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Transformational Grammar and Problems of Syntactic Ambiguity in English

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TRANSFORMATIONAL GRAMMAR AND PROBLEMS OF

SYNTACTIC AMBIGUITY IN ENGLISH

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A Thesis

Presented to

the Graduate Faculty

Central Washington State College

———————

In Partial Fulfillment

of the Requirements for the Degree

Master of Education

———————

by

Shirlie Jeanette Verley

August, 1968

APPROVED FOR THE GRADUATE FACULTY

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ACKNOWLEDGMENTS

I wish to thank, first, my chairman, Dr. D. W. Cummings for his assistance and guidance in the writing of this thesis. Next, I wish to thank Dr. Lyman Hagen and Dr. Don Goetschius for their participation on the committee. Last, my very personal thanks to my family, Gene, Sue, Steve and Shane for their patience.

TABLE OF CONTENTS

CHAPTER I

DESCRIPTION OF THE PROBLEM

Until very recently ambiguity was treated by composition textbooks and handbooks as an error in language or as an error in logic. But ambiguity is not an error; it is a phenomenon of language, and as such, must be described by a grammar of the language and dealt with effectively by a teacher of that language. Recently, leaders in the field of linguistics have undergone a definite change in attitude toward ambiguity. For instance, Emmon Bach writes, "We can state as a general requirement for a total theory of a language that any ambiguous sequence must have several representations in the theory" (6:100). Robert Lees, a leading transformationalist, says, ". . . syntactic ambiguity is a formal feature of the sentence itself, not a function of its context, and ought therefore to be elucidated by our grammatical description" (73:xxxix).

Syntactic ambiguity is that ambiguity that arises from the arrangement of words into grammatical combinations. When a syntactic arrangement lends itself to two or more different meanings, the utterance is said to be ambiguous. Another type, which will not be examined here, is lexical ambiguity-- that is, ambiguity due to the various meanings within the

words themselves and not to their order in the sentence.
Syntactic ambiguity, also here called <u>structural</u> <u>ambiguity</u>,
may be found in some older textbooks under the name of
<u>amphiboly</u>.

"Most people aren't aware of how many syntactic
ambiguities there really are, especially in written English"
(120:405). English has a number of characteristics which
actively contribute to ambiguity: (1) relatively few syn-
tactic positions, (2) many rules for arranging words into
patterns, (3) many words that may occur in two or more
different word classes, and (4) few <u>inflections</u>[1] that
signal word function. Thus, ambiguity is in the very nature
of our language.

If ambiguity is in the very nature of our language,
it is reasonable to ask why it is that spoken English creates
less of a problem than does written. The answer, of course,
lies in the extra cues, provided by both the speaker and the
listener. Quizzical looks, questioning grunts, requests for
more information or repetition are all physical acts the
listener may resort to in order to clear up ambiguity. The
speaker, not only responds to the listener's queries, but

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[1]The endings or suffixes such as -<u>s</u> which form plurals
in nouns, and -<u>s</u>, -<u>en</u>, -<u>ing</u>, etc. which a<u>re</u> added to verbs,
and also -<u>er</u> and -<u>est</u> endings of comparison.

provides many clues to meaning--his tone of voice, his facial expression, the words he stresses, the syllables he stresses, the hesitations, the pitch of his voice, and even the way he breathes while speaking. Misunderstanding in spoken communication may occur, but it is less likely than in written communication. Thus, the ambiguous structures discussed in this paper will be written structures, in this case English sentences or parts of English sentences.

Syntactic ambiguities abound in our written language. Comedy script writers make use of ambiguities almost every time they write a script, for this is the source of puns and jokes with double meaning. The politician may use ambiguity to make a statement with two possible interpretations in order to keep from being specific as to a policy. Newspaper headlines make extensive use of ambiguity to catch their readers' attention, i.e., "THIRD SON BORN TO GAMBLE," which announced the birth of the Gamble heiress's third son. Advertisers use ambiguity for both getting attention and for accompanying humor, i.e., "What shape is your stomach in?" Poets use ambiguity to squeeze as much meaning as possible into as few words as possible.

No one, not even an English teacher, objects to ambiguity in humor, advertising, and poetry. It is the unintentional ambiguity that should concern writers, educators, and readers. These people need to know that there are degrees

of ambiguity, ranging from that construction which causes only momentary hesitation as to which of two possible meanings is intended to that construction which is irresolvably ambiguous without further help from the writer. Ambiguity, at all the varying levels, including the comedy script writers from the preceding paragraph, should be the concern of teachers who want their students to be able to write clear, unambiguous prose. Even though it makes little difference whether comedy goes with script of whether it goes with writers, students must be made aware of this type of structure because the next time the combination NOUN + NOUN + NOUN occurs, it may be completely ambiguous, and important action may hinge on the recognition of the possible ambiguity.

Students should be helped to understand why ambiguity occurs so frequently in written English and how they can avoid it in their own writing. This present study attempts to help in that job. The first step in this project was to study traditional high school and college textbooks and handbooks to see what their authors had to say about ambiguous syntactic structures in English. Most commonly these structures were found under the headings of dangling modifiers, misplaced modifiers, ambiguous reference of pronouns, and ambiguity caused by faulty coordination and elliptical constructions.

The purpose of the textbook examination was to check the adequacy of the coverage given to problems of structural ambiguity. Some of the questions kept in mind during the evaluation were the following: (1) Was an attempt made to incorporate recent linguistic material and explanations into the textbooks? (2) Was there an attempt to discuss most of the ambiguous structures in English? (3) Was there an attempt on the part of the author to discover or explain the underlying causes of ambiguity in English? (4) Were there more constructive suggestions than negative ultimatums?

The traditional textbooks and handbooks were found to be weak in a number of different ways:

1. Material was assigned to handbooks just because it had always been there.

2. There was a very limited coverage of ambiguous structures. Some were selected; some were ignored.

3. The names of constructions and their definitions were inconsistent and confusing.

4. Some writers used a very negative approach.

5. Few handbooks offered any constructive help for the student.

One hundred twenty-four textbooks and handbooks were examined as part of this study.

DATES OF PUBLICATION	NUMBER OF TEXTBOOKS
Prior to 1960	17
1960	6
1961	7
1962	13
1963	9
1964	21
1965	26
1966	9
1967	9
1968	7
Total	124

Some of the totals above may be deceiving because many of these dates are actually dates of revised editions. Almost without exception, in the handbooks examined, revised editions showed no substantial change in their approach or coverage of ambiguous constructions. In other words, the publishing dates could just as easily have been in the 1950's rather than the 1960's, and the material on ambiguous language would have been the same.

The change of attitude mentioned in the opening paragraph of this chapter is evidenced dramatically by the fact that many more pages than ever before are devoted to ambiguity in books recently published by linguists. However, except for a forerunner or two such as Paul Roberts, very ' little has been done to put such a description into English textbooks. Roberts' later texts were considerably changed from his first texts, a fact for which, ironically, he has

been criticized. James Sledd criticized Roberts because he saw a "confidently stated position so quickly abandoned" (115: 417). But in looking through many handbooks, I noted that material was put into revised edition after revised edition with no evident effort to take a new look at the problems in light of new findings in linguistics. These handbook writers are the ones who really should be criticized for <u>never</u> abandoning positions and statements.

Another criticism of traditional textbooks is that some writers discuss only one or two ambiguities in modification and never mention that there are many others. If we take, for example, just dangling constructions, we find that Gorrell and Laird (47:262) discuss only dangling participles. Kierzeh and Gibson do not mention that gerund phrases can also dangle. Some authors note that a gerund dangler is a prepositional phrase with a gerund as the object (130:183) while others just call it a gerund phrase. McQueen (83:15-16) doesn't include dangling infinitives in his book. McPeek included dangling appositives, which most of the other books never mention. By "dangler" some of the writers mean a modification which has no word in the main clause to modify, while other writers mean a modification that attaches itself to the subject of the sentence but which, in fact, modifies a noun or pronoun that comes later in the main clause.

A third criticism of the textbooks is that multiple terms are applied to one structure. For instance, the ambiguous construction traditionally called, among other things, "squinting" modifier is listed under many titles, some of which are absurd: "two-way modifier" (124,Grade 11:361), "sandwiched" (24:190), "wall-eyed" and "swinging" (9:155 and 33:328), "cockeyed" (88:389), and "cross-eyed" (79:36). Admittedly, giving a name to a construction often is helpful for discussion purposes, but attaching half a dozen peculiar names to the problem does not seem educationally sound. The term "squinting" evidently came from an old meaning of squint which was cross-eyed (33:328). Someone cross-eyed could look in two directions. Since some modifiers can attach themselves either to a preceding structure or to a structure which follows, the term "squinting" was used to mean an ambiguous modifier that looked both ways.

