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TESOL QUARTERLY

A Journal for Teachers of English to Speakers of Other Languages

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Teachers of English to Speakers of Other Languages

Editor's Note

Early in 1969 the director of the English Language Training Program at the Defense Language Institute, Lackland Air Force Base, Texas, requested help from the TESOL organization in providing a series of lectures to its staff members. These lectures were to serve as a basis for a discussion of the state of affairs in teaching English as a second language. A list of topics was suggested, and six lecturers—each highly representative of the TESOL profession—were selected. These particular speakers were chosen because of their individual background and interest in the subjects agreed upon.

While the papers are directed mainly to those teaching at the adult level (because students at the Defense Language Institute are adults), the ideas have general relevance at every teaching level of the profession. It is for this reason that they are being published in their entirety in this issue of *TESOL Quarterly*.*

The lectures, delivered during the period from June to November, 1969, are printed in the order in which they were presented. They are followed (on page 89) by a short summary and discussion.

BWR

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A "Traditional" Linguistic Basis for Language Teaching

Edward M. Anthony

This paper presents a set of assumptions about language which are essentially in the Bloomfieldian tradition. The general categories of "sounds," "grammar," and "lexicon" are discussed in some detail in terms of this structural approach, and the interplay between these various aspects of language is stressed. The importance of contrastive analysis in determining what kind of linguistic structures signal meaning is illustrated by a comparison of English with Spanish and Thai. A wholly creditable system of teaching, a tremendous number of textbooks, and a large number of language courses are based upon this concept of language as interplay between stimuli and reactions.

Preamble

Some years ago I published an article called "Approach, Method, and Technique."¹ Since that time, I have tended to try to classify everything I do under one of those three terms. *Approach* means the assumptions about language and the assumptions about language teaching under which we operate. *Method* means the various procedures which we use to gain our end of language control. And *Technique* is what the teacher actually does in the classroom to implement a method and an approach.

As is perhaps proper for a lead off speaker in a lecture series, my paper will deal mostly with matters on the approach level. I'm going to try to describe one way among many to look at language—one set of assumptions about language. I may make some methodological comments along the way, but that is not to be my main thrust.

One more thing: The term *traditional* is not intended to be a nasty word.

I. Language

The human organism exists amidst a dazzling variety of phenomena. It is constantly bombarded by changing sights, tastes, smells, noises, and tactile impressions. Most of these the organism usually ignores: the traffic sounds outside an office window, a casual brushing against a desk, the familiar sight of the furnishings of a well-known room. It would be frightening indeed if we, as human organisms, were forced into constant and complete awareness of every tiny shift in our physical environment. We do, however, become aware of a selected few of the potential stimuli that are forever about us, and we change our behavior in some way as a result.

Mr. Anthony, Professor and Chairman of the Department of linguistics at the University of Pittsburgh, was Director of the Southwest Asian Regional English Program (1958-62) and is the author of *A Programmed Course in Reading Thai Syllables* (University of Michigan Press, 1962). He was President of TESOL, 1967-68.

¹"Approach, Method, and Technique," *English Language Teaching*, XVII, 2 (January, 1963).

A boy steps into a busy street. He sees a truck and hops back out of the way. A woman shopper notices the odor of fresh bread carried on the autumn breeze, hesitates, and enters a bakery to buy a loaf. A commercial announcement booms through the room at the conclusion of a music broadcast, and a man arises to turn off the radio. The sun becomes too hot and the gardener moves into the shade. Or a baby, fed a vegetable with an unfamiliar flavor, spits it out.

In each of these instances, some slight disturbance or skewness in the organism's relation to its total environment brought one portion of the environment into prominence and was followed by a related reaction on the part of the person concerned. The sight of the approaching truck was followed by the retreat of the boy. The smell of bread resulted in the shopper's purchase of a loaf. The man turned the radio off when his sense of hearing was affected by noises beyond the usual background sounds. The gardener felt heat and moved into the shade. And the baby, tasting a new food, rejected the offending tidbit.

Each of these microcosmic dramas consisted of two events, one following the other in time. We may, if we wish, speak in terms of the first of these events, the one received by the human senses, as a stimulus (S) producing the second of these events, the reaction or response (R). And we may use an arrow to join them in developing a formula that will apply to all five of the situations described:

$$S \rightarrow R$$

We could also, if we wished, examine rather closely the features of S. We could, for example, describe the total scene in which the boy was immersed: the climate, the weather, the buildings around him, the grass, the trees, the other people passing, the rest of the vehicles on the road. But we chose drastically to limit our interest in all these other features of his experience and to concentrate our attention on the boy, the street, and one truck. Our woman shopper unquestionably must have, in her journey, come in contact with other odors. The gardener felt a vagrant breeze, perhaps a drop of rain, a pebble in his shoe. The radio gives forth many sounds, the baby tastes many flavors. But in our discussion we have cut off all other sense impressions in favor of those related to the action in which our interest lies. And these we can examine in detail more profitably. As a result of such an examination, and if we made many similar examinations, we could describe the behavior of the human organism under certain conditions and, more important, predict with a fair degree of accuracy, its behavior in similar circumstances.

Such adventures into the prediction of human behavior have been and continue to be made by psychologists, sociologists, anthropologists, politicians, advertisers, linguists, language teachers, and lovers. For the present, we shall dwell upon the premises of the linguist and the language teacher, their ways of thinking about events, and the goals they pursue.

Up to now, however, none of our actors has uttered a word or made a vocal noise. We have as yet nothing to investigate. We have set our stage for pantomime. And it is significant to note that, although our actors have been human, the same dramas with minor changes could have beasts for actors. A dog, approaching a busy street, would shy away from the truck in much the same way as did the boy. A monkey might well smell fresh bread and help itself to a loaf. And many a cat slinks from the room when soft music changes to blaring talk. Even a worm hurries its way from sun to shade. Few animals will eat what is distasteful to them. We must, as linguists or language teachers, rewrite our human comedy. To do so, we must add characters as well. Scene one: A boy, out walking, attempts to cross a street. He does not see an approaching truck. Another pedestrian does, and, opening his mouth, makes a noise. The boy ducks out of the way and escapes unscathed.

Scene two: Mother and child are shopping. Mother smells fresh bread. Opening her purse, she hands the child some small pieces of metal. Opening her mouth she, like the pedestrian, makes noises. The child takes the small pieces of metal, disappears into the bakery and returns with a loaf of bread.

Scene three: A man and his wife sit quietly in a living room listening to radio music. The music stops and other noises come from the loud-speaker. The wife opens her mouth and also makes noises. The husband gets up and turns off the radio.

Scene four: A man is gardening in the sun. He straightens up, wipes his brow. A neighbor, also working in the sun, opens his mouth and makes a noise. The gardener replies and joins his neighbor under a shady tree.

Scene five: Since babies, before they speak or understand speech are very much like little animals, we must age one of our characters a trifle in rewriting scene five. Mother and child are eating lunch. The child bites into a sandwich with a little too much mustard. From the expression on his face, the mother knows that something is amiss. She tastes his sandwich, makes a noise with her mouth and the child gets rid of the food.

We have rewritten our scenes in order to introduce language, absent from the first and second drafts. We must now examine the contrasts between the two versions.

The first difference is that a new character has been added to each scene: a pedestrian, a child, a wife, a neighbor, and a mother. To deal with language profitably and practically, we seem regularly to need more than one person. In each instance our S for stimulus can apply to one person, our R for response to another. The animals of our second version have vanished into limbo. In exceptional instances they might play walk-on parts on our linguistic stage, but can never star. We need humans when we work with language. And finally, in each scene, at least one of the characters made noises with his mouth. This noise somehow interrupted or came between our S and our R. The S happened to one person, the R

was supplied by a different person. We must make room for the interruption in our rather neat S → R formula. It must now read:

S → Noise made with the mouth → R

We have at this point a formularized description of a situation in which language is used. But we must not make the mistake either of considering that this formula is limited to language or that we can consider part of the formula to be language without relating the part to the whole. In short, some cautionary comments are in order.

First, we must be rather careful to consider our formula in its entirety. S alone is not language, nor is R, as we have seen in our first and second versions of the drama. We cannot even state that noise made with the mouth is language when considered by itself. Dogs bark, monkeys chatter. And the formula applies to situations which our intuition tells us are not language situations. My presence causes a dog to bark, and I take to my heels. S → Noise made with the mouth → R. We are thus well advised to say that S → Noise made with the mouth → R is language only under circumstances like these:

When humans take part.

When members of one group of humans make approximately the same sounds when confronted with the same S, and when these sounds are followed by approximately the same responses within that group.

When this structure of sounds is employed by a rather large group of people throughout a reasonably extensive area over a longish period of time.

We have stated as more or less of an assumption that only humans use language. Now let us go on to point out some bases for this assumption. Just what are some of the differences between the admittedly communicative noises that animals make and those language sounds that humans make?

My daughter has a Siamese cat. As it happens, it was born in Bangkok and came to maturity there. In Bangkok it made certain squawks, purrs, mews, and grunts. When it was brought to the United States, it continued to make the same squawks, purrs, mews, and grunts. And when gentlemen cats, natives of the U.S. A., came to call, these communicated under the same conditions with the same various noises. The fact that my daughter's cat had been born and raised thousands of miles away did not disturb the communication in the slightest. And, if one could record the different kinds of cries a cat is capable of emitting, a dozen or so notations would probably suffice. No one, by linguistic analysis, listening to the hiss of an angry cat, can say, "Aha, that cat is from Iran, Egypt, or the Isle of Man."

Contrast this with the human condition. A gentleman from Java, in another country and speaking in the manner in which he was raised, cannot communicate through language with another raised elsewhere. He can communicate, but not through language. He may cry. We assume he is sad, and we are probably right. He may laugh, and we assume he is happy or

embarrassed; and again we are probably right. The level of laughter, tears, sobs, and sighs is shared in much the same way as the cat's squawks, purrs, meows, and grunts. But the human has access to a level of communication to which the cat does not. This is the first distinction that we note between animal and human oral noises.

Another distinction can be commented upon briefly. It seems reasonable to suppose that two thousand years ago people laughed, cried, and sobbed much the same as they do today. (This does not mean that crying, for example, functioned totally in the same way two thousand years ago. The social structure may or may not have approved of tears. Within the culture crying may have been considered manly or unmanly, laughter polite or impolite. But Caesar did not laugh in Latin, nor Plato cry in Greek.) Likewise cats mewed and purred. But no present day human uses language in precisely the same way as his ancestors. One might suggest attaching such things as grunts and meows and laughter to physical evolution, which is painfully slow in changing, and language to social evolution, which shifts more rapidly.

And human language is tremendously complex, much more intricate than an animal's meager repertory. Linguists use the term *structure* in speaking of this intricacy. A language is a *structure*. A speaker of a language operates within this structure when he uses language. The word *structure* can be applied analogously to non-linguistic things. A clock, for example, is a structure. It is composed of many small gears, plates, screws, and wheels. Each of these pieces works intimately with the other pieces. Any valid description of the watch would have to include a description of what each piece does: how it works to transmit the energy in a wound-up spring to the movement of the hands. Each piece has a different function, but always functions in relation to or in contrast with another piece. Compare this to a similar clock which has been taken apart and reduced to a number of miscellaneous pieces of metal with different shapes. A description of this pile of metal differs from the description of a clock. None of the pieces *does* anything. Now we describe a gear merely as a toothed flat circular piece of steel. But no piece has any relation to any other piece. We need not define one piece in its relationship to any other piece or to the whole. We have no structure.

A clock as a structure may be likened to a language. The parts, instead of being gears and wheels, are sounds and nouns and vocabulary. If I merely list the sounds of a language without relating them to the language as a structure, I have a group of unstructured parts. What is the structural significance of a sound I might write ssss? Even if I describe where my tongue is when I make the sound, how my jaw is set, where the friction comes from, I still have an unstructured sound. But when I say that this sound in the word say serves to differentiate that word from the word bay, I have begun to put the linguistic clock together, and have attempted a structured description.

Even when I cite a word such as **ring**, in isolation, most of the structure within which the word ordinarily appears is lacking. We know neither whether it is a noun or verb, nor its vocabulary or lexical meaning. In fact, we cannot be sure it is English. If it is English, it might mean (and here we add a type of structure to define it) the **ring** of a telephone, an engagement **ring**, a dope **ring**; I might **ring** a bell, or my ears might **ring**. Or I could **wring** a chicken's neck.

This latter example leads us quickly to another consideration. We have been dealing with language as *sounds*. The spelling of **wring** or **ring** may be associated with different meanings, but the sound is the same. The sentence **She (w)rings them**, as spoken, is ambiguous. **Them** might be hands or bells or chickens' necks. We get no clue from the sentence as spoken. We are, of course, interested in spelling. But it is always useful to keep the study of the written representation of language separate from the study of language itself. A language can exist without a writing system. It is perhaps fair to state that most languages of the world today have no writing system, especially when one considers the numerous Indian languages of the New World, for example. A number of missionaries have spent a good deal of their time actually constructing alphabets for these languages. And children who have not yet learned to read and write, and other illiterates, do use language. When we deal with dead languages our evidence is from written material. This evidence is definitely second best, and we have a harder analytical time. We must make educated guesses, add assumptions, and be satisfied with less extensive conclusions. Our S/R formula has gaps.

In addition to *structure, human, stimulus, response, spoken, heard*, another word that keeps cropping up in definitions of language is *arbitrary*. This simply means that the same animal, for example, may be referred to quite 'arbitrarily' as **chien, Hund, maa, perro, or dog**. If the relationship between this animal and the word we employ were other than arbitrary, all languages would name it with the same set of sounds. Even in onomatopoeia this arbitrariness is evident. We who speak English imitate a dog by saying "bow-wow." But a Spanish dog says "jao-jao," and some Oriental dogs say "wong-wong" or "bong-bong."

But the most important features of the description of language, at least for language teachers, revolve around the interplay of stimuli and responses, and the restrictions on this interplay in terms of a structure of sounds and their arrangements which a large number of people employ in the same way. Then we have language. Let us then proceed to examine the parts of this noise that we have agreed to call language; this structured noise made with the mouth.

II. Sounds

It is linguistically traditional to speak of human sounds in two different ways. We may, first of all, listen to a human vocalize without making any

reference to what brought forth this noise, and without observing the results this vocalization seems to have. This is, of course, examining the noise made with the mouth without S and without R. We can analyze this noise in a number of ways. We can record it on tapes, wires, disks. We can feed it into machinery that will make it visible. We can measure the amplitude of sound waves, their frequency—in short, how they disturb the air (or other substances) through which they pass. This kind of study occupies acousticians. For our purposes we can call it acoustic phonetics. Or we can probe into the ear of man and perhaps find out a good deal about how the noise travels from outside a man's head into and through flesh, nerves, and brain. This can be called auditory phonetics, if you like.

Or, we could go into a man's mouth and throat and note how different parts of this apparatus move together to modify a stream of air and thus produce a noise. This we call articulatory phonetics. In actual fact, language teachers spend a large amount of their time dealing with articulatory phonetics much less with auditory or acoustic phonetics. And linguists have developed an abbreviated way of describing how the parts of the vocal apparatus work together to produce certain sounds. They *could* say the following:

“This man's lungs are expelling air from the body through the nose. The vocal cords through which air passes are vibrating. On its way toward the nose, the air passes the back of the mouth, which is closed off at the lips.”

In fact they *do* say:

“He pronounced an ‘em’.”

And the linguist writes [m]. The only thing sacred about that particular written squiggle is that it has been agreed upon traditionally. When you have a large number of agreed-upon squiggles, you have that form of shorthand that is called a phonetic alphabet. Notice however, that in all this we haven't referred at all to the stimulus preceding the noise or the response which the noise got. We have no difficulty in talking about phonetics without worrying about language. Our linguist knows enough to say “He pronounced an ‘em’.” But he has not told us what language is being used. Perhaps he can't. Perhaps it comes from a baby too young to have language, in the sense we are using the word. Perhaps it comes from a language-less imbecile. Perhaps it even comes from an animal! After all, a cow says something that sounds suspiciously like an ‘em,’ although no one has to my knowledge studied any dialect of *cow*. It may not be a piece of research for which I would request sabbatical leave, but it would be quite possible to work on the articulatory nature, the articulatory phonetics, of a moo—to answer the question “Now how, brown cow, did you make that loud sound?” Articulatory phonetics can be used to describe any spoken language or none, human vocal noises or animal cries.

When, however, we introduce stimulus and response, we introduce meaning. In fact, one useful definition of meaning in language is simply

the stimuli which bring forth certain sounds and the responses that they characteristically get. When meaning is introduced, articulatory phonetics begins to take a slightly subsidiary role. We may still wish to describe 'em' as a sound made with the lips together, the vocal cords vibrating, the air going from the lungs through the nose, but now we are also interested in finding out what kind of stimuli result in the production of 'em' and what kind of response 'em' gets. We would very soon discover that in English 'em' contrasts with all sorts of other sounds; that 'em' doesn't usually appear all by itself, but sometimes represents part of the minimal contrast between different sets of stimuli and responses. We'd find that **me, bee, he, she, fee** differ minimally in sound related to meaning. Clearly **bee** is used in circumstances different from those associated with **fee** and receives a different response. If we proceeded systematically, we could isolate two or three dozen sounds that distinguish meanings in this way. Note that these sounds distinguish meanings but do not themselves have meanings. The difference between **b** and **f** may tell us which word is **bee** and which **fee**, but we would be hard put to assign meanings to **b** and **f**. In brief, if we discuss 'em' by talking about how it is made with the mouth, we are having a discussion of phonetics. If we talk about 'em' as a functioning sound unit which distinguishes meanings in a particular language, we are talking about something else which we label *phonemics*. 'Em' then can be called a phoneme.

This leads us directly to some interesting matters which impinge on language-teaching problems, which really merit more time than can be devoted to them here. Clearly **light** is used in English in different situations than is **right**. We may say that **r** and **l** are different phonetically. Clearly **r** differs from **l** phonetically. Not only may I use a different phonetic shorthand, but this shorthand reflects, among other things, the fact that my tongue is touching the roof of my mouth when I pronounce the **l** of **light** but is not when I say the **r** of **right**.

But we find, to our pedagogical sorrow, that some Oriental languages seem to attach no importance to this phonetic difference and the speakers of those languages cannot, without special training, produce or even hear the difference between **long** and **wrong, lace** and **race, late** and **rate**. What is clear enough to us is unclear to them. We may infer from this that phonemes vary widely phonetically from language to language, and that we may talk about phonemes only within one language. Neither the number, the distribution, nor the type can be assumed to carry over from one language to another. But before we begin feeling superior to our Oriental friend because we can hear things he can't, it would be well for us to reflect that he would hear the following two sentences as quite different:

He's got a big [ŋ]ew car.
He's got a big [n]ew car.

