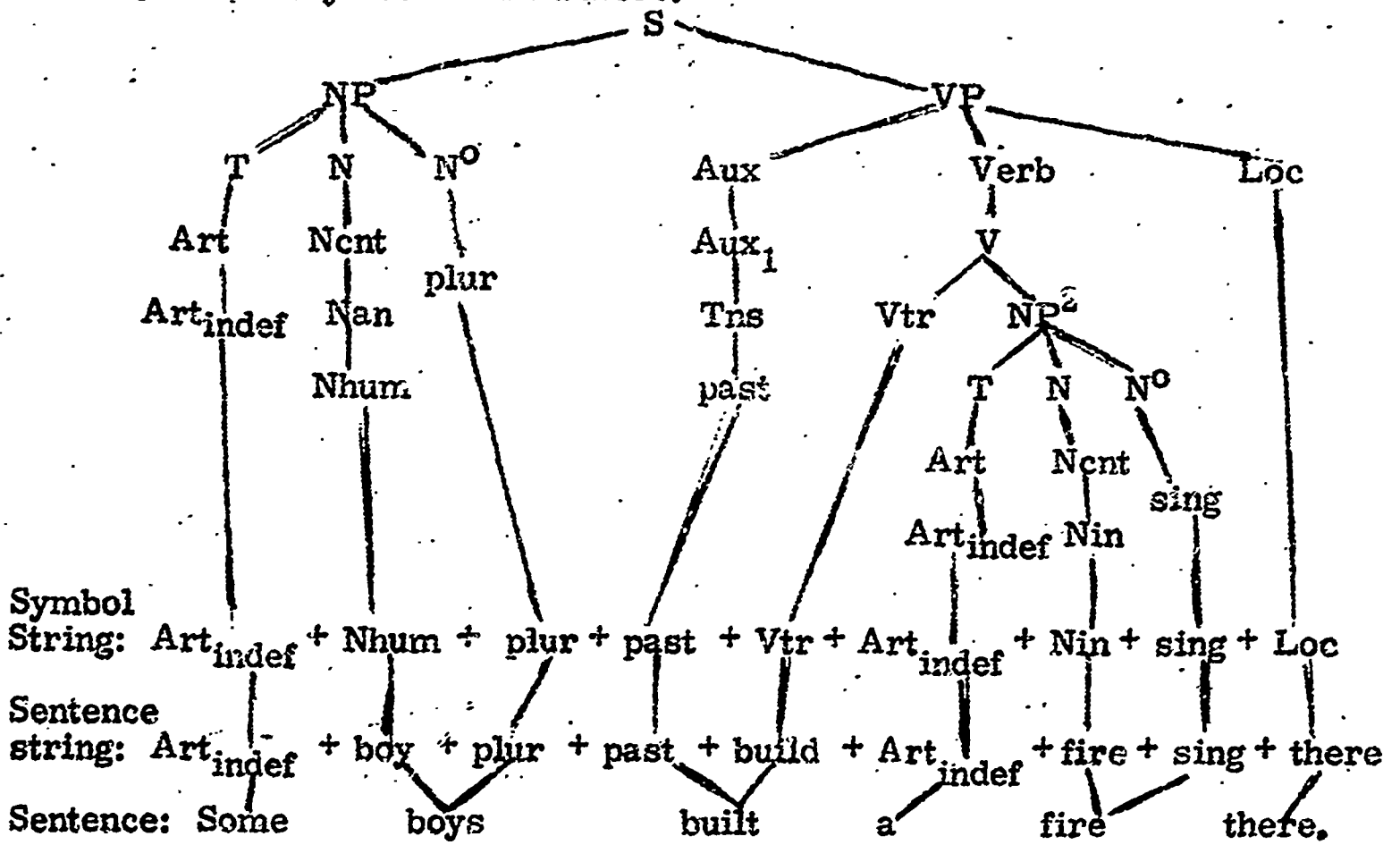
A. 1. Some boys walked by.



2. The trenches are dirty and wet.

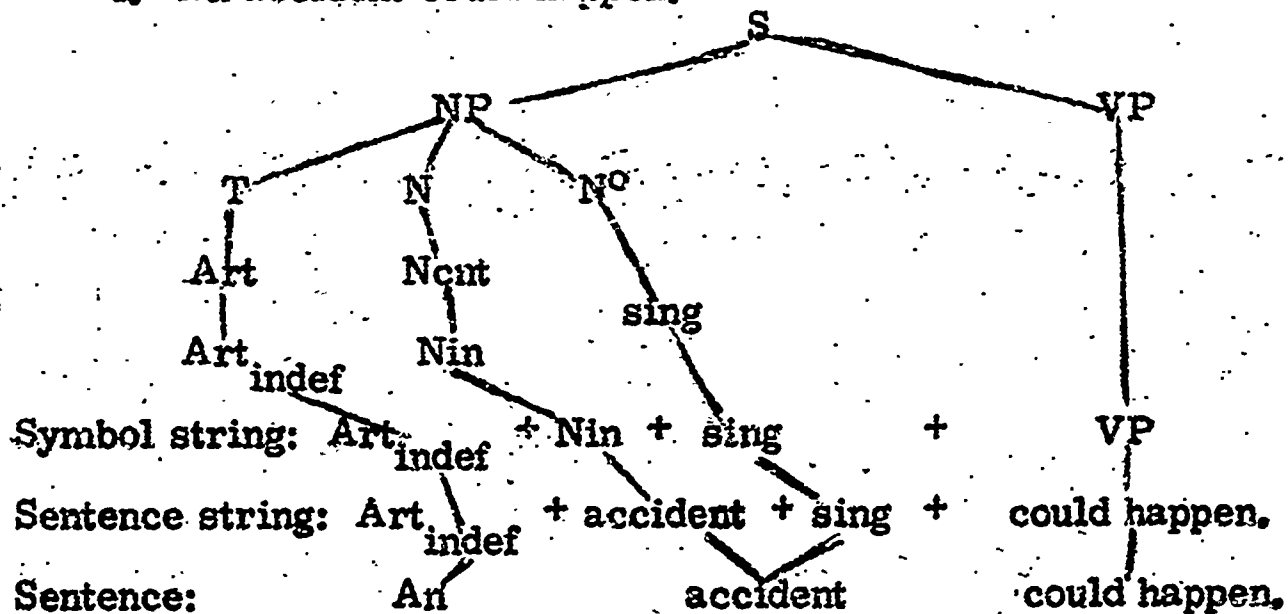


#3. Some boys built a fire there.

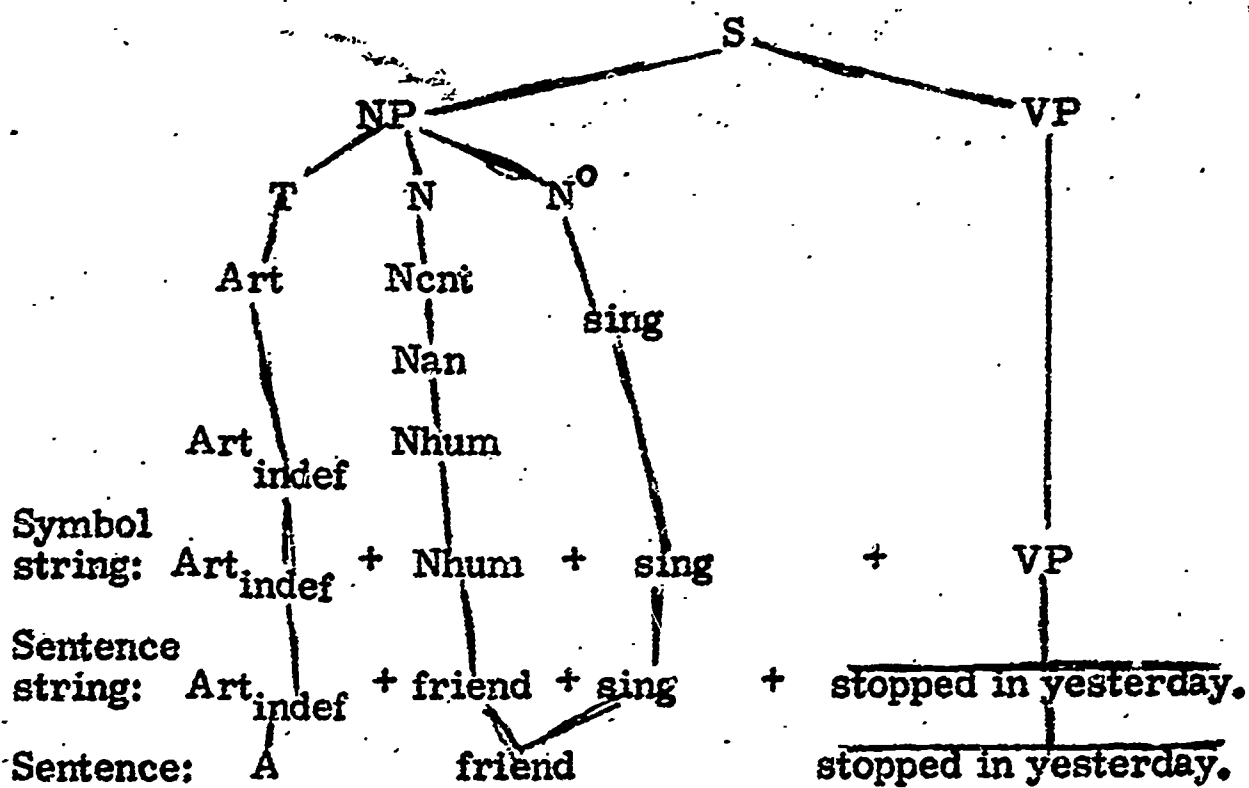


#We must develop the VP in this sentence so that we can account for the NP<sup>2</sup>, a fire.

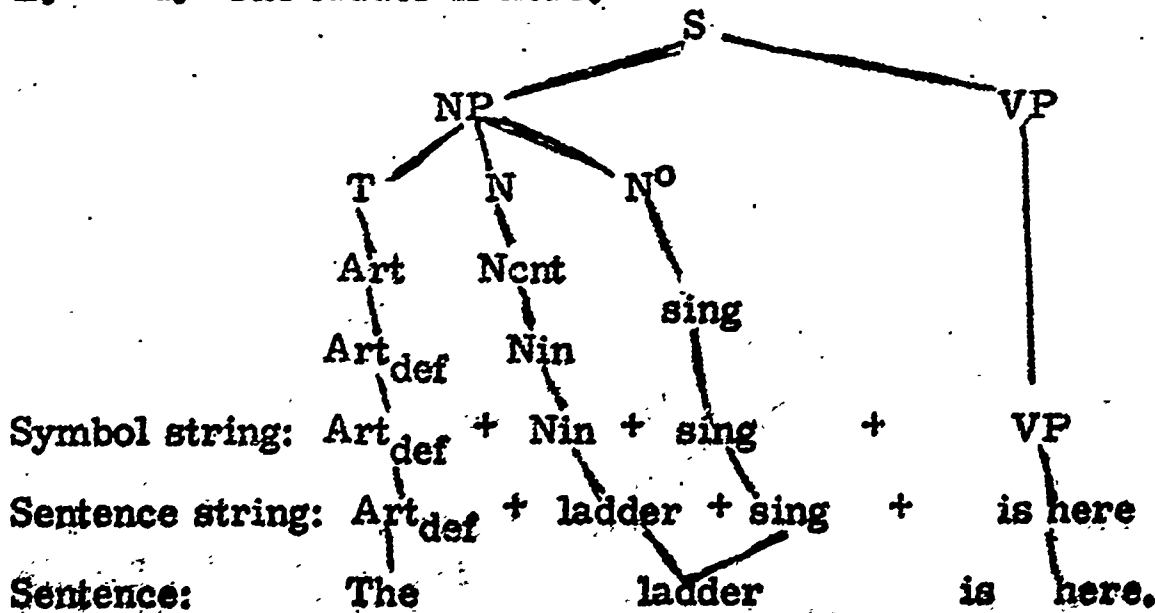
4. An accident could happen.



5. A friend stopped in yesterday.

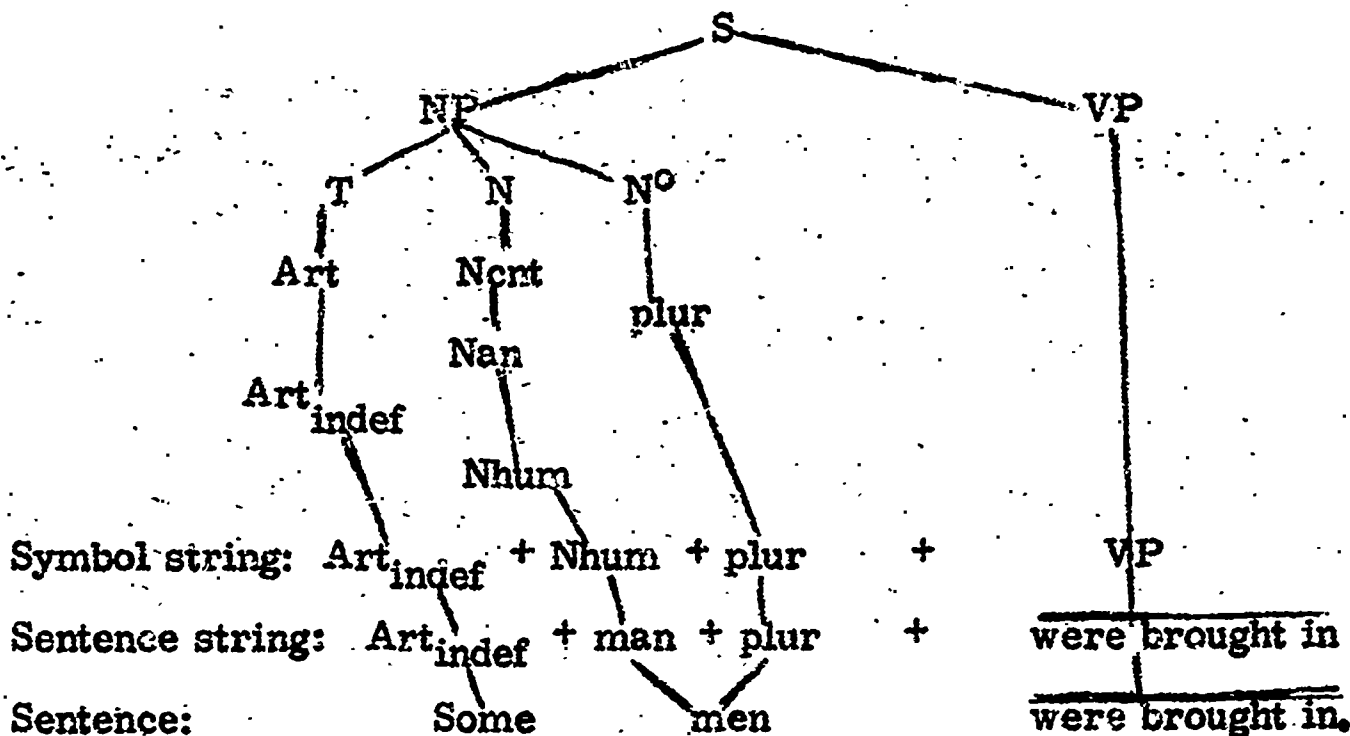


B. 1. The ladder is here.

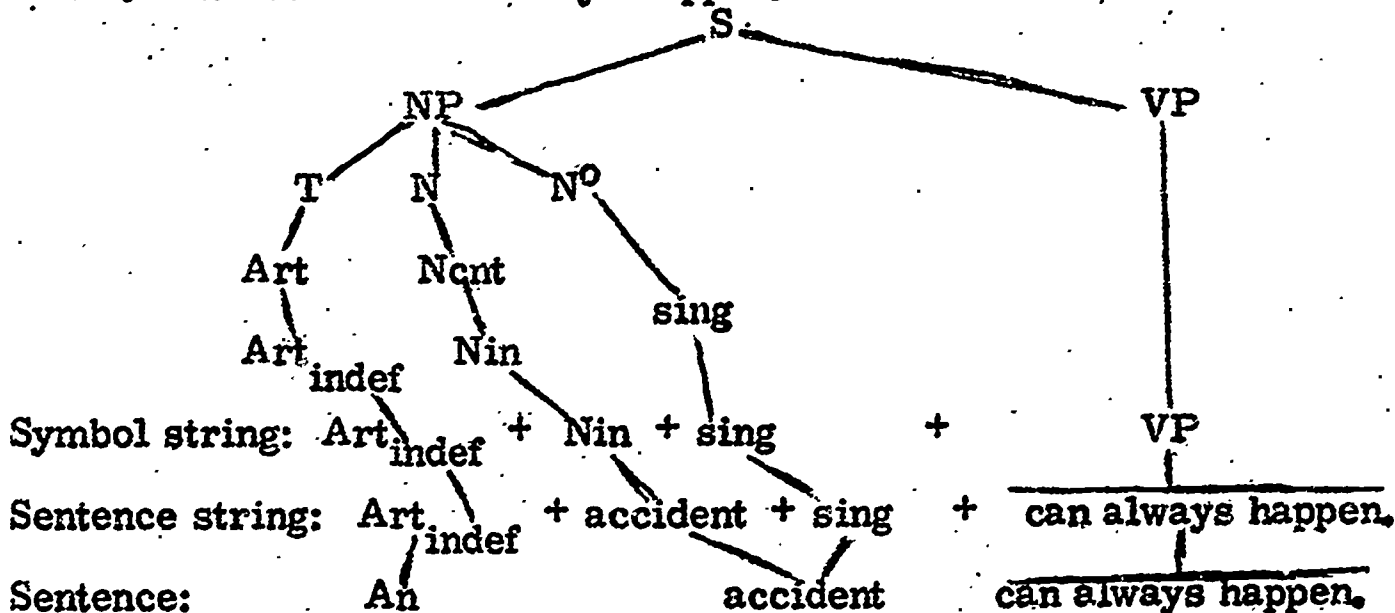




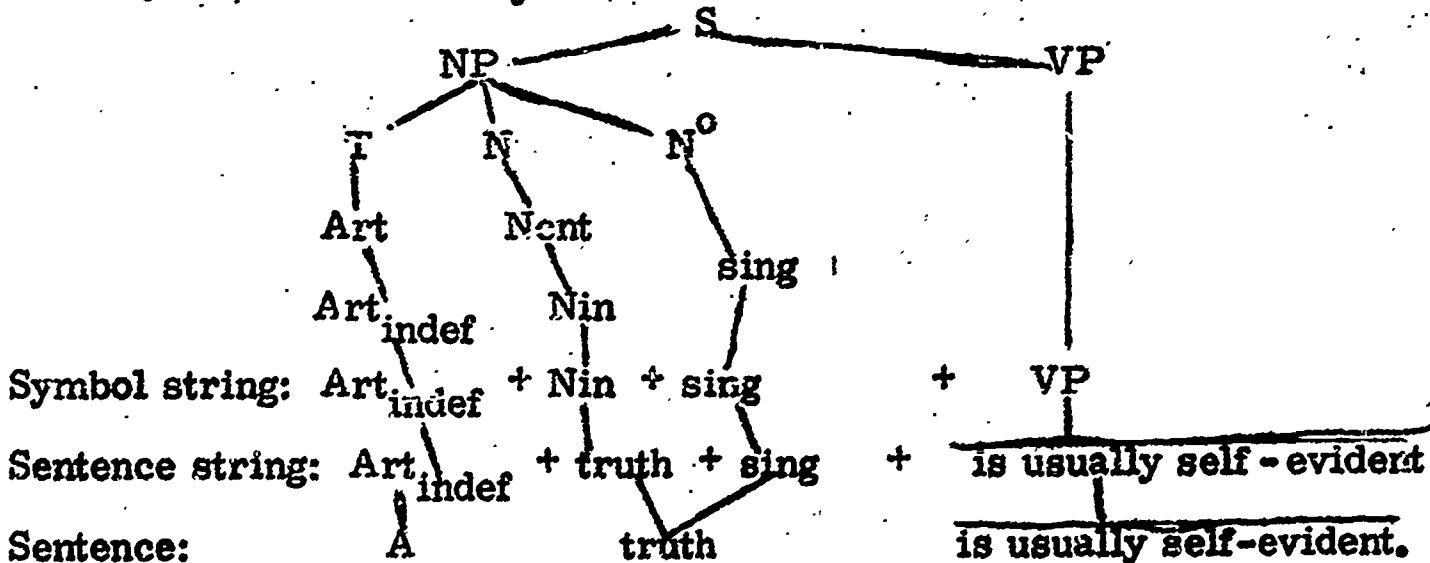
2. Some men were brought in.



#3. An accident can always happen.



#4. A truth is usually self-evident.

