

professional writers in an attempt to describe the patterns of development.¹⁴ He found that specific structures and sentence patterns increase or decrease in use as students grow. Also, the patterns of professional writers seem to be an extension of the pattern that is evident in the development of secondary school students. His findings suggest that a teacher's attempts to help a student improve his syntax need not be based on arbitrary criteria about what constitutes better syntax, but can rather be based on specific knowledge of how students change. If we know what comes after what in the normal course of development, we have a sound basis on which to decide what goals we should have for the student in this area. The research to date is not adequate to allow us to make definite statements about many particulars of the pattern, but anyone who refers to the study by Mr. Hunt will find that such investigation is well on the way to helping us state specific syntactic "use" goals on the basis of students' regular developmental patterns.

However, in the early 1900s a great deal of research of the same kind was done on "usage errors." Voluminous studies report what errors were made with what frequency at what grade levels. But this knowledge was of little value since English teachers have been unable to teach correct usage no matter when the problems occur. The same may very well be true for syntax. Even though we may be able to determine precisely what the student should learn, we may be unable to teach it effectively. We are still faced with the problem of effective approaches to the student's usage and syntax problems.

NOTES

1. Briggs, Thomas H. "Formal English Grammar as a Discipline," *Teachers College Record* 14: 251-343; p. 256.
2. *Ibid.*, p. 339-341.
3. *Loc. cit.*
4. Lyman, R. L., Summary of Investigations Relating to Grammar, Language, and Composition. *Supplementary Educational Monograph* 36, University of Chicago, 1929.
5. Symonds, Percival M. "Practice versus Grammar in the Learning of Correct Usage," *Journal of Educational Psychology*, 22: 81-95; 1931, p. 93.
6. Frognet, Ellen, "Grammar Approach Versus Thought Approach in Teaching Sentence Structure," *English Journal*, 28: 518-526; 1939, p. 518.
7. *Ibid.*, p. 526.
8. Tovatt, Anthony, "Diagramming: a Sterile Skill" *English Journal*, 41: 91-93; 1952, p. 93.
9. Carlsen, G. Robert, "English," *Encyclopedia of Educational Research*, third ed. New York: The Macmillan Co., 1960.
10. Harris, Roland J. "An Experimental Inquiry into the Functions and Value of Formal Grammar in the Teaching of English, with Special Reference to the Teaching of Correct Written English to Children Aged Twelve to

Fourteen." Unpublished Ph.D. dissertation, University of London, 1962, described in *Research in Written Composition*.

11. Braddock, Richard, Richard Lloyd-Jones, and Lowell Scher, eds., *Research in Written Composition*, Champaign: National Council of Teachers of English, 1963.
12. Bateman, Donald R. and Frank J. Zidonis, *The Effect of a Knowledge of Generative Grammar upon the Growth of Language Complexity*, U.S. Office of Education Cooperative Research Project #1746, 1964, pp. 134-136.
13. Christensen, Francis, "Sentence Openers," *College English*, 25, 1, October 1963, p. 8.
14. Hunt, Kellogg W., *Differences in Grammatical Structures Written at Three Grade Levels, The Structures to be Analyzed by Transformational Methods*, U.S. Office of Education, Cooperative Research Project 1968.

SUGGESTIONS FOR FURTHER READING

1. RICHARD BRADDOCK, RICHARD LLOYD-JONES, and LOWELL SCHER, eds., *Research in Written Composition* (Champaign: National Council of Teachers of English, 1963). Describes the requirements of sound research and the results of research concerning the relationship of grammar and composition.
2. KELLOGG W. HUNT, *Grammatical Structures Written at Three Grade Levels* (Champaign: National Council of Teachers of English, 1965). An analysis of the developmental patterns of students' syntax illustrating the values of transformational grammar for the teacher's improved understanding of student composition.
3. DONALD R. BATEMAN and FRANK J. ZIDONIS, *The Effect of a Knowledge of Generative Grammar upon the Growth of Language Complexity* (United States Office of Education: Cooperative Research Project 1746, 1964). A research project which shows a significant relationship between study of generative grammar and sentence structure.

Many teachers find that their problems related to teaching grammar have been simplified by the department chairman, the principal, or the curriculum committee. A course of study has been designed, a textbook has been chosen, the topics that must be covered have been made mandatory, and very little has been left to the individual teacher's discretion. Two decades ago this was the situation in most schools. Increasingly, however, this practice is being abandoned, and the grammar curriculum is a no man's land where fewer and fewer combatants dare enter. In 1968 the National Council of Teachers of English published *High School English Instruction Today* by Squire and Applebee who, after studying 158 high schools chosen "largely for their reputation in English," could write: "Virtually no sequential or well-planned programs in language were discovered."¹

Should a teacher find that no grammar program exists in his school, he must consider carefully the wisdom of teaching one on his own. First he must narrow the field, recognizing that spelling, punctuation, and capitalization are, strictly speaking, matters of usage and not grammar (see Chapter 17). Limiting the concept of grammar, then, to language structures and their relationships only, he must consider his purposes: why should he teach this content at all; and in view of all the available content alternatives in language study, as well as in literature and composition, why select grammar for attention, thus limiting the time that is available for the alternatives?

Assuming he can answer the questions of purpose in a satisfactory way—no easy task!—he must deal with one far more telling: Is he equipped to do the job? Two studies published by the National Council of Teachers of English² indicate that most English teachers are not adequately trained to teach grammar. Even today many teacher training institutions do not offer courses in grammar. It is incumbent upon any teacher not to teach error. In the absence of appropriate training in grammar on the teacher's part, the teaching of error is all but inevitable.

During the past three decades grammar scholarship has been the fastest growing, most dynamic and exciting area in all of English studies. The conventions and dominant points of view have been in continuous flux, and the rate of change has been accelerating. These changes involve the whole of the discipline from techniques of analysis, to the results of the analyses, to the fundamental philosophical views of the nature of languages and language structures.

The implications for public school teachers can best be understood through an analogy. Let us suppose a teacher assigned to teach chemistry in some remote place had only a textbook in alchemy to guide him and no other background in the science. Such is the English teacher with only his own high school experience in traditional school texts. Or more realistically, assume that in some far place the schools had only pre-World War II vintage chemistry texts asserting that matter and energy were only and always separate entities and that there were ninety-two elements in existence once and for all. A chemistry teacher who was himself untrained in contemporary chemistry and physics would allow his students to learn what is now error but what was once regarded as basic truth.

If today's English teacher cannot deal directly, with or without the aid of a class text, in such matters as allomorphs of morphemes, paradigms, deep structures and embedded sentences, marked and unmarked forms, suprasegmental phonemes, deletion transformations, and linguistic universals, he must perforce delegate instruction in grammar to his colleagues who have sufficient training. Even if he is conversant with the matters named and like arcana, if he does not stay abreast of developments in the field, he runs the risk of teaching error. A person who is informed only by his coursework in structural linguistics taken in the early '60s, for example, will teach a grammar that no longer enjoys the approval of grammar specialists. In short, given any choice, *most English teachers must not teach grammar* because they are simply unequipped to do the job honestly.

Even the teacher who has sufficient training will be left to his own devices in much of his teaching since even the most recent secondary school grammar texts suffer from an apparently unavoidable cultural lag in grammar scholarship.³ Then, too, as noted above, even an informed teacher must deal with the question of purpose in teaching grammar, and this question will be considered in some detail below.

To return to the situation described in the first paragraph of this chapter, a teacher, whether trained or not, may be required to do some grammar teaching in his classes. If this is the case, he will certainly find that he will be limited to one of three types of grammar and that his text in each case has organized the instructional sequences for him. One alternative might be the traditional school grammar familiar to us all. The second alternative might be the grammar that has come to be known as structural linguistics. The third might be transformational generative grammar. Let us examine

each alternative in terms of the character of its academic tradition, the dominant point of view of the school, the pedagogical purposes ascribed to the teaching, and typical lesson materials and procedures.

Traditional School Grammar

The academic influence of traditional school grammar in the English language has been traced to the eighteenth century.⁴ Having its roots in the classical grammars of Latin and Greek, the school grammar is modeled on these, and English is seen as an imperfect imitation of these purer archetypes. The intention of the grammarian is to present the rules of the grammar as prescriptions for the student to follow so that his speaking, and especially his writing, will not display incorrect forms and thus contribute to an unfortunate tendency towards the debasement of English that can frequently be found in careless users of the vernacular. The written language is viewed as the true language.

The sentence is the key form in analysis, and that analysis yields clausal and phrasal structures, subjects, predicates, complements and, in the most contemporary treatments, eight parts of speech. Each of these structures may be identified by reference to a set of definitions, and the instructional approach is to apply the definitions in a deductive analysis of syntax.

The tradition has been maintained with only minor variations since its conception, and the school student first encounters it in the third grade or even earlier. In schools where teachers are required to continue this tradition, appropriate textbooks will be provided for student use. Should the teacher be hazy about some of the niceties in the analyses, he need simply stay a few pages ahead of his students, and with the most moderate application, all will come back to him.

As Chapter 17 indicates, this form of grammar and the implied instruction studies relating to all phases of instruction and its lack of carry-over to the speaking and writing of the majority of students. In addition to these studies, the logical inconsistencies in the system have been demonstrated by many modern grammarians, most notably Charles C. Fries.⁵

If a teacher is required to teach this kind of grammar, he should minimize the time and energy that he and his classes expend on it. Additionally, it is his professional responsibility to bring to the attention of his superiors the research data and the theoretic attacks on the grammar in an effort to obtain a major curriculum change. In this case he must make absolutely clear the distinction between syntactic analysis and the study of usage including spelling, punctuation, and capitalization—in all likelihood his superiors will be unaware of the distinction and, in possibly invincible ignorance, will resist any change.

Structural Linguistics

It may be the case that as a result of a capital investment in textbooks, a teacher may find that his curriculum has a commitment to structural linguistics as the grammar that must be studied. Sometimes called descriptive linguistics, this school had its origins in the nineteenth-century work of cultural anthropologists and philologists.⁶ In dealing with exotic and primitive languages, these workers developed techniques for describing them. Whenever a language previously unknown to European or American scholarship—such as the languages of interior South America and Indonesia, for example—was encountered, it was often not possible to describe the language through the medium of translation, which is an unreliable procedure at best. Therefore, the techniques used in describing and analyzing languages had to be, as far as possible, free of reliance on translation or other semantic considerations. Over the years such techniques were developed, and later the same principles were applied to previously-known languages, including European languages, one of which, of course, is English.

The basic technique involved finding a native speaker of a language and recording what he said. Originally, the recording was done by hand and by using a phonetic alphabet with various diacritical markings. Today, field workers use tape recorders for the recording, but the speaker must be native to the language under study. This procedure implies the dominant philosophical view that language is what comes out of the mouth of a speaker. There are two important corollaries to this axiom: a written language is merely an attempt to reproduce a spoken language; the current language must be analyzed without reference to historical influences on it since any speaker may be unaware of the history of his language. (For example, it matters little in understanding or analyzing current English that historically the words "host," "guest," and "ghost" were once the same word.)

When a sufficient sample of the spoken language has been collected in its phonetic form, the sample—called a corpus—is analyzed into three levels, the phonological (significant sounds or alphabet), the morphological (words and parts of words that carry distinctive meaning), and the syntactic (sentence structures and substructures such as clauses and phrases). Thus the grammar of a language is a description of all the elements in each of these levels.

In summary, structural linguistics rejects the use of meaning as a criterion for the analysis of language. Instead, it uses structural criteria to establish classifications of observed data. This discussion purposely skirts the controversy over the use of "meaning" in linguistic analysis. Some linguists would claim that phonological, morphological, and syntactic classification can be accomplished strictly on the basis of structural criteria as this discussion implies. Others would just as strongly contend that the structural techniques mask an appeal to meaning. That is, although the linguist may not know the meaning of a foreign language, his use of a native informant to make

contrastive discriminations necessarily depends upon the native informant's knowledge of meaning.⁷

With its strong emphasis on oral language and the facts of language as it is actually used by native speakers, structural linguistics becomes almost necessarily involved in the analysis of differences among native speakers. Although the study of dialect patterns is a discipline with its own techniques and specialists, its close alliance to structural linguistics has led to its usual inclusion under this heading.

These, then, are the basic areas of structural linguistics—phonology, morphology, syntax, and dialectology. The discipline has had a profound effect upon the study of language because it gives a more scientific base to that study, freeing it from the incorrect, imprecise prejudices of early approaches and allowing a more accurate description of language.

The purpose for studying grammar, then, is simply to describe the structures in the language as it is observed in the speech of native speakers.

Ordinarily, secondary school teaching will ignore the level of significant sounds. Here are three sample exercises with parts of speech, in the domain of morphology. Since most students will know the traditional parts of speech, it is often necessary to expose the weaknesses of those preconceptions.

WORKSHEET

What part of speech do we usually call the following words?

barn	barns
door	doors
toy	toys
motor	motors
top	tops
table	tables
window	windows
taxi	taxis

As what part of speech are the underlined words used in the following sentences?

1. The barn door is open.
2. The door handle was broken.
3. The toy soldier stood on the shelf.
4. He bought a motor driven toy.
5. He bought a boat motor.
6. The table top was too high for the little boy to reach.
7. The top table was too high for the little boy to reach.
8. The window washer unhooked his safety strap.
9. The taxi driver looked tired.

These concepts can be extended by asking students to use them in other situations.

WORKSHEET

Name the part of speech of the underlined words:

- This joke will floor you.
 We must table the motion until the next meeting.
 A painting mirrors the real world.
 We should bottle this sunshine.
 I picture her as a blond.
 The police will book him for hitchhiking.
 You must face the problem.
 You shouldn't horn in on the conversation.
 We can nail it shut.
 They will page you on the loudspeaker.

If you saw the underlined words *without* a context, what part of speech would you call them? Why?

Put an X through the noun or pronoun that comes before the underlined word in each sentence.

Circle the other words that come before the underlined words. What kind of word do we usually call them? What two kinds of words often come before the main verb position?

If the students are determinedly attached to the traditional definitions, another approach is the use of nonsense language. In a sentence such as "The farpest brugerts grubbled forpingly" students can easily identify parts of speech. Such nonsense makes the point that they must be responding to clues other than the "meaning" of words. With such an example, we observe the use of positional and formal characteristics as bases for discriminating classes of words.