Worse than the haphazard and confusing coverage of ambiguities is the kind of help that the handbooks offer the student. Few handbooks make any attempt to analyze what it is in English grammar that allows ambiguous structures. Certainly one of the first steps toward correction and revision ought to be an understanding of the cause of the problem. Then, too, often the advice given was really no help at all. "Place modifiers where they will give the meaning you intend," (63:414). The student evidently

thought that he had, so what specific constructive help does such a statement give? "Pronoun references should be clear" (78:33) is not going to solve the problem of ambiguity if the student isn't aware of the particular trouble spot, doesn't know what causes the ambiguity, and doesn't have some concrete suggestions for removing the ambiguity. "Place phrases near the words they modify" (66:323) sounds like good advice until a student has an ambiguous sentence with several phrases that all need to be close to the same word.

Even worse, although educators and psychologists have long affirmed the advantage of saying "Do this" rather than saying "Don't do this," English textbooks still list their rules concerning ambiguous structures with a "Don't" attached to each statement (108:160-61). One series that resorts to a list of rules, does not even use the same number for the same rule in succeeding books in the same series (63:414).

The final criticism of traditional handbooks and text-books is that there is little evidence in most of them of any effort to revise the grammar material, using either linguistic terms or findings. Some texts, such as in the Harper & Row Series, added, to the end of the book, one chapter on linguistics, with little evidence of any effort to revise the other chapters relative to the linguistic approach. The two high school series examined which were

exceptions were Harcourt, Brace, The Roberts' English Series
and the Ginn series, Composition and Grammar. Both these
series do, in fact, bring transformational grammar to the
secondary English curriculum. The Roberts' Series, which
actually begins at the third grade level, introduces the new
vocabulary and the new descriptions step by step until, as a
high school student, the learner should have a sound, usable
knowledge of transformational grammar. Paul Roberts' series
was published in 1967, and the Ginn series was published
this year, in 1968. Both series are excellent. Other publi-
shers and writers may soon follow their lead, but today the
vast bulk of English textbooks are ineffective and out of
date.

Since the traditional textbooks and handbooks are so
inadequate, a clearer, more complete description of
structural ambiguity in English is obviously called for. The
following two chapters of this thesis offer this description.

Hopefully, a discussion of ambiguity, in itself, will
be helpful to any teacher or student who reads it. The
description should help teachers and students become more
sensitive to ambiguity, and sensitivity to ambiguous construc-
tions is the key. A teacher must be able to recognize the
structures in English grammar which are susceptible to
ambiguity. Then she can help the students become aware of
these structures, show them why the ambiguity develops, and
give them ways of correcting it.

In addition to the description of ambiguous constructions, this thesis will offer specific suggestions for teachers whenever possible. Most of these suggestions will be collected from writers in the fields of linguistics and education; few of them will be original. The main contributions of this paper will be (1) to assemble in one place some of the latest material on ambiguity in English grammar, (2) to describe ambiguity in a language that most classroom teachers can understand, and (3) to show the inadequacy of the traditional handbooks and textbooks in their coverage of structural ambiguity. Then too, perhaps this study may, in some small way, along with other studies, speed up a revolution which will replace the traditional handbook with something better.

CHAPTER II

THE DANGLING CONSTRUCTION IN ENGLISH

Chapter I pointed out some weaknesses of traditional textbooks. Some educators have been aware of these weaknesses for a long time but have had no description of grammar or approach to language that was more adequate. Today, many leaders in the field of linguistics feel that transformational grammar offers a more accurate description of English.

The transformational approach is very useful in analyzing and understanding some problems that have plagued teachers for years. One such problem is that potentially ambiguous structure that is found in most English handbooks and textbooks--the dangling modifier.

Admittedly, the dangling modifier is probably not the villain that it is made out to be in some composition texts-- and classes. For one thing, the linguistic setting in which the sentence appears will usually suppress the ambiguous misreading; for another, the reader's common sense will often override tempting ambiguities. But although the dangling modifier may well not be an unqualified villain, it is one form of ambituity that a careful writer should recognize, understand, and remedy. Very little good is served by taking the opposite extreme from the textbooks and maintaining, as someone like Bergan Evans appears to want to do, that the

dangling participle is not worth worrying about (36:354).
For anytime a writer starts relying on the reader's common
sense, he is probably asking for trouble; and dangling modi-
fiers can create a humorous picture for the reader, who must
then stop and reread. If the setting is serious, the humor
can be at best distracting, at worst devastating. Anytime
a writer of expository prose unwittingly calls attention to
his words rather than to their meaning, he is probably guilty
of an error, if not in grammar, at least in rhetoric.

Our first consideration is, "How ambiguous is a dangling
modifier?" Once in awhile this construction can be completely
ambiguous: <u>Staggering along the road, I saw a familiar form</u>.
The word <u>I</u> seems to refer to the person doing the staggering,
and yet, if the writer is one who writes sentences with
dangling modifiers, he may have meant that the <u>form</u> was
staggering. If this phrase does dangle, that is, refer to
<u>form</u> when it seems to attach itself to the <u>I</u>, the reader could
not get the intended meaning without further clues.

"<u>Though failing the course, my roommate kept encour-</u>
<u>aging me</u>," (133:295) also seems to be completely ambiguous.
There is a conflict between what the sentence seems to say
lexically and what the syntax necessarily implies. Who is
failing the course? According to syntax, <u>my roommate</u> is
the one failing, and yet, the meaning somehow would lead the
reader to think that the <u>me</u> must be the one who is failing
if <u>me</u> needs encouragement.

Many dangling modifiers go unnoticed. Judging from some examples collected by Robert W. Daniel (33:326), many leading writers write dangling constructions and many editors and proof-readers evidently accept them. In fact, the preceding sentence contains a common type of dangler which will be discussed later in the paper. Three of Daniel's examples follow:

> Desparately fond of dancing herself, one of Eustacia's expectations of Paris had been the opportunity it might afford her of indulgence in this favorite pastime.
> (Thomas Hardy)

> Looking back over it now for review, it seems to me that each chapter . . . (Lincoln Steffens)

> Working indoors all summer the way she had, her feet were tender. (Thomas Hardy)

Daniel gives other examples by Stephen Crane and G. B. Shaw, who certainly would not be considered careless writers.

But even though dangling modifiers are used by well-known writers, students should realize that dangling modifiers can cause problems, especially in the hands of the unskilled writer. Using the transformation rules developed by Noam Chomsky and others, we will now attempt to describe the dangling modifier in English. We believe the reader may find this a more consistent and workable description, which in turn can be applied to many other constructions that are structurally ambiguous.

The danglers in English are actually modifiers. Irving T. and Paul I. Richards define modification as the "function of adjectives and adverbs, and of phrases and clauses substituted for them. By this device the meaning of more primary words is altered or qualified to secure greater precision" (99:144). If a modifier is ambiguous, the precision is lost.

Transformational grammar treats most modifying structures whether they be words or groups of words, as <u>transforms</u> of <u>deep</u> <u>structure</u>. This deep structure contains a limited number of very basic English sentences, commonly called <u>ker-</u> <u>nel</u> <u>sentences</u>. Kernel sentences are of the simplest kind and contain the active form of the verb. Chomsky admits that this notion of kernel sentence is rather intuitional (20:18). But, however intuitional they may be, most native speakers of English would have little trouble identifying these kernel sentences.

By applying some transformation rules to these kernel sentences, we can generate the modifying structures of English. The structures created by application of the transformation rules are known as <u>transforms</u>. The kernel sentences from which these transforms are derived are often referred to as <u>source</u> <u>sentences</u>. Sometimes the source sentences are more than kernel sentences; they may contain some transforms already. For example, we may speak of the participial phrase, <u>relieved by the fresh rain</u>, as being derived from the source

sentence, I was relieved by the fresh rain. This source
sentence has already undergone a transformation which changed
the sentence The fresh rain relieved me to the passive I was
relieved by the fresh rain. Also, in this source sentence
is the adjective, fresh, derived by a transformation from the
kernel sentence, The rain is fresh. The term insert sentence
or constituent sentence applies, in general, to the source
sentence and, in specific, to the transform structure which
is inserted into or attached to another sentence upon which
the insert sentence depends. The sentence to which the
insert sentence is attached is called the matrix sentence.

When a modifying structure, now called an insert sentence,
is inserted into another sentence, called a matrix sentence,
a new grammatical English sentence has been generated. Using
some such process, native speakers of English are able to
generate an infinite number of English sentences, some of
which they have never heard before in their lives. These
generated sentences are the surface structure, and the under-
lying structures from which these were transformed is the
deep structure.