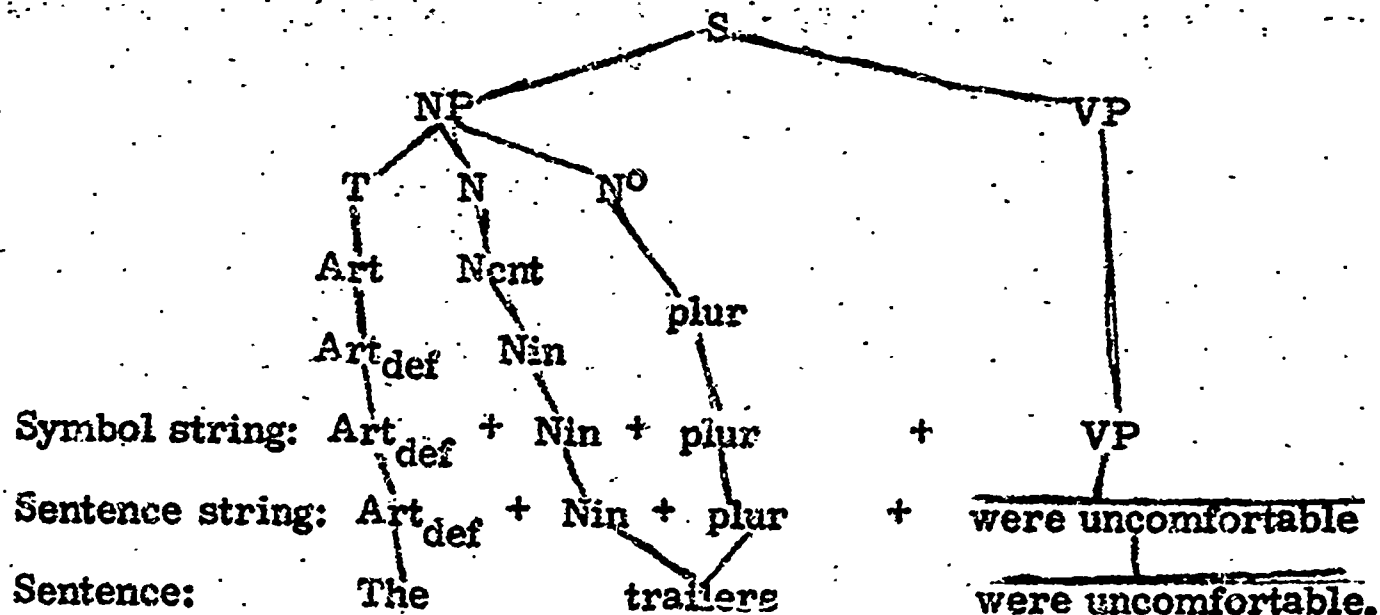


# (3) This sentence is the result of a transformation which re-positioned always between the aux and the verb.

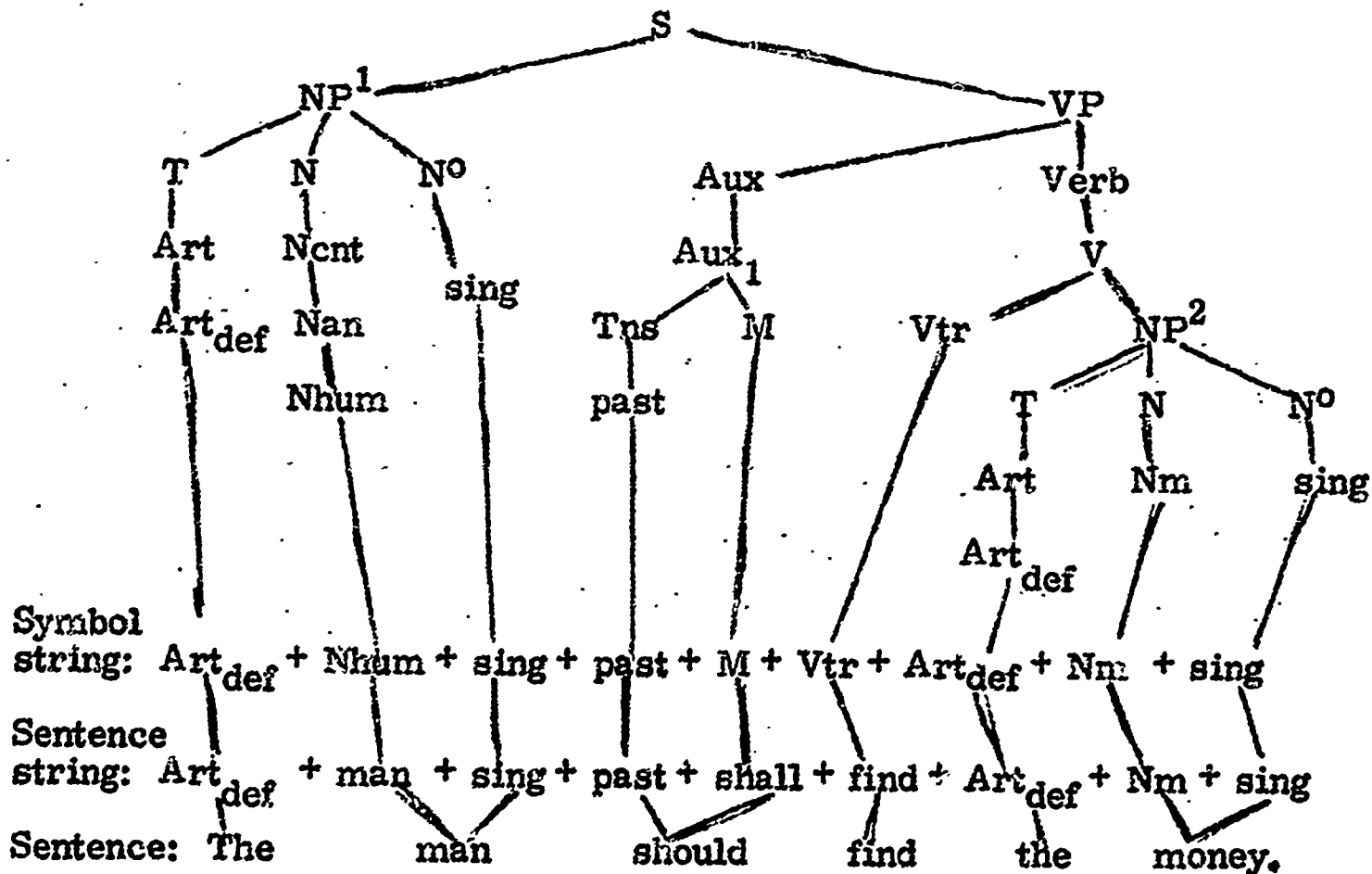
# (4) truth can also be classified as Nmass in some sentences. This sentence, like #3, is the result of a transformation which re-positions usually between Be and the adjective Pr.



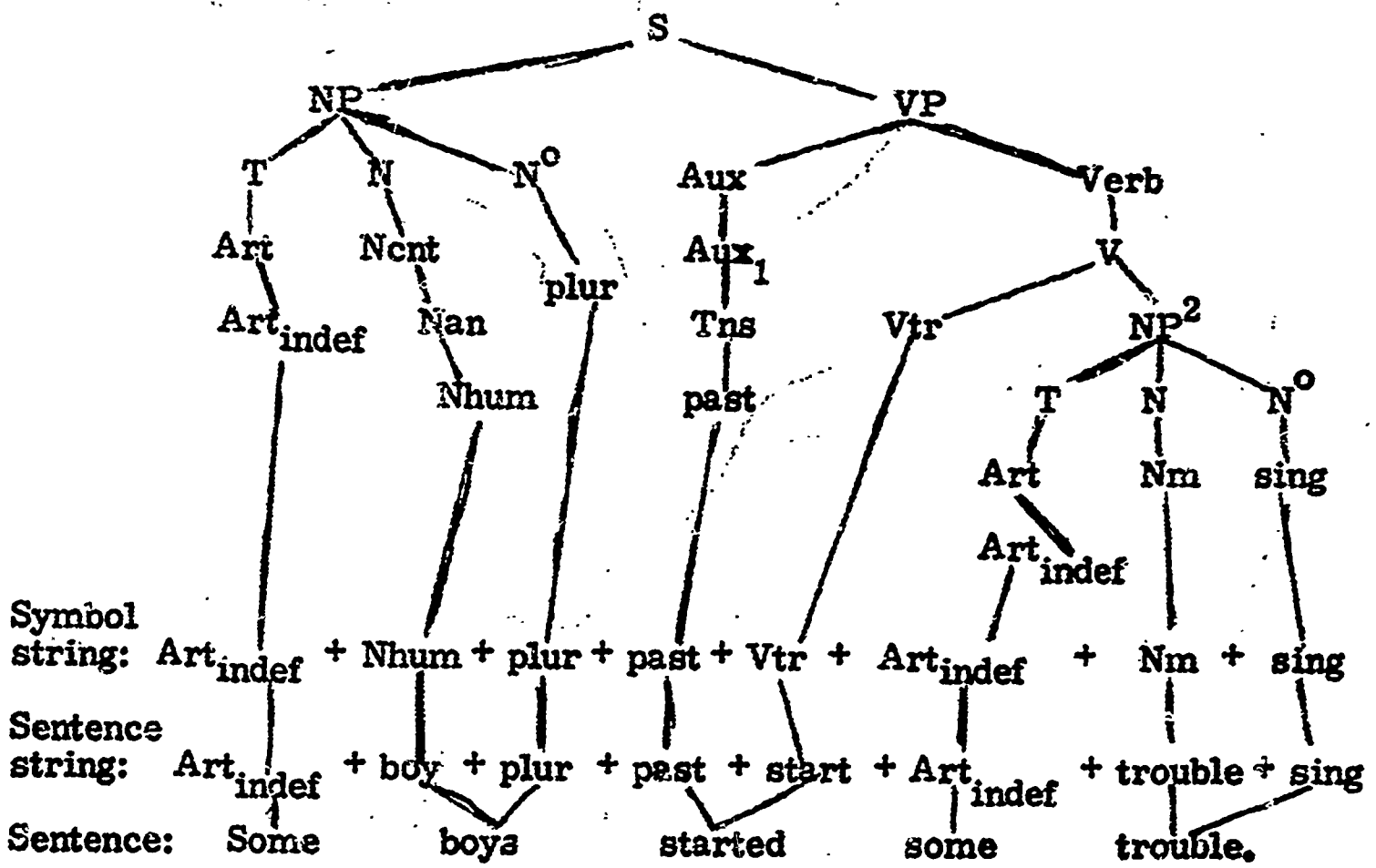
5. The trailers were uncomfortable.



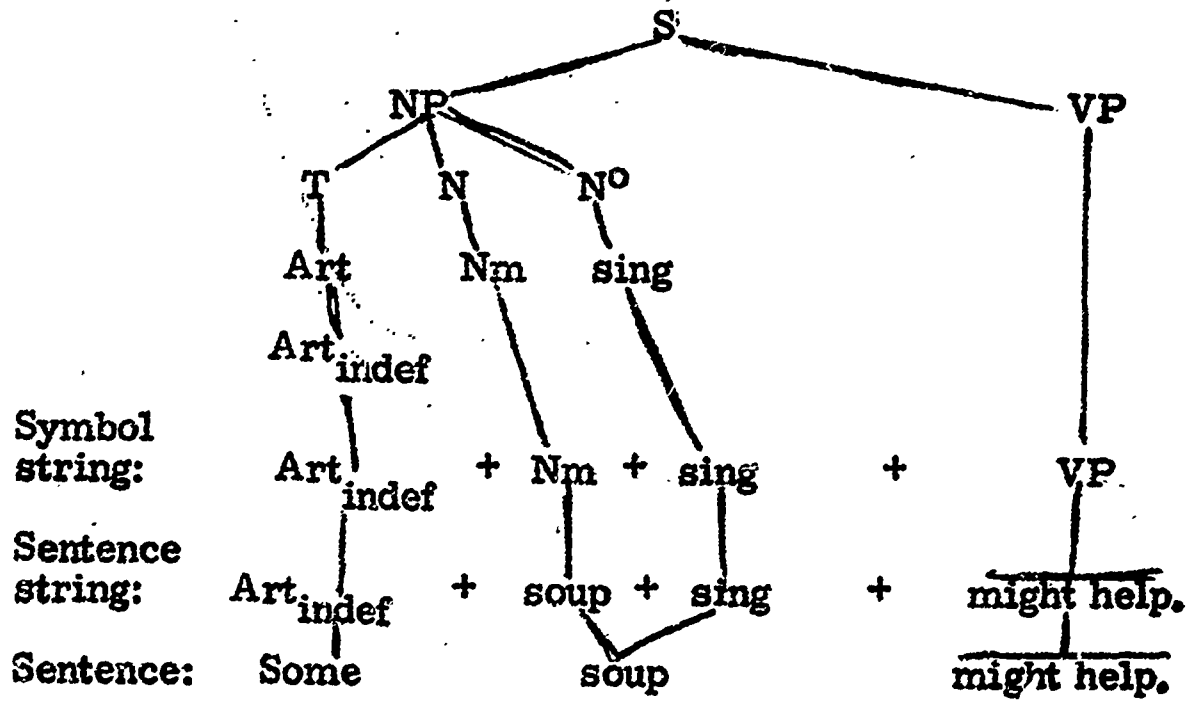
6. The man should find the money.



#7. Some boys started some trouble.

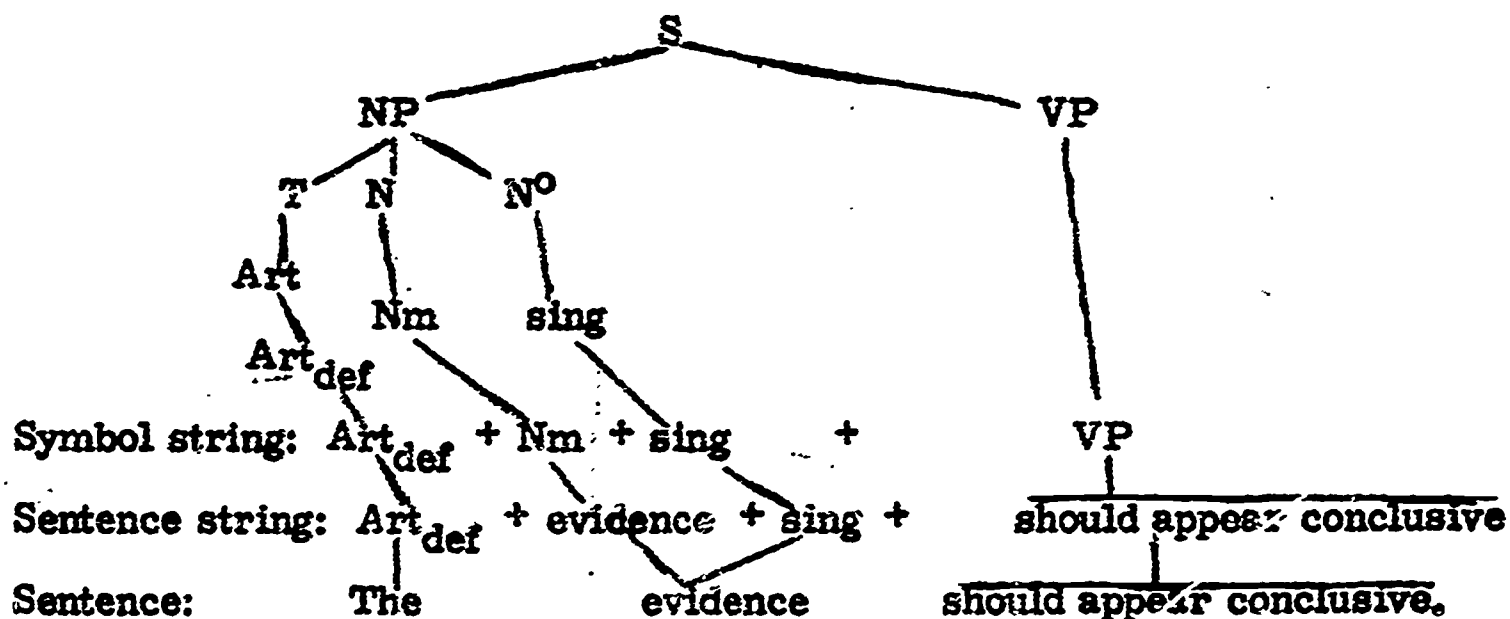


8. Some soup might help.

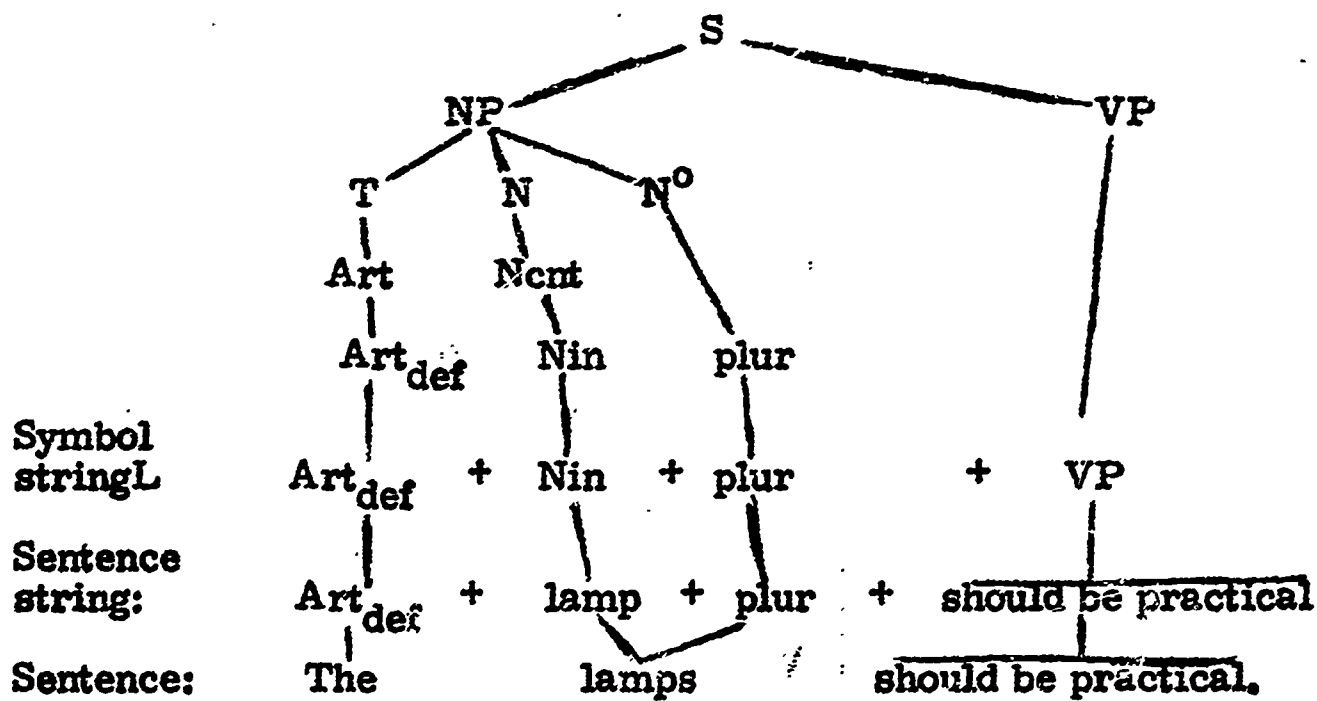


#trouble can also be classified as Ncnt in some sentences.