Enough of this kind of instruction effectively convinces both students and teacher that the traditional definitions are extremely difficult to work with. After such discussion, however, it is not necessary to *discard* the traditional definitions of parts of speech. The point is, rather, that such definitions have weaknesses, specifically that they are too vague to be operational, that they do not distinguish between form and function, and that they rely on other criteria such as position and form that are not made explicit. With these reservations, the students may continue to use the intuitions on which traditional definitions are based. Also, this procedure of identifying the weaknesses of a particular approach to the structure of language will be equally applicable to the other approaches. No presently available grammatical system solves all the problems of language structure, so students should get into the habit of discovering both

WORKSHEET

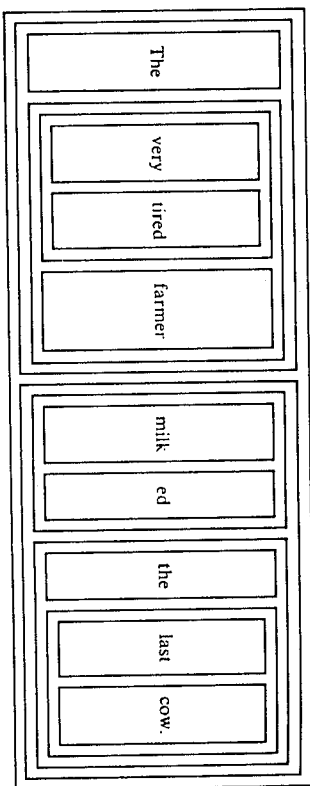
Column A	Column B	
1. boy	boys	The change from Column A to Column B is not the same for items 1 through 4 as it is for 5 through 8. But we can show that the different changes "mean" the same thing by building two positions, or frames, one for Column A and the other for Column B.
2. girl	girls	
3. dog	dogs	
4. book	books	
5. church	churches	
6. branch	branches	Column A frame: One _____ is here. Column B frame: Two _____ are here.
7. trench	trenches	
8. ditch	ditches	
9. man		
10. child		
11. tooth		By using these two frames, fill in Column B for items 9 through 12. Underline the part of the word that shows the change.
12. mouse		

Build three frames that will show that all the changes in these words have the same "meaning."

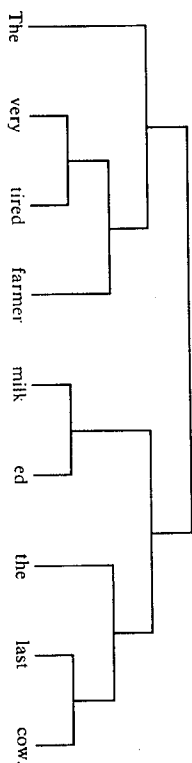
Column A	Column C	Column E
swim	swam	swimming
fold	folded	folding
sleep	slept	sleeping
fight	fought	fighting
Column A frame:		
Column C frame:		
Column E frame:		

weaknesses and strengths. Such procedures also suggest the kind of testing that is appropriate to possible language principles. From this kind of beginning, both students and teacher are free to suggest and test assumptions about categories and relationships in language. The teacher should be warned, however, that students who have thus been put on their guard will be difficult to deal with. Their rigor and questioning will be extremely disconcerting if the teacher wants them to take something for granted. But with preconceptions reasonably well destroyed, the class can continue their study of language in an unbiased way.

Structural linguists use many approaches to the analysis of relationships within the sentence, but the most common one is immediate constituent analysis, usually abbreviated IC analysis. This method assumes that the sentence may be analyzed by dichotomous cuts to the level of individual words, and sometimes morphemes. This is an illustration:



The diagram is often referred to as "Chinese boxes" and is far more easily and clearly illustrated by a branching tree diagram as follows:



Although many sentences yield nicely to this kind of diagramming, many do not, and the teacher left to his own devices in the matter of producing practice exercise material is cautioned to test sentences before presenting them to the class. Presumably, the strength of IC analysis is that the technique does not require that the word order of the sentence be changed to fit the analysis as is the case with the familiar sentence diagrams of traditional school grammar. However, this advantage is not always possible with IC analysis. For example, the reader might try to develop a nice, neat tree diagram for the following:

I first saw them working on the road.

The problem, of course, is deciding with which constituent "working on the road" belongs, "I" or "them."

Transformational-Generative Grammar

American interest in transformational-generative grammars burst into full bloom with the publication of Chomsky's *Syntactic Structures* in 1957.⁸ In addition to the problems involved in the IC analysis

of such ambiguous sentences as "I first saw them working on the road," Chomsky pointed out a number of other difficulties.

The central difficulty of structural linguistics is the basic view of the fundamental nature of language. Transformational grammarians hold that language is not simply the spoken language. Any corpus can never represent the whole language no matter how large that corpus might be. Whatever anyone says will represent only a selection of all that it is possible for him to say. Thus, any recorded corpus of actual speech is essentially accidental. Furthermore, however accurate a description of what has been heard might be, that description does not explain how the sentences were formed nor does it predict what other sentences might be formed. Beyond not explaining what could occur, descriptive techniques, because they are limited to actual observations, can never explain utterances that *can not* occur in a language. For example, no English speaker would ever produce a word like *rlisw (the asterisk preceding a hypothetical form is a convention used in language notation). The form *rlisw cannot occur, not because the consonant clusters are themselves unpronounceable in English (since "swirl" contains the same clusters), but for some deeper reason. Likewise no English speaker would produce such a sentence as: *running stops of into tables from nothing over can house, although each word is an English word.

There are limitations to the use of frames (as in the third worksheet above) in generalizing rules about relationships of clusters within a sentence. For example, one adjective frame in English is as follows:

The _____ noun

Many adjectives will fit into the slot in such a phrase as "the _____ man": "old," "young," "decrepit," or "happy," as examples. However, if the noun in the phrase is changed to "typewriter" yielding "the _____ typewriter," we find that while "old," and possibly "decrepit" will fit into the slot, "happy" will fit only as a metaphor and "young" will not fit at all, since the semantically appropriate contrast for "old" with inanimate nouns is "new." The structuralists' avoidance of meaning and reliance on structure in analysis results in a failure of frames to account for such idiosyncracies of language.

Rejecting the view that the whole of language is contained in actually observed utterances, transformational grammars present the view that a language is an abstract entity and that the utterances actually spoken represent epiphenomenal evidence of the existence of the abstract language. Many regard the ideas of Ferdinand de Saussure who developed a similar dichotomy of *langue* and *parole* as the source of this view of the nature of language.⁹

Any grammar of a language should be understood as a theory of that language. Through his experience with his language the native speaker intuitively knows the grammar of his language. The task of the grammarian is to state explicitly what the rules of this grammar are.

An English sentence is seen in essence as a "deep structure" containing

elements of semantic content such as *boy play. The rules of the grammar act upon this deep structure and result in the "surface structure" that actually occurs: "The boy is playing." This sentence is only one of many possible surface structures that the grammar might generate: "A boy plays; a boy does play; a boy was playing; was a boy playing; where is the boy playing; etc."

The purpose of studying grammar, then, is to develop the rules that will explain how surface structures are generated from deep structures and to state these rules so that they have the widest possible generality in their application. It should be clearly understood that this grammar in no way should be related to the psychological processes behind human speech or writing, at least at the present stage of development of the science. For example, Emmon Bach wrote in 1964:

"A grammatical theory is not a direct model of the user of a language (either speaker or hearer)."¹⁰

Chomsky wrote in 1965:

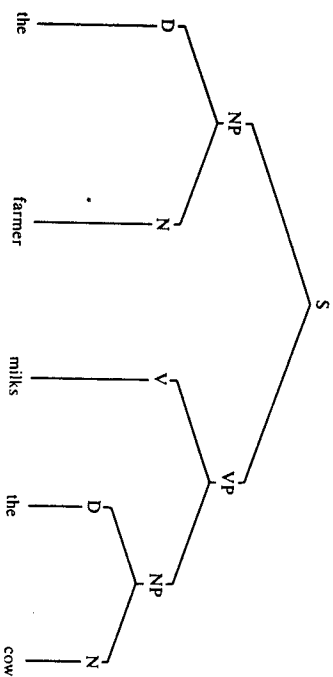
"To avoid what has been a continuing misunderstanding, it is perhaps worthwhile to reiterate that a generative grammar is not a model for a speaker or a hearer. It attempts to characterize in the most neutral possible terms the knowledge of the language that provides the basis for actual use of language by a speaker-hearer."¹¹

Ronald Wardhaugh wrote in 1969:

"It is important to reemphasize one crucial point about grammar and rules. The grammar and its rules are not a characterization of performance. They are not intended to be a model of how sentences are actually produced or understood by speakers—that is, a model of what speakers actually do in constructing sentences. The rules are not rules of behavior, nor do they have any necessary psychological correlates. Grammars generate sentences and descriptions; speakers produce sentences; generate and produce are not synonymous. It may eventually prove to be the case that the rules do correlate closely with psychological processes, but at the present time no such correlation is claimed for them. It may be the case, too, that a competence model of language underlies a performance model of language in some very simple way, but so far it is not clear how linguistic competence relates to the various kinds of linguistic performance."¹²

Instruction in transformational grammar begins with the assumption that a student has mastered certain fundamental concepts: he knows what the parts of speech are and can define these in an unambiguous way as well as being able to identify them in sentences; he knows what a well-formed Eng-

lish sentence is and what clauses and phrases are. The common procedure is to present unproblematical sentences for IC analysis by students who use tree diagrams. Next, students are taught a notation system that makes a branching tree diagram a more general statement of relationship. Take, for example, a simpler version of the sentence used earlier: The farmer milks the cow.



The abbreviations at the nodes of the branches have the following meanings:

S = sentence; NP = noun phrase; VP = verb phrase; D = determiner;
N = noun; V = verb.

When skill in such diagramming of simple declarative sentences is evident, the class is taught to reduce these to algebra-like formulations:

S \rightarrow NP₁ + VP
NP₁ \rightarrow D + N₁
VP \rightarrow V + NP₂
NP₂ \rightarrow D + N₂
D \rightarrow the
V \rightarrow milks
N₁ \rightarrow farmer
N₂ \rightarrow cow

The abbreviations have the same meaning as in the tree diagram, and the arrow should be read as: "may be rewritten as." Thus the student has learned to use "rewrite rules" in formulating an abstract analysis of a sentence.

The next step is to recognize that any simple declarative sentence having the verb in the active voice will always have as constituents the elements NP + VP, and that the irreducible kernels of these constituents will be a noun and a verb respectively. Thus the fundamental components of the deep structure as presented in current secondary texts, are the noun and the verb.

The next step is learning how surface structures are generated from deep structures. Given the same elements of the deep structure, farmer and milk, how is the following surface structure generated?

Does the farmer milk the cow?

From the deep structure, "farmer milk," the surface structure, "the farmer milks the cow," was generated. If different rules had been applied, the surface structure, "the farmer does milk the cow," would have been generated. It is clear that one rule is necessary to transform the "milk" of the deep structure to "does milk" in the surface structure, a rule that governs introducing the auxiliary "does." In order to introduce the appropriate auxiliary, it is necessary to supply information about tense with the semantic input of the verb in the deep structure. Since "is milking" is an acceptable option to "does milk" a selectional rule is also applied to the deep structure.

In order to generate the question, in addition to transforming the verb to verb + auxiliary, it is necessary to use a rule that shifts the auxiliary to a position before "farmer" in the surface structure. Rewrite rules cannot account for introducing auxiliaries and shifting them about in generating surface structures. The generic name for the new rules is "transformational" rules, hence the characterization "transformational generative" grammars. (In passing, it is interesting to note that De Saussure among others has proposed generative grammars that are not transformational in character, but that propose other theories explaining how sentences are generated.¹³)

The formulation that expresses the generation of "Does the farmer milk the cow" from the deep structure "farmer milk" is the following:

Q yes/no
farmer + milk + present $\xrightarrow{\hspace{1cm}}$ does the farmer milk the cow

or the more general form:

Q yes/no
NP + VP + tense $\xrightarrow{\hspace{1cm}}$ Aux + D + N + V + D + N

The double arrow in the formulation should read "is transformed by" and the superscript over the double arrow "the rules governing questions of the 'yes/no' type." There are question transformation rules of another type since not all English questions can be answered by "yes" or "no" as is the case for the one in this surface structure.

This formulation implies other, preliminary formulations that must be understood. One of the preliminary formulations is the rewrite rule governing Aux (the auxiliary that is chosen). In generating the surface structure, two options were available: "does milk," "is milking." The choice of the second option implicitly demands the change of the verb to its participial form. The rewrite rule for the auxiliary is stated as follows:

Aux \rightarrow $\left\{ \begin{array}{l} \text{does} \\ \text{is} \dots \text{ing} \end{array} \right\}$

Further, the semantic content of the verb "milk" implies the existence of the complement "cow." Only a few words may substitute for "cow": "goat, camel" and perhaps others. Although metaphors permit such substitutions as "lines" (the farmer milks his lines in the play), most other nouns could never appear as complements: *the farmer milks gasoline. Other deep structures prohibit noun complements: *farmer remain; while others, admitting noun complements, prohibit those implied by "milk": *farmer sing.

Of course, work with transformational rules need not begin with those governing yes/no questions. Any of the other transformations and the resulting analyses and syntheses will support the instruction. The intention is to express all the rules and to specify all the semantic content of all the deep structure inputs in the most explicit and at the same time most generally applicable statements as is possible.

Summary

This cursory and somewhat impressionistic review of the alternative grammars that are being taught in the schools today is, in large measure, gratuitous. Teachers with the appropriate training have no need of such a review, and they should have little difficulty in planning their instruction. On the other hand, since this review cannot possibly substitute for such training, the untrained person can make no use of it in instructional planning. It has been offered simply as an overview of what is involved in grammar teaching today.

Although we have examined traditional school grammar because it is used in many places, the authors state emphatically that such instruction is at present indefensible. The ill-informed assumptions that the written language is somehow superior to speech and that language change is equivalent to degradation are unsupported. The purpose underlying the instruction, that of effecting improvement in speech and writing, has been discredited by overwhelming empirical evidence. The inconsistent formulations of the grammar itself have been discredited to the extent that "... it has been very hard to get traditional materials published ..."¹⁴

As for structural linguistics, the transformational grammarians have shown a great many weaknesses in that view of the nature of language, in the procedures of analysis, and in the results of the analyses. Generally, transformational grammar has superseded descriptive grammar as far as academic approbation is concerned. Beyond this, there is some question as to the value of the classroom study of the material since the purpose of the study is to provide an accurate description of the language. Why should native speakers need a description of the language that they already know and use? Certainly, such study is defensible on the grounds of the humanistic argument that all human endeavors are worthy of study. This argument could admit any area,

even bricklaying, for curriculum consideration. However, since all topics may be supported by reference to humanistic ideals, all are in competition for teachers' and students' time and energy. Since no assertion has been made about the consequences of achieving an accurate description of a language, should such a description be achieved, one wonders if grammar study must exist as an end in itself, essentially.