Through an examination of the deep structure and the
transformations of participial phrases, we can see why the
surface structure "dangles." Transformational grammar describes
participial phrases as constructions derived by the applica-
tion of a transformation rule called T-rel, which inserts a

relative pronoun into an insert sentence between the subject
and the predicate or between the noun phrase (NP) that is the
subject and the verb phrase (VP) that is the predicate. The
relative inserted should be <u>who</u> after human nouns or pronouns,
<u>which</u> after non-human nouns, and <u>that</u> after either kind.
This first transformation creates a noun phrase followed by a
relative clause. Using the T-rel transformation, we see the
following change:

     Insert sentence: Mark was playing basketball in the gym.
                    NP   VP

     T-rel rule: Mark <u>who</u> was playing basketball in the gym
                 NP   RELATIVE CLAUSE

Now a second transformation rule <u>T-del</u> must be applied to
the relative clause to generate a participle. T-del is a
deletion rule which deletes the relative pronoun + tense +
<u>be</u> to create the participial phrase in the following manner:

     After T-rel
       rule: Mark   who   was playing basketball in the gym

     T-del rule
      deletes: w̸h̸o   w̸a̸s   playing basketball in the gym
              RELATIVE TENSE +
                         BE

     Results: Mark   playing basketball in the gym
              NP   PARTICIPIAL PHRASE

If <u>playing</u> had been the past tense <u>played</u>, a variation of T-
del, called <u>T-del-ing</u>, would have been applied. This rule
would delete the relative and substitute <u>-ing</u> for the tense.

```
After
T-rel:   Mark    who    played basketball in the gym

After                  ing
T-del-ing:  Mark who played basketball in the gym
```

Mark playing basketball in the gym

This participial phrase, <u>playing basketball in the gym</u>, can now be inserted into sentences that have the same subject as the insert sentence, which in this case is <u>Mark</u>. If the subject of the matrix sentence is some noun or pronoun other than <u>Mark</u>, the phrase will "dangle." Therefore, <u>playing basketball in the gym</u> cannot be inserted into the matrix sentence, <u>Mark's glasses were shattered in a scramble under the basket</u>, but it can be inserted into the sentence, <u>Mark broke his glasses in a scramble under the basket</u>.

A potentially ambiguous modifier, very similar to the dangling participle is the dangling elliptical clause. In fact, it may well be that this elliptical clause is actually just a participial phrase preceded by a word like <u>when</u> much like the gerund phrase preceded by a preposition, discussed later in the chapter, page 21-22. The subject of the clause is deleted, so the clause can only be inserted into sentences that have the same subject as the one that was deleted. Thus, from the clause <u>when Mary is climbing mountains</u>, we get <u>when climbing mountains</u> which is elliptical. This clause can then be inserted into matrix sentences having the subject

Mary, as in <u>When climbing mountains, Mary always carries her</u> <u>camera</u>.

The examples above are of participial phrases headed by a present participle. The same transformations can generate participial phrases headed by a past participle. Although the present-participle form can be generated from any of the basic kernel sentence patterns, only certain kernel sentences can generate this past-participle form. The past-participle form must necessarily come from patterns that can be trans- formed into the passive construction. In the following example, the passive transformation will be performed first, followed by T-rel and T-del:

Source or insert:	His parents corrected him for every mistake.
Passive:	He was corrected for every mistake (by his parents)
T-rel:	He who was corrected for every mistake
T-del:	corrected for every mistake
Matrix sentence:	He soon revealed a broken spirit.
T-SM	Corrected for every mistake, he soon revealed a broken spirit.

<u>T-SM</u> is a transformation that shifts the participial phrase to the front of the matrix sentence. If T-SM can be applied, then the phrase is what Roberts calls a <u>sentence</u> <u>modifier</u>, as distinct from a <u>noun</u> <u>modifier</u>.

Among the other constructions that can dangle is the infinitive phrase, an extremely adaptable construction. Any of the basic sentence patterns can add <u>will</u> before the finite verb. This <u>will</u> has to do with future purpose. The <u>to</u> construction in English can do much the same thing; it can be placed before the finite verb in any of the basic sentence patterns. Then we can insert <u>in order for</u> before the subject and insert <u>to</u> before the verb and through optional deletions, we can generate the infinitive phrases of English. The following is an example:

    (1)   John (will) win a prize.

    (2)   In order for   John to win a prize

    (3)   for John to win a prize (<u>in order</u> deleted)

    (4)   to win a prize (<u>for John</u> deleted)

Both (2) and (3) may be inserted into a matrix sentence which contains a different subject, for they carry their own subject with them. However, in order to insert (4) into a matrix sentence, the matrix sentence must have the same subject as was deleted from the insert sentence.

When a student can see the way in which, through transformations, participial phrases and infinitive phrases can be generated, he can see in what ways the two forms are similar and in what ways they are different and why a dangling construction would have been generated from the wrong source

or insert sentence. Traditional handbooks did not help the student see why the two types of phrases, although different, presented a similar problem.

Many handbooks included dangling gerund phrases and some mentioned that prepositional phrases were also subject to dangling. It appears that the two, dangling gerund phrases and dangling prepositional phrases, are the same problem but with different names. In the following example, notice how the prepositional phrase with its gerund phrase object does indeed have a different subject from the matrix sentence:

> By searching every house on the block, the boy was finally found.

The insert portion will no longer dangle if we give the matrix sentence the same subject. The insert sentence would have been We searched every house on the block, so the matrix subject should be we.

> By searching every house on the block, we finally found the boy.

Evidently any participial phrase with the present participle form, the ing form, may optionally have one of the prepositions of the type after, until, by, or upon inserted before it. Then this phrase may optionally be inserted before a matrix sentence if the matrix sentence has the same subject as has been deleted from the insert sentence.

Many handbooks had a short paragraph or a couple of examples at the end of the section on "danglers" which

pointed out that nominative absolutes did not dangle. The handbooks usually assumed that the reader knew what a nominative absolute was and gave no reason why this construction did not dangle. Using the transformational description above, nominative absolutes can be described in the same way the -ing-participial phrases were described. The difference is that in nominative absolute constructions, the subject of the insert sentence is not deleted. The insert sentence then carries its own subject when attached to the matrix sentence. The insert sentence, as a result, does not have to have the same subject as the matrix sentence. Because its construction is in so many ways similar to the -ing-participial phrase, the nominative absolute has the sound of a dangler. Thus teachers should probably teach students about dangling constructions and nominative absolutes at the same time, making sure that they understand the difference between the two.

Another ambiguous construction that probably should be grouped with those in the preceding paragraph are ones that most handbooks list as "acceptable danglers." The handbooks often listed two or three acceptable danglers, so when these were all assembled, there was rather a long list. The acceptable dangler is usually an -ing-participial phrase that suggests a summation or a concession which the writer and the

reader must make in common. In fact, David A. Conlin places
some of these with his absolutes. He says, "Infinitive
phrases and participial phrases are used occasionally as
absolute constructions" (27:224). The first two examples
below are from Conlin, except that the insert phrases have
been moved to the initial position so as to similar to the
constructions we have been examining:

> Viewing it in the perspective of time, Lincoln's
> decision was an intelligent one.
>
> Putting it very briefly, the burden of responsibility
> is entirely yours.
>
> Generally speaking, she is very reliable.
>
> Considering Mary's background, the behavior is to be
> expected.
>
> Judging from past experience, the train will be late.
>
> Taking everything into account, the decision to sell
> was made.
>
> Looking at it from another point of view, the house
> is well-built.

Other present participles in this list were allowing, concern-
ing, owing, regarding, talking, granting, and summing. In
business letters we probably find the most common "acceptable
dangler" of all.

> Enclosed with this letter, you will find . . .

CHAPTER III

OTHER SYNTACTIC AMBIGUITIES

Modifying Constructions

In Chapter II modifying structures such as gerund, participial, and infinitive phrases were discussed, using the terms and processes of transformational grammar. The same kind of tranformational description can be used to explain ambiguities which occur in other modifying structures of English. Norman C. Stageberg has done much work in structural ambiguity, and his article, "Some Structural Ambiguities," was very helpful in preparing this chapter (115).