9. The evidence should appear conclusive.



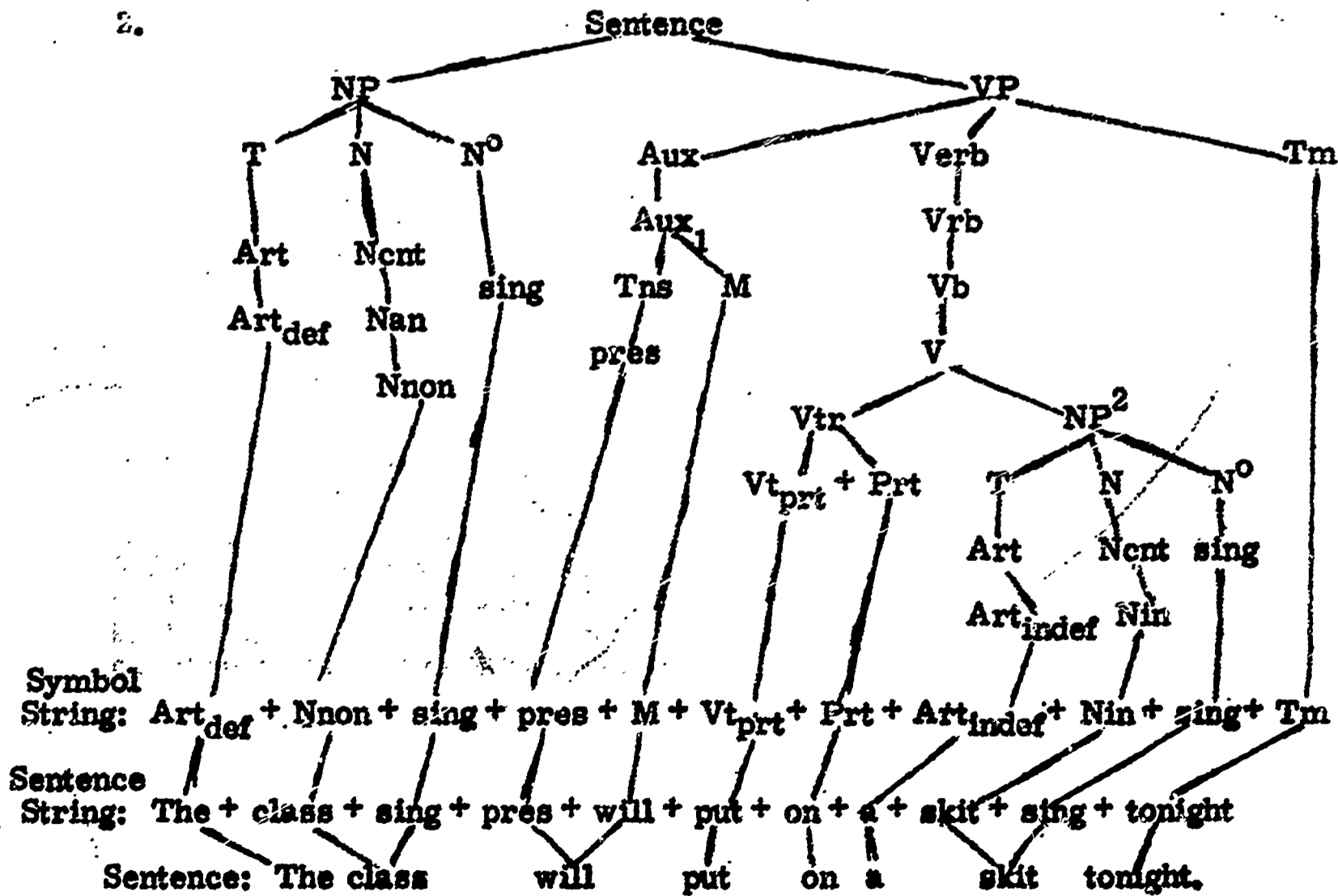
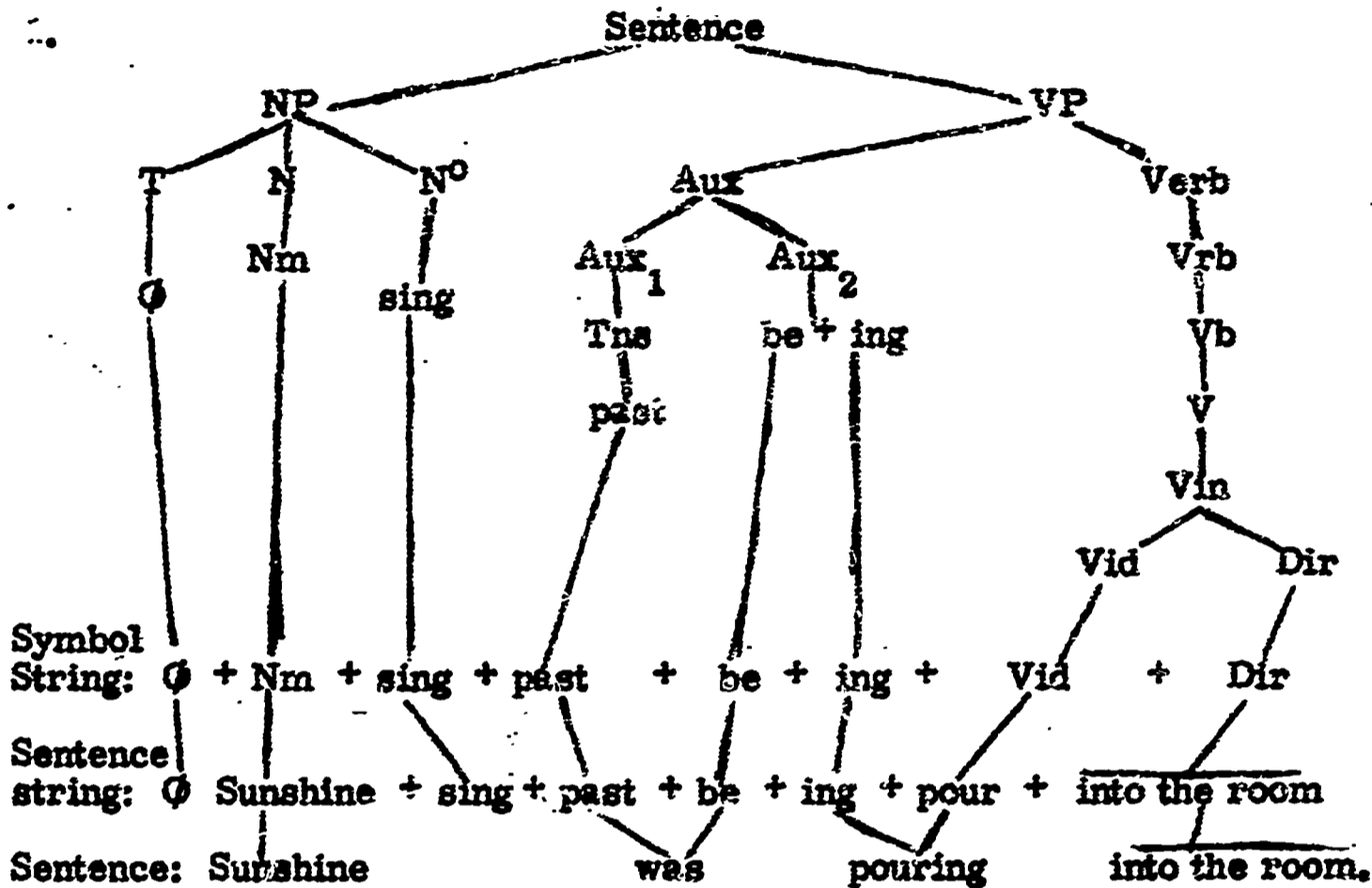
10. The lamps should be practical.





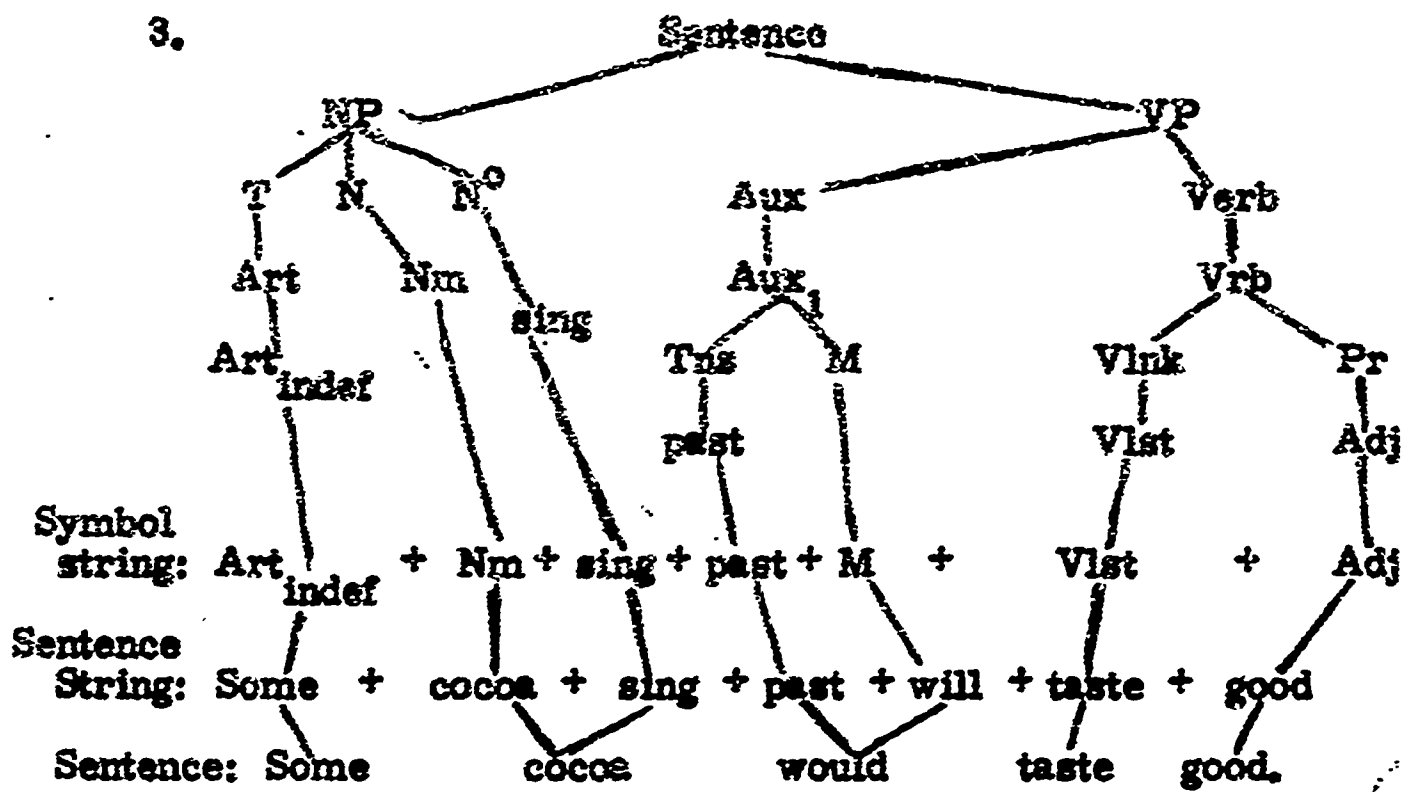
Cumulative Review; Page 40:

(Note: Before assigning this exercise read the note to sentence no. 9 which is found on page 71 of the manual)

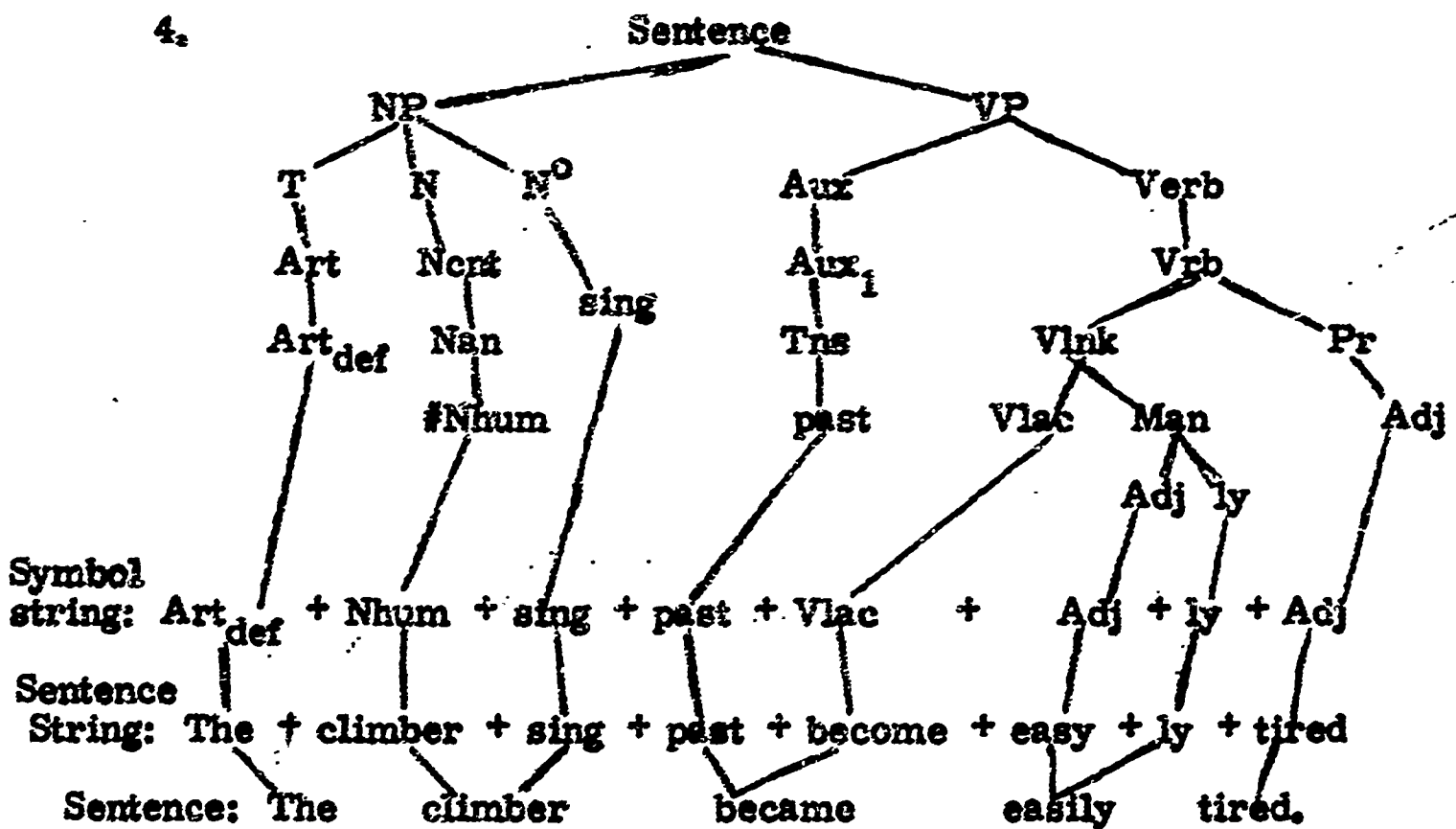




3.



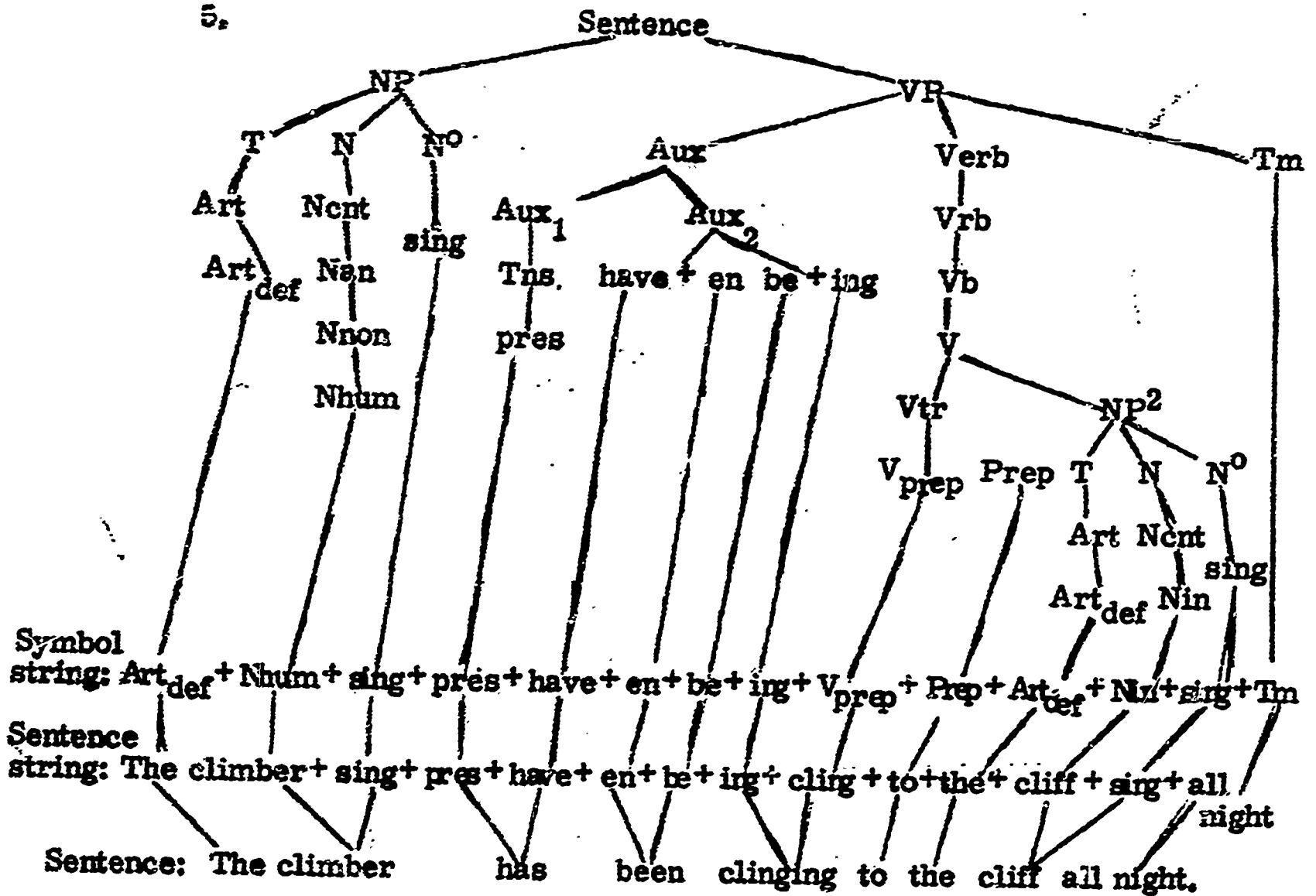
4.



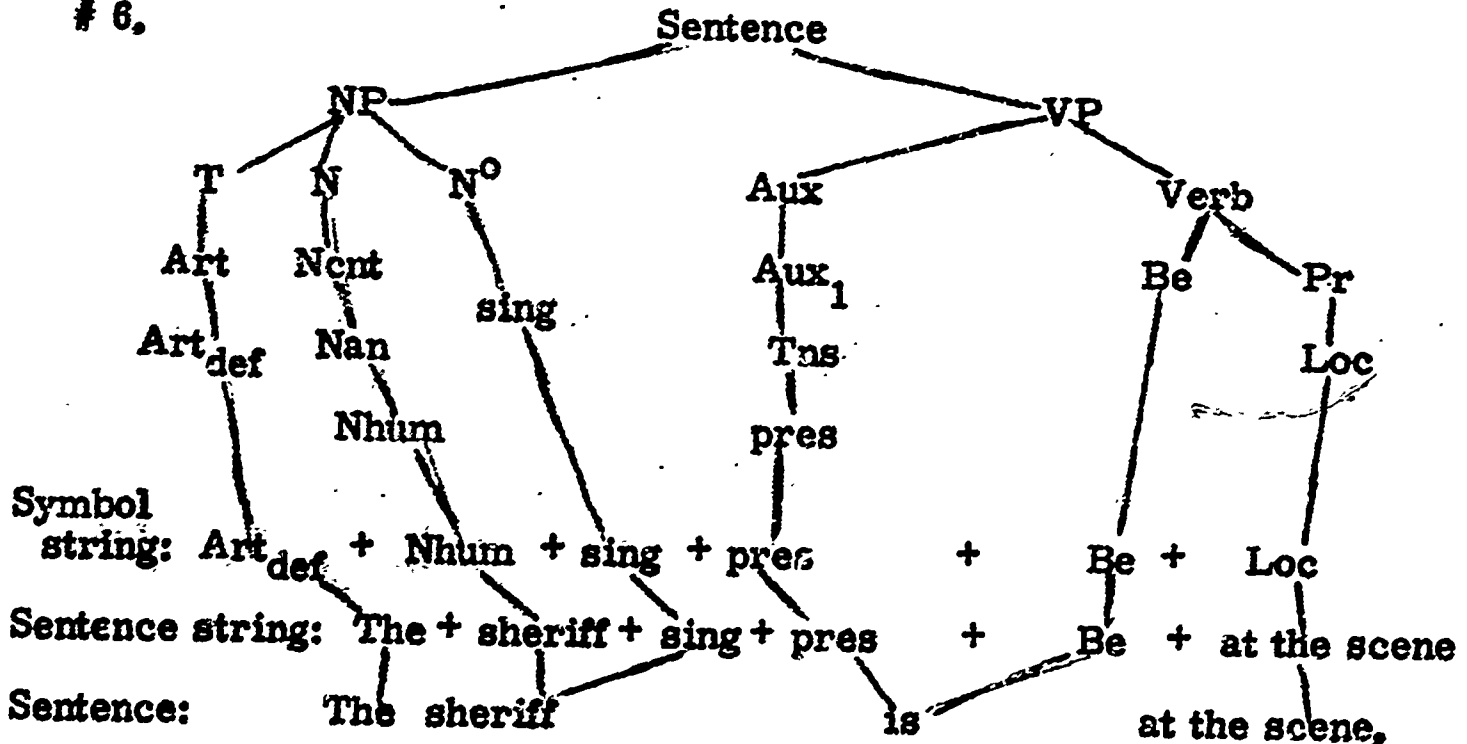
#(Since it can be argued that climber could be either human or non-human you should accept either, or let your students stop at Nan)

(This sentence comes out of the diagram with the manner adverb, easily, following the verb which is where our rules generate it. This corresponds to our intuitive feeling about it and to what we have discovered about the kind of linking verbs which can occur with Manner adverbs. The adverb can then be repositioned optionally).

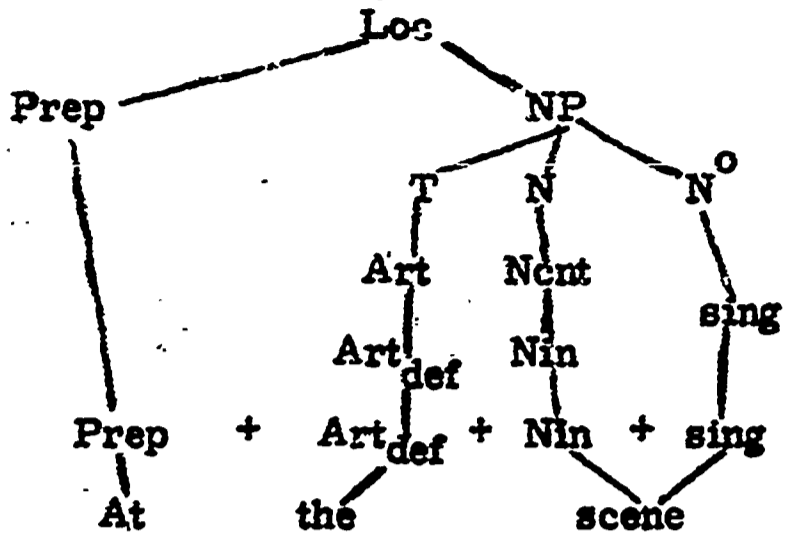
5.