Certainly work in dialects needs some foundation from descriptive linguistics. It may be the case that stylistic analysis can be done satisfactorily in no other way since other approaches tend to result in ambiguous statements about style. However, even granting the possible use of descriptive grammar in these other areas of study, one must decide on how much time may be devoted to grammar study per se. Unless the teacher has these other goals in mind, the value of learning about descriptive linguistics in the secondary school seems questionable.

In view of the disclaimers of the use of their grammar as models of the behavior of speakers or writers that have been made by the transformational grammarians themselves, it is doubtful that this study can have much value for high school students. The purpose of the grammarian is to express a coherent theory of language. If the native speaker does not need a description of the language he uses, certainly, a theory of that language could be of little consequence to him. At best, classroom work in developing such a theory without the hope that it refers to actual human language practice must be regarded as dilettantism in secondary school classes.

Generally, the purposes of the study argue against any extensive pursuit of grammar in secondary school. Additionally, most teachers are not well enough trained to handle the teaching. Beyond this, the classroom experience of students when they study grammar tends to be extraordinarily dull as well as fruitless. In view of these considerations, except for a special elective course available to those who show an inclination toward the study of grammar, that study should most certainly be minimized in secondary schools, if not eliminated altogether. As Owen Thomas, a transformational grammarian, has stated in the final chapter of his book, *Transformational Grammar and the Teacher of English*:

"A child should study language rather than grammar."¹⁵

NOTES

1. Squire, James R. and Roger K. Applebee. *High School English Instruction Today: The National Study of High School English Programs* (Champaign: National Council of Teachers of English, 1968), p. 144.
2. a. *The National Interest and the Teaching of English*, NCTE number 19704 (Champaign: National Council of Teachers of English, 1961).
b. *The National Interest and the Continuing Education of the Teachers of English*, NCTE number 19606. (Champaign: National Council of Teachers of English, 1964).

3. Long, Ralph B. "English Grammar in the 1970's," *College English*, Vol. 31, No. 8, May 1970.
4. Gleason, H. A., Jr. *Linguistics and English Grammar*. (New York: Holt, Rinehart, Winston, 1965), p. 29.
5. Fries, Charles C. *The Structure of English*. (New York: Harcourt, Brace and Jovanovich, 1952), pp. 9-19.
6. Gleason, *op. cit.*, pp. 31-47.
7. Winter, Werner. "Form and Meaning in Morphological Analysis," *Linguistics*, 3, January 1964.
8. Chomsky, Noam. *Syntactic Structures*. Mouton and Company, Printers, The Hague, Netherlands, 1957.
9. De Saussure, Ferdinand. *Cours de Linguistique Generale*. Payot, Paris, 1949 (developed by Charles Bally and Albert Sechehaye).
10. Bach, Emmon. *An Introduction to Transformational Grammars*. (New York: Holt, Rinehart and Winston, 1964), p. 186.
11. Chomsky, Noam. *Aspects of a Theory of Syntax*. (Cambridge: M.I.T. Press, 1965), p. 9.
12. Wardhaugh, Ronald. *Reading: A Linguistic Perspective* (New York: Harcourt, Brace and Jovanovich, 1969), p. 50.
13. De Saussure, *op. cit.*
14. Long, *op. cit.*, p. 766.
15. Thomas, Owen. *Transformational Grammar and the Teacher of English*. (New York: Holt, Rinehart and Winston, 1965), p. 209.

SUGGESTIONS FOR FURTHER READING

1. NELSON FRANCES. *The Structure of American English*. New York: Ronald Press, 1958. A basic comprehensive text of the structural linguist's analysis of language, including a chapter by Raymond McDavid introducing the study of dialects.
2. OWEN THOMAS. *Transformational Grammar and the Teacher of English*. New York: Holt, Rinehart and Winston, 1965. An introduction to the procedures and results of transformational-generative grammar with comments on its value to the teacher of English.
3. OTTO JESPERSEN. *Growth and Structure of the English Language*. New York: Doubleday, 1955. An exemplar of the careful thorough study of language structure by earlier "traditional" grammarians.

Basic Concepts

Semantics is the study of the meanings of words. Theoretically, we could choose any verbal or written symbol to stand for anything or any group of things; the symbols of language are arbitrary in this respect. But practically, our choice of symbols is, of course, not arbitrary. Words can communicate only if we agree upon what they stand for. Language is, therefore, a social contract.

It is such an intimate part of our lives that we often treat it as if it had a life of its own, as if it did things. But it is we who do things, who "abstract," "connote," and "define." These functions are inaccurately ascribed to language because to do otherwise demands awkward circumlocutions. Therefore, whenever language is the subject of an active verb in this chapter, the device is a shortcut and not an implication of word magic.

The *denotation* of a word is that set of things that the word stands for or represents. The denotation of the word "horse," for example, includes all those animals for which the word stands. Similarly, the denotation of the word "water" includes all that substance for which the word stands.

A word is not the same as the thing it denotes, however, because it represents only some of its characteristics. The word calls our attention to, is associated with, or abstracts certain aspects of real objects. The word "horse," for example, abstracts only certain characteristics of its denotation and does not give information about the differences that exist among the things denoted—their color, size, speed, breed, length of mane, intelligence, and so on. Similarly, the word "water" includes, among other things, mud puddles, distilled water, the ocean, and rain.

Words are also indefinite in their denotations. If we tried to give the perfect, or definitive, denotative definition of a word, it would be impossible to do so because it would be impossible to agree exactly upon all the things that should be assembled to give the perfect denotative defini-

tion. What about ponies? What about those tiny ancestors of the horse? What about those things on merry-go-rounds? What about that stuffed toy horse in the baby's crib? What about mules? Do these belong in the set of things denoted by the word "horse"? If not, what set do they belong to? Are ponies a subset of the set "horses"? Are merry-go-round horses "wooden, half-sized models of horses"? Or are they models of ponies? Such considerations may seem to be splitting hairs, but the consequences are extremely important. Since words abstract only certain characteristics of things, and since we cannot define exactly the characteristics that they abstract, we are in constant danger of using words that identify different characteristics for the listener than they do for the speaker. Since we use these words that identify a variety of characteristics of a large group of objects in connection with specific objects, we are in danger of having the listener associate different characteristics with the specific object than we intended. We are thus in danger of identifying the set of objects as identical rather than identical in only certain abstracted characteristics. In short, a word is an abstraction that identifies only certain, not totally unambiguous, characteristics of a thing or set of things.

When we try to define words, we do not usually attempt a denotative definition—that is, assemble a group of things that are identified by the word. Instead, we define it by giving—in other words—a list of those characteristics that the word abstracts. This kind of definition is called the *informative connotation* of the word. Such a definition is never totally complete or totally accurate for two reasons. First, the denotative definition, as we have pointed out, is not totally accurate. Second, the informative connotation can never perfectly match the denotative characteristics for the same reason. If each of us were to be as exact as possible, language would still display these inaccuracies.

But we do not try to be as exact as possible. Each of us is limited to his own experiences and consequently a different set of characteristics that we ascribe to words, both in denotation and informative connotation. In addition, we are sloppy in our use of language, accepting the inexact match between the characteristics we abstract from a word and those that our listeners abstract from the same word. Otherwise, we would have to spend our lives qualifying for exactness and specificity. In the preface to *Semantic Analysis*, Paul Ziff says, "some years ago while working on a manuscript in aesthetics I thought it would be helpful to say at least roughly what the phrase 'good painting' means in English . . . But then I began to wonder what had led me to say what I did . . . And so I worked back and back to the beginning of this essay." The result was a 247-page book.

The desire to communicate many things is in constant conflict with the desire to communicate exactly. We are constantly deciding how exact we need to be in order to communicate adequately. The abstract character of language allows us to communicate at the same time that it limits the exact-

ness of our communication. Language simplifies through abstraction, but its simplification is both a vice and a virtue.

Some words are more abstract than others. The words used as examples thus far—horse and water—are concrete in that they refer to things that can be touched. They are names of categories and, as such, general rather than specific. The contrast between general and specific is, however, a relative matter. For example, "thoroughbred" is more specific than "horse" because it names fewer touchable objects, but it is more general than "Percheron" because it names more objects. Although the words used as examples may differ on the general-specific scale, they are all concrete because they name real things. (Although the distinction between the general-specific scale and the abstract-concrete scale seems quite clear when presented with these illustrations, it will not hold generally; their interrelations are far more complex than this discussion suggests. In general usage, the two scales are interchanged indiscriminately.) The word "justice" is more abstract than "horse" because there is no "thing" that the word denotes, although it refers to relationships among real (sometimes), perceivable events. Prepositions are abstract in the same way; they refer to relationships and are extremely difficult to define with an informative connotation. (Try to define, for example, "on" in "The book is 'on' the table," and "The light is 'on' the ceiling.") Other function words are even more difficult to define descriptively—for example, "is" in "Julius Caesar 'is' the hero of the book." The words of grammar are abstract because they refer to attributes or relational qualities of words rather than real things. In fact, words that refer to words (like "verb") or words that are used to describe language (like "semantics") have a special name—"metalinguage." The word "abstract" is yet more abstract. It refers to a lack of concreteness in qualities that have been in themselves abstracted from real things. In other words, it is a characteristic of characteristics.

Affective connotation refers to the values that people give to words because of the attitudes and values that they have toward the things that words represent. The word "policeman," for example, represents, or stands for, a group of people whose characteristics include enforcement of the law. We could add many other characteristics to identify the informative connotations of the word. If anyone disagreed with such a carefully constructed definition, we could say that he was at fault because he did not adequately understand the "meaning" of the word. But if someone were to say that a policeman is a vicious, sadistic persecutor of the poor, we cannot say that his definition of the word is wrong. We can say that the affective connotations that he associates with the word "policeman" are different from ours. Or we might more probably say that his attitude toward policemen is changed from metalinguage the shift in the previous sentence. The focus has changed from metalinguage—his association with the word—to language—his attitudes toward the thing. We constantly get our reactions and feelings toward things mixed up, tied up,

or associated with our reactions to words. These feelings and reactions, attitudes toward and values given to the things that words represent are the affective connotations of words. Take any four-letter Anglo-Saxon obscenity. Its physical characteristics as black print on white page would be the same as any other word on this page, but if it were there in print, it would cause a stronger response than the other words. Those responses are the affective connotation of the word. These affective connotations may differ between individuals even more than the informative connotations they associate with words.

Differences of affective connotation are so strong that they often lead to new words. The present use of "fuzz" for "policeman" is one example. The two words are apparently synonymous in their informative connotations and apparently differ only in their affective connotations. Note that the word "synonym" in no way distinguishes between informative and affective connotation and is, consequently, ambiguous and inexact.

Differences in affective connotation are also evident in changes in meaning. In the early part of the twentieth century, the word "square" was used in sentences such as "He's a real square shooter." Informatively, the connotation is similar to that of "honest." Affectively, the connotation is one of praise and positive feeling. In the 1940s and 1950s, the word "square" meant something different. Informatively, the connotations are still close to those of the word "honest," although there is obviously some shift. Affectively, the connotations have reversed to condemnation and negative feeling. This kind of change in meaning obviously involves consideration of the metaphorical use of words; in neither case are the characteristics of the geometric shape abstracted in the word "square" associated with the people with whom the word "square" is associated. Also, this kind of change in meaning involves sarcasm, or the purposeful use of a word to represent characteristics antithetically related to its usual meaning.

Up to this point, we have indicated that words often represent some real thing or things (denotation); that they represent only certain characteristics of these things (abstraction); that they are not definite in their meanings; that they vary on a continuum of general-specific and on a continuum of abstract-concrete; that the communication made possible by words is both a vice and a virtue; that we can define words by citing either their informative connotations, their affective connotations, or both. But we have dealt with all these characteristics of words *in isolation*. Now we must consider the effect of putting words together.

If we were to come across an essay entitled "Transportation in the Glorious 1980s," we would be faced with an ambiguity created by the possibility of sarcasm in the word "glorious." The only way we would be able to determine whether the word represents positive or negative affective connotations is to read the essay. (Note that the informative connotation of "glorious" is merely a statement of its affective connotations. Incidentally, the usual informative connotation has changed from the obsolete "boastful or vainglorious" to its

present "praiseworthy,"² a shift from negative to positive affective connotation.) The meaning of the word "glorious" in the essay's title is not determined in this case by its general usage, nor by the informative and affective connotation reflected in a dictionary, but rather by its context—the other words that surround it. Of course, the meaning of the word in this context is partly determined by our previous knowledge of its usual meaning. Many meanings could fill the slot "Transportation in the _____ 1980s." The presence of the word "glorious" in this context reduces the possibilities drastically. In fact, only from the context of the essay could we determine that the usual affective connotations of "glorious" are inappropriate. The conflict of these connotations creates a tension of apparent ambiguity. Our knowledge of sarcasm resolves the ambiguity by allowing us to take "glorious" to connote the opposite of its usual connotation.

Other verbal contexts limit the possible meanings of a word even more exactly. "Producing musical notes by means of the voice is called _____." Few words will fit the restrictions of this verbal context. This is not surprising when we consider the fact that a definition, except in those very few cases where we point to a thing, is always the supplying of verbal context. The point is that the meanings of words depend to a great extent upon their relationship to other words. Consider again the word "glorious." How do we know what it means? How would we explain to someone else what it means? We cannot point to things; the word is not denotative. We can only use other words—splendid, resplendent, delightful, magnificent, praiseworthy, brilliant, worthy of glory. If our audience doesn't know those words, we can try to define one of them: splendid—gorgeous, sublime, superb. Or we can say that it means "very, very good" or "I like it very much." But we're still caught in the same problem. How do we know what "good" and "like" mean? At this point we might be willing to say that most language is a vast tautology. We could surely support such a statement with evidence from many conversations in which we have been involved.

The problems of semantics, then, lie in the relationships of language to external reality (denotation), of language to people's attitudes and values (affective connotation), and of word meanings within the language (informative connotation; context).

Evaluation of Curricular Importance

Will an understanding of these concepts increase the students' literacy?