But first, we should consider which modifying structures have been traditionally stressed in our textbooks. The emphasis has often been upon adjective modifiers such as pretty and adverb modifiers such as quickly, but since there is a growing tendency in English toward modifiers that are themselves nouns, perhaps the stress needs to be changed. In his doctoral dissertation George Anthony Hough, III, pointed out this growing tendency toward noun modifiers as seen in ball glove, in which the noun ball modifies glove. Hough examined front page articles in newspapers of 1894 with newspapers of 1964 (59:4647). He found more noun, noun sequence, and prepositional phrase modifiers now than in 1894. And even though there has been a decline in the proportionate

number of prepositional phrases since 1894, they still out-
number adjective and adverb modifiers. Admittedly, newspaper
writing is probably more inclined to noun modifiers, but still
this study shows one direction that our language may be taking.
Certainly teachers should be aware of this tendency; and if
studies of other types of modern English prose reveal similar
findings, teachers and textbook writers will want to give
more emphasis to noun, noun sequence, and prepositional
phrase modifiers. As we now examine the various ambiguous
structures, notice how often the structures are nouns and
prepositional phrases.

Group I Ambiguities

The structure of ADJECTIVE + NOUN IN THE POSSESSIVE
CASE + NOUN can cause ambiguity as in the colored lady's hat.
The adjective may come from either one of the following deep
structures: the lady is colored[1] or the hat is colored. The
application of the T-rel rule inserts a relative pronoun be-
fore the word is, giving us, in the first case, the lady who
is colored. The next transformation rule that can be applied
is the T-del rule, which deletes the relative pronoun who and
the TENSE + BE. This is the rule which generates relative
clauses. The T-del rule, when applied, gives us the lady
colored. Seldom is colored found alone following the noun it

---

[1]To the Hippie with "body paint," another ambiguity
may seem likely, as when the lady is actually painted or
colored.

modifies, but we do find compounds in this position as in the man, tired and weary. The next rule is the T-NM rule which moves the noun modifier to the position before the noun, giving us the colored lady. On the other hand, the kernel sentence, the hat is colored, could have undergone the same set of transformation rules and generated the colored hat. Thus it is impossible to tell whether colored modifies lady or hat. If, however, the adjective definitely went with one noun and not the other, there would be no ambiguity. In the example above, Negro would not have caused the ambiguity that the word colored did. Other examples of this kind are quiet student's room and older girls' dorm.

Into the same group we will put the structure ADJECTIVE + NOUN + NOUN as in the fresh vegetable man. Is the deep structure which produces the adjective the man is fresh or the vegetables are fresh? Because there is no way of knowing which is true, the structure remains ambiguous. The same kind of ambiguity exists in the athletic equipment director and the artistic clothes designer.

The third type in Group I is the NOUN + NOUN + NOUN structure as in the cadet graduation chairman. Does cadet modify graduation and come from the deep structure the graduation is for cadets or does cadet modify chairman and come from the chairman is a cadet? If, as in this example, two noun modifiers can cause all this trouble, longer

sequences of noun modifiers can lead to multiple possible meanings. The tendency in modern English is to use many of these noun modifiers in order to pile as much meaning as possible into headlines, into advertising, and into the first line of articles.

A fourth ambiguity is found in the NOUN + NOUN structure of the German teacher. Is German a transform of the deep structure the teacher is German or of he is a teacher of German?

The last type in Group I is MORE OR MOST + ADJECTIVE + NOUN. The modifiers, less and least, when they mean fewer, are included in this MORE group. In this ambiguity the question is whether the MORE-type modifier goes with the adjective or with the noun. The MORE-type modifier is used often in English and is very susceptible to ambiguity. In the structure more adventuresome explorers, more could be what is often called an intensifier[2] and modify adventuresome, or it could modify explorers if it means more in number. In the definition quoted from Richards and Richards in Chapter II, page 15, there was an ambiguous structure of this type, ". . . the meaning of more primary words is altered . . ." Does more modify primary or does it modify words? Other examples are less deadly insects and most harmful drugs.

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[2]Words such as very, really, rather, somewhat, too, quite, etc.

As we have seen in the examples of Group I, two deep structures are possible source sentences for each of these ambiguities. After students have a firm understanding of the cause, they can be given a number of methods for avoiding ambiguities. The transformational description should provide them with a single principle regarding ambiguity. Then, to this basic knowledge can be added methods for avoiding the ambiguities. As was already suggested, the ambiguity of the first type in Group I such as the colored lady's hat can be corrected by the substitution of a synonym for colored, so that it reads the Negro lady's hat. If the other meaning of colored is intended, colorful might seem to be a substitution, but colorful actually is used to describe people, too, as in He is a colorful political figure. Naming actual colors such as blue or red might lead to equally ambiguous combinations, so rewording would appear to be the best solution, e.g., the lady's hat was colorful.

For the second type, ADJECTIVE + NOUN + NOUN, L. M. Myers suggests that many people use hyphens to avoid this ambiguity (91,3rd. edition:88). By examining a few examples, we see that sometimes hyphens will work, and sometimes they won't.

1. the athletic-equipment director
2. the athletic equipment-director

3. the fresh-vegetable man
4. the fresh vegetable-man

>   5.   the artistic-clothes designer
>   6.   the artistic clothes-designer

Certainly the hyphens make the meaning clear, but somehow the hyphen seems more suited to 1., 2., and 6., than to 3., 4., and 5. Perhaps this is because titles that designate positions held by people are more apt to be seen hyphenated than other combinations. Rewording probably offers the best solution, e.g., <u>designer of artistic clothes</u> or <u>clothes designer who is artistic</u>.

The third type, NOUN + NOUN + NOUN, presents many cases of ambiguity, e.g., <u>city personnel directory</u>, <u>city sanitation board</u>, <u>adult sex education</u>, <u>college bus driver</u>. Again, hyphenation would remedy the ambiguity, but this method does not seem to be used generally. This type, too, seems to call for rewording.

Even hyphens will not help the next type of ambiguity. In this type the relationship between the two nouns is not known as in <u>German teacher</u> and <u>steel ship</u>. More information will have to be added to the context to tell whether the teacher is German or teaches German and whether the ship is made of steel or hauls steel.

The last type in Group I, MORE OR MOST + ADJECTIVE + NOUN, sometimes can be avoided with the addition of the article <u>the</u>.

>   1.   In August more adventuresome explorers arrived
>   and headed into the interior. (ambiguous)
>   2.   In August the more adventuresome explorers . . .

If <u>more</u> means more in number, the sentence will need to be
reworded. This particular type, as mentioned before, is very
susceptible to ambiguity and is one that students should be
taught to recognize and avoid. Rewording is also the best
method for avoiding ambiguity in the following examples:

1. Arizona has more deadly insects than . . . (ambigu-
    ous)
2. Arizona's insects are more deadly than . . .
3. Arizona has more insects that are deadly than . . .

Group II Ambiguities

Group II ambiguities are similar to those in Group I
except that those in Group II involve a series--that is, two
or more parallel items. The first ambiguous structure of
this group is MODIFIER (ADJECTIVE, ADVERB, OR NOUN) +
SERIES OF NOUNS as in the sentence <u>She collects Oriental vases,</u>
<u>cups and saucers, and coins.</u> The question is whether <u>Orien-</u>
<u>tal</u> modifies only the first word of the series or all of the
words in the series. In <u>Some of the strange animals that</u>
<u>we saw at the zoo were albino deer, platypuses, and Koala</u>
<u>bears,</u> is the only deep structure containing <u>albino</u> that of
<u>the deer was an albino</u> or is there also <u>the platypuses were</u>
<u>albino</u> and <u>the Koala bears were albino?</u> Structural ambigui-
ties of this kind seem more likely to occur in sentences in
which there are only two items in the series, for we seldom
put a modifier in front of several items with the intention
of modifying all the words in that series, as will be noted
in the examples below:

1. He failed the class because of his late reports, projects, and tests.
2. Please leave sour cream and milk.
3. You may have the broken table and chairs.
4. I bought some green melons and peaches.
5. Send me my striped jacket and coat.
6. We have a position open for young women and men.
7. Hand in your typed reports and tests.
8. The luncheon meeting is for the new teachers and principals.
9. I ordered upstairs curtains and drapes.

The same kind of ambiguity can occur when the series comes first as in SERIES OF WORDS + MODIFIER (NOUN, ADJECTIVE, ADVERB, PHRASE OR CLAUSE). In this case the problem is whether the modifier goes with only the last word in the series or with all the words in the series.

1. The problem with our stenography teacher was that she lectured and dictated unclearly.
2. Her boarders included three old men and a lady who drank.
3. Pass these baskets out to the children and the women with tickets.
4. Immigration permits will be mailed to the Japanese, the Chinese, and the South Vietnamese who send their applications in before August 10.