English speakers would, in all likelihood, hear these two as the same.

These differences in the use of sounds as functioning, meaning-distinguishing units in different languages and as parts of a total language structure are not limited to consonants and vowels. They permeate other aspects of language as well: pitch, as exemplified by the difference between on one level **He's a doctor.** and **He's a doctor?** in English, on another level **maa** meaning 'horse' and **maa** meaning 'dog' in Thai; and stress, as illustrated by the differences between **ENGLISH teacher** and **English TEACHER** in English.

The subject of the sounds of language has obviously not been exhausted by the brief essay above. And there is, of course, always something a little artificial about dissecting part of a structure as integrated as language. But it is indeed useful if it assists us in gaining insights into how language works, and even more importantly, in learning something of why we all have problems in learning another language and what precisely we will have difficulty with.

We now move on to another aspect of the study of language, the study of some kinds of units larger than the phoneme. The broad term that will be used to refer to this area of language study, without really defining it, will be *grammar*.

III. Grammar

We all know and accept the fact that there are different languages in the world. We accept the fact that there are varieties of a particular language. We often seem, however, to want to rush headlong into making a moral issue out of comparison of these dialects. We want to say that one dialect is 'better' or 'more correct' than another. Some of us believe that we must exercise great care indeed before we decide that British English is better than American English or Boston English more correct than San Antonio English. One reason is that we are not really judging the language variety but are judging the people who use that language variety. We can however, hopefully without offense, delineate groups of people and describe the variety of language they speak, including the kind of grammar they use. This kind of research is, traditionally, an investigation into the *grammar of usage*.

Groups of people can be described in various ways. One can take as the basis for study the kind of English spoken by those people who lived in England before 1000 A.D.—time delimitation. Or we can deal with geography and limit our interest to the language spoken by a group of people living in Pittsburgh, Pennsylvania. We can attempt to define a dialect spatially. Clearly we can combine the two and actually are, in a sense, forced to.

We can, if we wish, set up other criteria for limiting our group. We can say we are going to examine the English used natively by Americans in the Midwest who have a bachelor's degree, who are earning more than \$20,000 a year, and who have positions of responsibility and status. Or we

can deal with the Americans in the Midwest who earn less than \$2,000 a year, have never finished the sixth grade, and who work with their hands. In either instance we are examining usage—this time on a kind of social level.

Because dialects are defined by the groups of people who use them, we can easily believe that a person who spoke the language of England before 1000 A.D. would be recognized immediately, if he appeared in the twentieth century in Pittsburgh, Pennsylvania, as someone not a member of the Pittsburgh, Pennsylvania, group of people. Before he could function as a member of the group, he would have to add a dialect to his linguistic repertory. The same principle obtains even with the two Midwestern groups of people mentioned earlier. Those linguists who deal with English for the disadvantaged often recommend just that—that the linguistically disadvantaged be helped to add a dialect so that they will be able to be members of two groups of people simultaneously. (Parenthetically, if the \$20,000 a year man wishes to be accepted among the \$2,000 a year men, he had jolly well better become bidialectal too.)

All this can be classified under the term *grammar of usage*. There are a couple of implications for teachers of English to speakers of other languages here. First, one way of describing the job is to say that we are adding a language which allows the student to become a member of a macro-group of English-speaking people. Second, this job carries with it the obligation of assuring that the dialect learned allows the student to enter the micro-group with which he will be carrying on his English-speaking activities.

There is another implication: When we have chosen the particular English dialect that we wish our students to add to their repertory, we must examine that dialect realistically, descriptively not prescriptively, and functionally (i.e., not with a view toward developing our students' competence in producing definitional statements about the language). This kind of grammar study is classified as the *grammar of structure*.

First, some comments about linguistically traditional morphology and syntax are appropriate. Many linguists feel uncomfortable with the term *word*— they don't like to deal with it and prefer the term *morpheme*. An example may show why this happens:

The boys printed a weekly newspaper.

This sentence has six words. But if, in some way, we wished to talk about meaning units, the sentence has more than six: **the, boy, -s, print, -ed, a, week, -ly, news, paper**. There are ten meaning units that we can call morphemes, but we cannot call them all words. One word could include just one morpheme or several. The order of morphemes in a word has rigid limitations. A set of morphemes: **ed, re, un, view**, meaning respectively 'past,' 'again,' 'negative,' 'see,' never appears in the order **ed-un-view-re** or **view-un-re-ed** but must have the order **un-re-view-ed**. The order of

morphemes is, of course, language restricted. There is no reason at all why another language would have the same restrictions. There is, indeed, neither reason nor guarantee that another language would find it necessary to have a morpheme meaning 'past,' for example. (Sometimes it isn't even necessary in English: **They put on their hats yesterday** and **They put on their hats tomorrow** show time clearly without an **ed** in sight.)

If we wish to talk about words, comfortably or not, we may want to introduce another notion. A lot of grammatical meaning in the sentence **The boys printed a weekly newspaper** can't be explained away by morphology. If I ask about the subject of the sentence, you will tell me boys. If I ask you if a **baby buggy** is a **buggy** or a **baby**, you answer easily. If I ask you if a **buggy baby** is a **baby** or a **buggy**, you answer equally easily. And if I ask you about events described on this alleged historical marker: **The savage here the settler slew**, you may say that the sentence may be very poetic, but you can't tell who survived. All of these matters, and others, give us another rubric under which to classify grammatical phenomena: *syntax*.

Analyses of this type can help the language teacher very greatly, especially if one can compare the structure of the native language of the student and the structure of English. We will find that the languages may overlap in some of the grammatical signals they use, and that the areas of overlap probably provide little difficulty for the student of English. But in other areas of meaning, there may be no overlap, or partial overlap. These areas provide major obstacles to the quick mastery of a language. English, for example, has clearly defined distinctions between verbs and adjectives. The Thai language is much more liberal about these matters. **Man good** and **Man run** are word-for-word translations of complete Thai utterances. In English we find it necessary to distinguish morphologically between singular and plural in many nouns: **one book, two books**. The Thai finds it convenient to say **book one unit, book two unit**, with morphology not an issue. Again, the implication is clear. If you found a Thai student saying **three boy**, or **teacher good**, or **seventy-six trombone**, you would know why. In fact, you could have predicted it. If you had done the kind of contrastive analyses I have been suggesting, you could have made a large number of organized predictions of trouble spots for Thai speakers of English and could have written a grammar textbook or a pronunciation textbook specifically for these students.

In the particular approach to language that I am dealing with today, language has three subsystems—the sound system, the grammar system, the lexical or vocabulary system. Before introducing the last, it may be useful to give four example utterances, partly as a review, partly as an introduction.

1. Fim lif coranjula theklam.
2. The dundles gafitched a lubb.
3. Horse the kicked cowboy a.
4. The cowboy kicked a horse.

If I ask is utterance one English, the first impulse is probably to answer, "No." The sentence has no subject, no indication of whether it is past, present or future. It certainly doesn't have English grammar. The meaning of **fim**, or **lif**, or **coranjula**, or **theklam** is unascertainable. The lexicon is certainly not English. But, at least as I pronounce the utterance, the pronunciation is English. No English pattern of phoneme, distribution, stress or intonation is broken.

Utterance two clearly has a subject, object, plural, and a past morpheme. It clearly has English pronunciation. But the lexicon is still un-English.

Utterance three has English pronunciation, English lexicon, a touch of English morphology (kicked), but no syntax. We can't tell who kicked what or what kicked whom.

Utterance four has all of the subsystems functioning fully and hence is illustrative of a standard English sentence.

The whole point here is to show that full meaning requires the intricate integration of all the levels of language. Of these levels, lexicon is the most difficult to deal with satisfactorily in the contrastive situation. This is attested by the great number of valiant attempts to contrast phonemic systems in print, the respectable, though considerably fewer, contrastive grammatical studies, and the complete dearth of contrastive lexical studies of any but the most limited kinds. Here of course is the growing edge of this particular structural way of looking at language and language teaching—here is where we need pedagogically oriented research.

I can't solve the problem. I can finish only by pointing out some rather curious characteristics of the lexical system of a language, and by warning that there are certain dangers in the segmenting of language into sounds, grammar, and lexicon, even if it is a most useful analytical method for the most part.

IV. Lexicon

First of all, lexical items often have very vague or fuzzy meanings when they are cited out of a usual context. The example I often use is **ball**. In isolation, what does it mean? It could mean 'dance,' 'cry (bawl),' 'good time,' or 'plaything.' Even if the latter is ultimately decided upon in some way, it could be large, small; hard, soft; hollow, solid; round, oval; leather, wood, rubber.

Second, lexical items tend to cluster together to perform mutually defining functions. Below are two sets of words. The first is a mere list:

pipe	'water conduit'	'tobacco container'	'play a flute'
fast	'rapid'	'attached firmly'	'not eat'
pen	'animal enclosure'	Writing device'	(verb of these)
plant	'vegetable'	'factory'	(verb of 'vegetable')
stamp	'postage'	'put foot down'	(verb of 'postage' noun of 'put foot down')
junk	'rubbish'	'throw away'	'boat'

In this list there is no clue that causes the items in the list to cluster together, that excludes some meanings and forces others to prominence. The second list is quite different:

base	'pedestal'	'evil'	'square pillow'
pitcher	'container for liquid'	'person who throws'	
field	'area of study'	'large open area of land'	
fan	'cooling device'	'person interested in a game'	
fold	'action against the rules'	'ball hit outside certain lines'	

In this list there are numerous clues which tend to eliminate some of the meanings cited and to bring others to the fore. There is little doubt that the general subject is baseball. On the level of method and technique, this is probably what we mean when we talk about teaching vocabulary in context. But it is clearly true that we as yet don't know enough about lexicon or contrastive lexicon.

V. A Warning

Now a final warning about the dangers of the tripartite division of language. There is no reason to suppose that one language uses the same type of signal in a given situation that another does. Three examples make this clear:

1. A grammatical signal in one language may be the equivalent of a phonological signal in another:

Grammar in Spanish:	Pronunciation in English:
Este es mi libro.	This is my book.
Este es el libro mio.	This is MY book.

Spanish may signal one kind of emphasis by the addition of a **word—el—** and the shift of position and form of another word— **mio**. English uses a phonological device—loudness— **MY**.

2. A grammatical signal in one language may be the equivalent of a lexical signal in another:

Grammar in Thai:	Lexicon in English:
təŋkaan Kuat nʊŋ	I want a bottle.
təŋkaan nʊŋ Kuat	I want one bottle.

Thai may signal the difference between what we label as *definite-indefinite* grammatically by shifting the position of a particular word. English signals this by substituting one lexical item for another within one position.

3. A phonological signal in one language may be the equivalent of a lexical signal in another:

Phonology in Thai:

2 + 3 3 +
 Puuyiŋ Kon nan suay suay
 2 + 3 + +
 Puuyiŋ Kon nan suay suay

Lexicon in English:

That girl is very pretty.

That girl is rather pretty.

Thai may signal the difference between 'very' and 'rather' by different tone patterns: 'rather' by repetition of the same tone (**suay suay**), and 'very' by a difference in tone (**suay suay**). English signals this by substituting one lexical item for another.

Each language is, after all, a structure of its own type. Its logic is its own; it cannot be made to fit the pattern of any other language on earth.

VI. Conclusion

I will close with a brief apologia. I do not wish to give the impression that the view of language which I have presented today is agreed upon in all linguistic quarters. Some linguists with impressive credentials (including some of my own former students) would not accept the foregoing at all. This does not, to my mind, diminish its usefulness or indeed its truth, whatever we mean by that elusive word. You may remember the story of the blind men and the elephant. One grasped the tail and likened the animal to a rope. Another felt the trunk and said that the elephant seemed to him to resemble a fire hose. The third patted its side and announced that the elephant was like a wall. In this sense, all linguists are in the dark—a great deal depends on what part of the pachyderm we chance to grasp.

It has been useful for us to talk about language as associated with some sort of interplay between stimuli and reactions. We choose to believe this, and a wholly creditable system of teaching, a tremendous number of textbooks, and a large number of courses are based upon this belief. Another person may choose to believe something else, and will then build his own wholly creditable system of teaching upon that. Linguistics is in some ways similar to religion; there are linguistic Christians, linguistic Jews, linguistic Hindus, and linguistic Buddhists, whose beliefs conflict but survive.

Teaching Second Language Reading at the Advanced Level: Goals, Techniques, and Procedures

William E. Norris

The oral approach to teaching ESL rightly emphasizes oral skills at the beginning and intermediate levels, yet reading fluency, which cannot be achieved by simple transfer of oral skills, is much more important in the long run for most adult students in technical and academic programs. Directed to the classroom teacher, this paper focuses on three primary aspects of the teaching task at the advanced level: (1) definition of reading skill goals; (2) techniques for reading skill improvement; (3) classroom procedures. The student's general goal—getting information from the printed page efficiently, rapidly, and with full understanding—requires development in five skill areas: reading speed, vocabulary recognition, and comprehension of sentences, paragraphs, and complete reading selections. Techniques and exercises for improvement in each of the five areas are illustrated by examples compiled from ESL texts. Five types of questions for comprehension are described and ranked. Vocabulary improvement by means of word analysis and through use of context clues to meaning is discussed and illustrated. Classroom procedures involve three stages: (1) pre-reading preparation to minimize linguistic interference and provide motivation and purpose, (2) actual reading, and (3) oral and written follow-up activities.

1.0 Introduction.

'Hearing before speaking, speaking before reading, reading before writing.' (Defense Language Institute, *American Language Course: Intermediate Phase*, Instructor Text, p. 1.) This prescription has dominated contemporary second language teaching in America at least since 1941, the year that marked the entrance of the United States into World War II and, with that, the end of our 'linguistic isolation', as Moulton remarks in his excellent survey of language teaching in the '40s and '50s (Moulton 1961, pp. 84-85). The armed forces soon found that the recently established ACLS Intensive Language Program could meet the need for teaching large numbers of military men a practical speaking knowledge of many languages, most of which were completely unfamiliar to any Americans including the nation's linguists. But the linguists were soon at work analyzing the languages and designing course materials guided by such linguistic principles as these—principles which became, as Moulton puts it, language teaching slogans of the day: 'Language is speech, not writing. A language is a set of habits. Teach the language, not about the language.' Thus it was that the 'oral approach'

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(or 'audiolingual method') got its start with adult students. Quite clearly the emphasis was on spoken language.

Influential publications of the period in which linguists set forth more fully these 'linguistic principles of language teaching' were these: L. Bloomfield, *Outline guide to the practical study of foreign languages* (1942), C. C. Fries, *Teaching and learning English as a foreign language* (1945), E. A. Nida, *Learning a foreign language* (1950), and E. T. Cornelius, Jr., *Language teaching: a guide for teachers of foreign languages* (1953).

The sources of this oral language influence can also, of course, be traced back much farther than 1941 to the 'phonetic method' introduced in Europe and elsewhere in the late 19th century, which ultimately evolved into the 'direct method.' But the direct method had relatively limited success in America, and by the 1930s the emphasis in the schools was on memorization of grammatical rules and reading by translation. Nevertheless the direct method did influence intensive language programs, and its heritage is reflected in the characterization of the DLI *American Language Course* method as a 'direct-structural-oral-approach.'

1.1 The teaching of reading in the oral approach.

The basic view of most linguists toward the teaching of foreign language reading during the '40s and '50s was summarized by Fries in this widely quoted remark (1945, p. 7): "Even if one wishes to learn the foreign language solely for reading, the most economical and most effective way of beginning is the oral approach.' Nida (1950, p. 21) put it even more strongly: 'Listening, speaking, reading, then writing constitute the fundamental order in language learning. . . . The scientifically valid procedure in language learning involves listening first, to be followed by speaking. Then come reading, and finally writing of the language.' Although the actual 'scientific validation' of this premise may not be easy to substantiate, its pedagogical effectiveness is now generally accepted in foreign language courses for children and adults alike. At the beginning and intermediate stages of second language teaching, the modern approach places emphasis primarily—and almost exclusively—on the spoken language.

Unfortunately, in many ESL programs, especially intensive courses for adult students, the written language has been de-emphasized almost to the point of extinction. Some students never seem to be *taught* how to read English at all. Apparently they are expected to pick up reading skills 'automatically' along the way to oral mastery, or to develop them independently after completing oral language instruction. To be sure, many courses do not claim to go beyond the beginning or low-intermediate stages of instruction, but the neglect of reading seems not to have come about simply because beginners outnumber advanced level students. Witness, for example, the first two 'principles of foreign language teaching' listed by Cornelius in his *Language teaching*, a book that, along with Fries' *Teaching and learning EFL*, was one of the two most influential teacher

guides in the early application of the oral approach to the teaching of English as a foreign language: (1) The objective of a teacher of a foreign language is to expose students to the language as it is spoken. (2) The ability to read and write a language *may come as a by-product* of the process of learning the spoken language.' (1953, p. 11; emphasis supplied.)

Not all language teachers agreed, of course. Brooks, writing later (1960, pp. 122-129), fixed the class time for teaching reading and writing skills in proportion to oral skills at approximately 20% at the beginning level and 50% to 60% at the intermediate levels of FL instruction in the elementary and secondary school. But by and large there has been little attention to the systematic teaching of reading in beginning and intermediate ESL classes, especially the sort of preparation that might be expected to facilitate the student's acquisition of reading fluency at the advanced level of instruction.

1.2 Reading needs compared to oral language needs.

The down-grading of the written language in adult ESL classes can be accounted for on practical as well as theoretical grounds. The typical student enrolling in an intensive ESL course has an immediate need for spoken language skills. From the moment he arrives in Washington, Ann Arbor, Pittsburgh, or San Antonio, it is painfully obvious that however much English training he has had in the past, he is still in great and pressing need of receptive and productive oral fluency. Thus, beginning and intermediate courses have as a primary objective the development of aural comprehension and speaking ability. Little attention is given to the written language. The direct-structural-oral approach of the Defense Language Institute, for example, 'emphasizes the primacy of the spoken over the written word, and defines language learning as essentially the acquiring of a set of correct speech habits. Speech is the primary medium of instruction in both laboratory and classroom; writing, whether on the chalkboard or in the textbook, is employed chiefly as a guide or as reinforcement to oral performance.' (*American Language Course: Intermediate Phase*, Instructor Text, p. 2.)