# 6.

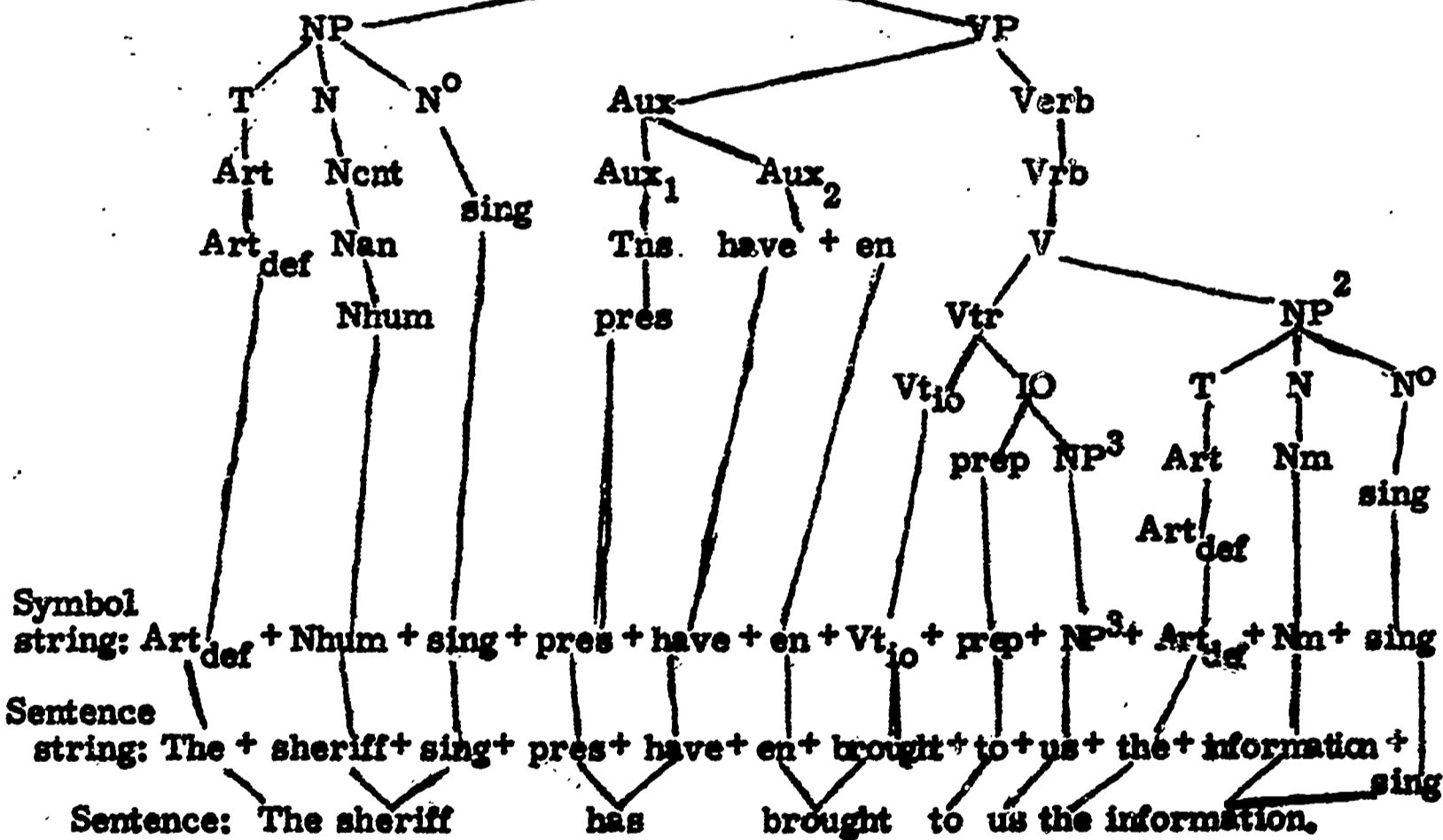


\*(By this time students will see that some locatives consist of a preposition plus an NP. You may want to let them see if they can add this information to the diagram:



#7.

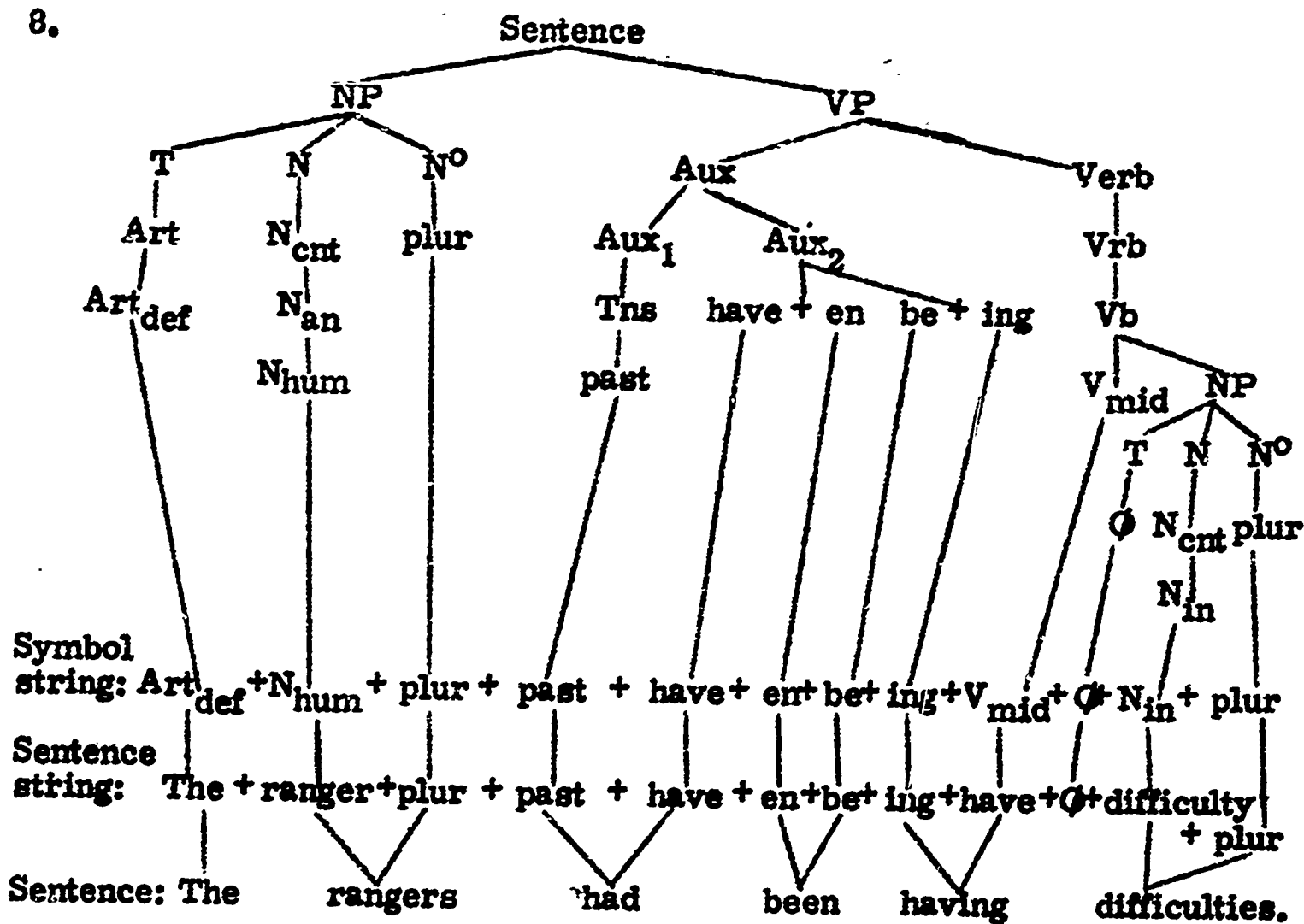
Sentence



#(Again here the underlying structure produces an ungrammatical sentence which, of course, must go through a transformation to delete the preposition.)

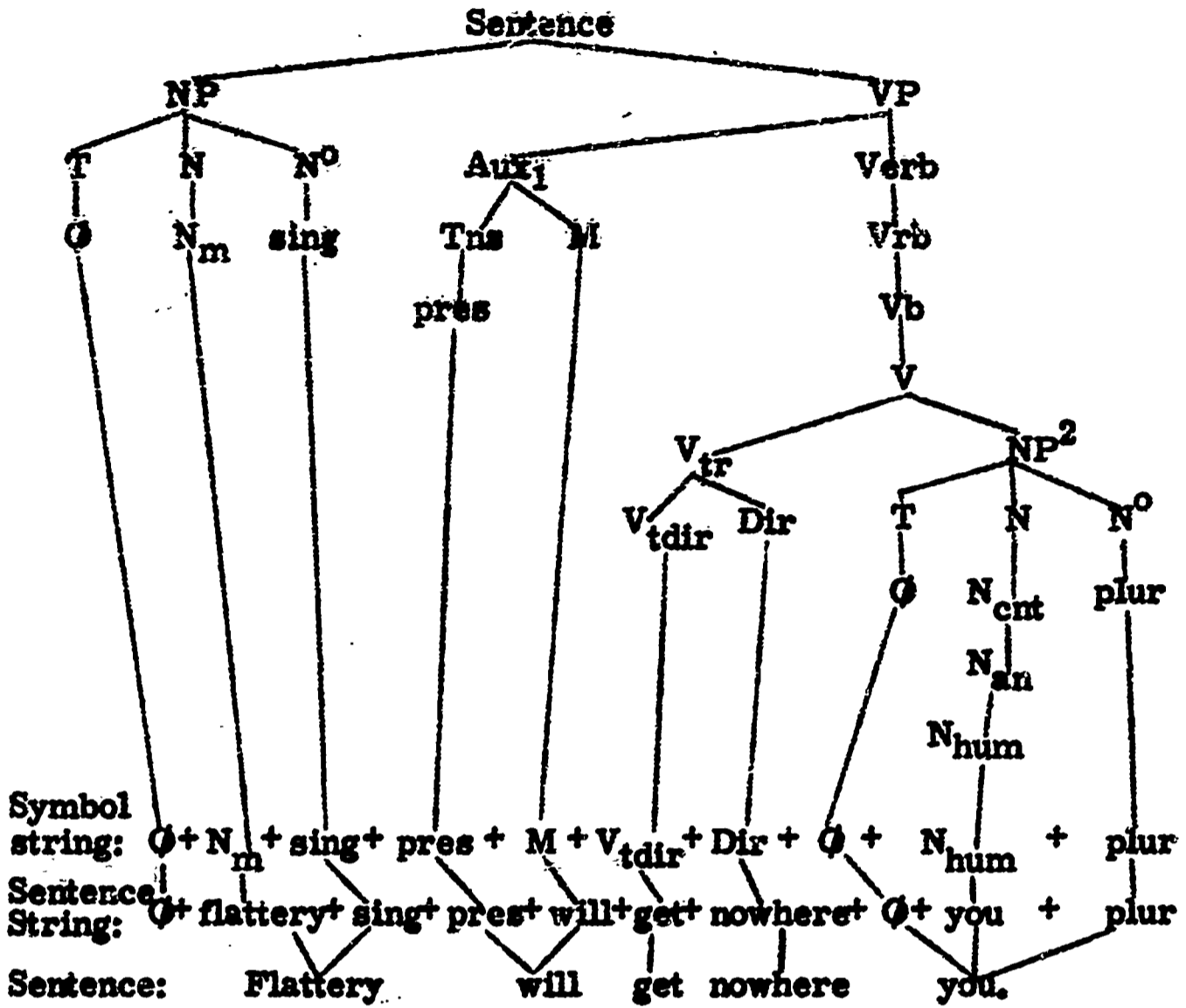


8.



9. NOTE: This sentence presents some difficulties and you may want to ask your students not to diagram it. However, if you have a bright and curious class it might be interesting to see what they can do with it. It is obviously a sentence in which language is used figuratively which is why it is effective, and it contains the verb get which is at the same time an interesting and a troublesome verb because it is found in so many categories. In this sentence it would seem to have the sense of take. Flattery will take you to no place. As such it could be thought of as a V<sub>tdir</sub> (transitive verb of direction) and could be diagrammed thus:





(Of course a transformation is necessary to reposition nowhere.)

**B. page 40:**

(Allow your students to use NP instead of the detailed derivation.)



3. NP + past + Vt<sub>io</sub> + IO + NP<sup>2</sup>  
The friend asked of me a question.

NP + pres + Vmid + NP  
I have a friend.

NP + pres + Be + NP  
The friend is a cop.

4. NP + pres + Vtr + NP + Loc  
Someone requires math in our school

NP + pres + Vtr + NP + Loc  
Someone requires science in our school.

5. NP + pres + have + en + Vt<sub>dir</sub> + Dir + NP<sup>2</sup>  
You have put somewhere the keys.

6. NP + pres + be + ing + Vi + Loc  
Bugs are crawling in the woodwork.

Ø + Nnon + plur + pres + Be + Adj  
Bugs are black.

7. NP + pres + have + en + Vtr + NP + Tm  
Someone has painted the car recently.

NP + pres + Be + Loc  
The car is on the street.

8. NP + pres + have + en + Vtr + NP<sup>2</sup>  
We have called the police.

NP + pres + have + en + Vtr + NP<sup>2</sup>  
We have received the permission.

NP + pres + Vmid + NP  
They have the permission.

9. NP + pres + Vt<sub>prep</sub> + Prep + NP<sup>2</sup>  
 The racket belongs to the roommate.

NP + pres + Vmid + NP  
 He has a roommate.

NP + pres + Vmid + NP  
 Bill has a racket.

10. NP + pres + be + ing + Vin + Loc  
 The costumes are hanging in the closet.

NP + pres + Be + Adj  
 The costumes are old.

NP + pres + Vmid + NP  
 Mary has a closet.

C. Page 40-41:

1. Someone has been sleeping in the bed } ⇒  
 I have a bed.

Someone has been sleeping in the bed which I have ⇒

Someone has been sleeping in the bed I have ⇒

Someone has been sleeping in my bed. ⇒

Has someone been sleeping in my bed? ⇒

Who has been sleeping in my bed?

2. Jerry is taking the math this year } ⇒  
 The math is new

Jerry has been taking the math which is new this year. ⇒

Jerry has been taking the math new this year. ⇒

Jerry has been taking the new math this year.

3. The friend asked of me a question } ⇒  
 I have a friend  
 The friend is the cop

The friend whom I have asked of me a question ⇒

The friend I have asked of me a question ⇒

My friend asked of me a question ⇒

My friend who is the cop asked of me a question ⇒

My friend the cop asked of me a question. ⇒

My friend the cop asked me a question.

4. Someone requires math in our school } ⇒  
Someone requires science in our school }

Someone requires math and science in our school. ⇒

Math and science are required by someone in our school ⇒

Math and science are required in our school.

5. You have put somewhere the keys. ⇒

You have put the keys somewhere. ⇒

Have you put the keys somewhere? ⇒

Where have you put the keys?

6. Bugs are crawling in the woodwork } ⇒  
Bugs are black }

Bugs which are black are crawling in the woodwork ⇒

\*Bugs black are crawling in the woodwork. ⇒

Black bugs are crawling in the woodwork.

7. Someone has painted the car recently } ⇒  
The car is on the street. }

Someone has painted the car which is on the street recently. ⇒

Someone has painted the car on the street recently. ⇒

The car on the street has been painted by someone recently. ⇒

The car on the street has been painted recently.

8. We have called the police } ⇒  
We have received the permission }  
They have the permission }



We have called the police and received the permission. ⇒

We have called the police and received the permission which they have. ⇒

We have called the police and received the permission they have ⇒

We have called the police and received their permission.

9. The racket belongs to the roommate } ⇒  
Bill has a racket  
He has a roommate

The racket which Bill has belongs to the roommate. ⇒

The racket Bill has belongs to the roommate. ⇒

Bill's racket belongs to the roommate. ⇒

Bill's racket belongs to the roommate which he has. ⇒

Bill's racket belongs to the roommate he has. ⇒

Bill's racket belongs to his roommate.

10. The costumes are hanging in the closet } ⇒  
The costumes are old  
Mary has a closet

The costumes which are old are hanging in the closet. ⇒

\*The costumes old are hanging in the closet. ⇒

The old costumes are hanging in the closet. ⇒

The old costumes are hanging in the closet which Mary has. ⇒

The old costumes are hanging in the closet Mary has. ⇒

The old costumes are hanging in Mary's closet.

MORE ABOUT QUESTIONS

Special for the teacher:

The following discussion of the question transformation may be of interest to you as background material. It is the theory underlying yes-or-no questions, and points up the relation between all questions, but most of this theory we have not gone into in the student version.

There is a basic similarity between noun clauses beginning with wh words (when, where, how, whether, etc.) and questions.

- (1) Tell me where he is : Where is he?
- (2) Tell me when it will be : When will it be?
- (3) Tell me how it should be done. : How should it be done?
- (4) Tell me who he is : Who is he?
- and (5) Tell me whether he should do it. : Should he do it?

Examples 1 - 4 are perfectly straight-forward. The only difference between the noun clause and the question is the inversion of the VP (or part of it) and the NP. If example 5 were exactly parallel with 1 - 4 the question should be \*Whether should he do it? In an older stage of English that is exactly what it was. However, in modern English the whether is obligatorily deleted in the question, even though it appears in the corresponding noun clause.

Notice that the inversion of the VP, or part of it, is meaningful. It means about the same as the phrase Tell me . . . . The inversion is accomplished in the following way:

- The car is here.       $\implies$       Is the car here?
- The boy will catch the dog.       $\implies$       Will the boy catch the dog?
- The dog has eaten the bone.       $\implies$       Has the dog eaten the bone?
- The boy is going to school.       $\implies$       Is the boy going to school?
- A cat ran under the house.       $\implies$       Did a cat run under the house?

Notice that in the middle three, tense and the auxiliaries M, have, and be, invert with NP. In 1, the verb Be inverted. In 5 it was necessary to add do because neither M, have, or be occurred in the sentence.

It is significant that not all base declaratives can become questions, and that some things which are ungrammatical as declaratives can become questions. For instance, there is no declarative for

Does he ever go?

and there is no question for

He hardly moves.

It is therefore desirable to include something in the kernel or base sentence to indicate that the sentence must become a question in order

to be grammatical. In other words there must be something to make the transformation obligatory. This is simply accomplished by including an optional symbol  $Q$  in the first rule. At that point a choice is made as to whether the sentence will become interrogative or not. This allows us to generate all questions in the simplest way, even those with no grammatical declaratives.

To return to the earlier examples, the question in 1 can be answered by

He is here.  
He is there.  
He is somewhere.  
Etc.

Answers to 5 are much like those in 1 - 4 but somewhat different as well. They could be

Yes, he should do it.  
No, he shouldn't do it.

or simply

Yes.  
No.

Such questions as 5 have come to be called Yes-or-No questions. The relation of answers like Yes, he should and No, he shouldn't to Either he should do it or he shouldn't is clear.

Either he should do it or he shouldn't do it; tell me which.

is a paraphrase of

Tell me whether he should do it,

or of

Tell me whether he should do it or he shouldn't do it.

This indicates that a sentence like

Either he should do it or he shouldn't do it.

is used as the source of the object noun clause in

Tell me whether he should do it or he shouldn't do it.

wh-either  $\implies$  whether

Deleting from this sentence will result in

Tell me whether he should do it or not.  $\implies$   
Tell me whether he should do it.



These last two are paraphrases of each other. The yes-or-no question, then, is derived from

Q+ either he should do it or he shouldn't do it.

The Q, as it does with other questions, causes inversion of all or part of the VP with the NP in each clause. The whether is deleted except in the embedding.

Whether should he do it or shouldn't he do it.  $\Rightarrow$

Should he do it or shouldn't he do it?

The or and the material following it may be deleted entirely, or deleted from, to yield or not, or or shouldn't he.

This explanation indicates that the generation of all questions involves wh-. The generation of each question is parallel to that of its related noun clause, except for the inversion in all questions and the deletion of whether in the yes-or-no question. Relating these sentences will materially increase the generality of the rules.

\* \* \* \*

The student version begins with a general review of the transformations which lead to questions. These were first introduced in Language II. The above justification for considering all questions related to the yes-or-no is not included, but the steps in the transformation are developed, and the desirability for the Q in the kernel is explained.

In the earlier unit on the question, the subject question (Who is going?) was developed in an optional section at the very end; and the suggestion was made that for some classes the material might very well wait for another year. Therefore, you should ascertain whether your students have had that material. If not, you will want to spend more time on the earlier parts of this unit and may even want to draw on some of the material in Language II.

The questions with when, where, how, who, etc., involve the notion of wh-attachment. When a sentence contains Q, one of its constituents may have wh attached to it, and the constituent then becomes a question word. Thus

	wh-Loc	$\Rightarrow$	where
	wh-Tm	$\Rightarrow$	when
	wh-NP <sub>hum</sub>	$\Rightarrow$	who(m)
and	wh-either	$\Rightarrow$	whether (see above)

But this attachment leaves the question words out of place. For instance when the sentence

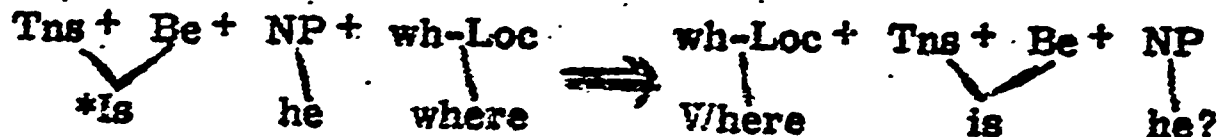
NP +	Tns +	Be +	Loc	
He	is	someplace		$\Rightarrow$

has been transformed and had wh attached to the Loc it becomes





A transformation (symbolized as  $T_{wh}$ ) then is required to move the structure with wh to the front of the sentence.