The easiest remedy for ambiguities of Group II is a simple rearranging. In the first type, if the modifier albino is meant to go only with deer, albino deer should be moved to the final position in the series: Some of the strange animals that we saw at the zoo were platypuses, Koala bears, and albino deer. If all three varieties were albino, the sentence would need to be reworded: The strange animals that

we saw at the zoo that were all albinos were the platypuses, the Koala bears, and the deer. The second type calls for the same remedy. If the modifier is meant to go only with the structure that precedes it, then that combination should be placed first in the series, e.g., The problem with our stenography teacher was that she dictated unclearly and lectured. Giving lectured a modifier of its own also would remove the ambiguity, e.g., she lectured all period and dictated unclearly. Both of these methods are used with the following example:

1. Her boarders included three old men and a lady who drank. (ambiguous)
2. Her boarders included a lady who drank and three old men.
3. Her boarders included three old men who were no trouble at all and a lady who drank.

Adding another modifier will also remedy the ambiguity in the first type:

1. Send me my striped jacket and coat. (ambiguous)
2. Send me my striped jacket and green coat.

3. I ordered upstairs curtains and drapes. (ambiguous)
4. I ordered upstairs curtains and living room drapes.

In some sentences the addition of a determiner removes the ambiguity as in the following examples:

1. I bought a green dress and coat. (ambiguous)
2. I bought a green dress and a coat.

3. Bring me the young cow and bull. (ambiguous)
4. Bring me the young cow and the bull.

Group III Ambiguities

In the sentence in Group II, the problem was as to whether the modifying structure modifies only the adjacent structure in the series or all the items in the series. Group III structures contain MODIFICAND + MODIFYING WORD GROUP A + MODIFYING WORD GROUP B. The ambiguity occurs because often Group B could possibly modify a word in Group A or could modify the modificand. Norman Stageberg writes ". . . the modifying word groups may be of three kinds--prepositional phrases, relative clauses, and verbal phrases. . . ." (116:483). Then, as Stageberg notes, these three different modifying groups, occuring in different combinations, could create the following nine patterns:

1. MODIFICAND + PREPOSITIONAL PHRASE + RELATIVE CLAUSE

   the hometown of the soldier that is in Germany
   the car in the building that had been burned
   the flag marker on his tent which was green

2. MODIFICAND + PREPOSITIONAL PHRASE + PREPOSITIONAL
   PHRASE

   We will meet after the show at the Brown Derby.

3. MODIFICAND + PREPOSITIONAL PHRASE + VERBAL PHRASE

   the plans for the recreation area developed by
     the United States Government

4. MODIFICAND + RELATIVE CLAUSE + PREPOSITIONAL PHRASE

   She will return the money that she borrowed after
     the 1st.

5. MODIFICAND + RELATIVE CLASUE + VERBAL PHRASE

    the mine which is below the line shack located on
      Mt. Baldy

6. MODIFICAND + RELATIVE CLAUSE + RELATIVE CLAUSE

    the exchange student that sent you the rug that
      came from France

7. MODIFICAND + VERBAL PHRASE + PREPOSITIONAL PHRASE

    a map covered with strange marks from an old pirate
      ship

8. MODIFICAND + VERBAL PHRASE + RELATIVE CLAUSE

    a fountain located at the new fine arts building
      which was designed by Ken Hotsko
    We made an effort to keep a straight face which
      was futile.

9. MODIFICAND + VERBAL PHRASE + VERBAL PHRASE

    There was a man frozen deep in the glacier named
      Zermati.

One final example, He engaged in long conversations
about running with his brother Teddy, is like pattern two
except that this example has three prepositional phrases.
The last phrase, with his brother Teddy, probably modifies
engaged but may modify running. So, there may be, in fact,
more patterns than nine, but they will probably be similar
to one of these given.

There are several different methods that can be used
with Group III to avoid ambiguity. One of these is the human
and non-human signal. Who signals human; which signals non-
human; that can be used for either one. Often by substituting

which or who for that, an ambiguity can be avoided, as in the
following examples:

1. of the hometown of the soldier that is in Germany
   (ambiguous)
2. of the hometown of the soldier who is in Germany
3. of the hometown of the soldier which is in Germany

4. the exchange student that sent you the rug that
   came from France (ambiguous)
5. the exchange student that sent you the rug which
   came from France
6. the exchange student that sent you the rug who
   came from France

In many of the other examples of Type III ambiguities,
one of the two modifying phrases or clauses can often be
made into a shortened modifier that can then be inserted
before the word it modifies:

1. The French exchange student that sent you the rug
   (from 4 above)
2. We made an effort to keep a straight face which
   was futile.(ambiguous)
3. We made a futile effort to keep a straight face.

4. the car in the building that had burned (ambiguous)
5. the burned car in the building
6. the car in the burned building

7. the flag marker on his tent which was green
   (ambiguous)
8. the green flag marker on his tent
9. the flag marker on his green tent

10. There was a man frozen deep in the glacier named
    Zermati. (ambiguous)
11. There was a man frozen deep in the Zermati glacier.
12. There was a man named Zermati frozen deep in the
    glacier.

The twelfth item above shows yet another method for avoiding this type of ambiguity--the two phrases were switched around. Another example of this remedy follows:

1. We will meet after the show at the Brown Derby. (ambiguous)
2. We will meet at the Brown Derby after the show.

Among the possible remedies for the following examples is moving the final phrase to the front of the sentence:

1. She will bring back the money that she borrowed after the 1st. (ambiguous)
2. After the 1st she will bring back the money that she borrowed.
3. She will bring back the borrowed money after the 1st.

4. the plans for the recreation area developed by the United States Government (ambiguous)
5. Developed by the United States government, the plans . . .

Some of the others in this group may need to be reworded to clear up the ambiguities.

Group IV Ambiguities

The ambiguous modifiers in Group IV include the traditional "squinting" modifier, discussed in Chapter I. This group is MODIFICAND + MODIFIER + MODIFICAND, and the ambiguity lies in the ability of the modifier to modify either the preceding structure or the structure which follows. The modifiers may be (1) adverbs of frequency such as sometimes, (2) adverbs of manner such as quietly, (3) prepositional

phrases, or (4) adverbial clauses. The examples below are grouped in that order:

1. People who smoke occasionally do not develop lung cancer.
   Students who cheat often come from middle-class homes.
   The discussion afterwards proved the success of the talk (44:216).

2. The man who laughed heartily ate his dinner (9:155).
   The trooper who was pushed unintentionally shot the boy (17:43).
   The uninvited guests were asked quietly to leave the auditorium (26, Grade 10:445).

3. When John applied for the position on the advice of his roommate he dressed very carefully (12:422).
   He said after the election he would take a vacation (12:422).

4. Mr. Hall promised me before I graduated he would write a letter of recommendation (29, Grade 11: 232).
   The salesman said when he was through with his deliveries, he was going back to New York.

Three methods of correcting the ambiguity in Group IV are (1) by adding a comma, (2) by inserting that, and (3) by moving the adverbial modifier to another position. The modifier sometimes can be moved to the initial position, sometimes to the final position, and sometimes to the position directly in front of the verb it modifies. There does not seem to be much of a pattern, so students will have to learn to move the modifier around until the meaning seems to be what they intended.

1. People who smoke occasionally, do not develop
   lung cancer.
2. People who smoke, occasionally do not develop
   lung cancer.
3. Occasionally, people who smoke do not develop
   lung cancer.
4. People who occasionally smoke do not develop
   lung cancer.

When the modifier is a clause, the comma does not remedy the

problem because the clause needs a comma anyway. The inser-

tion of the pronoun that often helps with the clause modi-

fiers.

1. Mr. Hall promised me that before I graduated, he
   would write a letter of recommendation.
2. Mr. Hall promised me before I graduated that he
   would write a letter of recommendation.
3. Before I graduated, Mr. Hall promised me he would
   write a letter of recommendation.
4. Mr. Hall promised me he would write a letter of
   recommendation before I graduated.

Group V Ambiguities

In addition to the modifying structures just discussed,

there are several other structures that lend themselves to

ambiguity. One that is often the only entry found in the

index under "ambiguity" is the item "pronoun reference."

Here, pronoun refers to the traditional personal pronouns

plus the reflexive self-pronouns.

As Stageberg points out (116:484), ambiguity in pro-

noun reference could be considered a lexical problem. How-

ever, since the problem can be explained as identical surface

structures derived from two different deep structures,

pronoun reference will be considered here as syntactic ambiguity.

> Mary asked Sue a question when she was studying.
>   (ambiguous)
> Matrix sentence: Mary asked Sue a question.
>
> Source for insert sentence: Mary was studying.
>   or
>   Sue was studying.