1. Functionally? Yes. The ability to use context to define word meaning aids students throughout their lives in the most basic aspects of word comprehension. Recognition of the use of words with powerful affective connotations will help them understand and control their responses to mass media—advertising, news, editorials, political propaganda.

Feb 1979

2. Educationally? Yes. Varying the levels of abstraction is an important skill of good writing. The ability to build definitions will aid students in any course.

3. In terms of the English curriculum? Yes. The interactions of words as parts of a single context is basic to the study of poetry. Sensitivity to subtleties of meaning plays an important part in both composition and literature. The basic concepts of semantics are more important to the study of English than the concepts of any other approach to language study.

4. Linguistically? Yes. The major weakness of most instruction in grammar/linguistics is that it is treated as an esoteric closed system unrelated to problems that are meaningful to students. The grounding of semantics in meaning is a significant introduction to the study of language and provides a basis for later more rigorous study.

Developing Curricular Materials for Basic Semantic Concepts

First, let us deal with the idea that words are arbitrary symbols that are useful for communication only because of the social contract to which we adhere. This idea involves many concepts—arbitrary, symbol, communication, social contract—each of which the student must understand in order to grasp this basic idea of semantics. The creativity of the teacher is important in finding ways to make these concepts clear to the student. One way to introduce the concept of symbols is to ask the students about the relationships between a word, a picture, an object. The teacher puts a picture of an apple on the board. The dialogue might go like this:

Teacher: What is this?

Student: An apple.

Teacher: Can you smell it or take a bite of it?

Student: No.

Teacher: Is it really an apple?

Student: No, it's a picture of an apple.

Then the teacher writes the word "apple" on the board.

Teacher: What is this?

Student: The word "apple."

Teacher: Is it a real apple?

Student: No.

Teacher: But we use it when we want to talk about the thing it stands for. What do we call a thing that stands for something else?

Student: A symbol.

Teacher: Is the picture a symbol?

Student: Yes.

Teacher: Is the word a symbol?

Student: Yes.

Admittedly, this is a simple dialogue, but it establishes the basic concept that words are symbols and not the things they stand for. Further, by having students write out characteristics that they associate with "school," it is simple to demonstrate that words mean different things to different people.

How can we introduce the idea of the arbitrary nature of linguistic symbols? We could continue the previous dialogue by asking the students the difference between the picture symbol and the word symbol. As soon as they respond with the phrase "looks like," the dialogue easily moves to the arbitrary character of word symbols. A second approach might be the presentation of a group of words from different languages that all refer to the same set of objects, followed by the appropriate dialogue that leads very naturally into the idea of social contract. Another approach that leads to the idea of social contract is that of making up words. The teacher points to the flat surface of the table and says, "bres." The students are puzzled. The teacher points rather frantically at the table and says more urgently, "bres." Finally one of the students says, "Oh, you mean the table!" And the teacher looks pleased and relieved and says, "bros." This time the students catch on more quickly. Then he points to one of the chairs with a writing surface that the students use and says, "brosterbros." Perhaps returning to "bres" and "bros" separately will be necessary before the students catch on. Pointing to the parts of the students' desk, the teacher says "brosterbres." Then he continues. Pen is "glick," paper-clip is "sloan," pen with clip is "glickersloan," drawer is "floss," desk with drawer is "brosterfloss." Then he puts the compounds on the board: brosterbres, glickersloan, and brosterfloss. "Ter," he asks, and the students—again the teacher may have to backtrack—respond "with." Then he asks, "Aren't these words as good as the ones we normally use." The discussion will point out not only the arbitrary nature of language but also the need for social agreement. Another approach is the use of readings that make the point, as the following lesson plan indicates.

Lesson Plan The Arbitrary Nature of Linguistic Symbols

TERMINAL OBJECTIVE

To write a paragraph explaining the arbitrary nature of linguistic symbols using an example.

MEDIAL OBJECTIVES

1. To use the word "arbitrary" appropriately.
2. To answer the study guide questions for the reading selection.

3. To explain orally how the reading selection illustrates the arbitrary relation of words to their denotation and informative connotation.

PROCEDURES

1. Tell the students what the word "arbitrary" means and give them examples of arbitrary decisions, for example, deciding by a flip of the coin. Write the word on the board, and give the students examples of arbitrary and rational decisions to see if they can distinguish them. Review yesterday's lesson and ask them in what sense words are arbitrary.
2. Divide the class into homogeneous groups of four or five students and give them these instructions:
"Read the selection I am distributing. When you have finished, discuss the answers to the questions. When you have discussed all the questions, select someone in your group to explain the selection to the class."
3. As they begin, circulate among the groups, giving necessary background information about the selection. As they finish their group work, distribute copies of all the selections to all the groups. Reassemble the class and have a student group explain its selection after the rest of the class has read it.
4. Write a model paragraph with the class about one of the selections. Assign the writing of a similar paragraph about one of the other selections for homework.

EVALUATION

Use the criteria established in developing the model paragraph to evaluate the homework assignment.

EVERYTHING HAS A NAME from *The Story of My Life* by Helen Keller

The morning after my teacher came she led me into her room and gave me a doll. The little blind children at the Perkins Institution had sent it and Laura Bridgman had dressed it; but I did not know this until afterward. When I had played with it a little while, Miss Sullivan slowly spelled into my hand the word "d-o-l-l." I was at once interested in this finger play and tried to imitate it. When I finally succeeded in making the letters correctly I was flushed with childish pleasure and pride. Running downstairs to my mother I held up my hands and made the letters for doll. I did not know that I was spelling a word or even that words existed; I was simply making my fingers go in monkey-like imitation. In the days that followed I learned to spell in this uncomprehending way a great many words, among them *pin*, *hat*, *cup*, and a few verbs like *sit*, *stand*, and *walk*. But my teacher had been with me several weeks before I understood that everything has a name.

One day, while I was playing with my new doll, Miss Sullivan put my big rag doll into my lap also, spelled "d-o-l-l" and tried to make me understand that "d-o-l-l" applied to both. Earlier in the day we had had a tussle

over the words "m-u-g" and "w-a-t-e-r." Miss Sullivan had tried to impress it upon me that "m-u-g" is *mug* and "w-a-t-e-r" is *water*, but I persisted in confounding the two. In despair she had dropped the subject for the time, only to renew it at the first opportunity. I became impatient at her repeated attempts and, seizing the new doll, I dashed it upon the floor.

We walked down the path to the well-house, attracted by the fragrance of the honeysuckle with which it was covered. Some one was drawing water and my teacher placed my hand under the spout. As the cool stream gushed over one hand she spelled into the other the word *water*, first slowly, then rapidly. I stood still, my whole attention fixed upon the motions of her fingers. Suddenly I felt a misty consciousness as of something forgotten—a thrill of returning thought; and somehow the mystery of language was revealed to me. I knew then that "w-a-t-e-r" meant the wonderful cool something that was flowing over my hand. That living word awakened my soul, gave it light, hope, joy, set it free! There were barriers still, it is true, but barriers that could in time be swept away.

I remember the morning that I first asked the meaning of the word, "love." This was before I knew many words. I had found a few early violets in the garden and brought them to my teacher. She tried to kiss me; but at that time I did not like to have any one kiss me except my mother. Miss Sullivan put her arm gently around me and spelled into my hand, "I love Helen."

"What is love?" I asked.

She drew me closer to her and said, "It is here," pointing to my heart, whose beats I was conscious of for the first time. Her words puzzled me very much, because I did not then understand anything unless I touched it.

I smelt the violets in her hand and asked, half in words, half in signs, a question which meant, "Is love the sweetness of flowers?"

"No," said my teacher.

Again I thought. The warm sun was shining on us.

"Is this not love?" I asked, pointing in the direction from which the heat came, "Is this not love?"

It seemed to me that there could be nothing more beautiful than the sun, whose warmth makes all things grow. But Miss Sullivan shook her head, and I was greatly puzzled and disappointed. I thought it strange that my teacher could not show me love.

A day or two afterward I was stringing beads of different sizes in symmetrical groups—two large beads, three small ones, and so on. I had made many mistakes, and Miss Sullivan had pointed them out again and again with gentle patience. Finally I noticed a very obvious error in the sequence and for an instant I concentrated my attention on the lesson and tried to think how I should have arranged the beads. Miss Sullivan touched my forehead and spelled with decided emphasis "Think."

In a flash I knew that the word was the name of the process that was going on in my head. This was my first conscious perception of an abstract idea.

ANSWER THE FOLLOWING QUESTIONS

1. Why did the first "finger play" not mean anything to Helen. What had she failed to do?
2. What was the first word that had meaning to her? Why was it easier at the well than it had been when the water was in the mug?
3. What does "abstract" mean?
4. Why were the words "love" and "think" so hard for Helen to learn?
5. If Helen had learned the motions for "think" as meaning "love," and the motions for "love" as meaning "think," would it have changed her knowledge? Would it have changed her ability to communicate?
6. In what sense are words arbitrary? In what sense are they not arbitrary? How does this selection show this?

Mark Twain, from *The Adventures of Huckleberry Finn*⁴

- "Why, Huck, doan' de French people talk de same way we does?"
- "No, Jim, you couldn't understand a word they said—not a single word."
- "Well, now I be ding-busted! How do dat come?"
- "I don't know, but it's so. I got some of their jabber out of a book. S'pose a man was to come to you and say Polly-vo-fo-franzy—what would you think?"
- "I wouldn't think nuffin I'd take en bust him over de head . . ."
- "Shucks, it ain't calling you anything. It's only saying, do you know how to talk French?"
- "Well, den, why couldn't he say it?"
- "Why, he is a-saying it. That's a Frenchman's way of saying it."
- "Well, it's a blame ridiculous way, en I doan' want to hear no mo' 'bout it. Dey ain' no sense in it."
- "Looky here, Jim; does a cat talk like we do?"
- "No, a cat don't."
- "Well, does a cow?"
- "No, a cow don't, nuther."
- "Does a cat talk like a cow, or a cow talk like a cat?"
- "No, dey don't."
- "It's natural and right for 'em to talk different from each other, ain't it?"
- "Course."
- "And ain't it natural and right for a cat and a cow to talk different from us?"
- "Why, mos' sholy it is."
- "Well, then, why ain't it natural and right for a Frenchman to talk different from us? You answer me that."
- "Is a cat a man, Huck?"
- "No."
- "Well, den, dey ain't no sense in a cat talkin' like a man. Is a cow a man?—er is a cow a cat?"

"No, she ain't either of them."

"Well, den, she ain't got no business to talk like either one er the yuther of 'em. Is a Frenchman a man?"

"Yes."

"Well, den' Dad blame it, why doan he talk like a man? You answer me dat!"

ANSWER THE FOLLOWING QUESTIONS

1. Why is Jim's criticism of Frenchmen unfair? What has he not understood about words?
2. What important problems has Jim recognized about language that comes from the arbitrary relation of words and things?
3. Answer Jim's last question.

Lewis Carroll, from *Through the Looking Glass*.⁵

- "I don't know what you mean by 'glory,'" Alice said.
- Humpty Dumpty smiled contemptuously. "Of course you don't—till I tell you. I meant 'there's a nice knock-down argument for you!'"
- "But 'glory' doesn't mean 'a nice knock-down argument,'" Alice objected.
- "When I use a word," Humpty Dumpty said, in a rather scornful tone, "it means just what I choose it to mean—neither more nor less."
- "The question is," said Alice, "whether you can make words mean so many different things."
- "The question is," said Humpty Dumpty, "which is to be master—that's all."

Jean Piaget, from *The Child's Conception of the World*.⁶

[A child is being questioned.] "Could the sun have been called 'moon' and the moon 'sun'?—No—why not?—Because the sun shines brighter than the moon. . . . But if everyone had called the sun 'moon,' and the moon 'sun,' would we have known it was wrong?—Yes, because the sun is always bigger, it always stays like it is and so does the moon.—Yes, but the sun isn't changed, only its name. Could it have been called . . . etc.?—No . . ."

ANSWER THE FOLLOWING QUESTIONS

1. In what situations is it important for Humpty to use the meanings that other people do?
2. In what way are Humpty's problem and the child's problem the same? In what way are they exactly opposite problems?

3. Who is the master? Is the man the master of words or are words the master of the man? Use the word "arbitrary in your answer. Use the examples of both Humpty and the child in your answer.

Another basic concept of semantics is that words abstract only certain characteristics of the things they represent. Two procedures for introducing that concept follow.

Teacher: How many of you know what the word "woman" means?

Students: (All raise their hands.)

Teacher: Then picture a woman and on a piece of scratch paper answer these questions: How old is she? How tall is she? How much does she weigh? What color is her hair? What is she wearing? What is she doing?

Do you expect your answers to agree with the other students in the class?

Students: No.

The teacher lets some of the students read their answers.

Teacher: Why did you say you knew what the word "woman" means if it means different things to each of you?

As the discussion continued, it would arrive finally at the characteristics that are included in the informative connotation of the word "woman" and would in the process indicate numerous characteristics that are not part of that informative connotation. Another approach is to play a game similar to twenty questions, in which the teacher answers only yes or no to the students' questions seeking the object he has in mind. As the game proceeds, the teacher diagrams student questions on the board:

thing
 mineral
 movable
 bigger than a bread basket
 transportation
 car
 station wagon
 Chevrolet
 Chevy II
 the teacher's car

Analysis of the pattern they followed from less to more limited categories leads to conclusions about the abstract nature of words.

Given a set of planned activities, the next step is to integrate reading and writing activities when they can be an integral part of the development of the semantic concepts. Of course, it is not necessary to have language, literature, and composition activities for each classroom period. But it is appropriate to integrate these activities and build skill in each when such integration aids in fulfilling the objectives of instruction. For example, the teacher might wish

to integrate these skills in the study of levels of abstraction. If he were to write out his rough plan for the lesson, it might take the form below:

LESSON ON LEVELS OF ABSTRACTION

PURPOSE:

See that different words are at different levels of generality and abstraction.
 Be able to use principle in questioning reading.
 Use principle to improve writing.

PREVIOUS LESSONS:

1. Arbitrary, symbolic, contractual nature of language.
2. Denotational meaning.

STEPS

1. Introduce concept.

Objectives: To discriminate words in terms of the number of referents they have.
 To determine which words have little denotational meaning (for example, function words and abstract words).

Medial Objectives: Understand "general," "specific," "abstract," "concrete."
 Spelling.

Activities: Recognize that terms are relative.
 Twenty questions game, discussion.
 Building ladder of abstraction.