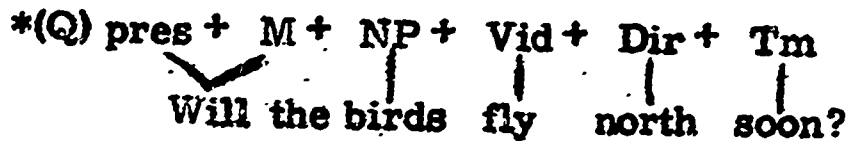
Notice that this happens also in the embedded noun clauses of 1 - 5.

The students' unit proceeds rather slowly over all of this material, and each step in the transformation is developed. There are many exercises, not all of which you may want to use. The important thing in each is to help the student understand the underlying structure and the basic relation between the various questions.

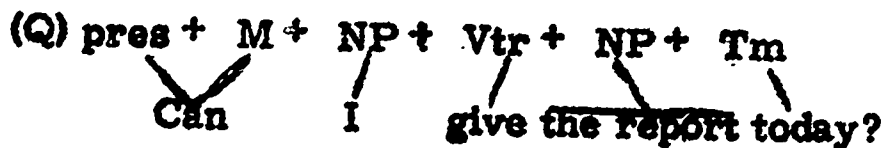
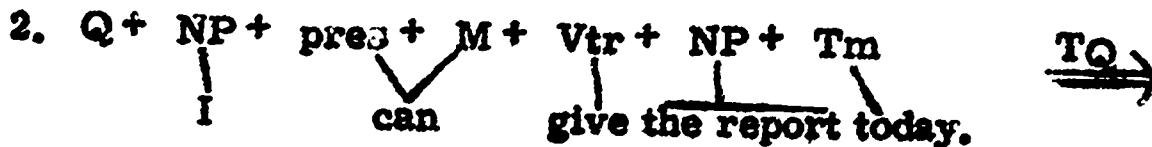
Though you will probably not wish to discuss it, we hope that the introductory explanatory material in this manual has added to your background understanding of the wider relationship with noun clauses.

There are additional explanatory notes included in the following answers to exercises on points that seem to need further explication.

Exercise p. 45: This exercise constitutes a brief review of the steps leading to the question transformation. It is designed to help the student recall, more or less by himself, the various elements involved.



(# The Q may be dropped from the string after it has gone through  $T_Q$ . If it does remain it is the symbol that indicates that the sentence should be pronounced as a question with rising inflection, etc. Do as you like about it.)



3. Q+ NP+ pres+ M+ Vtr+ NP T<sub>Q</sub> →  
 The boy should lock the bicycle.

(Q) pres+ M+ NP+ Vtr+ NP  
 Should the boy lock the bicycle?

4. Q+ NP+ pres+ M+ Vtr+ NP T<sub>Q</sub> →  
 I must pass the exam.

(Q) pres+ M+ NP+ Vtr+ NP  
 Must I pass the exam?

5. Q+ NP+ past+ M+ Vi T<sub>Q</sub> →  
 They would forget.

(Q) past+ M+ NP+ Vi  
 Would they forget?

B. 1. Q+ NP+ pres+ have+ en+ Vtr+ NP T<sub>Q</sub> →  
 Terry has given blood.

(Q) pres+ have+ NP+ en+ Vtr+ NP  
 Has Terry given blood?

2. Q+ NP+ pres+ have+ en+ Vtr+ NP+ Man T<sub>Q</sub> →  
 The chimps have learned a language quickly.

(Q) pres+ have+ NP+ en+ Vtr+ NP+ Man  
 Have the chimps learned a language quickly?

3. Q+ NP+ pres+ have+ en+ Vi+ Loc T<sub>Q</sub> →  
 The plane has landed in the driveway.

(Q) pres+ have+ NP+ en+ Vi+ Loc  
 Has the plane landed in the driveway?

4. Q+ NP+ pres+ have+ en+ Vtr+ NP+ Loc  $\xrightarrow{T_Q}$   
 Some people have built shelters in basements.

(Q) present+ have+ NP+ en+ Vtr+ NP+ Loc  
 Have some people built shelters in basements?

5. Q+ NP+ past+ have+ en+ Be+ Adj  $\xrightarrow{T_Q}$   
 The superintendent had been ill.

(Q) past+ have+ NP+ en+ Be+ Adj.  
 Had the superintendent been ill?

C. 1. Q+ NP+ pres+ be+ ing+ Vtr+ NP  $\xrightarrow{T_Q}$   
 The fish is dodging the hook.

(Q) pres+ be+ NP+ ing+ Vtr+ NP  
 Is the fish dodging the hook?

2. Q+ NP+ past+ Be+ NP  $\xrightarrow{T_Q}$   
 Fred was a girl.

(Q) past+ Be+ NP+ NP  
 Was Fred a girl?

3. Q+ NP+ past+ be+ ing+ Vi+ Loc  $\xrightarrow{T_Q}$   
 The children were walking in the cement.

(Q) past+ be+ NP+ ing+ Vi+ Loc  
 Were the children walking in the cement?

4. Q+ NP+ pres+ be+ ing+ Vi+ X  $\xrightarrow{T_Q}$   
 I am going with you.

(Q) pres+ be+ NP+ ing+ Vi+ X  
 Am I going with you?

(This sentence may present a problem. At least with you should provide some discussion. To some it may seem like a manner adverb. We can mark it X to show we haven't analyzed it yet. This might be a good time to set your students to thinking about manner adverbs and possible subclasses. All of the answers are not now available, but you should remember that in asking questions about such constructions we are going much farther than previous grammars have gone.)



5. Q+ NP+ pres+ be+ ing+ Vid+ Dir T<sub>Q</sub> →  
 They are flying to Hawaii.

(Q) pres+ be+ NP+ ing+ Vid+ Dir  
 Are they flying to Hawaii?

D. 1. Q+ NP+ past+ Vtr+ NP T<sub>Q</sub> →  
 Earwigs ate the shrubbery.

(Q) past+ do+ NP+ Vtr+ NP  
 Did earwigs eat the shrubbery?

#2. Q+ NP+ past+ Vid+ Dir T<sub>Q</sub> →  
 A leprechaun came out of the hole.

(Q) past+ do+ NP+ Vid+ Dir  
 Did the leprechaun come out of the hole?

\*(This is a kind of directional adverb which hasn't been discussed in this grammar--the kind that generally tells from what point rather than toward what point. Your students shouldn't be held responsible for it, but it will be interesting to see what they do with it, and you will perhaps want to discuss it with them briefly.)

3. Q+ NP+ past+ Vtr+ NP T<sub>Q</sub> →  
 She baked a pizza.

(Q) past+ do+ NP+ Vtr+ NP  
 Did she bake a pizza?

4. Q+ NP+ pres+ Vi+ Man T<sub>Q</sub> →  
 Joe drives dangerously.

(Q) pres+ do+ NP+ Vi+ Man  
 Does Joe drive dangerously?

5. Q+ NP+ past+ Vtr+ NP T<sub>Q</sub> →  
 The skunk discouraged him.

(Q) past+ do+ NP+ past+ Vtr+ NP  
 Did the skunk discourage him?



P. 46.

The discussion questions at the top of this page draw together the facts which have been demonstrated by the sentences of the exercise. The addition of Q necessitates a reformulation of the T<sub>Q</sub> transformation of the previous year. And the square brackets are added. This is a new symbol and a very useful one. It should be pointed out in connection with the similarity between the strings of an interrogative sentence and its corresponding declarative that there are a few sentences in English which appear only in the interrogative. For example:

Does he ever do it?

has no corresponding declarative.

\* He ever does it.

Treating this restriction and others like it are important reasons for placing Q in the underlying string. Only in strings with Q can we find ever. And only by transforming the underlying string are we able to generate sentences with ever. Q, of course, is the symbol which triggers the necessary transformation.

Exercise p. 47:

A. 1. NP + pres + be + ing + Vi + Loc  
The boys are sparring in the gym.

Q + NP + pres + be + ing + Vi + Loc  $\xrightarrow{T_Q}$   
Q + pres + be + NP + ing + Vi + Loc  
Are the boys sparring in the gym?

2. NP + past + Vtr + NP  
Jeannie dyed her hair.

Q + NP + past + Vtr + NP  $\xrightarrow{T_Q}$   
(Q) past + do + NP + Vtr + NP  
Did Jeannie dye her hair?

3. NP + pres + have + en + Vtr + NP  
The advisor has called a meeting.

Q + NP + pres + have + en + Vtr + NP  $\xrightarrow{T_Q}$   
(Q) pres + have + NP + en + Vtr + NP  
Has the advisor called a meeting?

9. NP + pres + M + Be + Adj  
You will be sorry.

Q + NP + pres + M + Be + Adj  $\xrightarrow{T_Q}$

(Q) pres + M + NP + Be + Adj  
Will you be sorry?

5. NP + pres + be + ing + Vtr + NP  
The elephants are eating peanuts.

Q + NP + pres + be + ing + Vtr + NP  $\xrightarrow{T_Q}$

(Q) pres + be + NP + ing + Vtr + NP  
Are the elephants eating peanuts?

B. 1. Q + NP + pres + M + Vtr + NP  $\xrightarrow{T_Q}$

(Q) pres + M + NP + Vtr + NP  
Will you pass the potatoes?

2. NP + past + Vid + Dir  
The climber fell into the crevice.

3. Q + NP + past + Vtr + NP + Tm  $\xrightarrow{T_Q}$

(Q) past + do + NP + Vtr + NP + Tm  
Did they reach him last night?

4. NP + pres + have + en + Vtr + NP  
He has seen the report.

5. NP + pres + Vtr + NP + Man  
David composes music easily.

6. Q + NP + pres + have + en + Vtr + NP  $\xrightarrow{T_Q}$

(Q) pres + have + NP + en + Vtr + NP  
Has the band learned the selection?

7. Q + NP + past + M + Vtr + NP  $\xrightarrow{T_Q}$

(Q) past + M + NP + Vtr + NP  
Should we decorate the hall?

- C. (Note: There is a typographical error in the first string of this exercise. There should be only one NP at the beginning: NP + past + write + NP)

Answers will, of course, vary, since they will be original sentences, but it is important that any string which has Q go through T<sub>Q</sub>. More and more your students should be seeing that transformations operate on the underlying strings.

Some possible sentences follow.

1. NP + past + write + NP  
The man wrote a letter.
2. Q + NP + past + write + NP  $\xrightarrow{T_Q}$   
(Q) past + do + NP + write + NP  
Did the man write a letter?
3. NP + pres + have + en + Vlnk + Pr  
The cook has become fat.
4. Q + NP + pres + have + en + Vlnk + Pr  $\xrightarrow{T_Q}$   
(Q) pres + have + NP + en + Vlnk + Pr  
Has the cook become fat?
5. Q + NP + past + be + ing + Vtr + NP + Man  $\xrightarrow{T_Q}$   
(Q) past + be + NP + ing + Vtr + NP + Man  
Was the farmer drilling a well eagerly?
6. Q + NP + past + M + have + en + Vin + Man  $\xrightarrow{T_Q}$   
(Q) past + M + NP + have + en + Vin + Man  
Would he have gone willingly?
7. NP + pres + Vmid + NP  
The book has merit.
8. NP + pres + have + en + Ee + Pr  
We have been at home.



Pages 45-49:

The discussion on these pages is a review whose purpose is to point up the basic similarity of all questions, by showing that they all are built on the yes-or-no question transformation. The important thing is to see that a general rule can account for many apparently different kinds of sentences. And this is, of course, one of the things a transformational grammar tries to do. There would be little advantage in making a different rule for each kind of question, but when an economy can be achieved by making one rule do for many different kinds, there is the obvious advantage of simplicity and, hopefully, of achieving a deeper understanding of the order of the language.

Exercise 3, pp. 49-50:

1. Who locked the door quickly?
2. How did Martha lock the door?
3. Where did she run?
4. Whom did Bill call?
5. When did Bill call the police?
6. When did the bulldozers begin to arrive?
7. What are the bulldozers moving?
8. Who has a bulldozer?
9. Where have the workmen arrived?
10. How will they remove the bomb?

Exercise 4, p. 50:

Answers will vary but the kinds of questions and the elements replaced should be as follows:

1. Wh-question--NP<sup>2</sup> or direct object Noun Phrase
2. Wh-question--subject NP
3. Wh-question--time adverbial
4. Wh-question--manner adverbial
5. Wh-question--subject NP
6. Wh-question--NP<sup>2</sup> or direct object Noun Phrase
7. Wh-question--manner adverbial
8. Wh-question--subject NP
9. Wh-question--NP<sup>2</sup> or direct object Noun Phrase
10. Wh-question--NP<sup>2</sup> or direct object NP
11. Wh-question--subject NP
12. Wh-question--locative adverbial
13. Wh-question--NP<sup>2</sup> or direct object NP
14. Wh-question--time adverbial
15. Wh-question--locative adverbial



Pages 50-54:

The discussion which begins at the bottom of page 50 deals with symbolizing the steps that occur in the production of wh-questions and the formulation of the rule. This is in one sense a review of the question unit in Language II, but it reformulates the rule to take account of the Question element in the kernel sentence. It also adds the useful symbol of the square bracket. It would probably be most useful to use the material on these pages as a class discussion and work out the sentences with the class.

Exercise 5, pp. 54-55:

This exercise deals with the underlying structure of a sentence, which is, of course, one of the most important concepts of the grammar: the sentences of our language involve a great deal of structure which is not always immediately apparent on the surface. And yet it is the underlying structure which explains why sentences are built the way they are, why we accept one sentence as grammatical and another not, and why sentences are sometimes ambiguous.

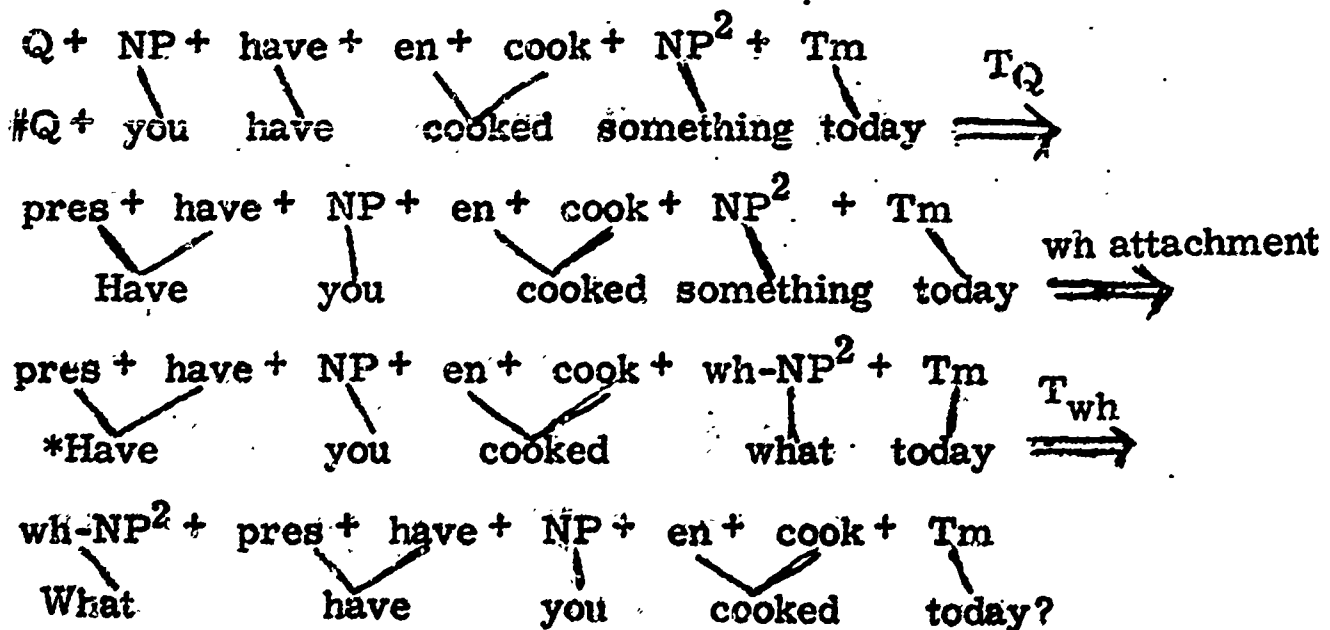
1. Q + the boy + past + steer + the boat + skillfully  $\xrightarrow{T_Q}$   
 past + do + the boy + steer + the + boat + skillfully.  
           Did       the boy   steer    the   boat   skillfully?
  
2. Q + the + boy + past + steer + wh-NP<sup>2</sup> + skillfully.  $\xrightarrow{T_Q}$   
 past + do + boy + steer + wh-NP<sup>2</sup> + skillfully.  $\xrightarrow{T_{wh}}$   
 wh-NP<sup>2</sup> + past + do + the + boy + steer + skillfully.  
           What        did       the   boy   steer   skillfully?
  
3. Q + the monk + plur + past + engrave + the manuscript + wh-Man  $\xrightarrow{T_Q}$   
 past + do + the monks + engrave + the manuscript + wh-Man  $\xrightarrow{T_{wh}}$   
 wh-Man + past + do + the monks + engrave + the manuscript.  
           How        did       the monks   engrave   the manuscript?
  
4. Q + wh-NP + pres + be + ing + whistle + in the park  $\xrightarrow{T_Q}$   
 pres + be + wh-NP + ing + whistle + in the park.  $\xrightarrow{T_{wh}}$   
 wh-NP + pres + be + ing + whistle + in the park.  
           Who        is       whistling   in the park?

5. Q+ The bird + pres + be + ing + whistle + wh-Loc  $\xrightarrow{T_Q}$   
 Pres + be + The bird + ing + whistle + wh-Loc  $\xrightarrow{T_{wh}}$   
 wh-Loc + pres + be + the bird + ing + whistle  
 Where is the bird whistling?
6. Q+ wh-NP + pres + have + en + arrive + on time.  $\xrightarrow{T_Q}$   
 pres + have + wh-NP + en + arrive + on time.  $\xrightarrow{T_{wh}}$   
 wh-NP + pres + have + en + arrive + on time.  
 Who has arrived on time?
7. Q+ The grandparents + have + en + arrive + wh-Tm.  $\xrightarrow{T_Q}$   
 pres + have + The grandparents + en + arrive + wh-Tm  $\xrightarrow{T_{wh}}$   
 wh-Tm + pres + have + the grandparents + en + arrive.  
 When have the grandparents arrived?
8. Q+ The movie + past + amuse + wh-NP<sup>2</sup>  $\xrightarrow{T_Q}$   
 past + do + the movie + amuse + wh-NP<sup>2</sup>  $\xrightarrow{T_{wh}}$   
 wh-NP<sup>2</sup> + past + do + the movie + amuse  
 Whom did the movie amuse?

Exercise 6, p. 55:

This exercise is the opposite of the preceding one. It works from sentence back to kernel. But its purpose is the same: to give the student practice in recognizing the underlying structure.