Either of these final two sentences could be the insert sentence, so unless other clues are given, the sentence is hopelessly ambiguous. Usually, if the two possible antecedents differ in gender or number, there is no problem. Note that in the following examples, no ambiguity exists:

>   1.   Mary asked Jack a question when he was studying.
>   2.   Mary asked Jack a question when she was studying.
>   3.   The girls asked Sue a question when she was studying.

However, the following example is ambiguous because the <u>they</u> could mean just the girls or the girls and Mary:

> Mary asked the girls a question when they were
>   studying. (ambiguous)

Charles Fries (44:200) discusses the ambiguity in the <u>self</u> pronouns and gives examples similar to the following one:

>   1.   Dan spoke to the man himself.   (ambiguous)
>   2.   Dan spoke to the lady herself.
>   3.   Dan spoke to the lady himself.
>   4.   Dan spoke to the men himself.
>   5.   Dan spoke to the men themselves.

It can usually be said then, that if somewhere in the sentence, you have ANTECEDENT. . .ANTECEDENT. . .PRONOUN, and if both

antecedents have the same number and gender, the pronoun will
be ambiguous unless the context provides some extra clues.

Rewriting seems to work well in the following examples:

1. Before you drive the car into the garage, sweep
    it out. (ambiguous)
2. Sweep the car out before you drive it into the
    garage.
3. Sweep the garage out before you drive the car in.

4. Mother called Sue when she arrived at the hospi-
    tal. (ambiguous)
5. When Mother arrived at the hospital, she called
    Sue.
6. When Sue arrived at the hospital, Mother called
    her.

Other Miscellaneous Ambiguities

Elliptical constructions can cause ambiguity if two
possible deep structures could be construed as underlying
the omitted part, e.g., Mr. Tebbs likes his new car better
than his wife. The omitted construction could be subject
and verb with wife as the direct object, or the omitted
construction could be verb and direct object with wife as
the subject. Whichever the writer intends, he should show
by writing out the construction as shown in the examples
below:

1. Mr. Tebbs likes he new car better than he likes
    his wife.
2. Mr. Tebbs likes his new car better than his wife
    does. (or better than his wife likes it.)

Many of these elliptical constructions are inexact compari-
sons, as in the example above. Elsbree gives another
example (35:227):

1. Claremont is farther from Los Angeles than Pomona. (ambiguous)
2. Correction: Claremont is farther from Los Angeles than Pomona is.
3. Or if the opposite were true: Claremont is farther from Los Angeles than it is from Pomona.

Another ambiguity occurs when a coordination could link two different structure together, e.g., <u>There stood a delivery boy with a large package and her son</u>. The ambiguity here can be avoided by shifting constructions or by rewording.

1. There stood her son and a delivery boy with a package.
2. There stood a delivery boy with a large package in one arm and her son in the other.

In solution 1., there is still a possible ambiguity. <u>With a package</u> could go only with <u>boy</u>, or it could go with both <u>son</u> and <u>boy</u>. The difference is very slight, but the careful writer might like to make the meaning explicit by rewording the sentence.

One last ambiguity should be mentioned, a perplexing one presented by Chomsky (20:21). One of the problems in his example is that prepositional phrases are quite freely deleted in English, and in some cases, these prepositional phrases are needed to show the relationship between other words.

I had a book stolen. (ambiguous)

Possible meanings:

1. Someone stole my book.
2. I had someone steal a book for me.
3. I almost had stolen a book.

Somewhere below surface structure, we might find one of the following:

1. A book was stolen (from me).
2. A book was stolen (for me).
3. A book was stolen (by me).

The writer must be aware of the possible ambiguities in such sentences as the one above, so that he can then give the reader as many extra details and clues as are needed to make his intended meaning unmistakably clear. Although perhaps not as numerous as the clues available for the speaker of English, the writer does have many methods available for his use. He can, at his leisure, choose the details he will add to make his written communication unambiguous. As we have seen, he may rearrange the existing structures in the sentence, or he may add details such as hyphens, commas, determiners, or relative pronouns. He may substitute a synonym for an ambiguous word or substitute the human signal who for an ambiguous that. He may remove an ambiguity by changing a singular to a plural or by adding another modifier. A writer who understands ambiguity in English and who has instructions in the many methods of removing it from his writing will have removed one stumbling block from precise, effective communication.

CHAPTER IV

CONCLUSIONS

The main purposes of this paper have been (1) to
examine the various structural ambiguities in English, (2) to
see what the traditional approach has been regarding ambigui-
ties, (3) to apply transformational processes and explanations
whenever possible, and (4) to give some specific methods for
removing ambiguities from written English. To a degree,
these objectives have been reached. However, the possibili-
ties have, in no way been exhausted. It is hoped that this
thesis will contribute to the change that is now taking place
in English grammar.

New descriptions and new approaches in linguistics
have brought fresh interest and deeper understanding to
English grammar, and its effects are finally being transfer-
red to some few textbooks for the public schools. It would
probably have been ten more years before such a trend was
seen had it not been for the late Paul Roberts, who applied
linguistic principles to the teaching of English.

A major break-through in English textbooks came with
a statement in the text by Larson, Jacobs, and Rosenbaum,
published just this year (1968) which states, in part, the
following:

    We believe that both adverbs and comparatives are
    adjectives in the deep structure, but not much is known
    yet about exactly how they are transformed from

adjectives in deep structures to adverbs and comparatives in surface structure. . . . Our investigation will reveal some interesting properties of these constructions, but further study by linguists will be necessary before we can be absolutely sure that our conclusions are correct. . . .(72:219)

Neither you nor the writers of your textbooks can answer all the questions about language. Linguists are presently trying to answer some of them to produce a correct statement of the grammatical principles of a language (72:262).

It is certainly time that textbook writers conceded their ignorance, for only then will a search for understanding begin. There are many aspects of our language that we have not adequately examined or described in traditional terms. There is so much more to be known, and surely this challenge will draw many young, enthusiastic people into the teaching and study of English. They, in turn, will demand better handbooks and textbooks and will demand that linguists have a hand in writing them. Future teachers are going to need to understand every phenomenon of their language that they can. One important part of that understanding is a knowledge of ambiguity. A thorough knowledge of ambiguity and a sensitivity to its many forms will help teachers and students eliminate one of the barriers to clear written communication. May this thesis contribute to that end.

BIBLIOGRAPHY

BIBLIOGRAPHY

1. Allen, Harold B. Readings in Applied Linguistics. Second
   edition. New York: Appleton-Century-Crofts, 1964.

2. Anderson, Wallace L., and Norman C. Stageberg. Intro-
   ductory Readings on Language. Revised. New York: Holt,
   Rinehart and Winston, 1966.

3. Angene, Lester E., Roderick A. Jacobs, Peter S. Rosenbaum,
   and Margueritte Johnson Caldwell. Composition and
   Grammar. Boston: Ginn and Company, 1968.

4. Arnston, Dorothy Horine. Beginning College Writing.
   Chicago: Scott, Foresman and Company, 1961.

5. Ashmead, John, Rinaldo C. Simonini, Jr., and Lionel R.
   Sharp. English Composition and Language. Boston: Ginn
   and Company, 1968.

6. Bach, Emmon. An Introduction to Transformational Grammar.
   New York: Holt, Rinehart and Winston, Inc., 1964.

7. Bailey, Matilda, Lalla Walker, Rosamond McPherson, and
   Jerry Reed. Our English Language. New York: American
   Book Company, 1961.

8. Baker, Sheridan. The Complete Stylist. New York: Thomas
   Y. Crowell Company, 1966.

9. Barrett, Laurence. Writing for College. New York:
   American Book Company, 1956.

10. Beardsley, Monroe C. Thinking Straight. Englewood Cliffs,
    New Jersey: Prentice-Hall, Inc., 1956.

11. Beckett, Ralph L., and Dwight L. Garner. Writing College
    English. Chandler Publishing Company, 1963.

12. Birk, Newman P., and Genevieve B. Understanding and
    Using English. Fourth edition. New York: The Odyssey
    Press, Inc., 1965.

13. Blumenthal, Joseph C. English 3200, A Programed Course
    in Grammar and Usage. New York: Harcourt, Brace and
    World, 1962.

47

14. Blumenthal, Joseph C., and Louis Zahner. _The English Language_, Grade 9. New York: Harcourt, Brace and World, Inc., 1962.

15. _____, and Louis Zahner. _The English Language_, Grade 10. New York: Harcourt, Brace and World, Inc., 1963.