2. Use concept in reading.

Objectives: To find words that are abstract/general.
 To find part of passage that makes these words more specific/concrete.
 To state possible communication failures.

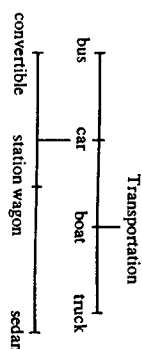
Activities: Reading and discussion.

Medial Objectives: Vocabulary in articles.

3. Use concept in writing.

Objectives: To make writing more specific.
 Define terms.
Activities: Practice definitions.
 Practice specifying general/abstract statements.
 Rewriting.

Notice that the statements of purposes, objectives, and activities lead logically to the statement of additional medial objectives, which in turn require additional activities. For example, a later curricular objective of defining *per genus et differentiam* suggests that the activity of building a ladder of abstraction should not be the simple listing from general to specific as was suggested above, but should rather include branching:



In this way the student will be better prepared to write definitions when he comes to that activity. In addition, it is necessary to repeat this and other activities often enough for the student to gain fluency.

The teacher must give students class time to practice writing under his direction both in small groups and individually. The same kind of extension of activities is necessary to have them write about their reading. In other words, those writing activities involve medial objectives, and the teacher must plan to include the activities necessary to reach these medial objectives.

The teacher must also look carefully at all the activities to see what assumptions they imply about student ability. These assumptions in turn become the bases for additional medial objectives. The most obvious problem is vocabulary, its understanding, spelling, and usage. In the readings suggested are the words "tussle," "persisted," "confounding," "consciousness," and "contemptuously," which the teacher must explain to the students before they read. More important, the teacher must introduce words for the concepts of the lessons: "symbol," "symbolic," "symbolize," "arbitrary," "denotation," "denotes," "denotative," "informative," "connotation," "abstract," "define," "definition." If the students are to know and use these words (which is certainly not as important as understanding the ideas they represent), they must be taught. If they are to work in groups, they must be given the necessary direction to be able to proceed with a minimum of disturbance. All these factors become medial objectives. The results of this kind of analysis are the specific formulation of materials and activities. For example, the selection from Helen Keller, used in the lesson on levels of abstraction, would have a study guide like the following:⁷

STUDY GUIDE: Selection from *The Story of My Life* by Helen Keller

VOCABULARY:

flushed	tussle	symmetrical
uncomprehending	confounding	sequence
		perception

1. In paragraphs one and two, Helen Keller knows both words and things. What does she fail to do?
2. In paragraph two, does "mug" have a referent? Does "water" have a referent?
3. Why is it easier for Helen Keller to understand "water" in the situation in paragraph three than in the situation in paragraph two?
4. Why are the words "love" and "think" more difficult for Helen Keller to understand than the words "mug" and "water"?
5. What events in the story illustrate the word "think"? the word "love"?

This introduction to abstract words in a text should be followed by an analysis of abstract words in other selections, such as the one below. Again students must be taught how to work with the concept.

WORKSHEET: Abstract Words

In both design and materials, the building is a major architectural innovation and is expected to exert a lasting influence on the planning of stadiums and exhibition halls of the future. Essentially it is a tent made of plastic, open on all sides except where the supporting cables are anchored to the earth. In sunlight the skin is translucent, and both the patterns created by the exterior cables and the flowered pattern of the interior are visible.

"Major architectural innovation" is an abstract phrase. Underline the words and phrases that make this abstract phrase more specific.

Such reading activities can be extended in length and sophistication as is appropriate for the particular class or individuals within the class. The writing activities can follow the pattern established by these reading activities. Students can be asked to specify such general statements as: The plane flew; the men shook hands; the woman drove the car, and so on.

The study of affective connotation begins with the distinctions among words with positive, neutral, and negative connotations. Students can begin with such simple examples as nag, horse, thoroughbred, and work with similar examples.

These activities can easily be extended into the analysis of advertisements and letters to the editor, both excellent sources of highly connotative writing. Again, more sophisticated students can work with more sophisticated ma-

WORKSHEET: Affective Connotations⁸

Below are thirty words or phrases. The eleven that are underlined have been put in the right place in the chart. Put the other nineteen in the chart. old, discreet, influential speaker, idealist, orator, officer of the law, tolerant, decayed, warmhearted, obedient, do-gooder, immigrant, rabble-rouser, humanitarian, cautious, Indian lover, official, alien, flatfoot, mature, cowardly, musky, bureaucrat, loyal, nondiscriminating, Pilgrim, slavish, sentimental, office-holder, detective.

<i>Good connotation</i>	<i>Little connotation</i>	<i>Bad connotation</i>
1. <u>loyal</u>	cautious	
2. _____	<u>sentimental</u>	
3. _____	old	
4. _____	<u>idealist</u>	
5. _____	<u>Indian lover</u>	
6. _____	<u>influential speaker</u>	
7. <u>Pilgrim</u>	office holder	
8. orator	<u>rabble-rouser</u>	
9. _____		
10. _____		

LESSON PLAN: Principles of Advertisements

TEACHER INTRODUCTION: Men can be persuaded to believe many different things. Hitler persuaded the people of Germany that they should go to war. The casualties that resulted were 8,500,000 killed, 21,220,000 wounded, and 7,700,000 missing. Christ has influenced untold millions of people over the last 1900 years. Today in America alone there are approximately 120,900,000 Christians.

Both of these men, then, had a tremendous influence over other men, one for good, the other for evil. Both had the ability to persuade—to change the way men act. Why? How is it that men can be persuaded to do things? Well, let's see: Try this for me. Put your arms straight out in front of you. Go ahead, straight out in front of you. That's right. All right, now while your arms are in front of you, fold your hands. Got them folded? All right, now keeping your hands folded, raise them over your head. Fine, now you can put your arms down, because you have just been persuaded. You just went through a bunch of silly gestures. Why did you do it? You thought there was a reason for it, didn't you? You thought something was going to result from it, didn't you? In other words, just by asking you to do it, I had promised you something. I had promised you that it was worthwhile doing. And this is one of the basic ingredients behind the power of persuasion. People are persuaded to do things because the persuader gives them a promise of results. The promises aren't always stated in so many words, but they are usually there, lurking behind the words.

materials. Also, writing exercises involving differing points of view are obviously appropriate at this point. The use of these concepts is, of course, an important step for students. The application in advertisements demands a more thorough investigation.

WORKSHEET 1: Promises**Underline the promises in the following statements:**

1. "Aw, please, Mom, let me go with you. I'll be good."
2. "O.K.! O.K.! I'll carry out the trash, but let me watch the rest of this program first."
3. "It's the first dance this year, and it won't cost much money!"
4. "If you let me get a driver's license, I'll wash the car every week!"
5. "I'm sorry, Dad, but if I didn't have to do so much work around the house, I'd study more."
6. "The needle will hurt just a little, but then you won't feel a thing when I pull the tooth."
7. Double your money back if not fully satisfied.
8. I can help you lose ten pounds in just two weeks. Send twenty-five cents for my booklet "How to Lose Weight."
9. "If you don't smoke until you're twenty-one, I'll give you one hundred dollars."
10. "If you aren't home by 11:30, you won't be allowed out of this house next week."

Of course, the reason for making the promise in each of these examples is that the speaker is trying to persuade the hearer to do something. In the following blanks, explain what it is that the speaker wants the hearer to do in each of the examples.

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____

WORKSHEET II: Promises

Fill in the blanks with the promises that advertisers might offer each of the following people:

1. A fat man _____
2. A student who is getting poor grades _____
3. A girl with a poor complexion _____
4. A boy who is skinny _____
5. A man who is poor _____
6. A mother who has a sick child _____
7. A man who wants a better job _____

WORKSHEET: Needs

Name the basic needs that are suggested by the following groups of promises:

1. Do people turn away when you talk to them? Try Sweetmint Gum to get rid of bad breath.
Be the life of the party. Buy our book of magic and watch people flock around you.
Lose that flabby fat and become a hit with the girls. Write for our six-week muscle-building course.
2. Too many debts? Too many bills? Not enough money? Call your nearest Friendly Finance office now!
Earn money in your spare time! Send for our course in radio repair. Get your boss's job! Learn how to manage people and watch your salary rise!
3. Feel tired? Lifeless? Need pep? Try Peter Piper's Pick-me-up for that quick energy lift!
Bouncing Flash shoes will help you win those races! Bouncing Flash shoes will keep you on the go! Bouncing Flash shoes will help you feel healthy! Be a bouncing flash! Buy Bouncing Flash shoes!
From football to bowling. From golf to hockey. Champions prefer PEP breakfast food.
4. Be the Joneses that everyone tries to keep up with! Subscribe to Home-maker's Magazine to make your house the most beautiful on the block. Everyone will watch when you step out of your Arrow convertible. Everyone will envy you in your Arrow convertible. Buy Arrow and hit the bullseye.
Only one man in a hundred is good enough to wear a Smithe Suit. Are you one man in a hundred?
5. Do the dishes, wash the clothes, make the beds, dress the children—too much to do? Save hours every day with an automatic dishwasher. Take a train! It's easier than driving.
Any job, anytime, anywhere, it's easier and quicker with a Presto Pen.

Additional analysis of ads will lead the class to develop a list of key questions that seem to be most significant for analysis. They will probably include questions like—What does this ad do to attract your attention? What does it do to hold your attention? What promises does it make? What words are most connotative? What words are informative? What does the ad do to get you to act? What audience does it appeal to? What is its purpose?

With this kind of analysis behind them, the students can select a product and develop their own ads for that product.

Extension of Basic Semantic Concepts

The first unit obviously contains in embryonic form many concepts that are open to further development later in the curriculum. Even though the further development of some of them may be rejected as inappropriate to the curriculum, they are still important for the teacher to know. An uninformed teacher cannot determine their significance to the curriculum and will consequently be handicapped in creating a good one.

The ideas about definition introduced in the first unit are obviously inadequate if the informative connotations of words are as difficult to specify as we have suggested. The unit deals, not with the difficulty of defining, but rather with the basic technique of defining. Although definition may not be a necessity for functional literacy, it is certainly an important skill in terms of other criteria. It should be developed and reinforced in nearly every unit of instruction in English, but to insure its adequate elucidation it is treated here as an isolated subject of discussion. In actual classroom practice, it would be far better to incorporate various aspects of definition into those units in which they will be used. In this way definition would be treated more realistically—as a constantly developing set of skills—than it would be if it were isolated in the curriculum.

The first unit on semantics will accomplish the first step toward the development of definition skills. On its completion, the students will have become aware of the difficulties of specifying the informative connotations of words, will have recognized the arbitrary nature of categories, will have tried their hand at *per genus et differentium* definitions, and will have had some experience with contextual definition. The purpose of additional instruction will be to develop further skill in these areas that have been already introduced and to introduce other techniques for definition.

First, words can be defined in nonverbal ways. Pointing is the basis of denotational definition. Pictures are the next best denotational device and are often used in dictionaries. Pantomime can help define many words. Diagrams and maps can be used as definitional devices. All such nonverbal approaches to definition are particularly valuable with young students and older nonverbal students for two reasons: they involve the students, and they emphasize the

real purpose of definition—the communication of meaning. The formal study of definition, on the other hand, can lead to the students' viewing it as a kind of esoteric ritual. That result is, of course, a disservice to them. It is important, consequently, that any teaching of definition be clearly focused on the real purpose—communication of meaning. Work with nonverbal definitions will help accomplish that purpose.

A second major approach to definition is the use of examples. Students normally use this approach without instruction. If the teacher asks, "What does 'angry' mean?" it is not unexpected for a student to reply, "Well, if I was told to be home by 10:00, and I didn't get home 'til 11:00, then my mom would be sitting up waiting for me and she'd be angry." Such a situational context for a word is a beginning of a definition, but it fails to be specific enough since many meanings can logically fit this situation. This weakness can be overcome by using multiple examples so that the questioner can get a feel for the similarities of situations that will more clearly define the word. There is no question that this approach to definition is far less exacting than a formal, expanded definition. But it works, and as the previous paragraph emphasized, this is a more important criteria for many students.

The same is true for the teacher's attempts to define words for students. The criterion of communication of ideas is far more important than the criterion of formal definition. Yet too often teachers teach words rather than ideas. For example, there is very little value in having the student be able to define the word "irony." The more time spent in class defining the word and the more time spent writing definitions, the more chance that the student's learning is rote. On the other hand, if the students are given illustrations in the form of stories and poems and situations, they may understand what irony is without being able to define it. Also, the teacher can test the student's understanding of irony by asking him to make up a situation that is ironic. The following situation was devised by a seventh-grade student:

A head bank executive puts some valuable diamonds in a safe and does not lock it properly. A bank clerk, known for his honesty, notices and can't resist. As the clerk is driving home, his conscience bothers him, and even for the money he cannot do it. Figuring that no one would ever know, the man drives back to the bank. He puts the diamonds in the safe and triggers the alarm, and is arrested for robbery.

Whether or not this student is able to define irony, his example illustrates an understanding of the concept. Thus, definition by example is important to both teacher and student as a device for communicating understanding.

A third approach to definition is to supply synonyms and antonyms. If the student knows which words have the same meaning as the object word, or the

opposite meaning, he is beginning to understand the object word. This beginning is obviously inadequate, however. If words are really synonyms, there is no basis for choosing among them. But if they do not have precisely the same meaning, then there should be some attempt to discriminate among the apparent synonyms. Each of our synonyms helps us to define vaguely the area of meaning involved. The discrimination among these synonyms helps subdivide that area of meaning and thus make it more specific.

In fact, any attempt to define can be viewed in this light. Metaphorically, we may consider the meaning of a word as an area. Any attempt to define the word is an attempt to mark the area of meaning that the word represents. Obviously, the more exactly the definition establishes (defines) the area of meaning, the better it is. Thus, a denotational definition (pointing) becomes more and more adequate as it includes more and more items within the semantic area. Yet to be even more adequate, it must also point to those things that are "nearby" but not included in the semantic area. Definition by example suffers from the same weakness. It says in effect: "This example is in the semantic area," but it does not specify the extent of the area or the boundary lines. Definition by synonym, on the other hand, suggests vaguely very broad boundaries for the area but does not delimit the area unless the definition distinguishes among the synonyms. On the other hand, definition proceeding from the general to the specific defines the broader inclusive meaning area by describing the genus and limits the area more exactly by distinguishing among different word meanings within that area.