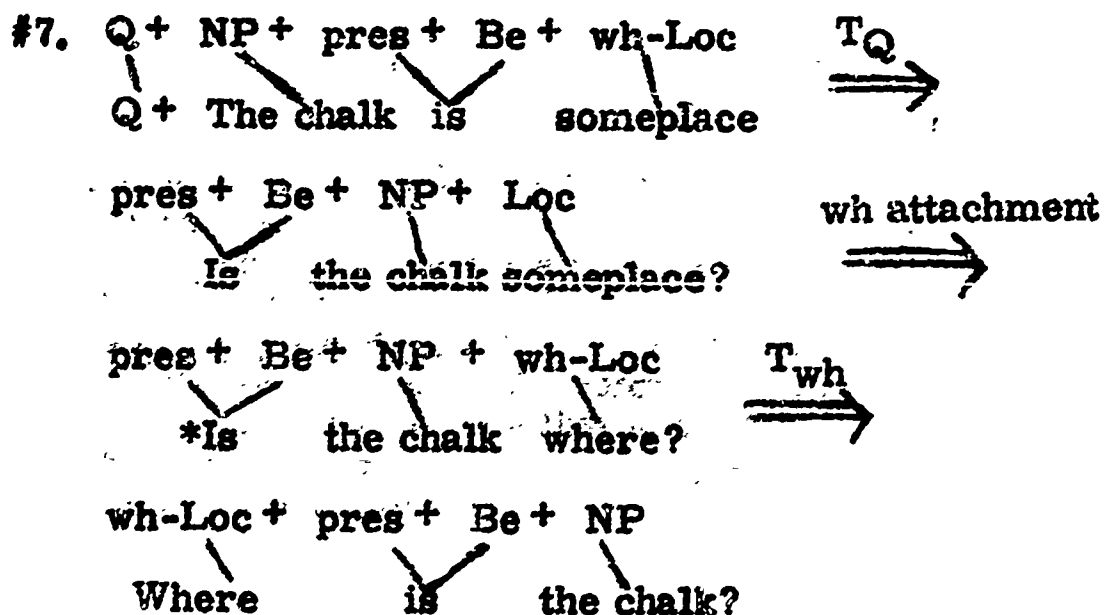
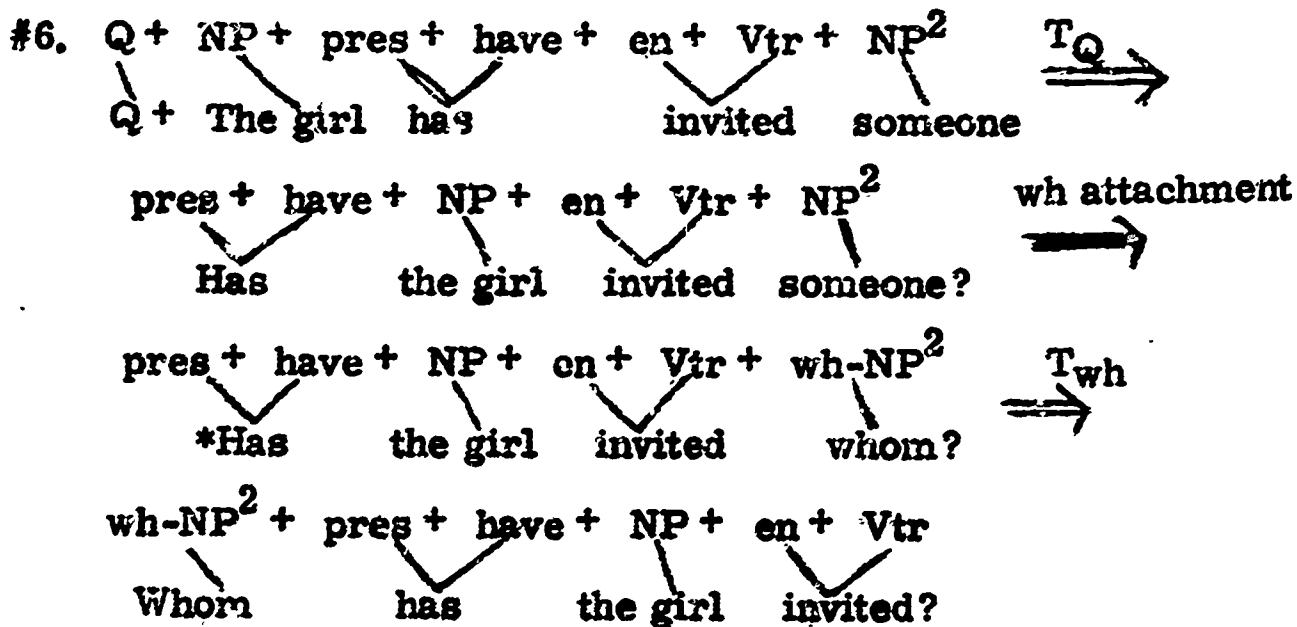
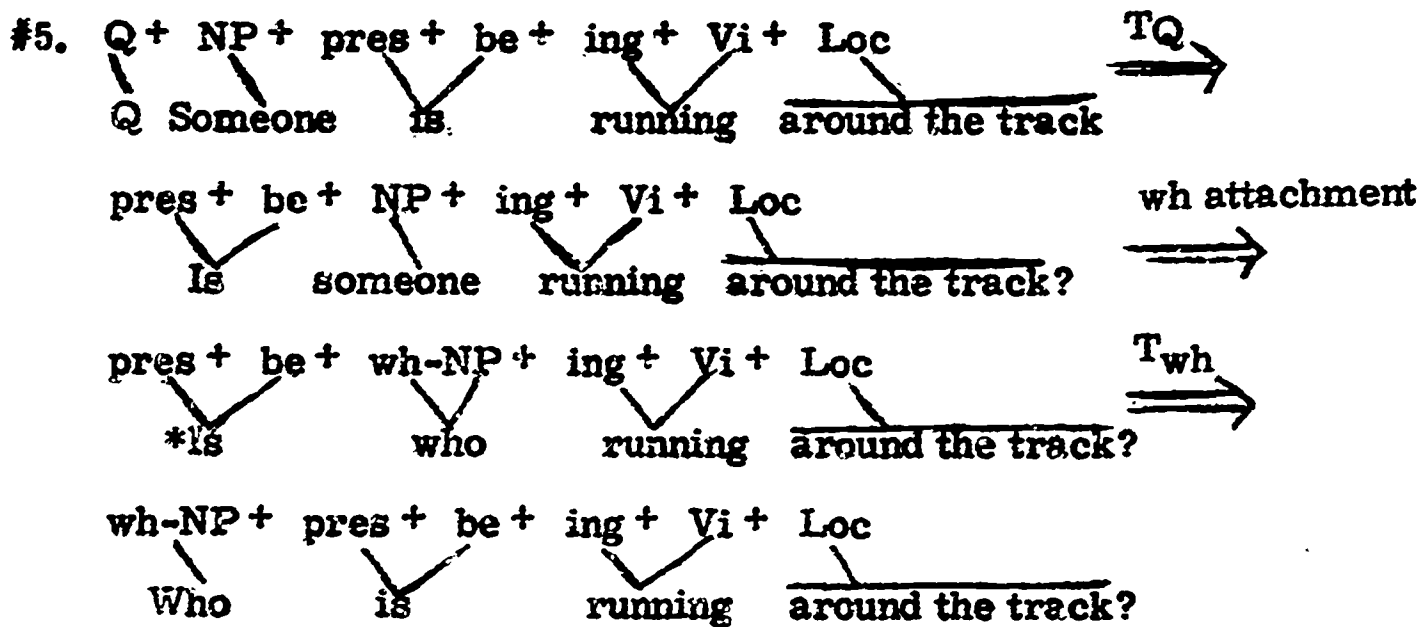
The example has had a step omitted. It should look like this:



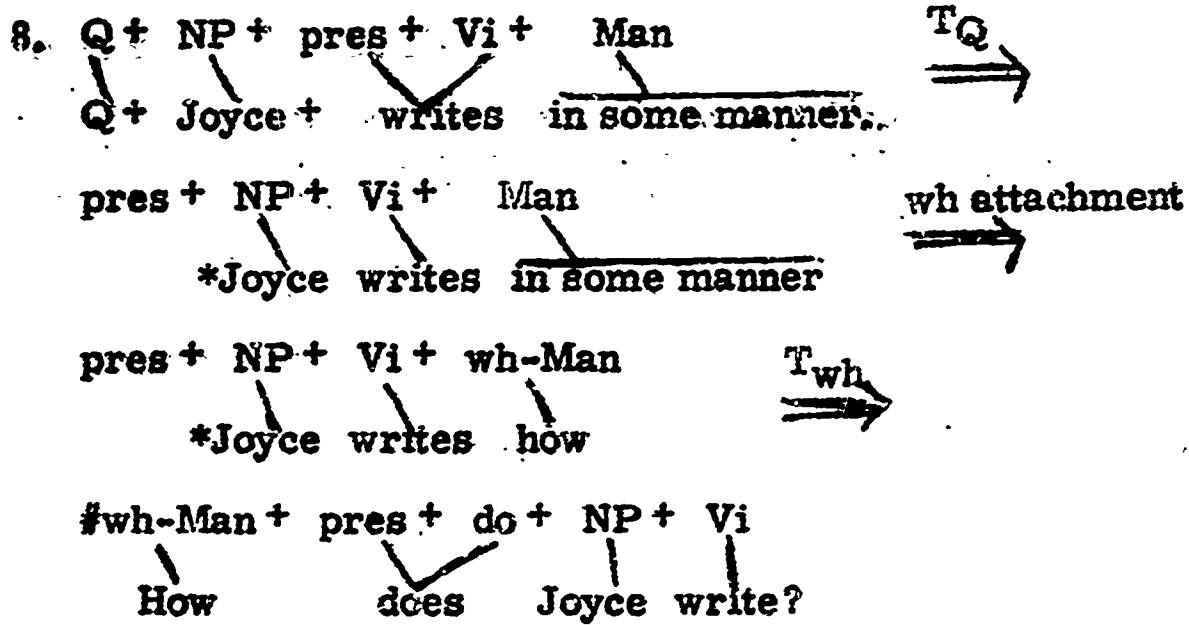
1. Q + NP + pres + have + en + finish + NP<sup>2</sup>  $\xrightarrow{T_Q}$   
 Q + The boy has finished the model
- pres + have + NP + en + finish + NP<sup>2</sup>  
 Has the boy finished the model?
- #2. Q + NP + pres + have + en + finish + NP<sup>2</sup>  $\xrightarrow{T_Q}$   
 Q + The boy has finished something
- pres + have + NP + en + finish + NP<sup>2</sup>  $\xrightarrow{\text{wh attachment}}$   
 Has the boy finished something
- pres + have + NP + en + finish + wh-NP<sup>2</sup>  $\xrightarrow{T_{wh}}$   
 \*Has the boy finished what
- wh-NP<sup>2</sup> + pres + have + NP + en + finish  
 What has the boy finished?
- #3. Q + NP + pres + M + Vid + Dir + Tm  $\xrightarrow{T_Q}$   
 Q + We will go to town at sometime
- pres + M + NP + Vid + Dir + Tm  $\xrightarrow{\text{wh attachment}}$   
 Will we go to town at sometime
- pres + M + NP + Vid + Dir + wh-Tm  $\xrightarrow{T_{wh}}$   
 \*Will we go to town when
- wh-Tm + pres + M + NP + Vid + Dir  
 When will we go to town?
- #4. Q + NP + past + Vtr + NP<sup>2</sup> + Loc  $\xrightarrow{T_Q}$   
 Q + Mary found something in the basket.
- past + NP + Vtr + NP<sup>2</sup> + Loc  $\xrightarrow{\text{wh attachment}}$   
 \*Mary find something in the basket
- past + NP + Vtr + wh-NP<sup>2</sup> + Loc  $\xrightarrow{T_{wh}}$   
 \*Mary find what in the basket
- wh-NP<sup>2</sup> + past + do + NP + Vtr + Loc  
 #What did Mary find in the basket?



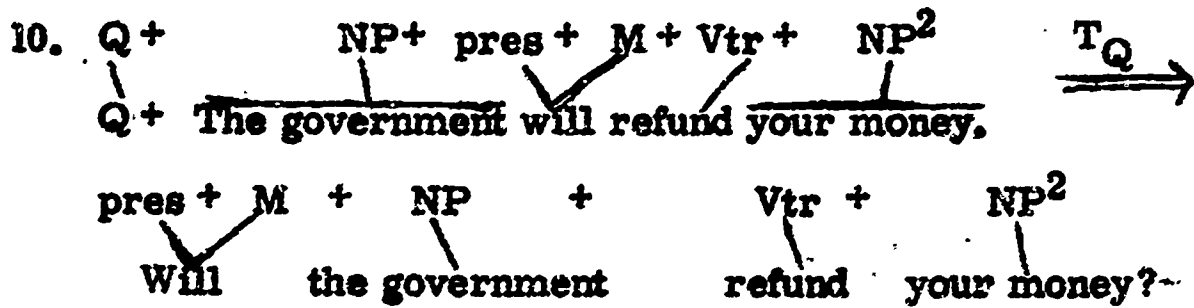
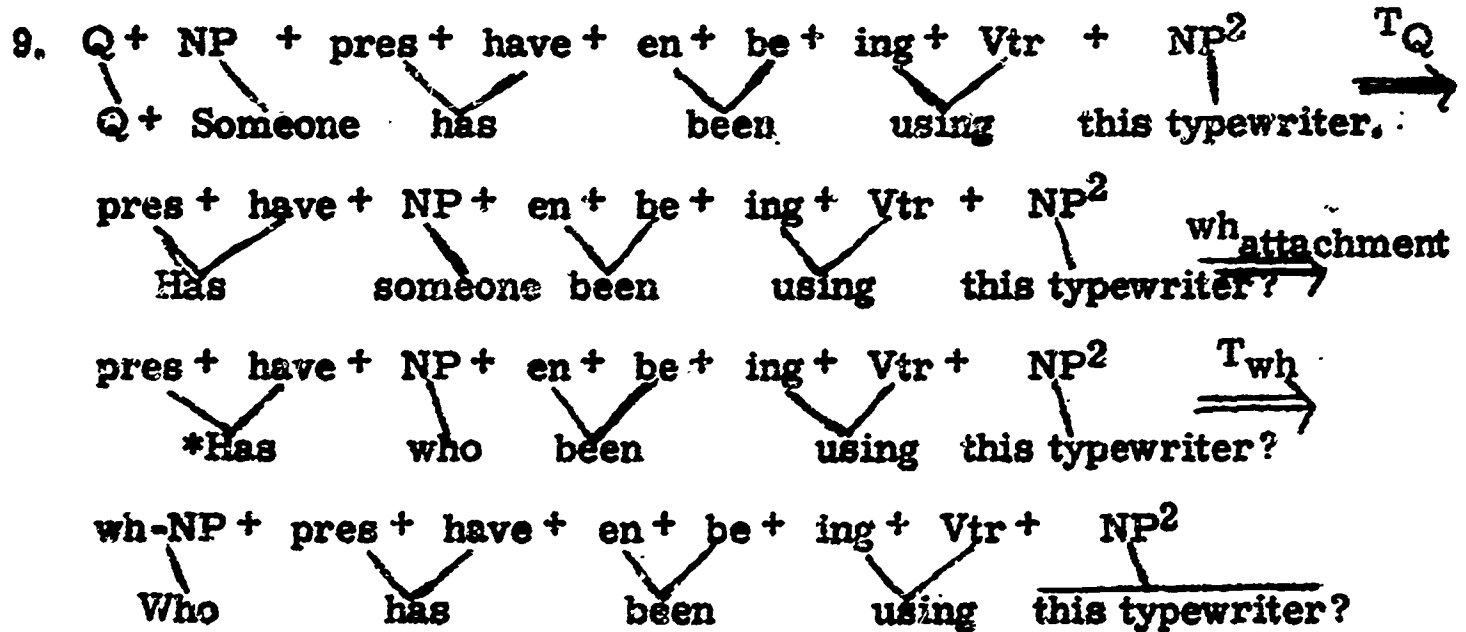
(# Actually the addition of do is a separate transformation, but we haven't formalized it yet. We have made the point that it should be added after the other transformations; so we have left the place where it goes blank and put it in, in the last step. Perhaps students can be led to see, in this way, that the tense has nothing to attach to until the do has been added and that without it the transformed sentences are not grammatical.)







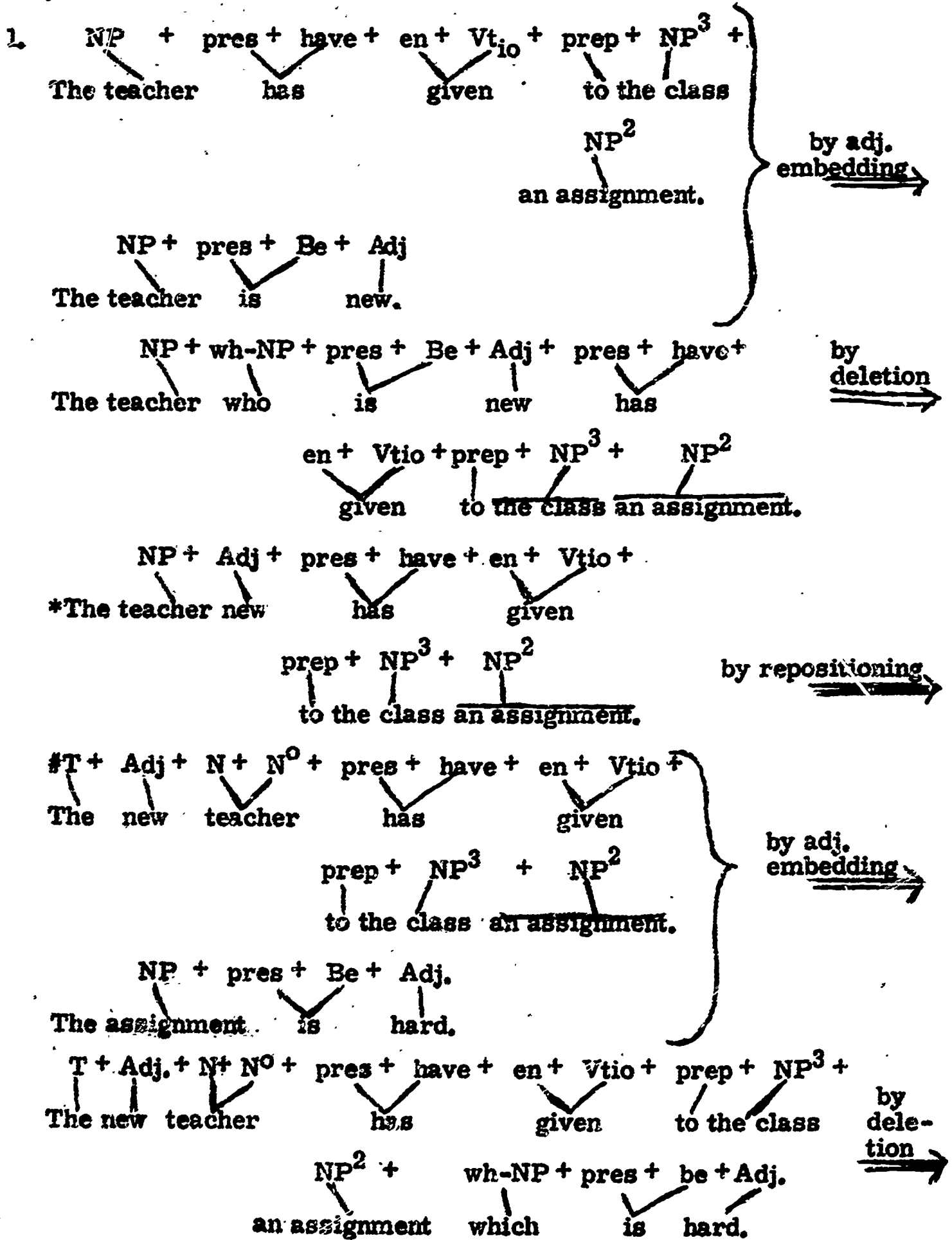
(#See the note to 4 above.)



#(When we reconstruct the underlying structure for sentences such as those in the example and in 2, 3, 4, 5, 6, 7, 8, and 9 of this exercise where there are question words such as who, whom, what, where, when, and how, we know that the words have replaced an element in the underlying source and we know what that element was--a NP, or Loc, Tm, or Man. But we can't know what specific NP or Loc, etc., might have existed. Therefore we can only use an indefinite NP or Loc, etc. We can say that underlying who or whom is someone; underlying where is some place, etc. This is a concept which has broad implications.)

Cumulative review, p. 56:

(This is a time consuming exercise. You might want to assign the sentences to small groups and have each group explain the one they have worked out.)



T + Adj + N + N<sup>0</sup> + pres + have + en + V<sub>tio</sub>  
 \*The new teacher has given

prep + NP<sup>3</sup> + NP<sup>2</sup> + Adj  
 to the class an assignment hard

repositioning

T + Adj + N + N<sup>0</sup> + pres + have + en + V<sub>tio</sub> +  
 The new teacher has given

prep + NP<sup>3</sup> + T + Adj + N + N<sup>0</sup>  
 to the class a hard assignment.

deletion of prep.

T + Adj + N + N<sup>0</sup> + pres + have + en + V<sub>tio</sub> + NP<sup>3</sup> +  
 The new teacher has given the class

T + Adj + N + N<sup>0</sup>  
 a hard assignment.

(#When the adjective is repositioned before the noun, it, of course, comes between the determiner and noun. Thus, in this step NP ⇒ T + N + N<sup>0</sup>. When the adjective hard is repositioned the determiner must become a.)

2. NP + pres + V<sub>mid</sub> + NP  
 Cherries make pies

by adjective embedding

NP + pres + Be + Adj  
 Pies are good

NP + pres + V<sub>mid</sub> + NP + wh-NP + pres + Be + Adj  
 Cherries make pies which are good

deletion

NP + pres + V<sub>mid</sub> + NP + Adj  
 Cherries make pies good

repositioning

NP + pres + V<sub>mid</sub> + T + Adj + N + N<sup>o</sup>  
 Cherries make good pies.

NP + pres + V<sub>mid</sub> + NP  
 Peaches make pies

NP + pres + Be + Adj  
 Pies are good

by adjective embedding

NP + pres + V<sub>mid</sub> + NP + wh-NP + pres + Be + Adj deletion  
 Peaches make pies which are good

conjunction

NP + pres + V<sub>mid</sub> + NP + Adj repositioning  
 Peaches make pies good

NP + pres + V<sub>mid</sub> + T + Adj + N + N<sup>o</sup>  
 Peaches make good pies

NP + and + NP + pres + V<sub>mid</sub> + T + Adj + N + N<sup>o</sup>  
 Cherries and peaches make good pies.