16. Braun, Irwin H. _Laugh and Learn Grammar_. 1963.

17. Brennan, Maynard J. _Compact Handbook of College Composition_. Boston: D. C. Heath and Company, 1964.

18. Brewton, John E., and others. _Using Good English_, Grade 9, Grade 11, Grade 12. River Forest, Illinois: Laidlaw Brothers, 1962.

19. Buckler, William E., and William C. McAvoy. _American College Handbook_. Second edition. New York: American Book Company, 1965.

20. Chomsky, Noam. _Aspects of the Theory of Syntax_. Cambridge, Mass.: The M.I.T. Press, 1965.

21. _____. "Current Issues in Linguistic Theory," _The Structure of Language_. Edited by Jerry A. Fodor, and Jerrold J. Katz. Englewood Cliffs, New Jersey: Prentice-Hall, 1964.

22. _____. "Current Scene in Linguistics: Present Directions," _College English_, 27:587-595, May, 1966.

23. Christ, Henry I., and J. C. Tressler. _Heath Handbook of English_, Grade 9 and Grade 10. Boston: D. C. Heath and Company, 1961.

24. _____, Anthony E. Terino, and J. C. Tressler. _Heath Handbook of English_. Boston: D. C. Heath and Company, 1961.

25. _____, Margaret Starkey, and J. C. Tressler. _Heath Handbook of English_. Boston: D. C. Heath and Company, 1961.

26. _____. _Modern English in Action_. Grade 9, Grade 10, Grade 11, and Grade 12. Boston: D. C. Heath and Company, 1965.

27. Conlin, David A. _Grammar for Written English_. Boston: Houghton Mifflin Company, 1961.

28. Corbin, Richard, Marguerite Blough, and Howard VanderBeek. _Guide to Modern English_. Chicago: Scott, Foresman and Company, 1960.

29. Corbin, Richard K. and Porter G. Perrin. _Guide to Modern English, Grade 11 and Grade 12_. Chicago: Scott, Foresman and Company, 1963.

30. Corder, Jim W., and Lyle H. Kendall. _A College Rhetoric_. New York: Random House, 1962.

31. Corrigan, Ralph L., Jr. _Themes for Study_. New York: Holt, Rinehart and Winston, 1966.

32. Cowan, Gregory, and Elisabeth McPherson. _Background for Writing_. New York: Random House, 1967.

33. Daniel, Robert W. _A Contemporary Rhetoric_. Boston: Little, Brown and Company, 1967.

34. Davidson, Donald. _American Composition and Rhetoric_. Fourth edition. New York: Charles Scribner's Sons, 1959.

35. Elsbree, Langdon, and Frederick Bracher. _College Handbook of Composition_. Seventh edition. Boston: D. C. Heath and Company, 1967.

36. Evans, Bergen, and Cornelia Evans. _A Dictionary of Contemporary American Usage_. New York: Random House, 1957. pp. 353-55.

37. Fleming, Harold, and Allan A. Glatthorn. _Composition: Models and Exercises_. New York: Harcourt, Brace and World, 1965.

38. Fodor, Jerry, and Jerrold Katz. _The Structure of Language: Readings in the Philosophy of Language_. Englewood Cliffs, New Jersey: Prentice Hall, 1964.

39. Francis, W. Nelson. "Revolution in Grammar," _Applied English Linguistics_, Edited by Harold B. Allen. New York: Appleton-Century-Crofts, 1964. pp. 69-85.

40. _____. _The Structure of American English_. New York: The Ronald Press Company, 1958.

41. Friend, Joseph. _An Introduction to English Linguistics_. Cleveland: The World Publishing Company, 1967.

42. Fries, Charles Carpenter. American English Grammar. New York: D. Appleton-Century Company, 1940.

43. _____. Linguistics and Reading. New York: Holt, Rinehart and Winston, Inc., 1963.

44. _____. The Structure of English. New York: Harcourt, Brace and World, Inc., 1952.

45. Glatthorn, Allan A., and Harold Fleming. Composition: Models and Exercises, Grade 11. New York: Harcourt, Brace and World, 1965.

46. Gleason, H. A., Jr. Linguistics and English Grammar. New York: Holt, Rinehart and Winston, Inc., 1965.

47. Gorrell, Robert M., and Charlton Laird. Modern English Handbook. Third edition. Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1965.

48. Griggs, Irwin, and David H. Webster. Guide and Handbook for Writing. New York: American Book Company, 1964.

49. Griggs, Irwin, and David H. Webster. Writer's Adviser for Freshman Composition. New York: American Book Company, 1952.

50. Guth, Hans P. Concise English Handbook. Second edition. Belmont, California: Wadsworth Publishing Company, Inc., 1965.

51. _____. A Short New Rhetoric. Belmont, California: Wadsworth Publishing Company, Inc., 1964.

52. _____. Words and Ideas. Second edition. Belmont, California: Wadsworth Publishing Company, 1964.

53. Harris, Zellig S. "Co-occurrence and Transformation in Linguistic Structure," The Structure of Langauge. Edited by Jerry A. Fodor, and Jerrold J. Katz. Englewood Cliffs, New Jersey: Prentice-Hall, 1964. pp. 155-210.

54. Hartung, Charles V. "The Persistence of Tradition in Grammar," Applied English Linguistics. Edited by Harold B. Allen. New York: Appleton-Century-Crofts, 1964. pp. 16-31.

55. Hathaway, Baxter. A Transformational Syntax, A Grammar
    of Modern American English. New York: The Ronald
    Press.

56. Hepburn, James G. College Composition. New York: The
    Macmillan Company, 1964.

57. Hill, Archibald A. "Correctness and Style in English
    Composition," Applied English Linguistics. Edited by
    Harold B. Allen. New York: Appleton-Century-Crofts,
    1964. pp. 389-395.

58. Hodges, John C., and Mary E. Whitten. Harbrace College
    Handbook. Sixth edition. New York: Harcourt, Brace
    and World, Inc., 1967.

59. Hough, George Anthony, 3rd. "Structure of Modification
    in Contemporary American English," Dissertation
    Abstracts, XXVI, 4647-4648, 1966.

60. Hudson, Randolph H. A Modern Handbook of American
    English. Chicago: Science Research Associates, Inc.,
    1966.

61. Jensen, Dana O., R. Morell Schmitz, and Henry F. Thoma.
    Modern Composition and Rhetoric. Boston: Houghton
    Mifflin Company, 1935.

62. John, Mellie, Paulene M. Yates, and Edward N. DeLaney.
    The New Building Better English, Grade 9. Evanston,
    Illinois: Harper and Row, Publishers, 1965.

63. _____, Paulene M. Yates, and Edward N. DeLaney,
    Linguistic Grammar: John C. Mellon. The New Building
    Better English, Grade 10. Evanston, Illinois: Harper
    and Row, Publishers, 1965.

64. _____, and Paulene M. Yates. The New Building Better
    English, Grade 11. Evanston, Illinois: Harper and Row,
    Publishers, 1965.

65. Jordan, Archibald C. The Writer's Manual. Cleveland:
    The World Publishing Company, 1966.

66. Kierzek, John M. The Practice of Composition. Form B,
    Third edition. New York: The Macmillan Company, 1951.

67. _____, and Walker Gibson. A Handbook of Writing
    and Revision. Fifth edition. New York: The Macmillan
    Company, 1967.

68. Kierzek, John M., and Walker Gibson. The Macmillan
    Handbook of English. Fifth edition. New York: The
    Macmillan Company, 1965.

69. LaBrant, Lou, Margaret Painter, and Robert U. Jameson.
    Your Language, Book 10. New York: McGraw-Hill Book
    Company, Inc., 1959.

70. _____, William G. Leary, Donald A. Bird, and
    Margaret Painter. Your Language, Grade 11. New York:
    McGraw-Hill Book Company, Inc., 1960.

71. _____, William G. Leary, and Donald A. Bird. Your
    Language, Book 12. New York: McGraw-Hill Book Company,
    Inc., 1962.

72. Larson, Arlene, Roderick A. Jacobs, Peter S. Rosenbaum,
    Margueritte Caldwell, and Lionel R. Sharp. Composition
    and Grammar, Grade 10. Boston: Ginn and Company, 1968.

73. Lees, Robert B. The Grammar of English Nominalizations.
    Fourth printing. Bloomington: Indiana University, 1966.

74. _____. "Transformational Grammars and the Fries
    Framework," Applied English Linguistics. Edited by
    Harold B. Allen. New York: Appleton-Century-Crofts,
    1964. pp. 137-146.

75. Lefevre, Carl A. Linguistics and the Teaching of Reading.
    New York: McGraw-Hill Book Company, 1964.

76. Lefevre, Helen E. and Carl A. Lefevre. Writing by
    Patterns. New York: Alfred A. Knopf, 1965.

77. Leggett, Glenn, C. David Mead, and William Charvat.
    Prentice-Hall Handbook for Writers. Fourth edition.
    Englewood Cliffs, New Jersey: Prentice-Hall, Inc.,
    1965.