Nevertheless, a careful consideration of the student's middle-range and long-range needs for English will usually reveal that reading ability in the language is going to be very important. For many of our students, in fact, reading skills will eventually be much more important than oral skills. To support this claim with respect to the military student let us take a look at the stated mission of the DLI English Language Teaching Program. Its objectives have been described as the teaching of English to allied military personnel '(1) to make them capable of attending Army, Navy and Air Force technical courses alongside U.S. military personnel and/or (2) to prepare them for job assignments which require coordination with United States forces here and abroad.' Immediately following his course the student must actively employ his English skills as a tool for

acquiring other skills in a technical course, or in order to work in cooperation with English-speaking personnel. Oral skills are essential for both these purposes, to be sure, but skill in reading is vital too. In a technical course much of the information the student must digest comes to him in technical manuals and other printed materials, supplemented by lectures and demonstrations. Indeed, the non-native speaker's best aid to understanding a lecture is to survey his manual beforehand and then carefully study his notes and manual afterward. Cooperation with U.S. forces will also require reading ability as well as oral ability. In many situations most if not all of the cooperative activities may be conducted through written communications in English: directives, operating procedures, technical bulletins, etc., while oral interchange will be minimal. The instructor text of the ALC puts the purpose of reading instruction this way (p. 32): 'In their future training and later military activity, students will be required to do a great deal of reading in textbooks, manuals, handouts, and directives of all kinds . . . Teaching how to meet these demands is what we mean by teaching reading for information . . . We are concerned only with teaching reading as a means to acquiring and transmitting specific information.'

Goals essentially similar to these can also be described for non-military students in adult ESL courses on college campuses and elsewhere.

1.3 Defining goals in teaching advanced ESL reading.

How do we define the specific tasks of a program for 'teaching reading for information'? In focusing on the advanced level we will assume that our students, in the beginning and intermediate phases of their instruction, have already been taught something about reading English, at least 'as a by-product' of their oral language study. They know the English alphabet and the regular conventions and common irregularities of the spelling system. We also assume that our students are literate in their native language, although we cannot be sure that they are efficient readers. It would be interesting and useful to know, by the way, whether reading efficiency in the *native* language has a bearing on acquisition of reading efficiency in a *foreign* language. In any event, since our students are literate, it is not the 'process' of reading as such that they must learn, but rather skills for reading a foreign language, English.

At the opposite extreme, we need not be concerned with teaching appreciation or evaluation of literature. In most adult ESL reading situations literary worth is not relevant. Even among native speakers, after all, most purposeful reading is for information, not enjoyment.

A third point: our goals will not include the teaching of 'speed reading' as that term is popularly employed today, but reading rate is not unimportant for the ESL student. On the contrary, the student who reads so slowly and laboriously that he can focus on just one word at a time—reading word by word—is not reading at all. He will usually be unable to put the words together to understand the sense of the sentence, and he will certainly

be unable to unite sentences into a full understanding of paragraph meaning. Ask him, 'What was the paragraph about?' and his only honest answer will be, 'About 75 words.' Improving the student's reading rate, in conjunction with and in part as a result of improving his other reading skills, is a very important goal. Harris says (1966, p. v), 'It has been our experience that even "advanced" learners of English as a second language tend to be slow readers and that their slow reading speed constitutes a serious handicap when they commence their studies at our universities.'

Our general goal, then, in the advanced reading course is to teach the student (who already has at least an 'intermediate' mastery of spoken English) how to get information from the printed page efficiently, rapidly, and with full understanding. A more complete understanding of our task can be gained by listing the specific reading skills our students must develop or improve in order to achieve this goal.

1.4 Five skill areas.

Advanced ability in ESL reading requires improvement in reading speed, vocabulary recognition, and the comprehension of sentences, paragraphs, and complete reading selections. These are not exclusive needs of the ESL student, of course, but are the skills that native speakers must also develop in order to become efficient readers.

1. Speed of recognition and comprehension.
 - a. Word recognition speed: improving eye movement, visual discrimination.
 - b. Word comprehension speed: symbol-sound-meaning association.
 - c. Sentence structure recognition: eye sweep, reading by structures.
2. Vocabulary recognition and comprehension.
 - a. Word formation: derivation and compounding.
 - b. Lexical range: choices and restrictions.
 - c. Vocabulary in context: using context clues to meaning.
3. Sentence structure and sentence comprehension.
 - a. Sentence structures: understanding advanced level conjunction, nominalization, embedding, etc., and grasping the 'main idea'.
 - b. Sentence comprehension: understanding the full meaning.
4. Paragraph structure and paragraph comprehension.
 - a. Paragraph organization: the 'central idea', paragraph development.
 - b. Scanning for specific information.
 - c. Full understanding: paragraph analysis.
5. Comprehension of the complete reading selection.
 - a. Surveying for the main ideas.
 - b. Scanning for specific information.
 - c. Reading for full understanding.

Section 3.1 below gives examples of techniques and exercises for the ESL student in each of these five reading skill areas.

2.0 Reading comprehension and oral comprehension: a comparison.

Teachers know that ESL reading ability does not develop simply as a 'by-product' of spoken language training. It is not easy for the foreign learner to transfer to visual symbols his already mastered comprehension of auditory symbols. After all, not even native speakers find it easy to learn to read English. Commonly, the difficulties of both native and foreigner have been attributed to the almost universally deplored 'poor fit' between English pronunciation and orthography. English, it is complained, is not spelled 'phonetically' (or 'phonetically'), and that is quite true; but it is at the same time an unfair charge since the English spelling system was probably never intended to be more than superficially phonemic. Contemporary linguistic investigation suggests that, all things considered, the present system may be hard to improve upon for its intended users, competent English speakers and readers. On the other hand, the system certainly was not designed to make things easy for the learner, whether native or foreign.

Aside from English orthography there is another major problem in learning to read: written English differs considerably from spoken English in many features of structure and style. Thus, we cannot assume that the student who has been taught authentic oral English will be able to cope automatically with authentic written English. Yet neither should we assume that *all* differences between speech and writing will make for learning difficulties. In fact, reading is in some respects easier than oral comprehension for the ESL student, as the second of the two comparisons that follow will illustrate.

2.1 Features of difficulty in reading compared to speech.

1. Words and phrases known orally may not be recognized in print (/mɑːjəl/—'module', /kænt/—'cannot'), or may be confused with homographs ('bow', 'read') or words spelled similarly ('strap'—'strip', 'through'—'thorough').
2. Vocabulary and usage not commonly heard in speech is encountered often in reading ('manifest', 'ambivalence', 'This fact is *nowhere better* illustrated *than* in the . . .').
3. Writing substitutes word order, lexical variation, and other signals for sentence stress, pause, and intonation.
4. Writing uses longer complete sentences employing complex embedding, nominalization, and other syntactical devices. ('The executive turns to the party for personnel to man the top jobs in the administrative agencies, and a further relationship is established through which the party makes a contribution to the organization and action of government.')
5. Contextual clues to meaning are necessarily limited to the written text; unlike speech, clues cannot be derived from the non-verbal situation.

2.2 Features of ease in reading compared to speech.

1. Written forms often differentiate homophones ('seed' - 'cede'), derivations ('proceed' - 'precede'), inflections ('miss time' - 'missed time'), and word junctures ('a nice house' - 'an icehouse') which are obscured in speech.
2. Dialectical variations in spelling ('labour') and syntax ('does not have' - 'has not got') are few and minor. Nor is it necessary for the reader to know the pronunciation in order to understand a new word through analysis or association with known words ('fragmentation' - 'avionic').
3. Expository writing makes use of a more limited range of sentence types than speech. Statements predominate; questions are rarer, especially the yes/no type, and short answers and reduced forms are uncommon. Further, the sentence fragments, redundancies, false starts, gaps, and hesitations so common in informal speech are almost entirely lacking. In other words, edited written English is more regular and 'correct,' employs complete and well-formed sentences, and is free of grammatical errors and misspellings.
4. Writing is permanent, not transient in time, and hence the reader can proceed at his own pace, pausing to puzzle out word formations and syntactical constructions, to consult his dictionary, to re-scan and reread.
5. Written English provides more background information than does informal speech; good expository writing, especially technical writing, does not require that we read-between-the-lines to find the meaning.
6. Finally, in contrast to oral dialog, the reader is not distracted by any need to formulate a verbal response. He can devote all his efforts to understanding what he reads.

3.0 Teaching advanced level ESL reading.

The principal methods of reading improvement, both native language and second language, have been known and in use for some time. ESL reading teachers and textbook authors have borrowed many ideas from materials for native language reading improvement, revising and adapting them to the needs of the non-native speaker. To these they have added a few other devices particularly suited to second language teaching. What we know about the teaching of reading comes mainly from the three disciplines of education, psychology, and linguistics, but there appear to be almost no new developments with special reference to *second language* reading except for some influence from current theories of transformational grammar. A check on current research by reading specialists (reported in *Reading Research Quarterly*) and projects by TESOL specialists (in *Language Research in Progress*, No. 8, June 1969) does not turn up any work concerned specifically with second language reading for adult students. One or two projects in bilingual education for children deal with reading,

with them.
When they . . .

2. *Vocabulary improvement.*

a. Word formation: derivation and compounding (See also sec. 3.3 below.)

—Use the correct prefix (dis-, im-, in-, mis-, un-) to make negative forma of the following words from the essay:

1. appear: disappear, 2. just: _____, 3. personal: _____

—Fill the blank with the proper negative prefix:

1. He always _____connects the wires.

2. He always _____pronounces the words

—Fill the blanks with a noun (plural form) related to the underlined noun in the sentence:

1. Our interest was in art and artists.

2. Our interest was in crime and —

3. Our interest was in music and _____.

—Complete the following table:

ADJECTIVE	NOUN	ADVERB	VERB
1. original	_____	_____	_____
2. _____	evolution	_____	_____

b. Lexical range.

—Which sentence illustrates the use of the word (or idiomatic or figurative expression) in the reading selection?

1. There are bound to be regional differences.

a. The book is bound in leather.

b. Children are bound to have some accidents as they grow up.

c. The prisoner's hands were bound.

c. Vocabulary in context. (See also sec. 3.4 below.)

—Using context clues:

A dynamic person can keep Washington affairs from becoming boring. Often, through his activity, he can become well-known in a short time.

The best synonym for dynamic is: —powerless —forceful
—athletic —cheerful

—Paired responses using semantic equivalents:

Instructor gives cue orally; students read aloud, recite, or write response. (Cue or response is from the reading selection.)

Cue: They are trying to fire MacDonald as president.

Response: They are trying to get rid of MacDonald as president.

d. Other vocabulary improvement techniques.

—Recalling words from their definitions:

Fill in the missing letters in words from the reading selection.

1. Able to be depended on: rel _ _ _ le
2. Too many to be counted: inn ____ able

—Using words in sentences (orally or in writing):

Use each group of words from the reading in a single sentence.

1. anthropologist, cultures
2. borrow, inventions
3. technology, slow, past

—Vanishing cues and alternative word glosses:

From a partially obliterated version of a previously read selection the student reconstructs the original, first using glosses and then without them.

wonderful

Less thXn twenty XXXXX XXX, a XXXXXXXXXXXX “new
period
XXX” XX medXcine—or so XX was supXoXed to XX—was
introduced
XXXXXXXX XX by the “wonder XXXXX,” the germ-XXX-
XXXs extrXXrdinary. Here, XX seemed, were the . . .

3. *Sentence structure and comprehension.*

a. Sentence structure and the ‘main idea’.

1) Grammatical details.

—Supply the appropriate preposition for each blank in these sentences from the essay:

1. **All cultures seem to be _____ a continuous state _____ change.**

—Supply the structure words that have been omitted:

1. Two women who meet — the first time often do — shake hands unless one is — especially honored guest.

2) Complex sentence structures.

—Combine each group of statements into a single coherent sentence:

1. All cultures change. Some cultures change at a slower rate than others.

—Drill on embedded relative clauses and pre-nominal modifiers;

Cue: The arbitration settled the issue. The arbitration was compulsory.

Response: The arbitration, which was compulsory, settled the issue. The compulsory arbitration settled the issue.

3) General syntactical meaning: the 'main idea'.

—Put a *check mark* before each statement that suggests approval.

Put a *circle* before each statement that seems to show disapproval.

—1. It is difficult to see how anyone could find Professor Baker's latest book anything but completely satisfying.

—2. Although I have highest personal regard for Professor Baker, I must confess that I find few major points in this book upon which he and I agree.

b. Sentence comprehension: understanding the full meaning.

—Logical completion:

Complete the sentence in a logical way using one of the four words.

1. You can trust Henry to take good care of your money, for he is very _____ (honest, angry, evil distant)

2. We had hoped that Robert would agree to help us, but he has _____ to. (desired, promised, refused, intended)

—Comprehension questions: See sec. 3.2 below.

4. *Paragraph structure and comprehension.*

a. Paragraph organization.

1) Reading for the 'central idea'.

—What single word expresses the central idea of paragraph 16?

—Read the paragraph quickly to determine the central idea. Then turn the page and choose one statement that best expresses the central idea. Do not look back at the paragraph.

2) Paragraph development.

—Paragraph 9 uses examples. Find another paragraph in the reading developed in this same way.

Paragraph 10 explains a reason for a condition. What other paragraph uses this same method of development?

—Create a coherent paragraph by placing the sentence below in logical order. (Five sentences from the reading are given.)

b. Scanning for specific information.

—Scan the following paragraph to answer this question: How did the college get its name?

c. Reading for full understanding: paraphrase and analysis.

—Paraphrasing:

Fill the blanks on the basis of the selection just read:

Much instructional material . . . is 'busy work.' Generally, such materials _____ comprehension; they do not _____ it. With practice on them we learn to _____ the examiner.

—Paragraph analysis:

Use the following strategy to determine what a paragraph is about: (1) Gather evidence—read the first sentence. (2) Establish an hypothesis—that the first sentence is the main idea. (3) Check it—read the second sentence. (4) Revise the hypothesis if necessary to include new ideas. Continue.

—Comprehension questions: See sec. 3.2 below.

5. *Comprehension of complete reading selection.*

a. Surveying for main ideas and organizational pattern.

—outlining:

The main ideas are given below in mixed-up order. Arrange them in the order in which the author discusses them: a) early settlers, b) need for water, c) major industries . . .

Outline the thesis and main supporting ideas in conventional outline form. (Preceding exercise has identified central ideas of separate paragraphs.)

—Paraphrasing and summarizing the main ideas (orally or in writing) .

—Organizational pattern:

Check whichever of the following statements best expresses the organizational pattern of this essay.

(Some editors make general or specific comments on the organizational pattern and style of the essay. These appear either before or after the selection, or in the exercises.)

b. Scanning for specific information.

—Skim quickly to find the number of the paragraph in which each of the following topics is mentioned or discussed.

c. Reading for full understanding.

—Discussion or summary of the reading (oral or written).

—Comprehension questions: See sec. 3.2 below.

3.2 Types of comprehension questions.

Questioning for comprehension deserves further description because it is a technique of wide usefulness for teaching other language skills besides reading, and because of its very extensive use in almost all reading texts: in some materials well over half of the exercises are comprehension questions of various kinds. Five types of questions for comprehension can be described and graded according to (a) the linguistic form of the required response, and (b) the relation between the information that is needed to answer correctly and the information provided in the reading selection.¹ The five types are listed here in order of increasing difficulty for the student.

¹ Suggested in part by Dacanay, 1963, pp. 269f. The illustrative examples are adapted from Croft, 1960, pp. 184-185, and from *American Language Course: Flying Training Terminology*, Instructor Guide, pp. 269-270.

Type 1: Information from the reading sufficient for the answer is contained in the question itself.

- a. Answerable simply Yes/No or True/False.
 'Before Frank left for town, did his wife hand him an umbrella?'
 'The ejection seat can eject through the canopy. True or False.'
- b. Multiple choice of answers is given with the question.
 'What did Frank's wife hand him before he left?'
 _____ an umbrella, _____ a piece of cloth, _____ a letter
 'Which aircraft have ejection seats, propeller aircraft or jet aircraft?'

Type 2: Answerable with information quoted directly from the reading selection. (Wh- questions, except not usually 'why' or 'how' questions.)

- 'What did Frank's wife hand him before he left for town?'
 Ans: '(She handed him) a piece of cloth (before he left for town).'
- 'What kind of seats do jet aircraft have?'

Type 3: Answerable with information acquired from the reading selection, but not by direct quotation from a single sentence. (Usually 'why' or 'how' questions.)

- 'How did Frank explain his difficulties to his wife?'
 Ans: 'First, Frank told her . . . Then he said . . .'
 'Under what conditions does ejection occur in jet aircraft?'

Type 4: Answerable from inference or implication from the reading; the information is not stated explicitly in the selection.

- 'How do you suppose Frank's wife felt about his explanation?'
 Ans: 'Well, since she looked cross, I suppose that she . . .'
 'Is there any danger of pilot injury during ejection? Explain.'

Type 5. The answer requires evaluation or judgment relating the reading selection to auditioned information or experience of the reader.

- 'What would *you* have done in Frank's place?'
 'Do you think a pilot should eject given the following conditions?
 . . . Justify your decision.'

The same types of questions are used in reading comprehension tests at various levels of difficulty. The construction of tests is ably surveyed by Pimsleur in his article 'Testing foreign language learning' (1966, especially pp. 207-214). A more detailed analysis of the problems of testing reading comprehension will be found in Lado, *Language testing* (1961, Chap. 15). Pimsleur points out various pitfalls to avoid in test construction—pitfalls which the exercise writer should also be wary of—and warns in conclusion that 'Tests are the truest reflections of the teacher's pedagogical aims: he should beware of his tests, for they tell the truth about his objectives as a teacher.' The word 'exercises' may be substituted equally for 'tests.'

3.3 Word formation analysis.

It is a commonplace to say that words derive their meanings from the contexts in which they occur. In the case of complex words, the derivational processes by which they are formed also contribute meaning. A feature of reading improvement courses for native speakers of English is training in the use of context clues and the use of word analysis as an aid to determining meanings. Word analysis is also introduced in some ESL reading texts (see sample exercises under 'Vocabulary improvement' in sec. 3.1 above), usually focusing on the most frequent and productive prefixes and suffixes, in contrast to native speaker texts, which concentrate on detailed analysis (i.e. definition) of less common Greek and Latin affixes and bound bases. The difference in emphasis is understandable; native speakers do not usually have difficulties with the more productive forms, but ESL students do. On the other hand, some ESL students find Greek and Latin components relatively easy to understand because they are common in the student's native language. Word analysis exercises for native speakers of English deal with roots and affixes such as those in CAPS in the following sentence, but in teaching ESL the need is to develop the student's ability to recognize and understand such derivational elements as are illustrated by the *underlined* forms. There is some overlap; e.g., the prefix CON-

—There are abund-ANT examples of this institut-ion to be observed in CON-TEMPOR-ary societies, yet certain values of our own culture PRECLUDE its accept-ance.