3. NP + pres + Be + NP  
 The girl is a senior

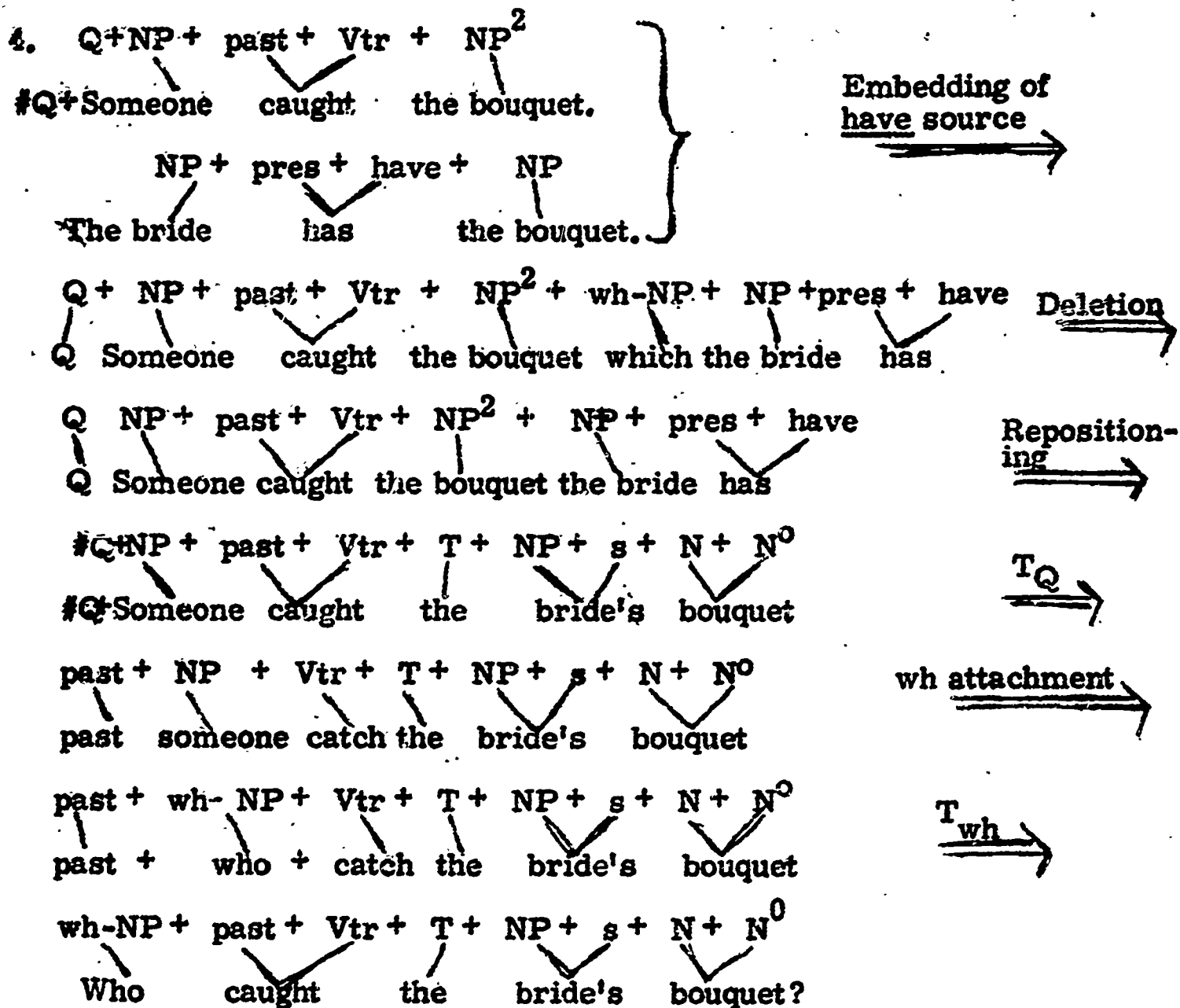
embedding

#NP + pres + V<sub>i</sub> + Tm  
 The girl finished first

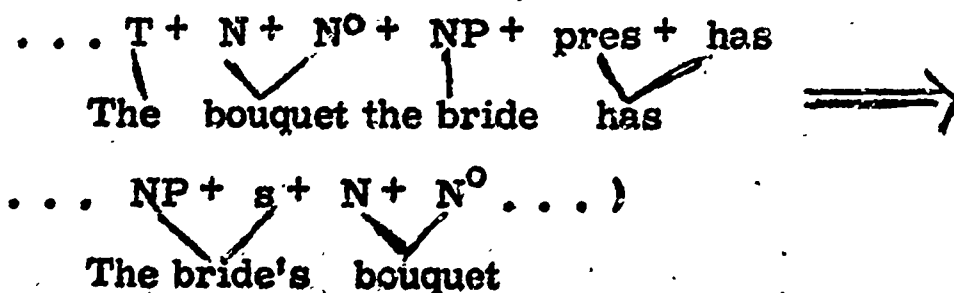
NP + wh-NP + pres + V<sub>i</sub> + Tm + pres + Be + NP  
 The girl who finished first is a senior.

(#The source sentence The girl finished first is not, obviously, an NP + Aux + Be + Pr sentence, which is the kind the student has had experience with. However, the embedding process is exactly the same. The only condition is that the NP of the consumer after which the source is embedded must be identical to the NP subject of the source. In this case girl in the consumer is identical to girl in the source)





(# When the repositioning of bride + has takes place, it replaces the determiner of the bride. Therefore NP must be rewritten as  $T + N + N^0$  in this step.



5. (An interesting problem of the order of transformations arises in this sentence. Actually there are a number of transformations involved: the passive, an adjective embedding,  $T_Q$ , and  $T_{wh}$  leading to the when question. You can discover by trial and error that if the adjective is embedded first we have to move it along with the rest of  $NP^2$  in the passive and question transformations, since it would now be a part of that NP. It may be simpler, therefore, to embed it afterwards. As we work with more complicated sentences involving several transformations, this problem of the order will appear more often. Students should begin to realize that it is important in preparation for a unit on the ordering of transformations in Language V.)

Q+ NP + pres + have + en + Vtr + NP<sup>2</sup> + Tm T<sub>Passive</sub>  
 #Q+ Someone has painted the house at sometime.

Q+ NP<sup>2</sup> + pres + have + en + be + en + Vtr +  
 Q The house has been painted deletion  
 by + NP<sup>1</sup> + Tm  
 by someone at sometime.

Q+ NP<sup>2</sup> + pres + have + en + be + en + Vtr + Tm T<sub>Q</sub>  
 Q+ The house has been painted at sometime.

Pres + have + NP + en + be + en + Vtr + Tm # T<sub>wh</sub>  
 Has the house been painted at sometime?

wh-Tm + pres + have + NP + en + be + en + Vtr } adjective embedding  
 When has the house been painted?  
 NP + pres + Be + Adj  
 The house is yellow.

wh-Tm + pres + have + NP + wh-NP + pres + Be + Adj + deletion  
 When has the house which is yellow  
 en + Be + en + Vtr  
 been painted?

wh-Tm + pres + have + NP + Adj + en + be + en + Vtr repositioning  
 \* When has the house yellow been painted?

wh-Tm + pres + have + T + Adj + N + N<sup>0</sup> + en + be + en + Vtr  
 When has the yellow house been painted?

(# The Q must be carried along in the strings until the transformation which it indicates has been performed. Then it may be carried or dropped.

Because Adj is placed between the determiner and noun, NP must be rewritten T + N + N<sup>0</sup> when that step takes place.)

\*(Actually the wh-attachment has been telescoped into this step. You will probably want to have your students include it between T<sub>Q</sub> + T<sub>wh</sub>.

Pres + have + NP + en + be + en + Vtr + wh-Tm  
 Has the house been painted when?)

THE NEGATIVE

This unit considers primarily the simple negative formed with not. The different treatment of strings like

A) . . . Tns +  $\left. \begin{matrix} \text{be} \\ \text{have} \\ \text{M} \end{matrix} \right\} . . .$

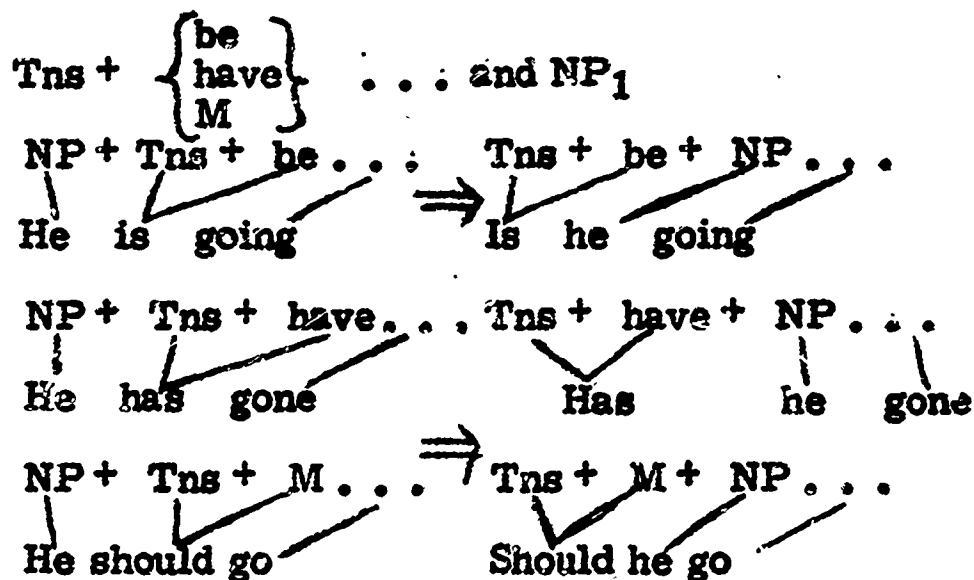
and those like

B) . . . Tns + Vrb . . .

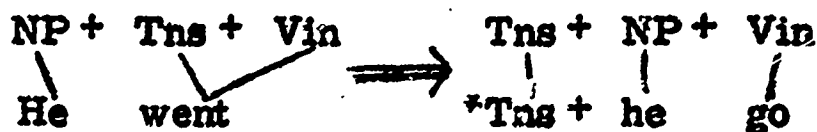
in regard to the negative is the most important concept of this unit. The treatment of B) occasions the insertion of do as support for a Tns which has no place to attach itself. The negative transformation inserts Neg in strings like B) in a position right after Tns. Not however cannot be past or pres. Do is thus introduced by

$T_{do}$  Tns  $\Rightarrow$  Tns + do

where Tns is not followed by be, have, M, or Vrb. But  $T_{do}$  is not a transformation which is necessary simply in negative sentences. Yes-or-no questions sometimes require it also. Note that questions of this type invert:



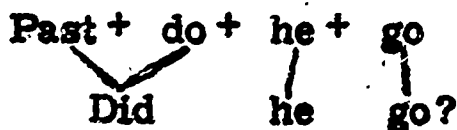
However, where a string has the form NP + Tns + Verb only the Tns and NP are inverted:



$T_{do}$  then operates since he is not be, have, M, or Vrb (and of course Tns cannot attach to he.)

$\text{Tns} + \text{he} \Rightarrow \text{Tns} + \text{do} + \text{he}$

with this result



Other structural changes, such as emphasis, also require the operation of do - support.

He + tns + emphasis + go  $\Rightarrow$  He did go.

But we won't attempt to formulate this use at this time.



ANSWERS TO EXERCISES

May we suggest that you work through the material on pp. 1 - 5 with your class. Each step in the process of formulating the rule is worked out as a guide for you to use and, of course, for the students to refer to. But they will probably be more clear if you can use the board to illustrate each one and to get the students to think them through.

Exercise pp. 57-58 :

1. NP + pres + be + ing + Vin      NP + pres + be + Neg + ing + Vin  
Tom            is            going.      Tom            is            not            going.

2. NP + past + M + Vtr + NP<sup>2</sup>  
The driver    could    explain the accident.

NP + past + M + Neg + Vtr + NP<sup>2</sup>  
The driver    could    not    explain the accident.

3. NP + past + have + en + Vtr + NP<sup>2</sup> + Loc  
I            had            made    an A    in History.

NP + past + have + Neg + en + Vtr + NP<sup>2</sup> + Loc  
I            had            not    made    an A    in History.

4. NP + past + M + Vtr + NP<sup>2</sup>  
Basil        would    meet the requirements.

NP + past + M + Neg + Vtr + NP<sup>2</sup>  
Basil        would    not    meet the requirements.

5. NP + pres + have + en + Vtr + NP<sup>2</sup>  
This        has            solved our problem.

NP + pres + have + Neg + en + Vtr + NP<sup>2</sup>  
This        has            not    solved our problem.

6. NP + pres + M + Vid + Dir  
The boys    will            go to the game.

NP + pres + M + Neg + Vid + Dir  
The boys    will            not    go to the game.

7. NP + past + be + ing + Vtr + NP<sup>2</sup>  
Alice        was            attending the play.

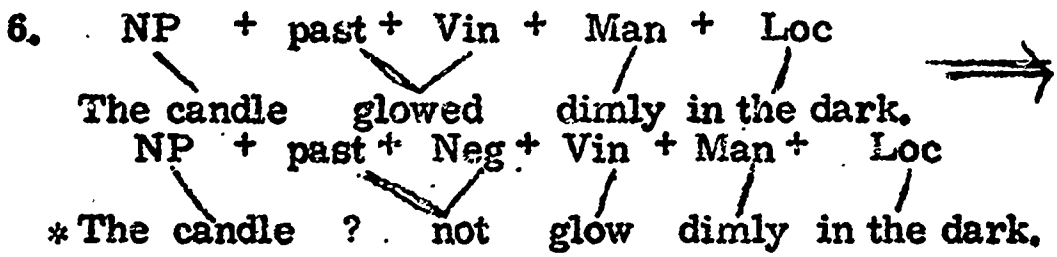
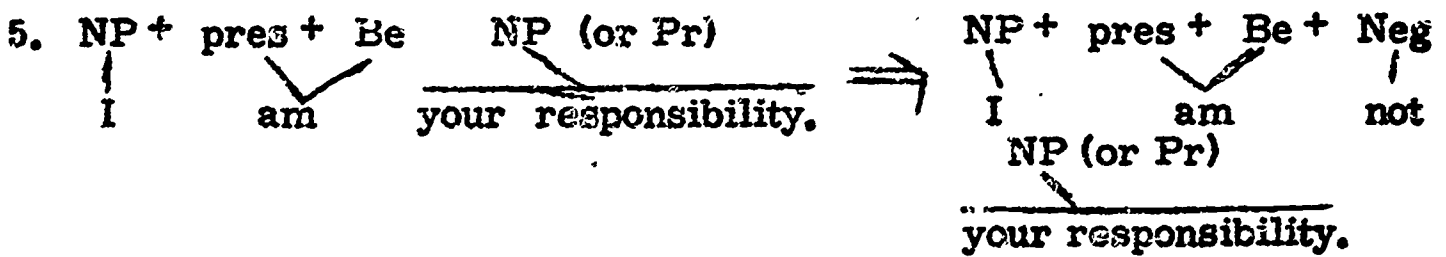
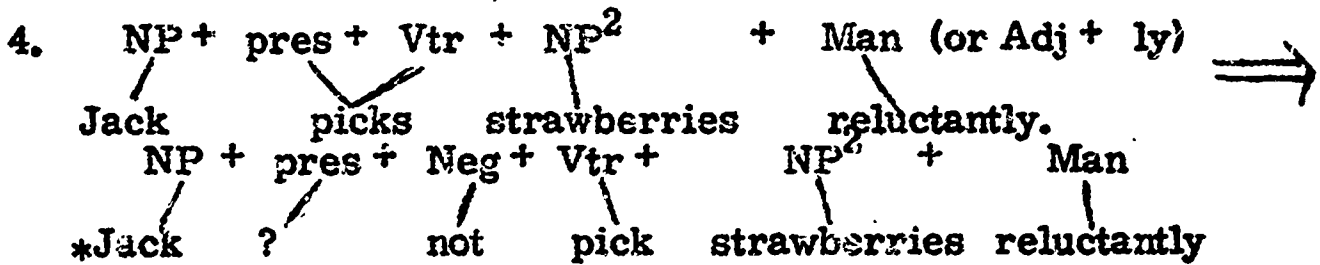
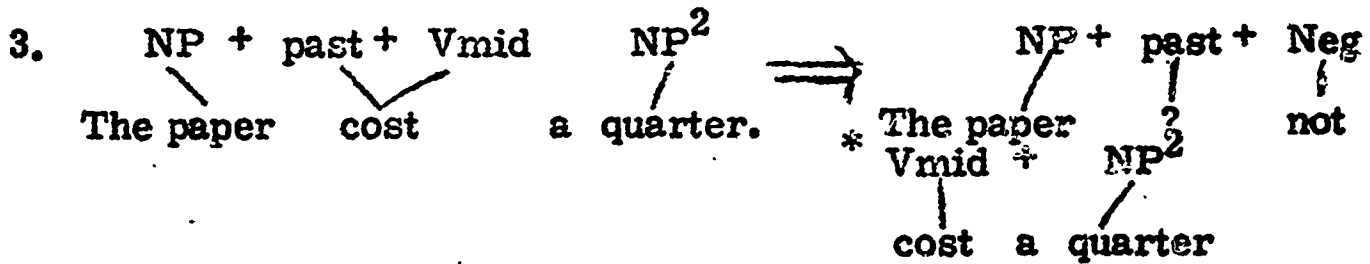
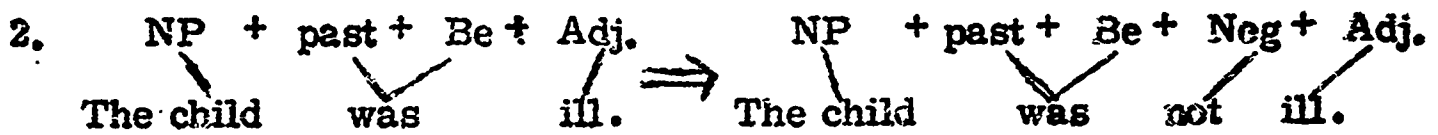
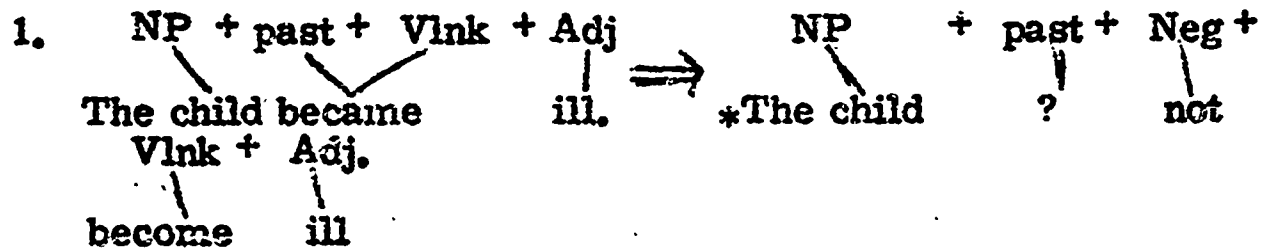
NP + past + be + Neg + ing + Vtr + NP<sup>2</sup>  
Alice        was            not    attending the play.



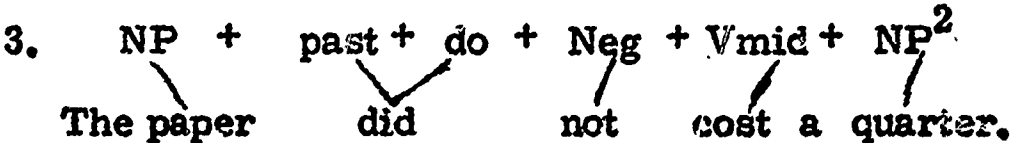
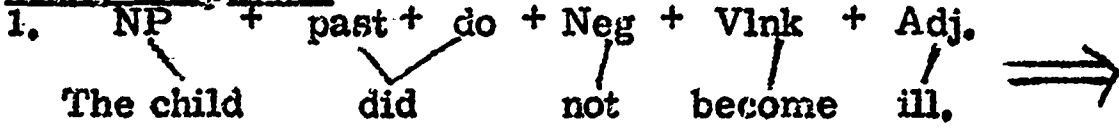
Students will find that not is always inserted after have, be, and M to produce grammatical negative sentences.

Exercise p. 59 :

This exercise proves that Tns cannot attach to not.



Exercise p. 51 :



4. NP + pres + do + Neg + Vtr + NP<sup>2</sup> + Man  
 Jack does not pick strawberries reluctantly. ⇒

6. NP + past + do + Neg + Vin + Man + Loc  
 The candle did not glow dimly in the dark.

Exercise p. 52 :

Our concern in this exercise is with do support and in formalizing the occasions when the negative transformation makes it necessary.

1. NP + past + Vtdir + NP<sup>2</sup> + Dir  
 The rain knocked the flowers to the ground.  $\xrightarrow{T_{Neg}}$   
 NP + past + Neg + Vtdir + NP<sup>2</sup> + Dir  $\xrightarrow{T_{do}}$   
 NP + past + do + Neg + Vtdir + NP<sup>2</sup> + Dir  
 The rain did not knock the flowers to the ground.

2. NP + pres + M + Vtr + NP<sup>2</sup> + Loc  $\xrightarrow{T_{Neg}}$   
 The team will hold a rally in the gym.  
 NP + pres + M + Neg + Vtr + NP<sup>2</sup> + Loc  
 The team will not hold a rally in the gym.

3. NP + past + Vtr + NP<sup>2</sup> + Loc  $\xrightarrow{T_{Neg}}$   
 Kofax pitched a no-hitter in Minneapolis.  
 NP + past + Neg + Vtr + NP<sup>2</sup> + Loc  $\xrightarrow{T_{do}}$   
 NP + past + do + Neg + Vtr + NP<sup>2</sup> + Loc  
 Kofax did not pitch a no-hitter in Minneapolis.

4. NP + pres + Vid + Dir + Tm  $\xrightarrow{T_{Neg}}$   
 Lorna goes to our school this year.  
 NP + pres + Neg + Vid + Dir + Tm  $\xrightarrow{T_{do}}$   
 NP + pres + do + Neg + Vid + Dir + Tm  
 Lorna does not go to our school this year.

5. NP + pres + Vtr + NP<sup>2</sup> + Tm      T<sub>Neg</sub> →  
 The cafeteria serves fish on Friday.      T<sub>do</sub> →  
 NP + pres + Neg + Vtr + NP<sup>2</sup> + Tm      ⇒  
 NP + pres + do + Neg + Vtr + NP<sup>2</sup> + Tm  
 The cafeteria does not serve fish on Friday.