78. Lehman, Alan. Readable Rhetoric. Minneapolis: Burgess
    Publishing Company, 1960.

79. Levin, Gerald. A Brief Handbook of Rhetoric. New York:
    Harcourt, Brace and World, Inc., 1966.

80. Lybbert, Evart Kay. "The Application of Linguistics to
    English Composition Teaching." Unpublished Master's
    Thesis, The University of Washington, Seattle, 1965.

81. McCrimmon, James M. A First Course in College Composition. Second edition. Cambridge, Mass.: Houghton Mifflin Company, 1957.

82. McPeek, James A. S., and Austin Wright. Handbook of English. New York: The Ronald Press Company, 1956.

83. McQueen, William A. A Short Guide to English Composition. Belmont, California: Wadsworth Publishing Company, Inc., 1967.

84. Marchwardt, Albert H. "Linguistics and English Composition," A Journal of Applied Linguistics, Special Issue No. 2: 15-28, March, 1961.

85. _____. Linguistics and the Teaching of English. Bloomington: Indiana University Press, 1966.

86. _____, and Frederic G. Cassidy. Scribner Handbook of English. Third and fourth editions. New York: Charles Scribner's Sons, 1960 and 1967.

87. Mitchell, John. Handbook of Technical Communications. Belmont, California: Wadsworth Publishing Company, Inc., 1962.

88. _____. Effective Writing. Third edition. New York: Holt, Rinehart and Winston, 1965.

89. Moore, Robert Hamilton. Handbook of Effective Writing. New York: Holt, Rinehart and Winston, 1966.

90. Morsberger, Robert E. The Language of Composition. New York: Thomas Y. Crowell Company, 1964.

91. Myers, L. M. Guide to American Language. Second and third editions. Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1959 and 1963.

92. Pearlman, Daniel P., and Paula R. Pearlman. Guide to Rapid Revision. New York: The Odyssey Press, 1965.

93. Pence, R. W., and D. W. Emery. A Grammar of Present-Day English. Second edition. New York: The Macmillan Company, 1963.

94. Perrin, Porter G., and George H. Smith. The Perrin-Smith Handbook of Current English. Second edition. Chicago: Scott, Foresman and Company, 1962.

95. Perrin, Porter G., George H. Smith, and Jim W. Corder.
     The Perrin-Smith-Corder Handbook of Current English.
     Third edition. Chicago: Scott, Foresman and Company,
     1968.

96. Pollock, Thomas Clark, and others. The Macmillan English
     Series, Book 9, Book 10, Book 11, Book 12. New York:
     The Macmillan Company, 1964.

97. Postal, P. M. "Underlying and Superficial Linguistic
     Structures," Harvard Educational Review, 34:246-266,
     1964.

98. Postman, Neil, Harold Morine, and Greta Morine. Discover-
     ing Your Language. New York: Holt, Rinehart and
     Winston, Inc., 1963.

99. Richards, Irving T., and Paul I. Richards. Proper Words
     in Proper Places. Boston: The Christopher Publishing
     House, 1965.

100. Roberts, Paul. English Sentences. New York: Harcourt,
     Brace and World, 1962.

101. _____. English Syntax. Alternate edition. New York:
     Harcourt, Brace and World, Inc., 1964.

102. _____. "Intonation," Introductory Readings on Langu-
     age. Edited by Wallace L. Anderson and Norman C.
     Stageberg. New York: Holt, Rinehart, and Winston, 1962.

103. _____. Patterns of English. New York: Harcourt,
     Brace and Company, 1956.

104. _____. "The Relation of Linguistics to the Teaching
     ofEnglish," College English, 22:1-9, October, 1960.

105. _____. Roberts' English Series. New York: Harcourt,
     Brace and World, Inc., 1967.

106. _____. Understanding Grammar. New York: Harper and
     Row, 1954.

107. Robertson, Duncan. Errors in Composition. Revised edi-
     tion. Toronto: The Macmillan Company of Canada Limited,
     1965.

108. Rorabacher, Louise E. A Concise Guide to Composition.
     Second edition. New York: Harper and Row, Publishers,
     1956.

109. Rosenbaum, Peter S. "On the Role of Linguistics in the Teaching of English," Language and Learning. Edited by Janet A. Emig, James T. Fleming, and Helen M. Popp. New York: Harcourt, Brace and World, 1966.

110. Rubinstein, S. L., and R. G. Weaver. The Plain Rhetoric. Boston: Allyn and Bacon, Inc., 1964.

111. Ruby, Lionel. "Ambiguity," Introductory Readings on Language. Edited by Wallace L. Anderson, and Norman C. Stageberg. New York: Holt, Rinehart and Winston, 1966. pp. 524-539.

112. Sapir, Edward. Language. New York: Harcourt, Brace and World, Inc., 1949.

113. Shaffer, Virginia, and Harry Shaw. McGraw-Hill Handbook of English. Second edition. New York: McGraw-Hill Book Company, 1960.

114. Shaw, Harry, and Richard H. Dodge. The Shorter Handbook of College Composition. New York: Harper and Row, Publishers, 1965.

115. Sledd, James. "Syntactic structures," Applied English Linguistics. Edited by Harold B. Allen. New York: Appleton-Century-Crofts, 1964. pp. 414-422.

116. Stageberg, Norman C. "Some Structural Ambiguities," English Journal, 47:479-486, November, 1958.

117. _____. "Structural Ambiguity: Some Sources," English Journal: 55:558-563, May, 1966.

118. Sypherd, W. O., Alvin M. Fountain, and V. E. Gibbens. Manual of Technical Writing. Chicago: Scott, Foresman and Company, 1957.

119. Thomas, J. D. Composition for Technical Students. Third edition. New York: Charles Scribner's Sons, 1965.

120. Thomas, Owen. "Generative Grammar: Toward Unification and Simplification," Applied English Linguistics. Edited by Harold B. Allen. New York: Appleton-Century-Crofts, 1964. pp. 405-414.

121. Tressler, J. C., and Henry I. Christ. Grammar in Action. Fourth edition. Boston: D. C. Heath and Company, 1962.

122. Wachner, Clarence W. English for Adults. New York: Holt,
      Rinehart and Winston, Inc., 1964.

123. Walsh, J. Martyn, and Anna Kathleen Walsh. Plain English
      Handbook. Revised edition.   : The McCormick-
      Mathers Publishing Company, 1951.

124. Warriner, John E., and others. English Grammar and
      Composition. Revised, Grade 9, Grade 11, and Grade 12.
      New York: Harcourt, Brace and World, Inc., 1965.

125. Watkins, Floyd C. and Edwin T. Martin. Practical English
      Handbook. Boston: Houghton Mifflin Company, 1961.

126. Watt, William W. An American Rhetoric. Third edition.
      New York: Holt, Rinehart and Winston, 1964.

127. Weinhold, Clyde E. English, Adult Basic Education. New
      York: Holt, Rinehart and Winston, Inc., 1962.

128. Wilbur, Diane A., Desmond J. Nunan, and John E. Warriner.
      Composition: Models and Exercises. New York: Harcourt,
      Brace and World, Inc., 1966.

129. Willis, Hulon. Structure, Style, and Usage. New York:
      Holt, Rinehart and Winston, 1964.

130. Wilson, Harris W., and Louis G. Locke. The University
      Handbook. Second edition. New York: Holt, Rinehart
      and Winston, Inc., 1966.

131. Wolfe, Don M., and others. Enjoying English, Grade 9,
      Grade 10, Grade 11, and Grade 12. Fourth edition.
      Syracuse: The L. W. Singer Company, 1964.

132. Woolley, Edwin C., Franklin W. Scott, and Frederick
      Bracher. College Handbook of Composition. Sixth
      edition. Boston: D. C. Heath and Company, 1958.

133. Wykoff, George S., and Harry Shaw. The Harper Handbook.
      Second edition. New York: Harper and Brothers
      Publishers, 1957.

134. Zahner, Louis, and Joseph C. Blumenthal. The English
      Language, Grade 11. New York: Harcourt, Brace and
      World, Inc., 1965.

135. _____, Arthur L. Mullin, and Arnold Lazarus. _The English Language-Senior Course_. New York: Harcourt, Brace and World, Inc., 1966.

136. Zandvoort, R. W. _A Handbook of English Grammar_. Third edition. Englewood Cliffs, New Jersey: Longmans Prentice-Hall, Inc., 1966.