Neither NL nor SL reading improvement texts give direct instruction in the analysis of word compounds, although words such as *network*, *outlying*, *underlie*, and *headlong* are frequent in all types of writing. Their analysis is probably unnecessary for native speakers, but the ESL student might gain some benefit from systematically organized exercises. Word compounds can be understood in part by analyzing syntactically the underlying constructions from which they are derived, but frequently only a 'literal' meaning is revealed, and context clues or other information must still be used to gain full understanding. Advanced ESL students will have little difficulty with, for example, compounds of the types Adjective + Noun (*highbrow*) or Noun + Noun (*network*) which reflect the syntax of basic modification patterns in English. But the syntactical analysis of other types may be beyond the student's English competence, or in any event may result in an ambiguous, misleading or nonsensical interpretation. For example, the student may consider such possibilities as:

<i>stronghold</i>	the hold is strong / it holds strongly
<i>withhold</i>	with a hold / it holds with X
<i>headlong</i>	his head is long / with a long head / he longs in his head

Verb + Adverbial constructions are particularly troublesome because a predictable order of compounding is not apparent: layout—outlying, breakup—

upswing, runaway—outrun, handout—offhand. Exercises for teaching the most productive word compound types, based on accurate classification and description, are presently lacking in ESL reading texts.

At best, word analysis can only be partly effective: the meaning of the base itself cannot be determined through internal examination.

3.4 Context clues to vocabulary meaning.

A more direct means than word analysis for determining the meaning of a word is to look for clues to the meaning elsewhere in the sentence or in adjacent sentences. Five types of context clues can be described: definition, experience, comparison and contrast, synonym, and summary. The examples of each type that follow were carefully selected (from ESL texts) to illustrate a single clue type, but clear-cut examples are not very common. For any given word in context there may be more than one type of clue present—or there may be none at all.

1. Definition. The word is defined or explained by the writer.

—A number of languages of South Africa have *clicks*, a variety of popping sounds made by forming vacuums between the tongue and the hard or soft palate.

— . . . result of *natural turnover*—the departure of workers through death, retirement, or voluntary decision to seek a job somewhere else, without any forced layoffs.

2. Experience. The meaning is clarified from direct or indirect experience of the reader; the situations is familiar to him or he can imagine it.

—The *sweat* rolled down his face. His entire body was wet, as if he had fallen into a spring. . . The heat was terrible.

3. Comparison and contrast. The context compares the word with a familiar word or, negatively, tells what it does not mean.

—Although he was accustomed to life in the desert, he could not *endure* the heat of this valley very long. . . Two more hours of such heat would finish him.

4. Synonym. The same ideas are expressed by two or more different words or phrases, one of which may be familiar to the reader.

—When it comes to manufactured goods there is actually more *diversity* in this country than Europe has ever known. The variety of goods carried by our stores is the first thing that impresses any visitor from abroad.

5. Summary. An idea or situation expressed in different ways is summed up in one word or expression.

—The Spanish word *ni* means 'nor,' but the closest equivalent combination of sounds in English is *knee*. In Congo Swahili *ni* is a prefix to affirmative verbs and means 'I,' while in Navajo it is a suffix to verbs and indicates complete action. . . . It is entirely *arbitrary* which sounds are employed to express particular ideas.

The ESL student who learns how to determine the meaning of an unknown word by means of word analysis or context clues whenever the

situation permits can minimize his dependence on the dictionary and at the same time gain a more precise understanding of the word's meaning in the particular sentence. Training in the use of context clues does not appear to have been developed in an organized way in ESL texts presently available. The trend in recent materials for native speakers has been toward programmed texts using the familiar fill-the-blank and multiple choice devices. Some of these texts have been used with adult ESL students (Plaister, 1968).

4.0 Classroom procedures for conducting the reading lesson.

Most advanced reading lessons are developed around a reading selection which may vary in length from a short paragraph to several pages of text. Three stages in teaching the lesson are (1) pre-reading preparation, (2) reading the selection, and (3) follow-up activities based on the selection. Stage 1 focuses student attention on the main objectives of the assignment. It may also provide information designed to minimize incidental problems which might otherwise be an obstacle to the main objectives. Stage 3 provides the drill necessary to achieve the objectives of the lesson.

4.1 Stage 1: Pre-reading preparation.

The choice of items for pre-reading preparation must depend on the lesson. For example, stage 3 vocabulary will not be anticipated by definition at stage 1 if the objective is training in the use of context clues, but a warm-up practice in the use of context clues might well start out the lesson. At another time, new vocabulary may be defined in advance if its lack would be a barrier to the aim of reading quickly for the central idea. Sometimes the only preparation needed will be a brief instruction: 'Try to read this selection faster than the last one,' or 'Read the next paragraph to find the central idea.' But at other times fuller development will be needed in order to prepare the student for linguistic problems and to motivate him.

a. Preparation for vocabulary, syntax, and/or other difficulties: (1) List new or difficult vocabulary items or idioms, with or without definitions, and give sentences from the reading plus additional sentences that show the meaning in context. (2) Present new or difficult grammatical structures. Give examples from the selection, supplemented by other examples if necessary, illustrating the meaning of the construction. (3) Explain items which may be difficult because the cultural or technical meaning is unfamiliar.

b. Motivate the reading. (1) Give purpose to the reading. Tell the students that they are to read, for example, in order to summarize the main ideas, or find specific information, or do a vocabulary exercise. (2) Outline or paraphrase the selection for the students. (3) Relate to the students' own experience, interests, or needs by means of questioning and discussion.

4.2 Stage 2: Reading the selection.

Two suggested procedures for conducting this stage are outlined here, the second more 'intensive' than the first. They are merely examples of how classroom reading of a selection might be carried on at a relatively early level of the course. At the later, more advanced levels of the course most classroom reading will be done silently.

a. Suggested procedure A: The teacher reads each sentence or phrase ('thought group')—Class repeats orally in chorus, book open—Individuals repeat same sentence. Teacher checks for pronunciation, rhythm, intonation. After entire selection has been read aloud, then class reads it silently for comprehension. Silent reading may be timed.

b. Suggested procedure B: Teacher reads each sentence aloud—Class or individuals repeat. Each sentence is immediately followed by one or more comprehensive questions of types 1, 2 or 3 (sec. 3.2 above) depending on student language ability. Each paragraph may also be followed by comprehension questions. Next, the teacher, class, or individuals read the whole selection through again orally. Silent reading may follow.

4.3 Stage 3: Follow-up activities based on the selection.

a. In the classroom: Exercises of the types described in sec. 3.1 are selected according to the aims of the lesson. They may be conducted orally or in writing, or a combination of oral and written procedure may be used: Teacher questions orally—Class responds in writing—Individual are called on to read answers orally.

b. As homework: Written exercises developed out of the day's classroom work are assigned. For example: Write out full answers to comprehension questions done orally in class.—Write a paraphrase, summary, notes, or outline of the reading selection.—Use the new vocabulary in additional sentences.

Homework assignments also carry the student into the preparation stage of the next lesson. He may be instructed to study new vocabulary in context, or to survey the selection for main ideas, or to scan it for specific information. At the earlier levels of instruction, however, reading for full understanding will be done only in the classroom under the teacher's supervision. At the most advanced levels, on the other hand, much of the reading might be done outside of class, with the class period devoted to follow-up exercises and preparation for the next selection.

4.4 Out-of-class reading.

Out-of-class extensive reading for expansion of reading skills, in contrast to intensive in-class drill in these same skills, makes use of relatively easier reading materials. Completely new vocabulary and grammatical patterns are minimized if not avoided altogether. Instead, the purpose is to provide

a wide range of use and meaning contexts for known vocabulary and patterns. The student develops his skills in deducing meanings of new words and extending the lexical range of known items. Although there are no specific exercises correlated with the reading selections, student motivation and follow-up are not unimportant. Reading matter that appeals to student interests or needs, and which is somewhat less difficult than the classroom readings, helps encourage students to read on their own. Additional motivation can be provided by having the student read with the aim of using the information gained for some purpose, such as solving a problem, forming a judgement or opinion, or making an evaluation, etc., all of which can be reported to the teacher or the class orally or in writing.

4.5 A note on mechanical aids to reading improvement.

The common classroom aids—chalkboard, pictures, charts—may be supplemented in reading instruction by greater use of duplicated handouts than is usual in the oral language class. Examples of vocabulary in context and collections of sentences illustrating structural patterns could be presented orally but they also ought to be *read* in a reading class, and duplicating them is much more efficient and less fatiguing than writing examples on the board. The overhead projector can also be used very effectively to present examples, and it has the advantage of limiting student attention to the particular items the teacher wants him to read; a pointer, mask, or marker is used to pin-point the problem. A student with his nose in a book or handout may or may *not* be looking at the appropriate example—a teacher never knows for sure. A further use of the projector is for pacing reading speed. A selection or exercise is flashed on the screen for a limited time only.

Special mechanical aids have been developed for teaching reading improvement to native speakers, principally the various *pacer* devices and the *tachistoscope*. Pacers are designed to increase reading speed by forcing the student to read faster under pressure. Tachistoscope and reading films are used to improve eye span and eye movement and thus efficiency. There are no reports I know of that such devices have been employed to any extent in second language teaching, and in fact, their value in native language situations is questioned. According to Smith (1961, p. 56) research evidence shows 'no significant difference in amount of improvement in reading skills between classes trained without machines and those trained with machines.' Certain individual students do show improvement as a result of such external pressure, and the use of machines may encourage more effort from some students. But machine-induced skills must be transferred to reading that is not machine-assisted if they are to be of any real value to the reader.

5.0 Summary.

There are many more aspects to the teaching of second language reading than have been discussed here, including such topics as the selection of

reading materials, adaptation and construction of texts and exercises, the relationship between reading and composition, teaching reading to special groups for particular purposes, and underlying linguistic factors in second language reading. A number of these matters have already been taken up in previous issues of the *TESOL Quarterly* and at TESOL Convention sessions. This article has concentrated on matters of immediate and practical classroom application by focusing on three primary aspects of the teaching task: (1) definition of advanced-level reading goals, (2) varied techniques and exercises for achieving improvement in five reading skill areas, and (3) suggested classroom procedures for conducting the reading lesson. The material gathered together here represents a compilation of goal definitions, exercise techniques, and suggested teaching procedures drawn from a wide variety of sources. I have tried to present it in a context broad enough so as not to obscure its relevance and applicability in the majority of teaching situations.

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An Evaluation and Comparison of Present Methods for Teaching English Grammar to Speakers of Other Languages

Russell N. Campbell

To learn to speak and understand a foreign language is to acquire native speaker competence in that language. How do we explain native speaker competence? The best answer to this seems to be that native speakers possess and utilize a finite number of rules to produce and interpret an infinite number of sentences, a set of rules that can be violated to produce ungrammatical or deviant sentences, rules that can be applied to produce one sentence which can be ambiguously interpreted, and rules that can produce two or more sentences with the same meaning. The ability of our students to speak and understand a foreign language, then, must in part depend upon our ability as teachers and textbook writers to provide them with the opportunity to acquire native speaker competence, that is, to provide them with the rules that will permit them to produce and interpret an infinite number of grammatical sentences they have never seen or heard in our classrooms or in the textbooks they use. Evidence seems to suggest that in the teaching of grammar to adults explication of the rules to be acquired is advantageous to the learner. Learning the rules, however, will not suffice to make the student a fluent speaker of the target language. It appears that the most efficient way of teaching the components of grammar is to provide the students with appropriate explanatory rules that account for the components of language and to follow those explanations with ample practice in using those rules—using them at first in manipulative drills but culminating the practice with the most realistic communicative experiences possible.

In 1933 Leonard Bloomfield (1933, p. 503) described modern language instruction in the United States as follows:

The large part of the work of high schools and colleges that has been devoted to foreign-language study, includes an appalling waste of effort: not one pupil in a hundred learns to speak and understand, or even to read a foreign language.

The seriousness of those remarks was to become dramatically clear a decade later during World War II. Our armed forces suddenly required a substantial number of men and women who were capable of carrying out the business of war and peace in a wide variety of modern foreign languages.

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The results obtainable from courses such as those described by Bloomfield obviously could not adequately meet this demand. Such courses were not designed to prepare people to use foreign languages in real-life situations to deal with real-life problems. Out of this predicament emerged the following question: What conditions are necessary and sufficient, in a formal language course, for students to learn to speak, understand, read, and write a foreign language? The solution that was to come forth—a solution that has influenced modern language teaching in this country and abroad for many years—was formulated by a group of the nation's leading descriptive linguists, men and women who had devoted their academic lives to the study of languages. These scholars brought to the problem their special knowledge and understanding of the nature of language and their understanding of the process of language acquisition. Collectively they established a set of postulates or assumptions that were to form the rationale for the design and development of new modern language courses. These assumptions were translated into textbooks and other materials to teach a large number of foreign languages which were, in turn, taught to thousands of men and women in intensive language courses. The results were phenomenal. At least they were phenomenal when compared to the results described by Bloomfield. Most of the students who completed those intensive courses *could speak, could understand, and even, in some cases, could read and write the new language.* This success did not go unnoticed by language teachers outside of the armed forces. Subsequent modification in the post-war years of foreign language courses for school children, university students, and for military personnel constituted an authentic revolution in approach, methods, and techniques of foreign language teaching and learning.

Comparison of these new language courses with the courses that Bloomfield described would reflect the divergent views held as to the nature of language and the nature of second language learning. Among other things the linguists insisted that the materials used for foreign language instruction should be based upon accurate descriptions and comparisons of the languages involved (the students' language and the target language) if the teaching of pronunciation, grammar, and vocabulary were to be done efficiently. On the other hand they rejected the "grammar" centered methods of the 1930's and insisted that to teach grammar, it was unnecessary, indeed, detrimental, to teach it in any other way than by providing massive opportunity to practice grammatical patterns. This question of the role of grammar in the modern language course is the central issue of this paper and I shall return to it a little later.

It may well be that one of the most significant aspects of these new, revolutionary language courses of the 1940's was that a different set of objectives had been established for foreign language courses. One might, for example, respond to Bloomfield's criticism by saying that the teachers of those pre-World War II courses did not really expect their students to speak and understand, or even read the foreign language. Perhaps their

only hope was that the students' horizons would be broadened, or, that they would develop certain transferable mental facilities as a result of the experience of studying a foreign language. Whether such goals existed or were in fact obtained is not known. But what is clear is that these were not the primary objectives of the courses instigated by the demands of the armed forces. The new objectives were, clearly, that at the end of the course the student should be able to speak and understand (and in some instances, read and write) the target language. Given that those were and are legitimate as well as widely accepted goals for modern language courses, it is appropriate that we ask ourselves exactly what we mean by them. That is, what precisely does it mean to be able to speak and understand a language?

One answer to the question is this: To learn to speak and understand a language is to acquire native speaker competence in that language. This sounds like a reasonable answer, but, what does native speaker competence mean? Native speaker competence is manifested or reflected in a number of linguistic abilities that all normal humans seem to possess. For example, all humans seem to be able to produce and understand an infinite number of sentences in their respective languages, sentences that they have probably never uttered, heard, or seen before. For example, I am certain that any speaker of English can understand the following three sentences, although I am equally certain they have never been seen or heard by anyone before:

- 1) Boil the watch in giraffe stew for 10 milliseconds.
- 2) The ants carefully dismantled the Empire State Building and, eventually, reconstructed it in San Antonio.
- 3) Mrs. Fidditch swallowed four superbly broiled cactus spines while standing balanced on her head high above the sea lions.

This ability to produce and understand sentences that have not been heard or uttered before is one example of native speaker competence. Another example is demonstrated by the fact that native speakers recognize when two sentences are synonymous or paraphrases of each other. In English we know that:

- 4) The fish ate the ants.

and

- 5) The ants were eaten by the fish.

mean the same thing. We also know that

- 6) The ants ate the fish.

does not mean the same thing as either (4) or (5). All native English speakers know this, with or without previous study of English grammar.

Native speaker competence also permits recognition of ambiguity. Speakers of English know that:

7) They are entertaining ladies.

can be interpreted either as a comment about the nature of the *ladies*, that is:

8) They are ladies who are entertaining.

or as a statement about what *they*, the subject of the sentence, are doing, as in:

9) They, the gentlemen, are entertaining the ladies.

Furthermore, native speaker competence permits English speakers to identify English sentences which are grammatical as opposed to sentences which are ungrammatical. For example, although the following are strings of authentic English words which could be pronounced with English pronunciation, English speakers know that they are not put together to form grammatically acceptable English sentences:

10) of eat boy a popcorn lot can that

11) tall went the home boy

12) a and a pencil bought he pen

Apparently these linguistic abilities, that reflect native speaker competence, are universally held by all speakers for their respective languages.

So far, we have said that to learn to speak and understand a foreign language is, in part, to gain native speaker competence in that language. To acquire native speaker competence, as we have seen, is among other things to gain the ability to produce and understand novel sentences (sentences that we haven't seen or heard before); to recognize grammatical and ungrammatical sentences; and, to recognize that certain sentences are paraphrases of each other. Now we are led to ask yet other crucial questions. How can we account for the fact that native speakers of a given language can produce and interpret an infinite number of novel sentences? How is it that they recognize ambiguous sentences or sentences that are grammatical or ungrammatical, or recognize that certain sentences are paraphrases of each other? In a word, how do we explain native speaker competence? Answers to these questions would bring us closer to isolating a rational basis for the development of foreign language courses.