Thus, any of these approaches to definition can become more and more sophisticated by more exactly delimiting the area of meaning appropriate to the word. Such growing sophistication in the process of defining should be a continuing part of the English curriculum. In addition, students should become aware of the variety of approaches appropriate for different definition problems. Location, physical appearance, parts, composition, function, causes, and development are all appropriate approaches to definition with some words. However, there are two major weaknesses of genus-differentiae definition: the suggestion of rigidity it implies and the failure to deal adequately with affective connotation.

Rigidity is implied in the process of categorization. Establishing and discriminating categories, a process basic to definition, implies an either-or, yes-no discrimination that is in most cases an oversimplification. Semantic space is not so simply and exactly divided as the discussion thus far has implied. What, for example, is poetry? Or, in metalanguage, what does the word "poetry" mean? Is there a set of characteristics that are sufficient in all cases to define a given piece of language as poetry? Form would seem to be a sufficient criterion in the case of limericks. Yet we might prefer to consider limericks as, at best, marginal to our conception of poetry. If we consider a criterion such as "emotive power," we find that it is neither necessary nor sufficient since many works that are obviously poetry are not moving and

many works that are obviously not poetry are extremely moving. Thus, the person who asks, "Well, is it poetry or not? It's got to be one or the other!" is rather unsophisticated in his desire to classify rigidly. We must be sure that our teaching of definition leads our students toward precision and understanding rather than rigidity and hair-splitting.

Affective connotations are an important part of meaning that create difficulty in definition. All the precision possible will not begin to encompass the emotions that are far more easily (though perhaps less exactly) conveyed by metaphoric, descriptive statements. Whitman's "When I Heard the Lean'd Astronomer" is an excellent example of the inadequacy we often feel in definitions that attempt precision at the expense of affective connotations. Obviously, we must help the students to develop skill in explicating the emotive qualities of words as well as their informative qualities.

A second area of concern that grows directly from the first unit on semantics is logic. After we have scrubbed away all the affective connotations presented in an advertisement, letter to the editor, editorial, or essay, we still have the job of deciding whether or not the argument holds. Techniques for evaluating and discovering weaknesses in arguments are the province of logic.

A third major concern suggested by the first semantics unit is the problem of the basic units of meaning. Obviously meaning is derived from endings syntactic patterns ("The bear bit the man; the man bit the bear"). A fourth concern implied in the first unit is the problem of changes in meaning. These concerns are more appropriately considered as the province of linguistics in Chapter 21.

These four concerns—definition, logic, units of meaning, and change of meaning—are tangential outgrowths of the consideration of basic concepts of semantics. Another outgrowth is the further development of the central problems of semantics, the study of meaning. To reiterate, the major questions are "What does the word ——— mean?" "How can we more exactly describe the meaning of ———?" and "How do words acquire meaning?" As the disciplines of philosophy, mathematics, psychology, and linguistics are becoming more concerned with semantics as a central problem in their respective fields, Miller,⁸ Osgood,⁹ Fodor and Katz,¹⁰ Joos,¹¹ and that reported by Minsky¹² all suggest that in the near future there may be striking developments in the field of semantics. But even at its present level of development, general semantics has high priority in the teaching of English. It introduces concepts that are of continuing value in the study of composition and literature. It introduces a way meaningful to students, concepts that are basic to further linguistic study. And in the work of writers like those cited above, it affords techniques of study that can be used by students who have a strong interest in pursuing more esoteric study in the field.

NOTES

1. Ziff, Paul, *Semantic Analysis* (Ithaca, N.Y.: Cornell University Press, 1960).
2. *Webster's New International Dictionary*, 2nd ed. (Springfield, Mass.: G. C. Merriam Company).
3. Keller, Helen, *The Story of My Life* (New York: Doubleday, Doran and Co., 1933), pp. 22–24 and 29–31.
4. Clemens, Samuel, *The Adventures of Huckleberry Finn*, Chapter 14.
5. Carroll, Lewis, *Through the Looking Glass*, Chapter 6.
6. Piaget, Jean, *The Child's Conception of the World*, pp. 81–82.
7. McCrimmon, James, adapted from Raab, Earl, and G. J. Selznick, *Major Social Problems* (White Plains, N.Y.: Row Peterson and Co., 1959).
8. Miller, George A., *Language and Communication* (New York: McGraw-Hill Book Co., 1951), Chapter 9.
9. Osgood, Charles O., "The Nature and Measurement of Meaning," *The Psychological Bulletin*, Vol. 49, May 1952, p. 213.
10. Fodor, Jerard, and Gerold Katz, *The Structure of Language: Readings in Philosophy of Language* (Englewood Cliffs, N.J., Prentice-Hall, 1964), part 5, Chapter 19.
11. Joos, Martin, "Semology: A Linguistic Theory of Meaning," *Studies in Linguistics*, Vol. 13, No. 3–4, 1958.
12. Minsky, Marvin, ed., *Semantic Information Processing* (Cambridge: MIT Press, 1968).

SUGGESTIONS FOR FURTHER READING

1. LOUIS B. SALOMON, *Semantics and Common Sense*. New York: Holt, Rinehart & Winston, 1966. A brief introduction to the principles of general semantics including an excellent (though unannotated) bibliography.
2. S. I. HAYAKAWA, *Language in Thought and Action*. New York: Harcourt, Brace, 1939. A more thorough exposition of principles of general semantics with many exercises easily adaptable for student use.
3. MARVIN MINSKY, ed., *Semantic Information Processing*. Cambridge: MIT Press, 1968. The chapters illustrate recent attempts to develop a semantic theory more precise and exacting than the field of general semantics has accomplished.

The study of language at a particular point in time is often referred to as synchronic linguistics whereas the study of language across time is called diachronic linguistics. But they are treated in the same chapter here because of their pedagogical similarities. The purposes of instruction in both are essentially the same. They are included in the curriculum to develop the student's general sensitivity to language. More specifically, it is hoped that the student will come to realize that language is a dynamic tool, that it is used differently by different people in different situations, and that it is flexible. These realizations may have some effect upon the way the student uses language, although their effectiveness in producing greater language sensitivity or a change in usage has not been proven.

The study of dialectology and language change are particularly interesting aspects of the study of language. This should, perhaps, not be surprising, considering the fascination we all show for "peculiarities" of other people's language and our easy adoption of neologisms. When students are given the techniques and opportunity to carry on investigations of these aspects of language study, their involvement in and enthusiasm for such investigation are in striking contrast to the antipathy and apathy that the teacher often faces when he introduces the study of grammar.

Also, the teaching structure for these two kinds of study is essentially the same. It consists of three major steps. First, the teacher presents a striking situation that focuses the students' attention on the area of study and uses this introduction to outline the major segments that the study will involve. Second, he leads the class in examining each of these major segments to help the students develop skill in using the techniques of linguistic investigation. Third, the students use these techniques to carry out their own study in one of the segments and report their findings to the class. This teaching structure is particularly adjustable to individual differences. The teacher can adapt

the instruction to the particular class and to individual students in the class through his management of four major variables: the depth and rigor of each segment of the overview, the grouping of students for their individual or small-group study, the support he gives each group or individual, and the format of reporting that he allows. In these ways he can be reasonably successful in involving the students and adapting the work to their levels of proficiency. So although dialectology and language history may be in many senses totally different kinds of study, they are in many ways similar pedagogically.

Dialectology

Instruction in dialect will merely enhance and perhaps objectify knowledge that the student already has. He knows that people use language differently; in fact, he adapts his own language to many different situations. The obvious first step is to call to his attention the vast differences that exist between different people's language patterns. This can be easily accomplished by presenting him with some recorded piece of language and directing the resulting discussion toward the kinds of differences that occur in language use. The discussion will lead to an outline of many of the major kinds of language variations. The teacher can then use additional stimuli either to pursue distinctions that the students have suggested or to introduce distinctions they have overlooked. As each kind of language variation is introduced, the teacher can help the students learn how to work with the material. As a result, at the end of these introductions, the students will have enough familiarity with the main distinctions and enough skill with the procedures that they can undertake an individual or small-group project of their own in the area of their greatest interest. Or the class as a whole can plan a single project to which each student can make an important contribution. With such an organization, it is easy for the teacher to vary the depth of treatment to fit a particular class and particular students within the class.

Many records, films, and TV programs can be used to focus discussion on language usage initially. A few questions by the teacher will serve to develop the discussion. The three most basic ones are: How does the language differ from ours? (pronunciation, vocabulary, grammar) What do we learn about the speaker from his language? (where he lives, what groups he belongs to) Is he unusual, or do most people have special language patterns? The kinds of answers that the students give to such questions and the specificity they are able to accomplish in their answers will give the teacher a general diagnosis of the directions he should emphasize in the unit. He should be sure to bring out in this first introduction the distinction between pronunciation, vocabulary, and usage since these are basic categories that are useful in working with the various kinds of language variation. For example, if the teacher were to use Andy Griffith's "What it was, it was football,"¹ as an introduction, he could

develop a set of guide questions for directing the discussion toward the major segments of dialect study that the unit of instruction will investigate.

DISCUSSION GUIDE QUESTIONS

- A. Why is the record funny?
 1. How does the speaker's language differ from ours?
 - a. What word did he lack for describing a football game?
 - b. How did he pronounce "town," "here," and "right here"?
 - c. How would we say "what it was that was agoin' to happen"?
 2. What do we assume about the speaker because of his language?
 - a. Where does he live?
 - b. What is his position in the community?
 - c. What does he do for a living?
 - d. How old is he?
- B. Was the language effective?
 1. Was the way the speaker used language effective?
 - a. What interfered with communication?
 - b. Did he get the ideas across?
 2. Was it effective for Andy Griffith?
 - a. What was his special purpose?
 - b. Does he always talk that way?
- C. Does our language reveal the same things about us in the same way?

The guide has at least one question for each of the major aspects of dialect study, and they are arranged in an outline form. It is possible that the first questions will touch off the entire discussion without the use of additional ones. It is also possible that the class will need additional questions to direct their attention. For example, if question A2d draws the unanimous opinion that his speech tells us nothing about his age, it would be necessary to ask additional questions such as "How does your speech differ from your parents?" to help them see that language does sometimes reflect age level. With this introductory lesson, the students will be ready to investigate dialect differences.

Since the rationale for this instruction is to achieve greater sensitivity to language, it would seem appropriate to begin attacking that problem early. It is important from this point of view to attack the problems that students will often display. They will make prejudiced judgments about correctness, usually the prejudice will be in terms of distance from their own language—the greater the distance, the "queerer" the speaker. Second, they will assume that language differences occur only with "foreigners" or "hillbillies," or any groups whose circumstances are considerably different from their own, but not with people they know. Both are of course the kind of language prejudice that blocks sensitivity or that is caused by a lack of sensitivity. If the unit deals only with the kind of distant case that student prejudice describes, it is much less

likely to be effective than if it can make a point with language closer to home. Although this emphasis should be maintained throughout the unit, it can be started immediately as an investigation growing directly from the first lesson. Note that the last question in the discussion guide begins this emphasis.

The second step of instruction is, then, the beginning of the examination of the students' immediate linguistic environment. Again the teacher focuses the discussion with the use of appropriate questions: "Do you know anyone who uses peculiar pronunciation, vocabulary, or grammar? Can you give me an example? Who has a little brother or sister about three years old? Do they use any funny variations that your family has picked up? What do I say that sounds funny? I bet you can think of some things that I don't even know myself," and so on. Once the students are aroused, the teacher must provide a method of recording information. All that is necessary is a large stack of three-by-five cards and a brief discussion of what information the class will want when a student reports on his findings. Using one of the examples that the students have given, the class will probably conclude with a citation slip that asks for answers to four questions: (1) What is the expression? (2) Who was the speaker? What is his age, occupation and approximate educational level? (3) In what circumstances did he use the expression? Who was his audience? (4) Why did he use the expression? (To be funny? unconsciously? for emphasis?) On the citation slip itself these questions should be reduced to what, who, when, why. With such procedures established, the teacher must allow some time each day for the students to report on their new findings and continue this emphasis throughout the unit. (A bulletin board displaying cards in an outline following the unit plan is a good project for students.) After this pattern is developed, the teacher proceeds with materials that stimulate the investigation of the major areas of language diversity.

Language patterns vary according to vocational or avocational interests. This particular aspect of language variety is a good starting place for student investigation because it is easy to identify and familiar to the students. (It should be noted that this kind of investigation is not a primary interest of the dialectologist. If he deals with it at all—which is unlikely—it will be as an adjunct to "social dialects." But the interests of good secondary school teaching are not, of course, exactly the same as those of the academic profession.) The variation in language patterns according to vocational interests involves vocabulary items primarily, although pronunciation and usage may vary to some extent. As a matter of fact, most vocational and avocational interest groups have developed their own dictionaries. Consequently, such study is a reasonably simplified matter for research. In addition, students find it interesting to pursue for two reasons. First, it allows them to pursue and display knowledge of special interests that are usually not useful in school. (This is a good time to refer to the students' interest inventories and encourage their display of such interests.) Second, in the school setting itself they have built-in models of language specialization in the curricular and extracurricular interests they are

pursuing. Cooking, football, and the orchestra are all sources for the study of specialized language. Once the original discussion has introduced the concept, a few leading questions will easily focus the students' attention on their own uses of specialized vocabulary. The field is elementary enough and the students' natural interests usually well enough developed that they can work reasonably independently at a brief project in this area. Better students may also build new interests in such a project.

PROJECT DIRECTIONS: Technical Language

1. Select an occupation, hobby, or special interest that you would like to tell the class about. (Sailors, cowboys, astronauts, stamp collecting, guns, rocks, football, cooking, sewing, baseball, and so on.)
2. Select ten important words in that field that most outsiders do not understand. Make a dictionary of those ten words.
3. Write a paragraph that briefly explains what the field is about. Use the important words that you have defined in your dictionary.
4. Write a paragraph that says the same thing as the previous paragraph, but this time *do not use* any of the special words of the field.

Notice that this exercise offers a variety of possibilities for building basic English skills—use of the reference sources of the library, understanding the structure of dictionary entries, and structuring a paragraph. Notice also that it does not call for the more complex skills necessary to integrate the information into a well-structured paragraph. If weaker students are having trouble with these kinds of skills, this project is an excellent one for them to pursue at greater length as an individual project at the end of the unit. At this point, it serves only as an introduction to this segment of language difference. It will not require much discussion for the students to objectify the major point—that an individual's use of language differs due to his interests and background.