Exercise p. 64 :

1. The puppy followed the children to school. (NP + Tns + Vt<sub>dir</sub> + NP<sup>2</sup> + Dir)

The puppy did not follow the children to school. T<sub>Neg</sub> →  
 (Neg + NP + Tns + Vt<sub>dir</sub> + NP<sup>2</sup> + Dir)

NP + Tns + Neg + Vt<sub>dir</sub> + NP<sup>2</sup> + Dir      T<sub>do</sub> →  
 NP + Tns + do + Neg + Vt<sub>dir</sub> + NP<sup>2</sup> + Dir  
 The puppy did not follow the children to school.

2. Many teenagers dunk french fries in catsup. (NP + Tns + Vtr + NP<sup>2</sup> + Dir.)

Many teenagers do not dunk french fries in catsup. T<sub>Neg</sub> →  
 (Neg + NP + Tns + Vt<sub>dir</sub> + NP<sup>2</sup> + Dir.)

NP + Tns + Neg + Vt<sub>dir</sub> + NP<sup>2</sup> + Dir      T<sub>do</sub> →  
 NP + Tns + do + Neg + Vt<sub>dir</sub> + NP<sup>2</sup> + Dir  
 Teenagers do not dunk french fries in catsup.

3. The culprit could explain everything. (NP + Tns + M + Vtr + NP<sup>2</sup>)

The culprit could not explain everything. T<sub>Neg</sub> →  
 (Neg + NP + Tns + M + Vtr + NP<sup>2</sup>)

NP + Tns + M + Neg + Vtr + NP<sup>2</sup>  
 The culprit could not explain everything.

4. We saluted the flag during the ceremony. (NP + Tns + Vtr + NP<sup>2</sup> + Tm)

We did not salute the flag during the ceremony. T<sub>Neg</sub> →  
 (Neg + NP + Tns + Vtr + NP<sup>2</sup> + Tm)

NP + Tns + Neg + Vtr + NP<sup>2</sup> + Tm      T<sub>do</sub> →  
 NP + Tns + do + Neg + Vt + NP<sup>2</sup> + Tm  
 We did not salute the flag during the ceremony.

5. His uniform was spotless. (NP + Tns + Be + Adj.)  
 His uniform was not spotless. <sup>T</sup>Neg  
 (Neg + NP + Tns + Be + Adj.)  $\implies$

NP + Tns + Be + Neg + Adj  
 His uniform was not spotless.

6. The tornado had destroyed the town. (NP + Tns + have + en + Vtr + NP<sup>2</sup>)

The tornado had not destroyed the town. <sup>T</sup>Neg  
 (Neg + NP + Tns + have + en + Vtr + NP<sup>2</sup>)  $\implies$

NP + Tns + have + Neg. + en + Vtr + NP<sup>2</sup>  
 The tornado had not destroyed the town.

An exercise in research, p. 54:

Students might be interested in examining the many other ways of making sentences negative. Such a consideration reveals the real complexity of the negative and might include a discussion of

- 1) the determiner, such as no
- 2) none (which may result from no + one  $\implies$  none)
- 3) nothing (no + thing  $\implies$  nothing)
- 4) neither . . . nor
- 5) never
- 6) Neg affixes or prefixes, such as non, un, dis, in, etc.

Standard usage frowns upon the use of two negative words in a sentence, but it accepts a negative prefix and a negative word

He is not unwilling.  
 We are never unwelcome.

- 7) the tag question which provides a negative tag if the original statement is positive, thus:

He did it, didn't he?  
 I didn't see it, did you?  
 He hasn't appeared, has he?

- 8) the degree to which words like hardly, scarcely, and seldom make a sentence negative.

He seldom goes to games.  
 He never goes to games.

Exercise pp. 37-68 :

1. The team was discouraged.  $\implies$   
 The team was not discouraged.  $\implies$   
 Wasn't the team discouraged?



2. The repairmen have been working all summer.  $\Rightarrow$   
The repairmen have not been working all summer.  $\Rightarrow$   
Haven't the repairmen been working all summer?
3. The squirrel raced to the treetop.  $\Rightarrow$   
The squirrel did not race to the treetop.  $\Rightarrow$   
Didn't the squirrel race to the treetop?
4. Bill is running for president.  $\Rightarrow$   
Bill is not running for president.  $\Rightarrow$   
Isn't Bill running for president?
5. The nurse discovered the serum in the icebox.  $\Rightarrow$   
The nurse did not discover the serum in the icebox.  $\Rightarrow$   
Didn't the nurse discover the serum in the icebox?
6. The group will take off in the morning.  $\Rightarrow$   
The group will not take off in the morning.  $\Rightarrow$   
Won't the group take off in the morning?
7. A bird flew into the attic.  $\Rightarrow$   
A bird did not fly into the attic.  $\Rightarrow$   
Didn't a bird fly into the attic?
8. This is John's typewriter.  $\Rightarrow$   
This is not John's typewriter.  $\Rightarrow$   
Isn't this John's typewriter?  
(Students will notice that John's is the result of possessive embedding. Further consideration to the order of transformations when several are involved in one sentence will be given in Language V units.)
9. The class has counted the errors.  $\Rightarrow$   
The class has not counted the errors.  $\Rightarrow$   
Hasn't the class counted the errors?
10. We have been reviewing the exercises.  $\Rightarrow$   
We have not been reviewing the exercises.  $\Rightarrow$   
Haven't we been reviewing the exercises?

Exercise p. 33 :

This exercise gives students an opportunity to write transformed strings for questions, negative questions, questions requiring do support, and negative questions requiring do support. Most important is the practice the student has in ordering the steps by which we reach a desired transformation. Sentences for the final transformed strings will vary, but the underlying strings should look like this:

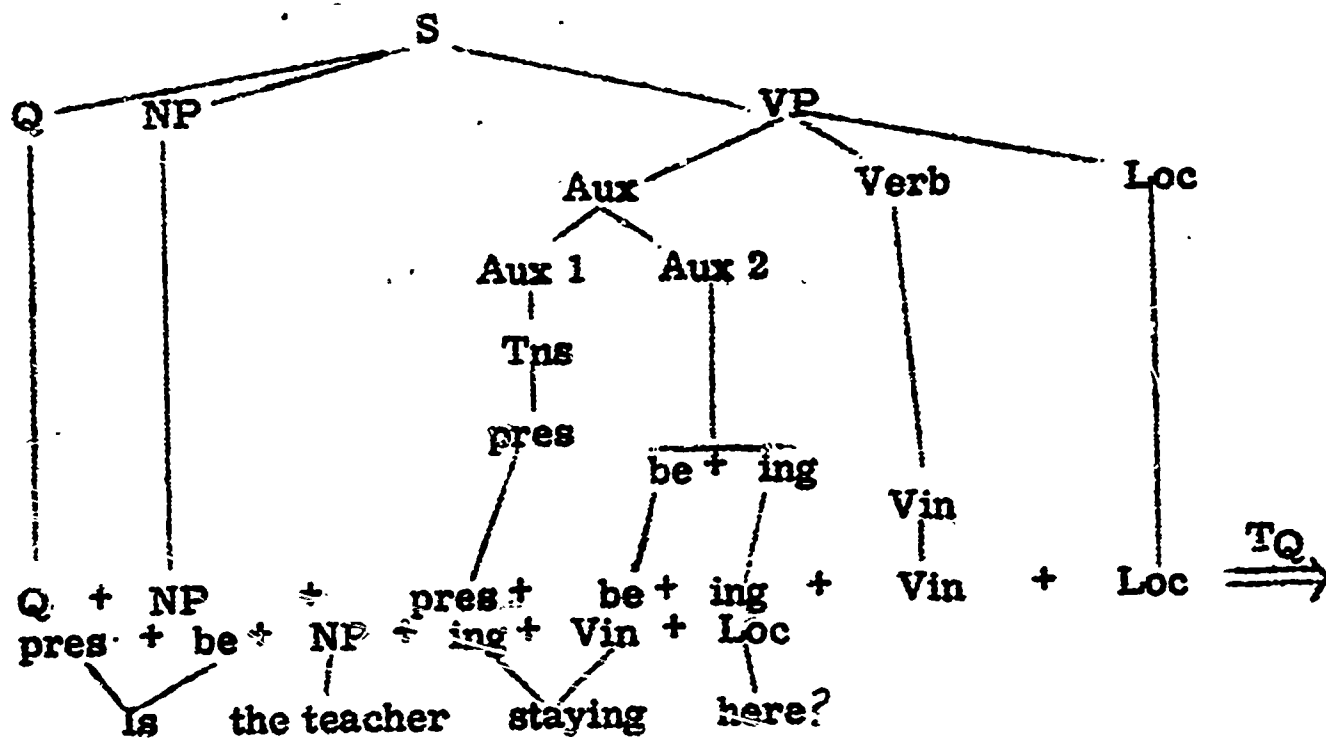
1. Q + NP + past + have + en + Vin + Man  $\xrightarrow{T_Q}$   
#(Q)+ past + have + NP + en + Vin + Man
2. Q + NP + pres + M + have + en + Vlnk + Adj  $\xrightarrow{T_Q}$   
(Q)+ pres + M + NP + have + en + Vlnk + Adj

3. Q+ NP+ pres+ Be+ NP  $\xrightarrow{T_Q}$   
 (Q)+ pres+ Be+ NP+ NP
4. Neg+ NP+ past+ M+ Be+ Adj  $\xrightarrow{T_{Neg}}$   
 NP+ past+ M+ Neg+ Be+ Adj
5. Neg+ NP+ past+ be+ ing+ Vin+ Tm  $\xrightarrow{T_{Neg}}$   
 NP+ past+ be+ Neg+ ing+ Vin+ Tm
6. Neg+ NP+ pres+ Vmid+ NP+ Loc  $\xrightarrow{T_{Neg}}$   $\xrightarrow{T_{do}}$   
 NP+ pres+ Neg+ Vmid+ NP+ Loc  
 NP+ pres+ do+ Neg+ Vmid+ NP+ Loc
7. Q+ Neg+ NP+ pres+ be+ ing+ Vtr+ NP+ Man  $\xrightarrow{T_{Neg}}$   
 (Q)+ NP+ pres+ be+ Neg+ ing+ Vtr+ NP+ Man  $\xrightarrow{T_Q}$   
 (Q)+ pres+ be+ Neg+ NP+ ing+ Vtr+ NP+ Man
8. Q+ Neg+ NP+ past+ M+ have+ en+ Vlnk+ Pr  $\xrightarrow{T_{Neg}}$   
 (Q)+ NP+ past+ M+ Neg+ have+ en+ Vlnk+ Pr  $\xrightarrow{T_Q}$   
 (Q)+ past+ M+ Neg+ NP+ have+ en+ Vlnk+ Pr
8. Q+ Neg+ NP+ past+ have+ en+ Vtr+ NP+ Loc  $\xrightarrow{T_{Neg}}$   
 (Q)+ NP+ past+ have+ Neg+ en+ Vtr+ NP+ Loc  $\xrightarrow{T_Q}$   
 (Q)+ past+ have+ Neg+ NP+ en+ Vtr+ NP+ Loc
10. Q+ Neg+ NP+ pres+ Vt<sub>dir</sub>+ NP+ Dir  $\xrightarrow{T_{Neg}}$   
 (Q)+ NP+ pres+ Neg+ Vt<sub>dir</sub>+ NP+ Dir  $\xrightarrow{T_Q}$   
 (Q)+ pres+ Neg+ NP+ Vt<sub>dir</sub>+ NP+ Dir  $\xrightarrow{T_{do}}$   
 (Q)+ pres+ do+ Neg+ Vt<sub>dir</sub>+ NP+ Dir

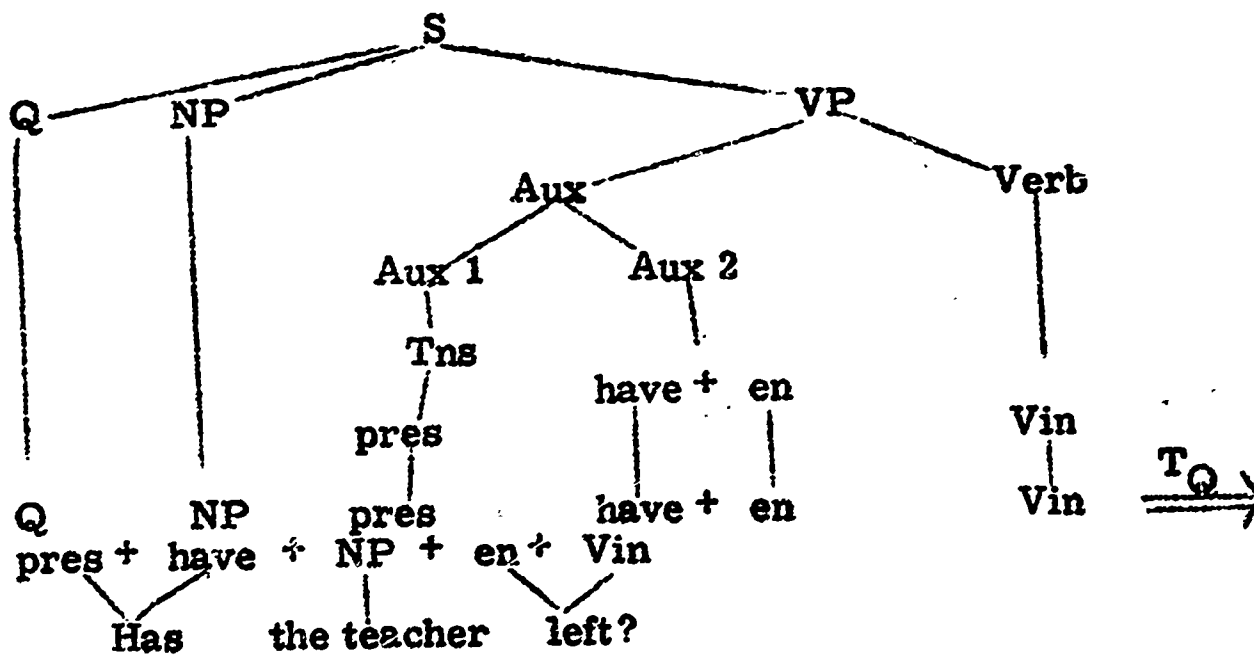
\*(The symbol Q may be carried optionally in the strings after the yes-or-no transformation has been performed, or it may be dropped. If it is carried it simply indicates that the sentence will be read as a question, with rising inflection. T<sub>Q</sub> simply arranges the elements in the right order.)

Exercise, pp. 68-69:

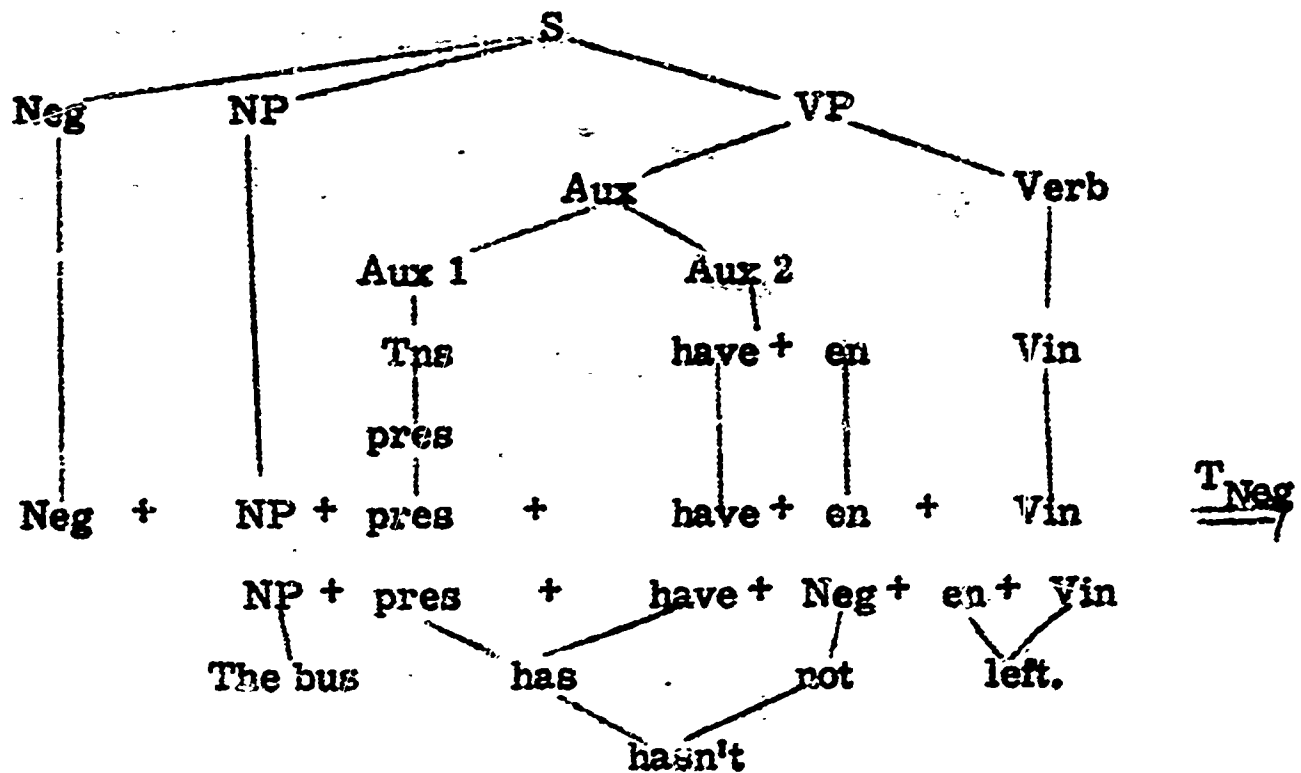
1. Is the teacher staying here?



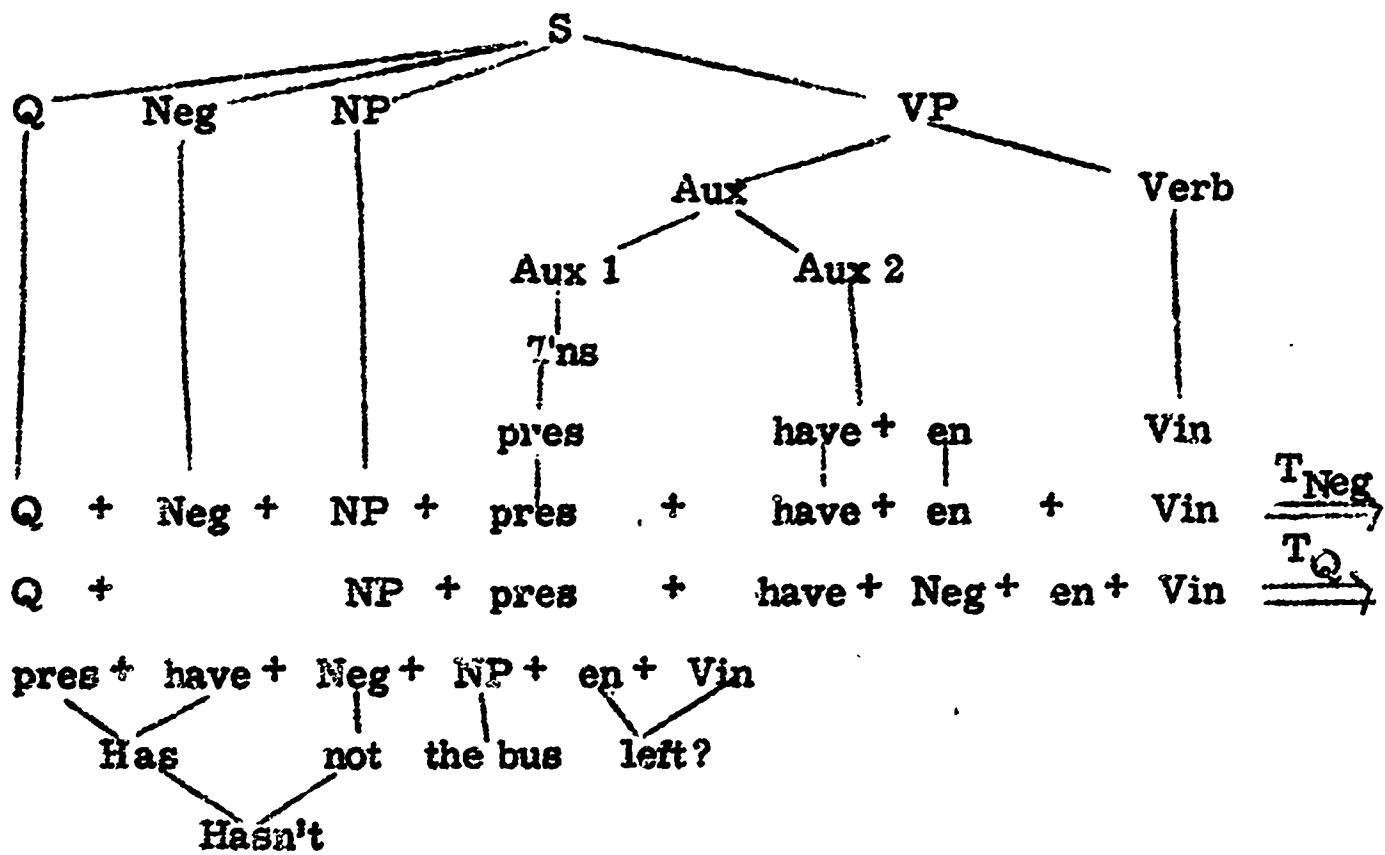
2. Has the bus left?



3. The bus hasn't left.



4. Hasn't the bus left?





5. Can't the pointer find the bird?