There are not too many readily acceptable answers to these questions. It would be outlandish for example to assume that we have heard, or have been taught and then stored in memory banks in our brains all possible English sentences against which we could judge meaningfulness, grammaticality, or ambiguity. Postal has given some suggestion as to the enormity of such a task in the following:

Since people typically operate with novel expressions, it must be the case that what we learn when learning a language is something more than a list of sentences. Learning Chinese, for example, is not a matter of memorizing an enormous list of Chinese sentences. The number of sentences used in normal communication in any language is so large that it would be impossible to learn all of them directly. In English, for example, the number of possible sentences consisting of twenty words or less is estimated at 10^{30} . There are about 3×10^9 seconds in a century, so you can gauge how titanicly large that number of sentences is. (Jacobs and Rosenbaum, 1968, p. 268)

The most satisfactory answer that has been put forth to date is one that states that the abilities mentioned above which are manifestations of native speaker competence can best be accounted for by assuming that speakers possess and utilize a finite number of rules to produce and interpret an infinite number of sentences, a set of rules that can be violated to produce ungrammatical or deviant sentences, rules that can be applied to produce one sentence which can be ambiguously interpreted; and rules that can produce two or more sentences with the same meaning. It is this set of rules, then, that helps to account for native speaker competence as defined above; it is this competence that permits humans to speak and understand their respective languages; and it is this ability that we have set as our primary objective for most of our modern language courses today. The ability of our students to speak and understand a foreign language, then, must in part depend upon our ability as teachers and text book writers to provide them with the opportunity to acquire native speaker competence, which means to provide them with the rules that will permit them to produce and interpret an infinite number of grammatical sentences they have never seen or heard in our classrooms or in the textbooks they use.

Although all of our examples so far have dealt with rules of syntax, it is clear that rules which account for native speaker competence in English, or Spanish, or Vietnamese, or Swahili, or any other natural language, also include rules of pronunciation and rules of semantics. All languages have in common the use of sounds to form words, words to make phrases, and phrases to make sentences, as well as rules to combine sentences into longer and more complicated sentences. And, it can be demonstrated that the kinds of rules that are involved in producing sentences are common to all languages. It is the application of those rules that is idiosyncratic to each language and helps to account for the differences among the grammars, the sound systems, and the lexicons of the world's languages.

In the teaching of English to speakers of other languages it follows that the learner, if he is to acquire native speaker competence, must learn the rules of English on all these levels. However, keeping in mind the above discussion of rules and competence, I would like to return now to just the question we raised earlier: namely, what is the role of grammar in modern language courses?

The literature abounds with rejections of the way that grammar was

taught in the pre-linguistically-oriented courses. It was never a question, however, of whether students had to learn the grammar or syntax of the foreign language. Charles Fries made this clear when he wrote:

The question then is not whether one should learn a new language without learning the grammar of that new language. That is an impossibility. . . Even if one insists that the conscious formulation of the patterns involved is unnecessary, there is no escaping the need for learning them and in that learning the student will progress more satisfactorily if his efforts are channeled to avoid confusion, if he does not try to attack all the diverse complexity of the structure of a language at the same time. (1946, p. 28)

The objections to earlier treatments of grammar in foreign language courses sprang from two sources. There was, first of all, a rejection of the teaching of grammatical rules that were considered irrelevant, inadequate, or esoteric. For example, it was felt that the learning of a paradigm such as the preterite of the Spanish verb *ir*: *fui, fuiste, fue, fuimos, fuisteis, fueron* was irrelevant to the use of those forms in speaking Spanish. Or, that teaching students that a 'Noun is the name of a person, place or thing' was inadequate and irrelevant to the learning of English as a second language. Or, that in teaching French to give the students an esoteric rule such as 'When a conjunctive pronoun or a conjunctive adverb is used with a verb in the imperative, it follows the verb, and in writing is joined to it by a hyphen,' was a waste of time, and in and of itself an unnecessary component of a French language course.

Secondly, among the linguistically oriented language teaching experts, it was generally agreed that the overt teaching of grammatical rules in the language course, even if they were simple, relevant, and comprehensive, was to be avoided. Typical of this attitude is the following statement:

Talking about the language is a fascinating activity at any stage, but if it is done in the classroom and in the students' mother tongue, it is a waste of time. Nothing can replace the practice required for mastering the language. Only when the production of the foreign language has become automatic can the student be said to have made any real progress. Conscious analysis can only slow down the process for the speaker. (Northeast Conference, 1958, p. 38)

Also, Nelson Brooks has said:

Analysis is important in its proper sphere, but analogy is used instead through pattern practice to produce a control of language structure without the time and effort required for grammatical explanations . . . since every speaking person has mastered his own language through imitation and analogy without benefit of analysis. (1964, p. 146)

We said earlier that if our objective is that our students will be able to speak and understand the foreign language, then they must acquire the rules of sentence formation (syntax) possessed by native speakers of that language. From the quotations given above, although stated differently, there seems to be little disagreement with this assumption. The point that is debatable, however, is the insistence upon the inductive process of

acquiring the grammatical rules of the foreign language. The assumption that since students acquire their native language “through imitation and analogy without benefit of analysis” that they can most efficiently acquire a second language by those means is highly debatable.

At least the question whether this applied to all learners—be they five-year-old children, high school students, or adults—must be asked. As a matter of fact it has been asked, and although the evidence (Cf. Erwin-Tripp, 1968; Xiem, 1969, Ritchie, 1967; Jakobovits, 1968; Rivers, 1964) is still inconclusive, it strongly suggests that certainly in the teaching of grammar to adults (and probably to anyone over twelve) explication of the rules to be acquired is advantageous to the learner. That is, he is more likely to learn the structure faster and retain it longer if the rule is given first. Let me see if I can make clear why this may be so by borrowing learning problems from two psychologists (George Katona and Dennis Auchard). Imagine that my task is to teach you, and your task is to learn, the following number so that you could produce it upon demand in ten minutes or a week from now:

3710141721242831

To accomplish this task I could use ‘pattern practice’ exercises in which you repeated parts or all of the number after me for an extended period of time. As a result, some of you would in fact learn it—probably by devising on your own some mnemonic device or rule to help you remember it. But the chances are minimal that most people could accurately recall the number a few minutes or a few days from now. If, on the other hand, prior to ‘pattern practice’ I informed you that this long number is the result of a series of simple numerical additions, not only would you be able to immediately reproduce the number but you would have two additional facilities which are essential to gaining the kind of competence that we discussed above. First the solution: The number is made up of subnumbers which are the result of adding 4 to the first digit, then adding 3 to that sum, then alternately adding 4 and 3 to the sums of previous additions (Thus: $3+4 = 7+3 = 10+4 = 14+3 = 17$ etc.) What you have learned from this simple rule is not only this number but you have also gained a means of checking the accuracy of your future production of the number—that is, you have a rule to determine if the number is ‘grammatical’ or ‘ungrammatical’. Secondly, with this rule you could produce new ‘numbers’ that have the same grammar. You could also extend this number indefinitely or you could produce an infinite number of numbers that conform to this rule.

The second learning problem has to do with the teaching and learning of ‘dutness’. My objectives might be stated as follows: At the end of the lesson, the student will be able to recognize and produce ‘duts’:

Following an inductive procedure, I might proceed as follows: The configuration in Figure 1 is a *dut*.

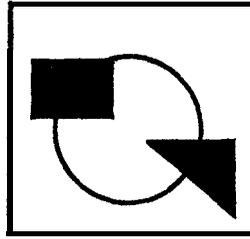


Figure 1

Figure 2 is also a *dut*.

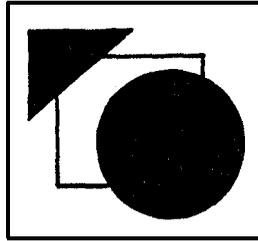


Figure 2

Figure 3 is not a *dut*.

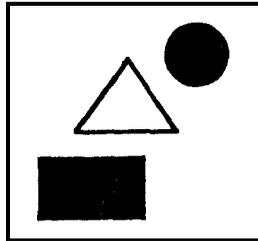


Figure 3

On the basis of these examples many of you would now be willing to respond to the question, Is Figure 4 a *dut*?

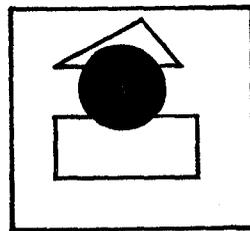


Figure 4

If you answered yes, perhaps it was because you have formulated a hypothesis (or guess) that states that when the geometrical figures intersect or overlap it constitutes a *dut*. You would be wrong—Figure 4 is not a *dut*, but Figure 5 is:

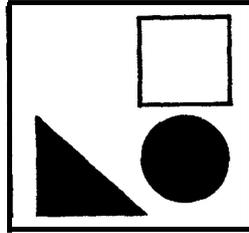


Figure 5

Is Figure 6 a *dut*?

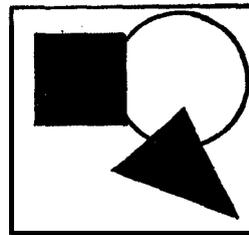


Figure 6

If you said yes, you are wrong again. If you said yes, it may be that you had formulated a new hypothesis which took into account that all true *duts*, as in Figures 1, 2, and 5, contained solid triangles. As it turns out this information is not relevant to *dutness*. The game could continue. Sooner or later—given sufficient trials (which consume much valuable time) everyone would eventually solve the puzzle or catch-on as to what constitutes the ‘grammar’ of *dutness*. There are some who have aptitude for such puzzle-solving, and for them this procedure for *dut*-learning or grammar learning might be appropriate. For the majority of students, however, it is at least highly questionable if this is the most efficient procedure. For them there may be long periods of frustration and many opportunities for failure. It is possible that as a game it is amusing—but as a steady diet in the learning of a large number of rules as is necessary in second-language acquisition, it is difficult to defend. What is a *dut*? If at the outset I had provided the rule: *Duts* are configurations which 1) contain both a rectangle and a *right* triangle and 2) the sides of the right angle of the triangle are parallel to the sides of any right angle of the rectangle, then the teaching and learning process could have proceeded with maximum efficiency and with a minimum of confusion and despair on the part of the student. It

seems very reasonable to assume that we should avoid making the learning process a puzzle-solving, guessing game that requires the student to supply the solutions. It further seems reasonable that the student know what is relevant and what is insignificant in the particular learning task. For example, the presence of a circle, the size of the figures, or the relative positions of the figures, are of no consequence in determining dut-ness. This information could be given from the beginning, thus eliminating the formulation of a large number of false hypotheses. And notice, again, with knowledge of the rule, the student could now, with assurance of accuracy, construct or identify an unlimited number of new duts with confidence. It is anticipated that with knowledge of the above dut rules, no one would make mistakes in identifying which of Figures 7, 8, 9 and 10 are duts and which are not.

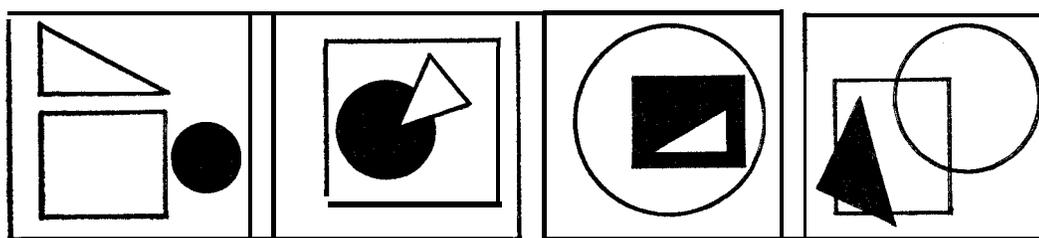


Figure 7

Figure 8

Figure 9

Figure 10

The following quotation summarizes what I have been trying to demonstrate with these learning problems:

Young children, of course, have to learn syntactic rules through an inductive process of discovering various linguistic regularities in the multiform language patterns to which they are repetitively exposed. Grammatical generalizations would make absolutely no sense whatsoever to them, since they are manifestly incapable of understanding complex relationships between abstractions. This type of discovery learning, however, is exceedingly wasteful and unnecessary when we deal with older learners who are perfectly capable of comprehending abstract syntactic propositions. It takes a long time to discover grammatical rules autonomously and inductively; and until the correct discovery is made, practice is not transferable. Furthermore, as long as these rules are known only intuitively and implicitly, their transferability to comparable situations is restricted to what is analogically quite similar and obvious.

Deductive use of grammatical generalizations, on the other hand, is decidedly more efficient in second-language learning. No time is wasted in discovery, and both the generalization and the experience of applying it to appropriate exemplars are transferable from the very beginning of practice. (Ausubel, 1964)

It seems perfectly clear that to learn to speak, understand, read, and write a foreign language implies the need to acquire the rules that native speakers of that language possess which account for their competence in that language. It is equally clear, however, that simply understanding the

rules will not suffice to make the student a fluent speaker of the target language. It is therefore appropriate and necessary that the rule, once understood, should be applied in much the same way that is characteristic of pattern practice techniques. In the quotation from Fries above, it was said, "The student will progress more satisfactorily if his efforts are channeled to avoid confusion." This is certainly the basic argument for providing the learner with a generalization, a description, an explanation, or, in a word, a rule that reveals to him what it is that he is expected to learn.

In summary, the teaching of the grammar of a new language is fundamental to the development of competence in that language. It appears that the most efficient way of teaching the components of grammar is to provide the students with appropriate explanatory rules that account for those components and to follow those explanations with ample practice in using those rules: using them in mechanical, manipulative drills in the beginning but culminating the practice with the most realistic communicative experiences possible.

After all of the above has been said, I must now consider with you these realistic questions:

- 1) Are there grammars which provide us with all the rules we would include in, say, a course of English as a second language?
- 2) Are the rules written in such a way that they would be comprehensible to our students?

The answer to both these questions is 'yes and no.' Linguists and grammarians, from Poustma and Jespersen to Jacobs and Rosenbaum have provided us with an impressive, almost staggering, body of information on the grammatical rules of English. These grammars are the substance of our field. Yet, there are still substantial areas of English grammar that have not been fully understood and reduced to rules. And of the rules now available to us, many are controversial or incomplete.

On the other hand, thanks to the generations of grammarians from Palmer to Fries who have been deeply involved in teaching English to speakers of other languages—much of what we know about English grammar has been reduced to rules and generalizations that are usable in the classroom. Yet, the remarkable new insights into grammar that have been revealed by transformational grammarians have yet to be translated into readily usable pedagogical rules.

In sum, much of the grammar of English has been successfully analyzed. A considerable, but smaller, portion of it has been translated into pedagogically satisfactory rules or explanations. It follows that future progress in the teaching of English as a second language will depend largely upon the success grammarians and linguists have in further explicating the rules of English (and other languages), and upon the success language teachers and

textbook writers have in reducing those rules to meaningful explanations for learners of foreign languages.

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Student Competence and Performance in ESL

Robert J. Di Pietro

Foreign language teachers hope to develop in their students the ability to write and speak with ease in all required situations. This involves a competence which allows the student to construct varied sentences around a central theme or situation and yet remain within the grammatical constraints of the language because he understands the underlying rules or principles in the language. Teaching materials should be so constructed as to produce this kind of competence. The student's performance will illustrate how well or how badly he has achieved competence; and his performance can be improved by well-designed, well-sequenced materials which are based upon a knowledge of the rules or principles underlying the language. Illustrations of these rules and their application in teaching English to speakers of other languages are given along with a plea for the utilization of a generative framework of language in developing materials to avoid fragmentation of teaching into units of unrelated bits and pieces.

If you ask a language teacher about the goal he has set for his students, he might well answer 'fluency'. Or he might express a desire that his students become 'competent' in the language he is trying to teach them. No doubt about it. 'Fluency' and 'competence' are two of the favorite catchwords in the field of foreign language instruction. One reason for their popularity is that they are very useful in talking to laymen and prospective students. Not only can both terms be easily found in most English dictionaries, but no one can argue with *Webster's* (2nd edition, unabridged) definition of fluency as 'the ability to write or speak easily, smoothly, and expressively' and of competence as 'capacity equal to requirement.' Any teacher worth his salt should hope that, as a result of his instruction, his students will write and speak with ease in all required situations.

It is when we try to be explicit about our goals that we run into complications with catchwords, no matter how facile they may seem. Just when does a student finally achieve smoothness or expressiveness in his speech? Our inclination is to match him off with the native speaker and ask the following question: will our student be able to communicate without difficulty in those situations in which the native speaker is likely to find himself? Only a glance at the materials used at Lackland in ESL is enough to show that the writers had such situations in mind, starting with very basic ones like greeting someone, telling time, naming classroom objects, mailing letters, and going on to the more technical ones of discussing governmental organization and ballistics. In the manner of most materials

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written since World War II, situational contexts are predetermined and competence levels are satisfied when the student is able to use grammatically correct sentences in talking about the subjects covered. As in other programs of instruction, no allowance is made for stuttering, hesitating, not completing sentences, and so on. It is at this point that our analogy with the native speaker breaks down because the unedited and unrehearsed speech of the native is often filled with such phenomena. Charles Hockett (*A Course in Modern Linguistics*, New York: Macmillan, 1958, p. 143) gives the following example of unedited speech:

It's uh . . . it's uh not . . . I mean he . . . (throat cleared) actually well he he we we had just sort of . . . in many ways sort of given up . . . trying to do very much . . . until . . . bedtime. Unless it's something that he can be included in . . . whereupon he will . . . usually isn't interested for long enough to really . . . carry through with it.

There are several reasons why no consideration is made in foreign language instruction for the unedited speech of natives. First of all, no foreign language teacher seems overly interested in evaluating the fluency of the native speakers. Secondly, it is supposed that if given the chance, people who really know how to speak the language can do their own editing and turn ungrammatical sentences into grammatical ones. In fact, Hockett supplies the following as an edited version of the example given above:

We had (in many ways) just sort of given up trying to do much until bedtime. Unless it's something that he can be included in, whereupon he usually isn't interested for long enough to really carry through with it.

It seems somewhat anachronistic that we teachers expect our foreign students to utter only grammatical sentences while allowing our fellow speakers of English all kinds of liberties with the language. Yet we do expect our students to be innovative with the sentences we give them in the form of dialogs and pattern practice. When the student fails to innovate, the results may be grammatical but not communicative. The following excerpt from Eugene Ionesco's play, *The Bald Soprano*, is a dramatic illustration of what can happen. Ionesco, himself, was a student of ESL and reacted strongly against the overformalization of dialogs to which he was exposed (the setting is the sitting room of an English home):

Mrs. Smith: There it is nine o'clock. We've eaten the soup, the fish, the potatoes fried in lard, and the English salad. The children have drunk English water. We have dined well this evening. That is because we live in the suburbs of London and because our name is Smith.

Mr. Smith (continues to read, clicks his tongue.)

Mrs. Smith: Potatoes are very good fried in lard; the salad oil was not rancid. The oil from the grocer at the corner is of better quality than the oil from the grocer across the street. It is even better than the oil

from the grocer down the street. But I prefer not to tell them that their oil is bad.