This concept can be extended by discriminating between specialized vocabulary that serves a special need by naming some thing or concept that does not have a name in everyday speech and specialized vocabulary that simply gives a big name to something that has an equally precise name in everyday language. A discussion of this distinction can point out the difference between specialized language that identifies ideas and specialized language that identifies membership in a particular group. Usually students are aware that their slang identifies them with their peer group. The introduction of this idea leads logically to a discussion of slang. (Again, this topic is of pedagogical concern but not of important concern to the dialectologist.) The investigation is very close to the students' knowledge and interests but does demand skill that the second lesson (technical language) did not demand. Although the material is at hand, it has not been systematized either by the students' prior pursuits (as

in the case with hobbies) or by any available library source. (Although there are slang dictionaries, they are never up-to-date on new slang. Also, the teacher may wish to review slang dictionaries before having the class use them. They often contain expressions that the teacher may wish to avoid.) The students must develop skill in collecting and organizing their own research.

If the students have been given an opportunity to report on language peculiarities that they have noted on citation slips and their work has been displayed on the bulletin board, all of them will have developed some skill with citation slips. The teacher need only focus their attention on their own slang.

Teacher: What does the word "cob" mean as you use it?

Student 1: It means to steal something; when you "cob" something, you steal it.

Student 2: No, it doesn't. It's not that bad. It's not serious like stealing. You could cob somebody's pencil or book, but if you took something from a store you wouldn't say you "cobbed" it.

Student 3: Yes, you would.

After a consensus of definition, the teacher continues the discussion.

Teacher: What do we need to put on the citation slip?

Student 3: The word and the definition.

Student 4: And who used it.

Student 1: And not just who, but what kind of people use it, like just teenagers.

Teacher: Do all teen-agers use "cob"?

Student 6: No, just us around here.

Teacher: You mean all over town?

Student 1: Well, maybe not. Maybe just at this school.

Teacher: Then what do we need on the citation slip?

Student 1: Well, his name tells us that unless we don't know him, then we need to know where he goes to school.

Teacher: Good. O.K., now everybody make up a citation slip for "cob."

After students have done so and the teacher has collected them:

Teacher: O.K., let's see how many teen-age slang words we can list on the board in the next minute.

Citations on additional findings are discussed the next day, the teacher collects the citations, and after a brief discussion the students write a brief paragraph about adolescent slang.

With this background the investigation of geographic distinctions in language can perhaps be pursued with more detachment than prejudice. In fact, the teacher can evaluate his teaching up to this point by the detachment with

which the students can discuss the problems of language geography. We are finally dealing with a concern of importance to dialectologists.

The sophistication of some dialectologists in determining the geographic origins and backgrounds of individuals through analysis of language is phenomenal. They are sometimes able to place individuals within miles of their homes, often placing them exactly in large cities. A major tool in making such distinctions is a phonetic alphabet that permits the accurate transcription of language samples. With the careful use of this tool, dialectologists have discovered the specific pronunciation peculiarities that distinguish areas and have formulated lists of key words that will elicit these distinctions from inhabitants of those areas. Vocabulary items and grammatical peculiarities have also been carefully classified. The results have been more specific dialect boundaries (isoglosses) than many would have imagined possible.

In addition, these investigations suggest a variety of causes for dialect distinctions, which might be classed under the general heading of influence patterns. The original language patterns of an area will be very similar to those of the area from which the original inhabitants come. These language patterns will spread along courses of migration, which are influenced by geographic barriers. The more isolated the language community, the more likely it is to reflect its origins. The more it is influenced by communication with, and migration from, other areas, the more it will absorb other patterns. If two areas are in close communication, they may become a single language community by mutual influence, or the patterns of one area may become dominant. Dominance usually flows from cultural and political centers of influence toward outlying districts.

Various recordings for the study of American dialects are available commercially. (See Chapter 14.) Some teachers have their classes send tapes along with questionnaire forms to schools in various parts of the country, asking that students in those schools record their answers to the questions and return the tapes. It is best to make arrangements with teachers in such cooperating schools in advance. Sometimes, a particular school will be fortunate in having students from various parts of the country. Such students may be willing to act as informants in a class's study of dialect. Other schools will have student populations that represent a variety of dialect patterns. In addition students enjoy seeing some of the dialect maps and questionnaire forms used in studies such as Kurath's *A Word Geography of the Eastern United States*. In short, a little effort will provide resources for students to conduct some analysis of dialects in their own immediate environment and around the country.

If the students wish to develop a questionnaire to send to other schools or to give to students from other areas, they must work out the necessary questions to elicit response. For example, they might ask, "What do you call staying out of school all day without anyone knowing it?" or "What do you call going somewhere else when you should go to school?" Kurath lists the following variants in response to such a question:

played truant
skipped school
played hooky
hooked school
hooked jack
bagged school
bagged it
lay out (of school)
laid out (of school)²

The next step is to have them suggest other questions that might elicit other differences. The teacher may also extend the lesson into grammar problems, but since they are minimal, he may only mention the possibility. Drake's suggestions are helpful to the teacher:

Window coverings on rollers
Devices at edges of roof to carry off rain
Small porch, often with no roof
Kind of wooden fence
Wall made of rocks or stones
Heavy metal utensil for frying
Water outlets
Playground equipment—goes up and down by balancing two people
Bread made of corn meal
Round flat confection with hole in middle
Homemade cheese
Food eaten between regular meals
Worm used for bait in fishing
Sick ——— stomach
To coast lying down flat³

Another extremely important lesson is to teach the students to recognize how one individual may use different language patterns in different situations. The students are, of course, aware that they "wear different language hats" at different times and in different places. The procedures for the teacher follow the same pattern: Focus attention on the problem, and provide procedures for collecting and reporting evidence. At this point in the unit, it would be difficult to avoid direct confrontation of the issue of value judgments connected with language. The issue is part of the larger issue of custom and tradition and the appropriateness of such criteria for making value judgments. Although these issues cannot be resolved, it does seem necessary to let the students face the problem: Is our adaptation of our language a reflection of good manners and consequently appropriate, or is it, on the contrary, a failure of pride in self-identity and a form of hypocrisy? The concept of appropriateness can be extended to a consideration of the differences between oral and

written language and to the arbitrary, tradition-oriented requirements that various writing styles demand. Again, the purpose of the instruction up to this point is not to develop the concepts with great depth, but rather to introduce them in such a way that the students' interest will be stimulated.

With this background, the fourth major step of the instruction can begin. The students pick topics for further investigation and proceed with the investigation and preparation of reports on their discoveries. Such reports should be judged on the usual compositional criteria and can serve as an evaluation of the teacher's success in reaching his major objective—greater sensitivity to language usage.

Obviously the teacher can easily vary the individual assignments. For example, the slowest students might simply extend and synthesize the work they have already done. For the more advanced students, the problems could range in difficulty all the way up to those appropriate for graduate students in college.

There are many possible ways to supplement or extend these activities, the most important being the addition of reading assignments. Shaw's *Pymalion* is particularly appropriate. Shuy has many suggestions for activities in his *Discovering American Dialects*.⁴ Having a variety of such materials available is very helpful in providing worthwhile activity for students who finish projects first. However, the instruction can be judged successful without them if the students' projects indicate that they have a less biased and more sensitive view of dialect differences.

Language Change

The instruction on language change should begin and proceed in much the same fashion as the unit on dialectology, beginning with a startling illustration of how the language has changed and proceeding by answering the questions, "In what ways has language changed?" and "Why does language change?" Each major kind of change should be the subject of whole-class instruction so that all students can answer the questions in a general way. After such an overview, they can proceed by studying any one aspect of change in greater depth.

The history of the English language is usually segmented into four major periods. The first begins with the withdrawal of the Roman Empire from the British Isles and the invasion of the isles by Teutonic tribes. Celtic, the earliest language, had survived the invasions of the Roman Empire, and at the beginning of the Teutonic invasions in the fifth century, both Celtic and Latin were spoken in the British Isles. The Teutonic invaders included the Angles, Saxons, and Jutes, all apparently from the area of present Denmark and the Netherlands. As they settled first in the southeast corner of the isles and gradually spread inland, their Germanic language gradually replaced the earlier Celtic, which retreated with its speakers to the northern and western area. This

POSSIBLE RESEARCH TOPICS

1. Write a dictionary of the contemporary slang of your school.
2. What do adults know about teen-age slang?
3. Of the slang of the 1920s, 1930s, or 1940s, what words became standard English? What words have died? Do adults still use these words? Can an adult's age be determined by the slang he knows?
4. What is the slang of the fifth and sixth graders of your community? What words does it have in common with your slang? What words are different?
5. Are there differences in slang among the various schools at the same grade level?
6. What differences distinguish the language of teachers and students?
7. Are there differences in language between students of the same age in different socioeconomic levels?
8. What distinguishes the language of adults from the language of students?
9. What distinguishes the language of people who are from different areas of the country?
10. How many distinct sounds are there in the English language? Give examples of each sound.
11. What are the differences in the use of the vocal organs that create the different sounds of our language?
12. Describe the characteristics that distinguish the language of a TV personality.
13. Select a special interest group and determine what distinguishes the language of the group (plumbers, musicians, football players, and so on).
14. How have patterns of speech moved west as our country developed?
15. Develop a map of the isoglosses of your community.
16. Explain the differences in language usage that one person shows in different situations.
17. Discover the peculiarities of language that develop within a single family.
18. What gestures do people use when speaking? What do they mean?
19. What peculiarities of language can be found in the lyrics of modern popular music?
20. Develop a bulletin board of peculiar language usages that you hear on TV and radio or see in newspapers and magazines.
21. What evidence of foreign language influence can be found in your community? In individuals of your community?
22. Do people speak differently on the telephone?

change in the language of the British Isles was well-established by the twelfth century, and it is this period of time—from the fifth century through the twelfth century—that gives our language its basic Germanic characteristics. The language of this first period is called Old English (O.E.).

The period from the twelfth century through the fifteenth century is called

Middle English (M.E.). The beginning of this period, which immediately follows the Norman conquest in 1066, is marked by the use of French as the language of the upper classes. By the end of the Middle English period, however, French had lost its influence. The steady inroads of English into the speech of the upper classes was accelerated in the fourteenth and fifteenth centuries by the Hundred Years' War, which made French the language of the enemy, so that by the fifteenth century English was a language common to all the people. During this period the language changed in many ways. The inflectional endings that were a characteristic of Old English were dropped, and word order became more important. Latin and French words replaced Old English words. The language of the beginning of the Middle English period is in most of its essentials foreign to today's speaker of English. By the end of the period, however, the language is recognizable as the precursor of our present one.

Modern English (Md.E.) begins with the sixteenth century, at the start of the Renaissance. This period shows two profound influences on the English language. The first is the spread of literacy, which was influenced by an increase in schooling and the invention of the printing press. Both of these forces had an essentially conservative effect and probably helped to stabilize both the grammar and the orthography of the language. The second major influence was the Renaissance itself, which, because of the tremendous expansion of knowledge in many fields, greatly increased and changed the vocabulary. The following centuries are ones of regularization and standardization through such influences as the continued increase in schooling, vast improvements in communication, the development and use of dictionaries, and the study of grammar. Although the language continued to change, changes were relatively minor, and the written language of the seventeenth, eighteenth, and nineteenth centuries is very close to that of today.

As we approach the present, language history shares the problems of all historical efforts. Our lack of distance from the subject may distort our perspective, and what we think are general trends and developments may in fact be passing fancies. Nevertheless, the present language of our country is usually identified as Modern American English (M.A.E.) or Current American English and is most often discussed as a synchronic entity rather than as a diachronic extension of the past. Some generalizations about M.A.E. do, however, seem possible. The "melting pot" has had the profound effect of extending the language through borrowings from other languages. Scientific development has accounted for the inclusion of many words from Latin and Greek roots. Our gadget-oriented society has caused a vast expansion of vocabulary through neologisms. Writers such as E. E. Cummings and Madison Avenue advertising men illustrate our willingness to play with and innovate language. It seems fair to conclude that M.A.E. will in the future be considered a period of change in language, but we are too close to it to define with any certainty just how the change will affect it.

Secondary school students seem to assume that language is static. Probably

the school's prescriptive emphasis on "correctness" in language reinforces this view. A recording of a passage in O.E., M.E., and Md.E. strikes most students as astonishing; some may respond with disbelief. But with this introduction, they are ready to consider two basic questions: In what ways does language change? and Why does language change? They will have no difficulty naming

WORKSHEET: Changes in Vocabulary

Be prepared to explain to the class what influence you would expect the following events to have on the English language:

1. As English settlers move west, they communicate with native American Indians who have names for crops, utensils, and places that the English do not have.
2. New Orleans is founded and settled by the French but eventually is absorbed by the English.
3. As the Southwest is settled, raising cattle becomes a major occupation. The workers learn many of the methods of the Spanish people who had been living in the area for many years and use many of their tools.
4. Many Oriental people settle on the West Coast. They make many contributions to the area, but they are particularly noted because they will work for low wages and because their food is very different and very good.
5. The discovery of electricity leads to a device that will carry people's voices over thousands of miles by means of wire. Finally, a new invention carries their voices without wires.
6. A device is invented that will provide the power to pull people in a carriage without a horse.
7. A man named McAdam invents a cheaper way to make roads smooth and easy to travel on.
8. A machine is invented that will actually move through the air.
9. A new game, baseball, is invented that becomes a national craze. Everybody talks about it, and the words that describe special happenings in the game become common knowledge to everyone.
10. A war occurs that not only involves many people in fighting but makes it necessary for everyone to make great changes in the way he lives.
11. The invention of the atomic bomb causes us to change our thinking about war. It also suggests that a new era is starting in which many things will change.
12. The Americans are in competition with the Russians. The Russians send up the first space capsule, which they call sputnik.

Specific questions:

- What do items 1-4 have in common? _____
- What name could you give these kinds of language changes? _____
- What do 5-8 have in common? What name would you give them? _____
- What do 9-12 have in common? What name would you give them? _____

the three major areas of language change: pronunciation, vocabulary, and grammar. Moreover, they will probably be able to mention some causes of vocabulary change, such as events and new products. But this will probably be the extent of their knowledge. The general discussion of the two questions will establish what they are able to articulate and will prepare them for instruction in these areas.

Studying the specifics of early change in the English language is a complex task. For that reason, instruction should begin with other problems. Perhaps the easiest one for students to work with is the change in vocabulary that is evident in today's culture. All they need for material is recent magazines and newspapers and a few carefully constructed worksheets from the teacher to develop their knowledge of the causes and kinds of vocabulary change that can occur in language.