Mr. S. (continues to read, clicks his tongue.)

Mrs. S.: However, the oil from the grocer at the corner is always better.

Mr. S. (continues to read, clicks his tongue.)

Mrs. S.: Mary cooked the potatoes very well, this time. The last time she did not cook them enough. I do not like them when they are not well cooked.

Mr. S. (continues to read, clicks his tongue.)

Mrs. S.: The fish was fresh. It made my mouth water. I had two helpings. No, three helpings. Then I had to go to the W. C. You also had three helpings. However, the third time you took less than the first two times, while as for me, I took a great deal more. I dined better than you this evening. Why is that? Ordinarily, it is you who dines better. It is not appetite that you lack.

Mr. S. (clicks his tongue.)

In this short passage, the newly fluent Ionesco skillfully uses a variety of structures and a flow of appropriate vocabulary that should flatter any teacher. Yet the result is certainly not communication, any more than are the following sentences copied verbatim from exercise 2 (p. 78-79) of the *Student Workbook* for Volumes 1100-1400 of the *American Language Course*:

Mary goes downtown to buy a radio. There are a few transistor radios in the store. Mary wants to buy a small radio. Mary has only a little money for a radio. She looks around the radio department for a long time. She listens to a lot of radios. She finally decides to buy a portable.

Of course I am not being completely fair. The sentences were originally given as the models for a tense change from present to past. While we do not argue that knowledge of how to use the past tense is irrelevant, would we ever want our students to speak or write precisely in the manner illustrated? Rather, we should expect each student to convey the same information in a natural and personal way.

Competence

In this paper I am going to discuss that illusive quality which allows the speakers of a language to construct and edit infinitely varied sentences around a central theme or situation and yet remain within the grammatical constraints of that language. Call it 'competence', if you wish, but whatever catchword you use, it is the ultimate goal of any worthwhile program of instruction. Our discussion of it can be centered around two questions related to language instruction: (1) Just how innovative can a speaker be in a given situation? In other words, if we supply the student with the

basic vocabulary and structures that go with each situation, how much variation can we expect of him? Quite clearly, some situations provide room for very little variation—greetings, for example ('Hello, how are you? Fine, and you?', etc.)—while others are almost infinite in their possibilities, such as a discussion on governmental organization. (2) The second question concerns the ways in which the details of competence are specified. Is there, in fact, a concrete way of stating language competence? Are we limited to hinting at it through illustrations with numbers or geometrical patterns, as you have seen in an earlier paper in this series?¹

To return to the first question, the one regarding innovation, we can say that, while we do not expect to produce eloquent orators or poets in English, we do want our students to be able to communicate without the aid of a dictionary or grammar book. But to be able to speak a language unaided by prompting devices requires a knowledge of the rules of that language. Whether we approach the teaching of these rules by the simple, unadorned memorization of them or by exposing the student to a number of sentences which illustrate them is not under discussion here. No matter how the student learns the rules, he *must* learn them and know how to apply them if he is going to speak the language. By rules I do not mean the many over-generalized ones often encountered in our traditional grammar books—rules like 'an adjective is a word that modifies a noun' or 'a verb describes an action or a state of being'. Such rules may have a place in the study of language universals, but they are almost useless in teaching a specific foreign language. It is even questionable that an appeal to the student's innate powers of logic is sufficient. The student must learn not what is universal or logical in communication but the ways in which such things are communicated specifically in the language he is studying.

An example of the kind of rule I have in mind is the following: 'The use of a numerical modifier larger than one (**two, three, four**, etc.) requires that the noun which it modifies be made plural'. For example: **one book**, but **two books, three books, four books**, and so on. This particular rule is cited because here, at Lackland, you doubtlessly have had students whose native language has nothing similar to it. As a result of your strategy of instruction, your student may never be able to openly formulate the rule. To do so is really irrelevant to your goal of teaching English. As long as the student can use the rule correctly in speaking, he knows it. He may have learned it unconsciously by going through a series of substitution exercises which focussed on irregularities in the plurals of nouns: **one child/two children, one mouse/two mice**, etc. On the other hand, he may have been exposed to a lesson which made it its major topic. Regardless of how he learns such rules as number agreement and noun pluralization, when he can apply them beyond the sample sentences given in the text, they become

¹ Russell Campbell, "An Evaluation and Comparison of Present Methods for Teaching English Grammar to Speakers of Other Languages."

part of his language competence, or, more specifically, his *English* language competence.

With this view of language as rule-oriented, the give-and-take of language learning becomes clear: the student, in order to learn, must come to an understanding of the grammatical principles underlying the exercises. The teacher and the materials writer, on the other hand, must structure the materials and the instruction so that the student is not misled by his own logical devices. The materials must be cumulative—not only in the sense of vocabulary building or idiom formation, but also so that the presentation of English grammar proceeds logically and is not self-contradictory.

The other question—the one regarding the formal specification of competence—is answered in the affirmative. There are many ways to specify language competence and some general view of language design is needed for all of them. The instructor should have some sort of framework, some notion about how language works and how English, in particular, is put together. Any conjecture about how a language is learned must be accompanied by a theory about the design of that language. It is, in fact, inevitable that exposure to any program of instruction induces both the student and the teacher to conjecture about the organization of the language being taught.

Language is usually interpreted as having three general components: syntax, phonology and semantics. Syntax comprises the ways in which sentences are built. It is not difficult to see how each language has its favorite ways of building sentences. In English, sentences containing a subject noun phrase and a predicate verb phrase are so favored that it would be far-fetched to formulate a general rule stating that the derivation of all English sentences ultimately involves these constituents. Such a rule would certainly underline each of the following sentences taken from the elementary phase of the *American Language Course*:

These officers are pilots.
That woman is a teacher.
I see two trains.
January is the first month of the year.

Even questions like:

Do you hear those planes?
Is she reading the newspaper?

are reducible to noun phrase and verb phrase elements. The use of temporal complements, negatives, question words, and so forth are all adjuncts to the basic noun phrase-verb phrase sequence.

It is important that the learner, if he is to develop a competence in English, have a cumulative and coherent grasp of the underlying structure of these sentences, how they are interrelated and how new sentences can be built which are correct and answerable to the same rules. He must know,

for example, that the expression **how long** in the sentence **How long is the rope?** refers to distance, while the same expression in the sentence **How long is the winter in Canada?** is temporal. It must be clear to him that the sentence **The orders were executed by the soldiers** can be transformed to **The soldiers executed the orders**, while the sentence **The orders were executed by nightfall** cannot be subjected to the same rule.

As far as syntax is concerned, there are only two basic operations: substitution (whereby new vocabulary is inserted without changing the structure of the sentence) and transformation (whereby the structure of a sentence is changed by some explicit operation). *The American Language Course* has ample illustrations of both:

That's not a.....
 chair
 pencil
 book (substitutions)

You hear a plane.
 Do you hear a plane?
 I see a train.
 I don't see a train. (transformations)

The point is not that the student should acquire an immense inventory of sentences, but that he should understand the operations involved and apply them to his own sentences. The extent to which he is able to perform these operations in English delineates the parameters of his competence in that language, as far as syntax is concerned.

In treating the phonology of English, the *American Language Course* has chosen to present it simultaneously with syntax and semantics. Although all human languages draw from the same inventory of possible sounds, each language has its own rules governing how sounds are put together and how they are related to syntactic and semantic elements. Limiting ourselves to a taxonomy of English phonology, we discover that English has approximately 36 consonants and vowels. Tallying the possible combinations of consonants alone, Charles Fries (*Teaching and Learning English as a Foreign Language*, Ann Arbor, 17th printing, 1963, p. 18ff) found 39 in the pre-vocalic position and 151 in the postvocalic position. To acquire a competence in English, then, would involve being able to pronounce all possible combinations of vowel and consonant sounds. It would also involve an ability to place stress and pitch levels in the proper places and to understand the pronunciation of English sounds by other speakers. No one could be said to be competent in English if he could not tell which sounds were English and which belonged to another language—Spanish or Russian, for example.

By semantics, the third general component of language design, we refer to the units of meaning and their arrangements which occur in English. Each language selects and develops its own vocabulary and idioms from the

semantic units it considers vital. English, since it is a language of wide use in all sorts of human communication, has a very extensive semantic range. Nevertheless, we must keep in mind that there are areas where English underdifferentiates. The contrasting semantic properties of the German words **Mann** and **Mensch**, for example, are put together in one English word **man**, as are those of Spanish **esquina** and **rincon** in the English word **corner**.

A student can be said to be competent in the matter of semantics when he knows not only the necessary vocabulary to converse in English, but also the senses or meanings that make up that vocabulary. Take the word **bachelor**, for example. It would not be enough for him to know that **bachelor** means an unmarried male. He must also know that the word can be used to describe the graduate of a four-year college curriculum, male or female, that it can be used to identify a kind of living quarters (a 'bachelor' apartment), and even perhaps that seal hunters in Alaska call unmated male seals **bachelors**. The student must be acquainted with the various senses of the common English words **meat** and **flesh**, to take yet another example. Each of us who is a native speaker of English automatically knows how to pick between the two and say:

The **meat** tastes good.
 The spirit is willing, but the **flesh** is weak.
 The professor advanced a **meaty** argument.
 He was a **fleshy** person.

And we know the difference between **horse meat** and **horse flesh**. In order to draw up explicit rules about the semantics of **meat** and **flesh**, we would have to specify at least the following elements:

1. human or non-human (compare: 'meat of the argument' with 'sins of the flesh')
2. internal or external ('meat of the walnut' vs. 'flesh of a pitted fruit')
3. prepared or unprepared ('deer meat' vs. 'deer flesh').

I cannot stress too heavily that the explanation of these semantic differences by way of formal features is only a means to explain what the native speaker possesses in his competence.

No one has ever made the total model of competence explicit for English or for any language. Yet we all have one within us, if we can rightly say that we speak the language. When we learn a second language, we acquire a second competence—one that is complete in the same ways that our first one is.² Looking at the task of the teacher in this light, we can see how

² This is not to imply that all speakers of a language have identical competence. Rather, their competences are similar enough for them to communicate. In fact, it is likely that no two speakers have competence that are exactly alike.

teaching is akin to guidance. The teacher guides the student in building his personal competence. When the guidance is accurate, the student is led to construct rules that are analogous to those of a native speaker. The sentences produced by the student are acceptable to the native speaker because they match sentences the native speaker himself is likely to generate. When the student finds himself secure in producing English sentences unlike any that he has been taught, the goal of fluency has truly been attained.

Performance

Whereas linguistics, with its prime interest in language systems, has been concerned above all with the investigation of competence and the construction of language theory, the language teacher, on the other hand, must work with many problems of an applied nature while not losing sight of theory. That is to say, the language teacher copes with the student's motivation, his aptitude, the style in which the instructional material is presented, its intrinsic interest, and so forth. These and many other factors are relevant to predicting what the student is *likely* to say—a matter quite distinct from judging what he is *capable* of saying.

One of the teacher's prime needs is testing. We often speak of four language skills (oral comprehension, speaking, reading and writing) as desired goals, but the testing of these skills, especially of speaking and reading, is very difficult. The poor showing a student makes on one test may have little to do with his real competence. There may well have been other factors quite apart from his ability to handle the language which contributed to the bad results. For this reason, it is important to distinguish between competence and performance. Performance is only a reflection of competence. It is only through exposure to countless performances that one gains an insight into the real competence of the speaker. In fact, the student's performance at various stages in the program provides the teacher with the feed-back necessary to refine and readjust the instruction. To achieve less than constant building of the student's language competence is wasteful.

Of course, no teaching strategy is totally efficient. No matter how carefully we program our materials, there will always be the problem of knowing just when a given part of grammar has really become part of the student's competence. Even in the kind of automated programming done via mechanical teaching machines, where the material is broken down into very small bits and the student is prevented from proceeding to the next step in the program until he has satisfied the requirements of the previous one, there is the problem of retention. What assurance do we have that the material has become a part of the student's competence? Will he be able to use it in an original way outside of the restraints and time-span of the program? Such programs often equate one or, at best, a limited number of performances directly with competence. In simpler words, it is believed that if the student gets the answer right, he must also have understood how

and why the question was asked and what its ramifications are for the rest of the language.

In a sense, all good materials and instruction are programmed. They must have a goal and proceed toward it in a logical way. They must not skip any important step nor be repetitious. However, the student needs a variety of techniques in order to perform well. Boredom can quickly set in if he is made to respond in the same way throughout the course. We must not lose sight of the fact that language is communication in many ways—and usually with live persons. The more varied the techniques used to teach language, the more motivated the student will feel to participate in communication. I will not go into detail about factors underlying motivation because another paper in this same series will be discussing them.³ Let it suffice here to emphasize that a student's competence should not be evaluated on the basis of one performance, or even repeated instances of the same kind of performance. It should also be made clear that these remarks are not limited to one particular language skill, but are relevant to all of them.

Many good illustrations of how competence may be built in English and student performance stimulated are to be found in the *American Language Course*. (Incidentally, our remarks are not intended as either rejection or endorsement of the materials. The kinds of questions we ask about competence and performance must be asked about any type of instructional materials. Because it is impossible to include a discussion of how the material is actually taught, our observations will be restricted to the material itself.)

Habit and Competence

Looking at the *Instructor's Manual*, one notices, within the first few pages, that the term 'habit' is used to describe the acquisition of language. On page 5, for instance, the instructor is warned against allowing the student to develop 'bad habits' during the early weeks of study. Not only are they hard to break later on but they also create difficulties at more advanced levels. What has 'habit' to do with 'competence', we may ask. First of all, 'habit' is a conditioning of reflexes leading to automatic and predictable responses to stimuli. For some time, it was fashionable to view language learning as habit formation. As a result, a very great part of the exercises and drills of our modern instructional strategies is built upon this psychological concept.

Competence, on the other hand, has to do with a different aspect of language behavior, namely, the intellectualization or the cognition of language which underlies habit formation. It has only been in the last few years that linguists and psychologists have begun to talk in earnest about language learning as the building of competence. The admonition that early-acquired 'bad habits' have injurious effects in subsequent stages of

³ Frederick Bosco, "The Relevance of Recent Psychological Studies to TESOL."

language learning is supported by the notion that the building of language competence is a cumulative effort and that the rules of language are sequential, with each new rule dependent upon preceding ones and elaborative of them.

What is missing from the materials as they stand is an explicit statement of how these rules are sequential. Yet, enough of the grammar is made clear so that the learner can build a model of competence for himself. If we consider the first unit alone, we find that an impressive amount of English grammar has been covered in just three lessons. The modest listing of demonstrative pronouns (**this, that**), the interrogative (**what**), the indefinite article (**a**), and the third singular of the present indicative of the verb **be (is, 's)** does not give an accurate picture of the great extent of English syntax which the student learns when he has become competent in these areas. It is not very hard to see that pronouns and articles, for example, are not easily understood without reference to the nouns to which they are related. Knowing about interrogatives in a language requires knowledge of declarative, as well. The information given about the forms of **be** and the indefinite article carries along with it an insight into how English structures its predicates. The seemingly simple sentence **John is a student** represents some very important facts about English. First of all, the learner is exposed to the word order of English, subject before predicate, which may not be the order in his own language. Furthermore, predicates with expressions of occupation must contain a form of the verb **be** and an indefinite article before the noun. Russian, to take a language without this requirement, would simply have the equivalent of 'John-student' ([iván stud'ént]). French, while having something comparable to the English verb **be**, would not employ its indefinite article: *Jean est étudiant* (i.e., 'John is student'). An inspection of other languages would yield even more variations on the same theme.

These basic facts about English grammar are drawn together to form an incipient stage of the learner's new competence. To characterize this stage, we can postulate the following simple, but far-reaching rule:⁴

$$(1) S \rightarrow NP VP$$

That is to say, S (sentence) is to be further specified as containing a NP (noun phrase) and a VP (verb phrase). This statement represents the most general observation one could make about sentences. The following rules explain each of the elements given to the right of the rewrite arrow:

$$(2) NP \rightarrow \begin{cases} \text{ART N} \\ \text{PROPER NAME} \end{cases}$$

$$(3) VP \rightarrow V NP \\ \text{etc.}$$

⁴ For an explanation of the conventions used to write these rules, see A. Koutsoudas, *Writing Transformational Grammars* (New York: McGraw-Hill, 1966).

Rule no. 2 specifies that noun phrases are to be rewritten as either a sequence of article plus noun or as a proper name. With rule no. 3, we indicate that verb phrases consist of verbs followed by noun phrases. In formulating these rules, it is important to order them so that each is more restrictive than the preceding one. Far down near the end of our list of rules, we would specify the actual vocabulary of the language, e.g.,

- .
- .
- .
- w. DEF ART \rightarrow *the*
 x. INDEF ART \rightarrow *a*
 y. N \rightarrow *boy, soldier, student, etc.*

Such rules are called *lexical rules*.⁵

Let us suppose, for the moment, that our learner has misinterpreted the data which should have led to the formation of the rules of competence as we have stated them. Let us say, for example, that he did not observe that indefinite articles are not used with proper names in English, which led him to conclude that nouns and proper names are both in the same class. This state of affairs would require the following adjustment in rule no. 2, to read as follows:

$$(2a.) \text{ NP} \rightarrow \text{ART} \begin{cases} \text{N} \\ \text{PROPER NAME} \end{cases}$$

In applying this rule, the student would generate sentences like the following:

- *A Mary is a student.
- *A Henry is a soldier.

If he remained uncorrected, his understanding of subsequent rules would be affected. For example, he might pluralize *Mary* and *Henry* in the same ways as *student* and *soldier*.

At this point, let me put you at ease and assure you that no one should expect the linguistically untrained teacher to be able to formulate such rules. It is enough to be aware of the implication of the theory, namely that everything you teach your student about English will be used by him in coming to his own understanding of the language. If you have structured your instruction carefully, the student will be able to communicate with ease rather than parrot what he has heard from others.

In regard to developing competence in phonology, as well as in the semantics that underlies vocabulary, there are several elements to consider.

(1) First of all, the study of English in a country where it is also the language of the people has several advantages over the study of the language

⁵ The rules, as given here, are intended only as illustrations. There is much discussion among theorists concerning the organization of rules and the ways in which they should be stated.

in a foreign language context.⁶ The student of ESL is exposed to a natural socio-cultural matrix for pronunciation and vocabulary beyond the four walls of the classroom or the laboratory. As useful as a tape recorder is in providing native-speaking models, it cannot really carry on a conversation. Once the student is placed in a community of native speakers, he quickly learns that the models provided him by the taped voices and by his teacher are just two concrete instances, two personal interpretations of the total language. If he is to develop his own competence, he must learn to accept a range of variation. For example, if the voice on the tape says [hæf] and [haws] but he hears in the streets [hæyf] and [hæws], he must be able to recognize both sets as being within the general range of competence of an English speaker. He need choose to say only one of the sets, but he cannot ignore the feed-back from other speakers. As native speakers of English, we constantly restructure our speech. During my own youth in southern New York State, I pronounced the words **fog** and **hog** invariably with the vowel [a]. After having since lived in various places, I find myself tending to make these words rime with **log** and **dog**, with the vowel [ɔ]. Other words that give me pause are **leg** [ləg] or [ləyg], **egg** [ɛg] or [eyg], and **catch** [kæç] or [keç].

(2) The student's awareness of these phenomena and his ultimate rejection or acceptance of them in building his own competence depends to a large extent on the nature of the competence he has already built in his native language. Going through Volume 1200 of the *American Language Course*, I observed that the authors have treated many features of English pronunciation which are not likely to be found in quite the same way in the student's language. To name but a few: [ð], [θ], [l], [r], [v], [w], consonant clusters with [r] and with [s], the so-called reduced vowel [ə], stress patterns and intonation. Not many explicit instructions are given regarding articulation and aural discrimination, but it is probably the case that few are needed. The student learns to discriminate and produce the sounds by listening to the tapes, to his teachers, and to speakers outside of class.

No matter what we may do to try to control it, actual student performance remains unpredictable in several ways. Apart from knowing that the potential student body will be adult and presumably literate in their native languages, nothing can be forecast about the individual's capacity to learn a second language. What Mr. X learns in two hours might take Mr. Y two weeks and Mr. Z a year. The answer to how many times a drill must be repeated is a simple but pedagogically useless one: until the student has mastered the point. There are numerous other nonlinguistic factors affecting performance: the degree of 'culture shock' suffered by the student in coming to the United States, how well he sleeps at night, and even whether or not the food in his new location agrees with him. The sooner he can relate

⁶The distinction is conveyed in the terms ESL (English as a second language) and EFL (English as a foreign language).

to his new environment, the faster he learns the new language that goes with that environment. Since no single performance can be an accurate measure of the student's newly acquired language competence, my advice is to give the student a chance to react verbally many times and in many ways before he is judged.

To conclude, I repeat that no teacher need become a linguist in order to utilize the notions of competence and performance in his work. As far as competence is concerned, the teacher should ask himself the following questions about his use of the instructional material: (1) Is it organized in such a way as to allow a total picture of the English language to emerge at the end of the course? (2) Does the presentation go from the more general to the more specific in the coverage of vocabulary, syntax, and pronunciation? (3) Are the explanations made at any point ever contradicted or partly negated in subsequent sections?

Performance can be better evaluated if the teacher keeps in mind: (1) the student's personal motivation and (2) his ability to adjust. It is not to be expected that the teacher know much about the native language of the student, but any amount of information is very helpful in predicting the kinds of difficulties he will have.

No course of instruction is perfect. No teacher is perfect. But if we do not have some generative framework of language in mind, we will be reduced to a fragmentation of our teaching into units of unrelated bits and pieces. A good course of instruction is cohesive. Once your student completes his formal study, no one will ever ask him what he learned in Unit Three, or what is the proper intonation for questions in English. He will simply be expected to speak and understand what is said to him. His competence in the language will be evaluated in terms of his performance.

Epilogue

The contents of Mr. Campbell's paper entitled "An Evaluation and Comparison of Present Methods for Teaching English Grammar to Speakers of Other Languages," which preceded the present paper, were made known to me shortly before the date of my own presentation. Because Mr. Campbell chose to discuss in some detail the theme of 'performance and competence,' I am moved to comment on some matters which he brought up in his paper. First of all, the change in the objectives of foreign language teaching wrought by linguists of the Bloomfieldian school entailed a rejection of the earlier 'mentalistic' approach to language in which competence finds its roots. Bloomfield, himself, wrote: "In the division of scientific labor, the linguist deals only with the speech-signal (r . . . s); he is not competent to deal with problems of physiology or psychology." (*Language*, New York: H. Holt, 1933, p. 32). It has only been in the past few years that linguists have begun to develop the formal apparatus for a fruitful study of competence. The results of their studies have yet to make an impact on foreign language teaching.

We should also emphasize that although pattern practice and other types of manipulative drills appear to be useful in language work, it has not been proven that they are necessary adjuncts to the interpretation of competence as a set of rules. The use of such techniques are more aptly investigated with reference to their value in eliciting performance.

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An Evaluative Comparison of Present Methods for Teaching English Phonology

Ronald Wardhaugh

The audiolingual approach to language teaching emphasizes certain kinds of necessary phonetic abilities. An appeal is made for the teaching of additional phonological facts of the type presented in Chomsky and Halle's *The Sound Pattern of English*. In such an approach, more attention would be paid to written English than before, particularly when teaching students who are adult, educated, and literate in their own language. Teaching materials should be developed to produce mastery of the total phonological system of English, not just of certain phonetic skills.

The audiolingual approach to foreign language instruction places a great emphasis on teaching students the phonology of the target language in contrast with certain other approaches which emphasize a mastery of skills such as reading or translation. In this paper I intend to discuss some of the reasons for such an emphasis on phonology in the audiolingual approach. During the course of the discussion some evaluative comments will be made on certain methods and techniques that are used in classrooms by teachers and on several of the assumptions behind such methods. These comments will lead me into a presentation of some major objections to the assumptions and derivative practices. I will briefly outline a few current ideas about our present understanding of what may be called the "facts" of phonology in general and of English phonology in particular, and I will suggest that present methods almost entirely fail to communicate most of these facts to students. I will conclude by suggesting that future developments in our art must include some provision for helping students to master just such facts.

One fundamental assumption behind much of what we do in classrooms in foreign language instruction is that language lives in the throat and mouth and not on paper, that is, that language is essentially speech. Consequently, in the linguistic literature, we read such statements as "language is speech not writing," "the spoken language is primary and the written language is 'secondary'"; "all human beings have access to systems of sounds, whereas many have no access to writing systems to represent these systems of sounds"; and "children always learn to speak before they learn to write." Although most linguists would agree on the validity of these

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statements about language, it is not so clear that they have direct relevance to formulating a methodology for language teaching. A methodology for language teaching must draw heavily on linguistic knowledge, but methods and techniques employed by linguists for doing research in linguistics are not necessarily appropriate for teachers engaged in the task of teaching foreign languages. Too often in the past methods and techniques from the former area were extrapolated into the latter area, sometimes successfully to be sure, but the result has inevitably been a very constricting total approach to language teaching.

I said that there would be almost total agreement among linguists that all languages are systematic and that the sounds of languages are systematic too. If we assume that in order to speak English a person must learn the sound system of English, we must be fairly sure what that system is like if we presume to teach it. An examination of textbooks designed to teach English to non-English speakers published in recent years conveys the impression that the sound system of English is generally well understood and that ways of teaching it have been rather well worked out. For example, the sound system is said to consist of a set of functional contrastive units called phonemes. This set of phonemes is small and finite, even though there is apparently more than a little disagreement as to the exact number of units in the set depending on whose system one chooses: for example, that of Pike and Fries or that of Trager and Smith. Basically though, there is agreement that words such as **beat, bit, bait, bet, and bat** contrast in their vowel phonemes. Since native speakers of English make these contrasts quite automatically, one major task which confronts a student who is learning English as a foreign language is mastery of this contrastive system of sounds.

It must be observed too that the sound system, or the phonology of a language, has usually been described as though it existed completely independently of the syntactic system. Indeed for a long time many linguists decreed that it was absolutely necessary to maintain a strict separation between the phonological and syntactic systems of a language. These systems were regarded as completely independent of each other because of the so called "duality" feature in language design, that is, independent subsystems, one of sounds and the other of meanings. Moreover, there was considerable insistence that the details of the phonology should be worked out without recourse to syntactic information so as to avoid the error of "level-mixing." It is possible today to observe some of the consequences of this view of phonology in certain current practices. For example, it leads to, and may seem to justify, a separation of phonetic drills from meaningful practice with the language in exercises which require students to discriminate among sounds and to mimic sounds without requiring them to associate these sounds with any particular meanings or syntactic functions. This view of an autonomous phonology may even seem to justify the use of nonsense syllables and nonsense expressions in

teaching, together with an injunction to students to be less concerned about what something means than about what it sounds like.

There are two other dichotomies which considerably influence how the phonology of English is taught to non-native speakers of English. Not only does there tend to be a more or less rigid separation of the teaching of phonology from the teaching of syntax, but there is a similar strict separation observed between teaching speaking skills and writing skills, and, within skills teaching, a separation between teaching what may be called the receptive skills and the productive skills. The dichotomy between speech and writing arises from the fact that writing is a representation of speech and that in first language learning the acquisition of the spoken language always precedes that of the written language. Consequently, in second language teaching and learning an emphasis has been placed on teaching the skills used in listening and speaking before those used in reading and writing. Students, no matter how literate they may be, are required to master the spoken forms of language before they see the language in print lest they misunderstand their language learning task or allow it to be interfered with by, for example, the apparently unphonetic spelling system of English or a carryover of habits from the first language.

The second dichotomy, the listening-speaking one, is founded on a belief that receptive skills are basic to productive ones. For example, there is an assumption that until a learner can hear the difference between **beat** and **bit**, or until he can distinguish a statement intonation from a question intonation when the basic sentence structure is the same, as in **You're ready.** and **You're ready?**, it is impossible for him to produce the differences.

Although it is possible to question the validity of all three of the aforementioned dichotomies, as I shall do later in this paper, they can appear to be very soundly based, for it *is* possible to present a more or less plausible case for the separation of phonology from syntax, of speaking from writing, and of receptive from productive skills, offering arguments ostensibly based on the nature of language and the nature of learning. For many years linguists and language teachers did present such a case. However, if the views of the nature of language and language learning on which the dichotomies are based are somewhat suspect, as they are at present, the dichotomies may be suspect, too; and teaching methods based on them may well need to be reexamined. It may not be necessary to abandon the teaching methods, but the possibility does exist that a greater variety of instructional methods may become available if the dichotomies are abandoned, with a consequent increase in the effectiveness of instruction.

Let us briefly examine some of the practices that are used in the classroom to teach phonology. First of all, drill work on minimal contrasts in the target language is widely used so that students learn to differentiate the odd word in such sets as **beat-beat-bit** and **mate-met-mate**. Then students learn to pronounce the word which contains what can be called the

“new” sound. This sound may be new in one of two different ways. The sound may exist in the first language as an allophonic variant of a phoneme, just as the Spanish [ð] exists as a variant of the Spanish /d/ phoneme. In this case the student learning English must learn to distinguish English **den** and **then**, and **ladder** and **lather**, and then to produce the different English words. In effect he must make himself conscious of a distinction which he made unconsciously before, that is, a distinction between the sounds [ð] and [d]; and at the same time he must learn to make the distinction in a variety of positions in English: for example, initially, medially and finally in words.

In other cases the actual sound is quite new to the learner and must be mastered in some other way. The second problem then is one of teaching or learning entirely new sounds in order to combat still another kind of interference from the first language. A variety of approaches can be used. Students may be asked to exercise the ability to mimic strange sounds. Such ability is said to decrease with age, children being better able to mimic than adults. Then, again, the ability apparently varies with individuals independently of age, because some people are much better or much worse at mimicry than the average. The mimicry practice can be done in various ways: for example, students may be asked to speak their first language with a target language accent, or to try to mimic utterances in the target language without any concern for what the utterances mean or how individual parts of the utterances function. It must be apparent to anyone who is familiar with audiolingual teaching techniques that considerable emphasis is placed on exercises designed to improve students' ability to mimic utterances in the target language.

In order to combat possible interference from the first language much stress is placed in pronunciation practice on those features from the first language which carry over to the target language with damaging consequences for communication in the target language and also on those features of the target which are entirely new and which therefore must be controlled so as not to impede communication. Consequently, there is an emphasis on specifics: for example, on a subset of the total set of consonants, vowels, and distributional patterns of the target language. Within this subset there is a concentration of emphasis on either eliminating carry-over from the first language to the target language, or on making allophonic distinctions into phonemic ones, or on teaching entirely new distinctions, or on altering distributional patterns. However, carryover from the first language to the target language is encouraged for the remaining part of the total set. Such an emphasis is justified on the basis that one need teach the problems only and that, in teaching a new language, one can always count on some carryover from the first language. Some of this carryover will obviously be an obstacle to the learner; but, depending on the two languages involved, a lot of it will turn out to be most helpful.

Often the actual teaching is done in such a way that much attention

must be given to the choice of a notation system for the phonetic distinctions to be mastered. Students are therefore often required to master a vocabulary of phonetic terms. In some variations of the audiolingual approach a lot of time, particularly at the beginning of a course, is spent on teaching phonetics. Students are asked to acquire some sophistication in talking about the distinctions they are being taught and about the articulatory nature of these distinctions and considerable time may be spent in actually reading phonetic notation. Students are almost treated as though they were students of linguistics, not students of a foreign language.

In all of this work the goal of the teacher is one of helping his students acquire the ability to speak the target language intelligibly. Consequently, the pace of the utterances being taught is kept near that of native speakers of the target language; all the major phonemic distinctions are taught; control of suprasegmental characteristics of stress, pitch, and pause is practiced; and students are given massive amounts of drill—for example, in language laboratories—to establish the new habits of the target language.

I suggested earlier that this approach to teaching English phonology is very constrictive in the range of methods it allows teachers to employ. At this point then it seems appropriate to amplify such a statement. First of all, though, it is necessary to show several of the shortcomings of the methods outlined above. For example, the assumption that language is speech not writing, while valid as a statement about *language*, is not valid as a guiding principle in *language teaching* when the students we teach are already literate. No literate person ever considers language to be only speech; it is certainly much more, and teachers would be unwise to shut their minds to that fact.

Secondly, the view of the sound system itself that is incorporated in teaching and the notion that phonological facts may be separated from syntactic and semantic ones find little current support among linguists. This second objection is particularly strong in view of the fact that teachers using the audiolingual method have insisted that one of its great pillars of strength is that it is based on sound linguistic knowledge. Today the very soundness of the linguistics on which the method is apparently based is called into question. The current position is that the linguistic knowledge incorporated into most audiolingual courses is far from the best linguistic knowledge now available.

Thirdly, the various dichotomies mentioned earlier—between phonology and syntax, between speech and writing, and between receptive and productive skills—can only be maintained at a considerable cost. Phonology and syntax appear today to be inseparably fused and not to be discrete levels of linguistic organization. Though fused, syntax today seems to be more important than phonology in that it is somehow more central in an overall description of a language; therefore, one could argue that it should receive more emphasis at first. Similarly, speech and writing are closely connected both in the literate learner and in the fact that the

writing systems of such languages as English and French can be shown to be rather good representations of phonological information. And, finally, there is both psychological and linguistic evidence to suggest that there is both an articulatory and a syntactic basis to the perception of phonological information.

Let me contrast the view of phonology usually found in the audiolingual method with the one put forward in recent years by the generative-transformationalists. The main claims of the generative-transformationalists are that phonology is an integral part of a total language system, not one of several discrete and independent levels: phonology, morphology, syntax—and perhaps semantics. They postulate abstract phonological entities called *systematic phonemes* and a set of rules which operate to realize these systematic phonemes in sound, that is, as some kind of phonetic substance. This set of rules is universally constrained in various interesting ways; and the entities the rules operate on, the systematic phonemes, are optional, in the sense that they preserve very important relationships among words such as **sane** and **sanity**, **sign** and **signal**, **permit** and **permission**, and **mode** and **modify**, to cite but a few examples.

The theory claims that a speaker of English has acquired certain phonological knowledge as a result of speaking the language. Some of this knowledge that Chomsky and Halle ascribe to the speaker in *The Sound Pattern of English*¹ is of great interest to us. The native speaker of English evidently has no phonemic schwa vowel, only a phonetic one, so that [ə] is always a reduced full vowel. He also assigns stress phonetically not phonemically, there being only basically stressed and unstressed vowels with this difference quite predictable. He also has an underlying set of systematic phonemes which is rather well represented by current English orthography, particularly if he is a literate educated adult.

The particular problem that interests many of us today is how to build the knowledge of English phonology that native speakers have, as we currently understand that knowledge, into someone learning English as a foreign language, particularly someone who is literate and who has a need to use the language in both its spoken *and* written forms. In the experience of many of us in using the audiolingual approach with literate adults, we notice that even beginning students want to write down what they are learning. We notice, too, that a completely audiolingual approach does not work very successfully for more than a few days if paper and pencils are banished from the classroom and that serious morale problems can occur. Of course, we might object that such a fact is more indicative of the way students have been previously conditioned to learn than of an inherent inadequacy in the approach we use. All of us know what a powerful effect such conditioning has on human beings, and I think we can all grant that conditioning plays an important part in such a need to reach for paper

¹ Noam Chomsky and Morris Halle, *The Sound Pattern of English* (New York: Harper & Row, 1968).

and pencils. However, I also think that other psychological factors come into operation too. Language is speech and no more than speech only for the *non* literate: for the literate, language is both speech and writing. Moreover, the orthography of a language such as English is not as bad as people like George Bernard Shaw have made it out to be with such spellings as **ghoti** for **fish**. It was certainly not bad for the taxonomic linguist, who went from sound to spelling in his phoneme-grapheme correspondences, and it is a whole lot better again for the generative-transformationalist. English spelling could be a good crutch for learners and one that we should be prepared to use in certain circumstances.

Then again the sounds of a language do not exist apart from the meanings that the language conveys. Admittedly, we can deal with sounds independently of meanings but really only in the sense that magnetic tapes, phonograph records, parrots, and mimics deal with sounds, or certain structural linguists do for artifactual reasons. Indeed, the claim that sounds and meanings in every language are intimately fused may be stated even more strongly as follows: It is surely false to suppose that in the perception of speech one works out what sounds one has heard in an utterance and then, *and only then*, tries to put these sounds into some kind of syntactic and semantic framework; that is, that one uses some kind of consecutive processing, first of all working out what sounds one has heard and then figuring out a meaning for them. Any processing that is involved is surely concurrent: a processing of sounds, syntax, and semantics together, with almost certainly the first strongly controlled by the second and third. Likewise, in speaking, all three dimensions are involved at once. We cannot therefore put forward any but a very weak case for teaching phonology as a part of language which is somehow separate from syntax and semantics. Note that the separation of syntax, phonology, and semantics in a generative-transformational grammar is acknowledged to be an artifact of presentation, not one of theory as it was in structural grammar. Chomsky himself has strongly insisted on this point in his recent work.