This introduction will identify three major causes of language change—the influence of borrowing, the influence of major historical events, and the influence of specific new products or items that require new words to describe them. Each of these may be developed. For instance, neologisms may be explored as in the following worksheet.

WORKSHEET: Neologisms.

Neologisms are new (neo-) words (logo). There are many ways in which people coin new words.

- The following words are called acronyms. How were they made up?

a. AWOL	VISTA	WASP	SCUBA
UNESCO	WAC	CORE	radar
- Find two acronyms other than those listed.
- How was the word "acronym" made up? (*acro*, the Greek word for outmost, or the first letters + *nyma*, the Greek for name = names made up of the first letters of a group of words.)
- Look up "homonym," "synonym," and "homograph" to see how they were created by joining two forms that already meant something. Find at least one additional word created by combining Greek or Latin forms.
- Many words are borrowed from other languages like "Volkswagen" and "sputnik." Find two more examples like these.
- Some words are used because of their connotations—"Timex" for a wristwatch, "Heet" for an antifreeze, " Contac" for a cold medicine. Find two additional examples and explain how the original meaning is appropriate for its new use.
- Many new words are adaptations of names of people or places—a "macadam" road, a "maverick" for an independent person. Find two more examples of this kind of neologism.
- See if you can find neologisms that do not seem to fit any of these categories of coinage.

To investigate word borrowings requires special dictionary skills, so it is important that the teacher check to see that the available dictionaries include the necessary etymological information and that students are versed in the use of the etymological abbreviations that the dictionaries use. Looking up the derivations of words in a few passages such as the one below provides insight into the variety of sources from which English has borrowed words.

WORKSHEET: Word Borrowings

Tell when and from what languages the underlined words came into the English language:

A castle basks in the sun. A small Scottish breeze ripples across the loch. It is afternoon in the Highlands.
As you travel around Britain, sights like this may tempt you to forget your schedule and loaf. Go ahead. Britain offers unpteen ways to take it easy.

The study of the way in which major events lead to the formation of new words in English is even more demanding if it requires research. Some problems can be selected that will demand relatively simple research. Those that

WORKSHEET: Major events that have influenced our language.

Recent integration problems have led to many new words: The names of groups, such as CORE and the Black Muslims; the names of new events, such as sit-ins and freedom rides. We can find many other major events that have had a strong effect on our language. Research one of the following events to discover what new words it brought into our language:

- Women's recent dress fashions
- New schools of art in the 1960s
- Cosmetic and beauty-aid advertisements
- The atomic age
- The space age
- The automobile
- Baseball
- Football
- Prohibition and the 1920s
- World War I
- World War II
- Integration
- Roman control of England
- The French conquest of England
- Pioneers moving west
- The Civil War

need more research can be saved for the better students. Also, students might work in groups on these projects.

Changes in pronunciation and syntax are more difficult for students because they demand a more specialized knowledge of the history of the English language. Some general principles can be illustrated in M.A.E. For example, word shortening is apparent in the change from airplane to plane, automobile to auto, and gymnasium to gym. Analogical change can often be observed in the language of young children or in such nonsense verse as the following:

PLURALS ARE SINGULAR

Now if mouse in the plural should be,
and is, mice,
Then house in the plural, of course,
should be hicc,
And grouse should be grice and spouse
should be spice
And by the same token should blouse
become blice.
Then if one thing is that, while some
more is called those,
Then more than one hat, I assume,
would be hose,
And gnat would be gnose and pat
would be pose
And likewise the plural of rat would
be rose.⁵

The analysis of unintentional lapses in language can be developed into many categories, as Muinzer shows in his excellent brief summary of the field of language history.⁶ But such activity seems of relatively minimal importance to the student or to developing his understanding of how language changes. Additional lessons must draw more directly on the work of language historians. Three major kinds of activities seem basic: the relation of English to other languages, the changes of inflection and pronunciation in the history of English, and semantic change.

At the beginning of the nineteenth century, it was established that Sanskrit had many similarities to European languages. In fact the study of old Sanskrit manuscripts led to a recognition of underlying similarities among many languages including Old English, Gothic, Latin, Greek, and Sanskrit.

On the basis of this kind of comparative work, linguists have established that many present languages have grown from a single parent language, which has been named Indo-European to reflect the geographic areas whose languages can be traced to it. Charts showing the relationships among languages appear in most dictionaries.

The principles behind the comparative study that makes this analysis pos-

sible can be demonstrated to students, using language samples like those below that are from Schlauch's *The Gift of Language*.⁷

WORKSHEET: *Indo-European Languages.* All these language samples mean the same thing. Group them according to their similarities and differences.

Danish:	Ja, mor, jeg har tre.
Dutch:	Ja, moeder, ik heb drie.
French:	Oui, ma mère, j'en ai trois.
Czech:	Ano, matka, mám tři.
Icelandic:	Já, módir, ek hef þrjá.
Portuguese:	Sim, mãe, tenho tres.
Polish:	Tak, matka, mam trzy.
German:	Ja, Mutter, ich habe drei.
Italian:	Sì, madre, ce n'ho tre.
Flemish:	Ja, moeder, ik heb drie.
Norwegian:	Jo, mor, jeg har tre.
Rumanian:	Da, mama mea, eu am trei.
Russian:	Da, mat', u men' á tri.
Spanish:	Sí, madre, (yo) tengo tres.
Swedish:	Ja, moder, jag har tre.
English:	Yes, mother, I have three.

TEACHER DISCUSSION GUIDE: Indo-European Languages

Distribute Worksheet I on Indo-European expressions. (If possible, print each on a 3" by 5" card and give each student a set, so he can manipulate them more easily.) Tell the students that each foreign sentence means the same thing as the English, and ask them questions that will help them group these languages according to their similarities and differences. For brighter classes, few questions will be necessary. Slower students may have to be led step by step through the analysis of similarities and differences; for such students it is wise to use fewer languages. The following questions should be used as they are necessary in the particular class to gain an *adequate* classification. It would be far better to follow the spontaneous lead of the class than to try to use the specific questions and answers, which are presented here only to illustrate the kind of procedure involved.

1. All these languages have many similarities that suggest that they are somehow related. What characteristics do all these languages have in common? (Initial letter in *mother* and the "r" in *three*.)
2. How would you group these languages on the basis of their similarities and differences?
 - a. What three groups could we make on the basis of the second letter in the word *mother*?

I	II	III
English	French	German
Dutch	Portuguese	
Norwegian	Rumanian	
Swedish	Polish	
Flemish	Spanish	
Danish	Italian	
Icelandic	Czech	
	Russian	

3. What letters in the words for "yes" suggest that our classification of Group I is correct? (the initial *y* or *j* that all in Group I have in common.)
4. On the basis of this evidence, is German closer to Group I or Group II? (Put German back into Group I.)
5. What letters of the words for "have" are similar in all Group I words? (Initial *h* in all the Group I words.)
6. Let's look further at the languages we have included in Group II. Do you see any basis for subdividing them into two or three groups?
 - a. How could we divide them into two groups on the basis of the letters in the words for "yes"? (*i* versus *a*; note that this misclassifies Rumanian as Slavic rather than Romance.)

Ila	IIf
French	Rumanian
Spanish	Czech
Portuguese	Polish
	Russian

- b. How do the letters of the word for "I have" support our classification? (All IIf languages include the letter *m*.)
- c. How does Rumanian differ from the other languages in IIf? (No *i* in mother; more than four words; *e* in three.)
7. Where should we put Rumanian? (If the discussion flounders, the class could decide by vote; the decision is not important at this point.)

If students have developed fluency in this pattern of analysis, they should be divided into small groups to follow the same pattern in subdividing the languages of Group I. If they have not developed fluency, the teacher should continue to direct the analysis until it is completed.

When the student analysis is completed, distribute copies of the correct subdivision. Explain to the students that their analysis may differ from the linguists' because the linguists had more information to work from, including the pronunciation of these words.

An analysis of the changes in English from O.E. to M.E. to Md.E. to M.A.E. is fairly complex and relatively difficult to present to students. Recorded and transcribed comparative passages in O.E., M.E., and Md.E. are a

basic tool. With these available, the teacher may lead the entire class in a brief analysis of some specific changes in vocabulary, pronunciation, orthography, and syntax. Additional study of this area should be reserved for special projects of advanced students.

The final introductory lesson is an analysis of semantic change. The worksheet below will allow students to discover changes in meaning from general to specific, specific to general, good to bad, and bad to good:

WORKSHEET: Semantic Change.

The following words illustrate four of the chief types of semantic change (changes in meaning) in English. For each word, the first meaning given in parentheses is the old or original meaning; the second is the modern one. Arrange these words into four groups according to the kind of semantic change they represent.

1. *acorn* (various kinds of nuts—the seed or nut of oak trees)
2. *bonfire* (a fire for burning bones or corpses—any large outdoor fire)
3. *boor* (a farmer—an ill-mannered person)
4. *boycott* (an Irish captain who was ostracized by his neighbors—refusal to associate with any person or group)
5. *cad* (a younger son of an aristocratic family—an ill-mannered fellow)
6. *cattle* (property or wealth—cows, bulls, and steers)
7. *champagne* (wine from a French district—any wine resembling French champagne)
8. *corn* (a hard particle—the seed of a particular cereal crop)
9. *cunning* (knowing or skillful—tricky or meanly clever)
10. *dean* (an officer in charge of ten people—a major college administrator)
11. *deer* (any small animal—a particular animal with antlers)
12. *discard* (reject a card—throw something away)
13. *ferry* (travel—travel by boat)
14. *gossip* (a godparent—a spreader of rumors)
15. *hussy* (a housewife—a woman of low morals)
16. *knave* (a boy—a villainous man)
17. *knight* (a young male servant—a titled person)
18. *lady* (a breadmaker—a woman of quality)
19. *marinet* (a French general who was a stickler for discipline—any rigid disciplinarian)
20. *minister* (a servant—a clergyman or statesman)
21. *pedagogue* (a slave—an educator)
22. *shibboleth* (a password used in the Bible—any word or phrase that identifies a particular group)
23. *shirt* (a loose outer garment worn by either sex—a garment worn by a man)
24. *skirt* (a loose outer garment worn by either sex—a garment worn by a woman)

Students who are interested in pursuing semantic change as an individual project may be offered additional suggestions for study, such as the following.

WORKSHEET: Dead Metaphors and Doublets.

Many words that once embodied sharp metaphors have been used so long that the comparison they originally conveyed has been forgotten. We call these words "dead" metaphors. Here are some words that you will find more interesting to use when you know the lost metaphor that each conceals. Look up the origin of these words in a good dictionary and be ready to explain the dead metaphor in each case.

- | | |
|---------------|-----------------|
| 1. aplomb | 11. magazine |
| 2. capricious | 12. muscle |
| 3. career | 13. prevaricate |
| 4. contrite | 14. precipitate |
| 5. delirium | 15. result |
| 6. easel | 16. sarcasm |
| 7. eliminate | 17. subtle |
| 8. embarrass | 18. superfluous |
| 9. eradicate | 19. tribulation |
| 10. grenade | 20. urchin |

The following pairs of words or doublets have similar origins. Consult an unabridged dictionary. Sometimes you will find that one of the words retains the original meaning and the other is a later development; sometimes both have left the original meaning far behind. Tell what element of meaning is common to each set of doublets, what the original meaning was, and how the other meanings appear to have developed.

If the dictionary you use gives definitions in the order of their historical development, as most dictionaries do, the order will help you see the way the meaning has changed. The explanatory notes at the beginning of your dictionary tell whether historical order or frequency of use determines the order of the definitions. Do not overlook quotations that show you how a word was used at a certain date.

- | | |
|----------------------|------------------------|
| 1. daft, deft | 11. parole, palaver |
| 2. danger, dominion | 12. poignant, pungent |
| 3. etiquette, ticket | 13. praise, price |
| 4. genteel, jaunty | 14. sergeant, servant |
| 5. guest, hostile | 15. shirt, skirt |
| 6. jealous, zealous | 16. sole, sullen |
| 7. lap, lapel | 17. soprano, sovereign |
| 8. lace, lasso | 18. tabernacle, tavern |
| 9. mosquito, musket | 19. tradition, traitor |
| 10. onion, union | 20. vast, waste |

The instruction in language change has introduced students to the following ideas: (1) Language changes in pronunciation, vocabulary, and grammar. (2) Contact with other languages influences change. (3) New words are made up in a variety of ways. (4) Major events have a strong influence on language. (5) Analogy and shortening affect language. (6) English is one of the Germanic languages of the Indo-European language family. (7) The meanings of words shift in many ways. Each of these is an appropriate topic for the student to pursue as an individual project. As with dialectology, the teacher may control the difficulty of the task and should judge the success of the unit by its effectiveness in making the students more sensitive to the diversity of language.

NOTES

1. Griffith, Andy, *Just For Laughs*, Capitol Records T962.
2. Kurath, Hans, *A Word Geography of the Eastern United States* (Ann Arbor: University of Michigan Press, 1949), p. 79.
3. Drake, James A., "The Effect of Urbanization on Regional Vocabulary," *American Speech*, Vol. 36, No. 1, February 1961, pp. 17-33.
4. Shuy, Roger W., *Discovering American Dialects* (Champaign: National Council of Teachers of English, 1967).
5. Mitter, Frank, *Little Book of Word Tricks* (Mount Vernon, N.Y.: Peter Pauper Press, 1958), p. 33.
6. Muinzer, Louis A., "History: the Life of the Language" and "Historical Linguistics in the Classroom," *Illinois English Bulletin*, November 1960.
7. Schlauch, Margaret, *The Gift of Language*, formerly *The Gift of Tongues* (New York: Dover Publications, 1955), pp. 51, 53, and 55.

SUGGESTIONS FOR FURTHER READING

1. HANS KURATH, *A World Geography of the Eastern United States* (Ann Arbor, Michigan: University of Michigan Press, 1949). The scholarly publication resulting from the work of dialectologists.
2. ALBERT C. BAUGH, *A History of the English Language* (New York: Appleton-Century-Crofts, 1957). A standard text on the history of the English language.
3. ROGER SHUY, *Discovering American Dialects*. Champaign: National Council of Teachers of English, 1967.
4. A. L. DAVIS, ed., *American Dialects for English Teachers*. Washington: United States Office of Education, 1969. Contains checklists of items for variations in regional and social dialects as well as an extensive bibliography.