Given these circumstances—namely, a new description of English phonology which makes the claims it does, a sympathetic attitude towards the English spelling system, literate adult learners, and established learning patterns—we are forced to ask ourselves how we can construct an optimal system for teaching English, particularly English phonology in this instance. Note that I am basically accepting the general claims advanced by Chomsky and Halle in *The Sound Pattern of English*, for their paradigm seems to be the most fruitful one within which to work in current linguistics. It is not necessary, however, to accept all the details of that treatment. Note, too, the importance of recognizing the age and type of learner involved: let me then stress again that for the purposes of this discussion he is *adult*, *literate*, and *educated*. Given a different kind of learner, say a five-year-old nonliterate, entirely different strategies would be called for. Perhaps one of the greatest weaknesses of the audiolingual method has been that it has

tended to treat the literate, educated adult, as though he were a five-year-old child! He is not, and cannot be, and we must recognize that fact.

The problem we face then is one of putting all of our knowledge of the language and of our students to work most efficiently with the goal the mastery of the phonology of English. We should try to work out a system whereby from the first we can present our students with the sounds of English and the spellings of English *concurrently*. We have tended in the past to concentrate on developing a metalanguage of phonetic symbols and terminology in the hope that we can help students master the traditional phonemic system. At some later state, generally unspecified, the students would become literate in English through recognizing patterns of phoneme-grapheme correspondences if they had enough will-power: "literacy-by-osmosis" would be a suitable name for the process involved. Certainly that is how literacy seems to be achieved—if it is ever achieved—within the audiolingual method! The suggestion I am making is that we use not a purely phonetic metalanguage but rather one which combines certain basic terms from phonetics with regular alphabetic symbols. It is probably just as easy for students to use the regular alphabet in classes in English phonology as it is for them to learn a phonetic alphabet, even if they are literate in a Romance language. There are certainly no more difficulties in the task. If students are going to confuse statements about sounds with statements about letters, they can do it just as easily with a phonetic alphabet as they can with the regular English one. The regular orthography has the additional advantage for a learner that he can relate sounds to letters in meaningful words which he can find written in exactly that way all around him. In effect, the use of the regular orthography eliminates a stage of learning for the student, a stage which, in the experience of many of us, he often tries to avoid anyway.

Employing the regular orthography from the beginning has further advantages because the orthography has certain consistencies built into it which a phonetic transcription (substitute phonemic transcription, if you wish) does not have. For example, it relates morphemes which appear in different phonetic shapes in different words: **sign** and **signify**, **phone** and **phonic**, and **please** and **pleasant**. At first this might seem to be as much a disadvantage as an advantage, but disadvantage it is not. The different phonetic shapes of morphemes are usually systematic in their variation, since the suppletive process is very rare indeed in English, confined as it is to such items as **go-went**, **good-better**, and **am-is-was**. Often the variation that is involved is below the conscious awareness of native speakers, as in the formation of noun plurals in **-s**. It should be our task in teaching English to a non-native speaker of English to get him to develop this same subconscious control. It is for this reason that we must arrange for different allomorphic variants to be presented to the learner systematically. There is no reason in the audiolingual approach for relating **sign** to **signal**, or **face** to **facial**, or **Spain** to **Spanish**, but there is every reason for doing so if

language is to be taught as a functional whole. In the same way it is to be hoped that we can help the foreign student to master such phenomena as stress assignment, palatalization, tensing and laxing, and so on.

A few brief examples follow of the kinds of data that we should attempt to build into our teaching materials in the hope that we can concurrently develop in students *phonetic control* of the actual sounds speakers of English use—though not of course perfect phonetic control, for we are not training either parrots or spies—together with subconscious mastery of the *phonological system*. Notice this important dual emphasis: phonetics *and* phonology.

We must attempt to teach minimal contrasts of the **bin, pin** kind whether these contrasts are shown in the orthography by single letters (**b,p**) or by digraphs such as **th** as in **thin**. Contrasts such as **pin, pine** and **tub, tube** are likewise important because of the orthographic connection of the vowels with a mute final **e** and because of the derivational system of English. This mute **e** is likewise important in words like **flee, pie, doe** and **blue** where it shows the tenseness of the underlying vowel. Other subtle kinds of phonological patterns are revealed in the spelling system, as, for example, the palatalization of the **s's** in **press-pressure** or the **c** in **face-facial**, or the neutralization of stressed vowels before **r** as in **fern, girl** and **turn**. Note that what I am saying is that there are certain systematic phonological processes at work in English words and that the orthography captures many of these processes in systematic ways. Students should be taught both the phonetic realizations and the processes in a methodical way; that is, they should be taught the phonetic forms that speakers use and the principles that speakers are apparently following in producing these forms. To teach one without the other would be unsatisfactory.

We can see this most clearly in connection with the teaching of English stress. In the Trager-Smith system familiar to most of us four degrees of stress are recognized, and stress assignment seems largely unpredictable: hence the four degrees are said to be phonemic. Students learning English as a foreign language are consequently faced with the task of learning the stress assignment patterns of words almost as one learns the meanings of new words: that is, item by item. However, to a native speaker of English stress assignment in words is quite predictable. If such is the case, if stress is entirely or almost entirely predictable for a native speaker of English, we must instill in the learner of English as a foreign language those same intuitions about stress, or at least as many of them as we can. These intuitions may well be acquired if we systematically arrange work on pronunciation to show how stress is assigned in words such as **ángle, eléct, góssip, defér, cáptain, ágony, ánecdote, archáic**, etc. There are many words which exhibit exactly the same stress characteristics as these, and such patterns seem to me to be at least as important to the student who is to communicate effectively in English as mastery of the **beat-bit** distinction, unless we expect him to talk in monosyllables all his life. Likewise shifting

of the kind we observe in **pólitics, political, politician** is also important. As you can see, I am suggesting that the view of phonology encapsulated in the audiolingual method is a narrow one, just as the range of methods used in teaching is a narrow one.

I think it is safe to conclude this evaluation of present methods of teaching English phonology by pointing out that much of what we do is necessary. Students must develop phonetic control of the language, and many of the methods we employ in the classroom do help them to acquire such control. But note that I have deliberately used the words *necessary* and *phonetic*. I use the word *necessary* but not in conjunction with its familiar partner *sufficient*. What we do is necessary, but I hardly think it is sufficient because our goal must be more than the phonetic one. It must be mastery of the *phonology* of English, which means that students must develop intuitions about the sound system of English in addition to the phonetic abilities achieved by mimics and parrots. I think that recent work in generative-transformational theory which focuses on English phonology holds great promise to teachers of English as a foreign language. It promises to help us to organize a lot of data which have been with us for many years, as, for example, the data in Wijk's *Rules of Pronunciation for the English Language*² and in Marchand's *The Categories and Types of Present-Day English Word Formation*.³ The next major development in teaching English phonology to non-English speakers will be in the area I have mentioned, but unfortunately as yet almost nothing exists that is of use in our classrooms.

² Axel Wijk, *Rules of Pronunciation for the English Language* (London: Oxford University Press, 1966).

³ Hans Marchand, *The Categories and Types of Present-Day English Word-Formation*, second ed. (Munich: C. H. Beck, 1969).

The Relevance of Recent Psychological Studies to TESOL *

Frederick J. Bosco

This paper considers the relevance of recent psychological studies to the teaching of English to speakers of other languages. It discusses questions of fostering positive transfer; of displaying aspects of language via enactive, iconic, and symbolic representation, and of focusing on language from the standpoint of its essential functions. The views of language proposed by linguists are formalization of a linguistic structure which can be taught most effectively through experience-grounded and goal-directed learning tasks consistent with the learner's developmental level. The student must not only acquire an understanding, either tacit or explicit, of the ways in which English sentences are constructed, but more importantly, he must actualize this knowledge into functional patterns of behavior. Development along these lines can be assisted by means of instructional tasks which are productive and informative, and which are anchored in concrete experiences.

The problem of language acquisition has been the subject of increasing examination by linguists and psychologists alike. The task of assessing the relevance of recent psycholinguistic studies to the teaching of English to speakers of other languages (TESOL) is not an easy one in view of the necessarily restricted nature of experimental work and the vastly more complex problems confronting the classroom teacher. Nevertheless, it is important to reflect upon the growing body of psychological studies in order to come to a better understanding of what is entailed in a theory of second-language instruction.

This paper considers three recurring themes in psychological theory and research which bear on the pressing problems of classroom instruction. The relevance of these themes to TESOL is discussed, and concrete examples are offered. The paper concludes with suggestions for the teaching of a given aspect of grammatical structure in the form of a schema in which there is a convergence of the multiple factors considered earlier in the discussion.

The first theme concerns the classic problem of transfer—the manner in which knowledge gained in one context is transferred to others. The student's exposure to formal language training is necessarily limited. The problem of making this limited exposure productive in situations encountered outside the classroom is critically important. The matter can be put in somewhat different terms. The language user is required to produce sentences

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in a more or less logical sequence in response to multiple demands and different social settings. The specific sentences which a speaker needs in any given situation cannot be anticipated. Instructional strategies cannot therefore limit themselves to matching specific linguistic responses to specific sets of stimuli. Rather, serious attention must be given to the "creative aspect of language use," that is, to the stimulus-free nature of language and to the virtually limitless possibilities of expression (Chomsky, 1966, 3-31). The speaker's internalized system of rules enables him to produce and understand sentences that he has not previously encountered. These new utterances are "similar to those previously produced or encountered only in that they are formed by the same grammar, the same internalized system of rules" (Chomsky and Halle, 1968, 3). The notion of transfer is therefore crucial to any theory of language acquisition. It is widely held by psychologists and educators alike that the student's understanding of the basic principles underlying a discipline is central to the problem of transfer and that transfer can be maximized by bringing out the underlying structure and generative propositions of a field of knowledge.

The second theme concerns the mode of representation of the subject matter, the way in which the subject matter is exposed to the learner. The student's perception of the critical elements of a problem is determined in large measure by the way in which the problem is displayed. Different facets of a problem are emphasized by different representations. Specific surface features of language, for example, can be displayed via iconic, or configural, representation while operations and internal relationships may require more abstract modes of representation. Cognitive theorists, particularly those of the Gestalt school, stress the importance of perception in learning, and consider the perceptual features according to which a problem is displayed to be an important condition of learning (Hilgard and Bower, 1966, 563). Therefore, a problem should be so structured that the significant features are brought into focus, and that non-significant elements are subordinated.

The third theme has to do with the establishment of experience-grounded and goal-directed learning tasks which focus on language from the standpoint of its essential functions. Language serves many purposes. It functions to maintain contact, to command, to describe, to point things out, and to express the internal feelings of a speaker; and it can itself become the focal point of discourse as, for example, in discussions of dialectal variations and grammaticality. Language programs must take into account the many concrete functions served by speech as well as the creative aspect of language use.

It is well at this point to ask precisely what the teaching of English to speakers of other languages entails. I should like to suggest that there are various tasks involved, each requiring different strategies.

I. Instruction in the language.

- A. Association of linguistic units with the cultural matrix in which they function—To initiate the process of expression, the learner requires raw material in the form of lexicon, basic sentences, and short verbal exchanges. These units must be learned in association with the cultural matrix in which they function if any degree of understanding and expression is to be achieved. The student can acquire the basic language data and associations in any number of ways, such as the imitation of models, the memorization of basic sentences and short dialogues, and the building of response patterns to verbal and situational stimuli.
- B. Internalization of the grammar of the language, the rules of competence—The student must master the rules that determine sound-meaning connections and characterize the structure of the language. Competence is achieved by way of performance. However, performance should not be blind and peripheral in its reference, but rational and motivated. Performance must be grounded on understanding if it is to build competence.
- C. Internalization of the relationships between language and its concrete functions—This task has to do with mastery of the basic functions of language for the purpose of effective operation in the language community. Communication is fundamentally directed toward the achievement of goals. It is the emphasis on communicative goals which characterizes this aspect of language instruction. Instructional strategies should treat language in all the variety of its functions.

II. Orientation into the life patterns of the members of the speech community with whom one is to deal.

Language has a social, cultural, and historical dimension. If a person is to function effectively in a speech community, he must be acquainted with the life style of the members of the community. Such an orientation includes an understanding of what the speakers consider to be important and what they talk about.

Transfer of Learning

Transfer of learning occurs when principles, skills, and patterns of experience gained in one situation are applied or transposed to new situations which share perceptual features with it. Psychologists speak of two kinds of transfer: specific and non-specific. Specific transfer refers to the application of skills from one task to another, while non-specific transfer refers not to the transfer of specific skills, but rather to the extension of general principles, methods of operation, and patterns of relationship from one situation to another. It involves the recognition that a given problem represents a specific

instance of a more general class of problems that one has already encountered. A further distinction is made between positive and negative transfer. Positive transfer is achieved when learning in one situation favorably influences learning in subsequent situations. One might expect, for example, some positive transfer from the skill of reading Italian to that of reading Spanish. Negative transfer arises when learning acquired in one context has a detrimental effect on subsequent learning. Interference phenomena in language acquisition attest to the reality of negative transfer. For example, the learner gives evidence of negative transfer when he produces the utterance "Can you tell me where does Captain Walsh live?" based on the rules underlying the question "Where does Captain Walsh live?"

There has been extensive experimental work on the problem of transfer, particularly in the area of perceptual-motor skills and verbal learning. I shall not attempt to survey the literature, but only to note certain general trends. Conditioning theorists prefer to speak of generalization or induction rather than of transfer. Skinner (1957) uses the term *induction* to refer to the tendency for stimuli with similar properties to arouse similar behavior. Transfer is explained in terms of elements in the new situation which are "identical" with elements in the original situation. Cognitive theories expect a high degree of transfer in those situations in which the essential elements and patterns of relationship inherent in the situation are open to the inspection of the learner. The gestalt concept of transposition, for example, is based on the notion that the learner transfers patterns of dynamic relationships from one situation to another. Tolman (1932), whose "purposive behaviorism" is at one and the same time gestalt and behaviorist, considers transfer the result of the carry-over of a sign-gestalt from one context to another. The animal in a maze builds up a "cognitive map" of the maze by learning the significance of signs along the route, not by the building of motor habits. Bruner (1960) suggests that the acquisition of structure, rather than the mastery of facts and techniques, is central to the problem of transfer. In his view, the unifying concepts and ideas of a subject-matter field should receive priority in curriculum development to assure form and continuity to the program. In order to foster the transfer of general concepts, Bruner favors a *spiral* curriculum. Spiraling involves designing the instructional program in such a way that the basic principles and concepts underlying the subject matter are revisited at regular intervals, each time in more elaborate and complex forms. Thus, the systems of knowledge are constantly strengthened and deepened by a repeated return to the basic concepts of the systems. This emphasis on the structure of knowledge also appears in the work of Gagné (1965), whose hierarchical model of learning encompasses signal learning, stimulus-response learning, chaining, verbal association, multiple discrimination, concept learning, principle learning, and problem solving. Stephens (1960) suggests that for transfer to be maximized the feature to be transferred should be brought into focus, that meaningful generalizations should be developed, and that a variety of experiences should be provided to develop the generalizations that are to be transferred.

The problem of establishing the conditions for effective transfer of learning in an ESOL program should not be ignored. A number of strategies can be developed to maximize positive transfer and to minimize negative transfer. Negative transfer can be reduced in the initial stages of instruction by making available to the learner a significant amount of language without recourse to translation and analysis. In this way, a wide range of expression can be developed in a "molar," or functional, manner with transfer playing a minor role. Following the initial stages, the student can be introduced systematically to the rules of sentence formation. At this point, it is imperative that the underlying rules of sentence formation be converted into patterns of experience. Another strategy to promote positive transfer is the spiraling of the instructional program to assure that the major grammatical processes and integrative patterns are revisited at regular intervals.

Specific tasks designed to promote transfer should be utilized. Such tasks can be formulated in such a way that the learner is called upon to use familiar material in a new way. Once the learner has successfully carried out a series of introductory tasks to assure familiarization with the relevant grammatical features, he is given a series of transfer tasks in which he must apply the principles to new situations. To illustrate, let us assume that the student has been introduced to the rule that frequency words like *usually*, *always*, etc., normally precede verbs like *drive*, *feel* etc., but follow *is* and other auxiliaries such as *can*, *might*, etc. To foster transfer, one might pose a series of questions which elicit meaningful responses, such as:

How do you usually feel after a hard day?

I'm usually tired.

What do you usually do when you are hungry?

I usually eat.

What do you usually do after your 9:00 class?

I usually go to the '89 for coffee.

In an experiment concerning the development of language skill via pattern drills, Oller and Obrecht (1968) conclude that the effectiveness of a drill is increased if the language of the drill is related to communicative activity. Kolers (1968) and his assistants at M.I.T. and at the Center for Cognitive Studies at Harvard have reported on the series of experiments conducted with bilingual subjects concerning the acquisition, storage, and retrieval of information. Their studies demonstrate the importance of meaning in the storage of words. The work of Oller and Obrecht, as well as that of Kolers and his assistants, suggests that for the acquisition and storage of linguistic units, an informative context is vital.

How can an informative content be maintained in language drill without obscuring the critical features of grammatical structure? The answer to this question lies in utilizing tasks of a transfer type which embody an informative and cultural content, but which are carefully designed to reinforce specific grammatical features. To illustrate, the following contexts, though thematically diverse, can prompt structurally similar sets of sentences:

Context A: Change of State



Water freezes at 0° Centigrade.
 The freezing point of water is 0° Centigrade.
 At what temperature does water freeze?
 What is the freezing point of water? etc.

Context B: Cruising Altitude

Boeing 707	cruise	30,000 to 40,000 ft.
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The Boeing 707 cruises at a typical altitude of thirty to forty thousand feet.
 The typical cruising altitude of the Boeing 707 is thirty to forty thousand feet.
 At what altitude does the Boeing 707 typically cruise?
 What is the typical cruising altitude of the Boeing 707?

Other strategies can be utilized to reinforce grammatical structures while providing meaningful choices. Freedom of expression cannot be attained unless scope is allowed for choice and for personal comment. Consider the following examples, which permit some measure of choice and comment:

I can't decide whether to go skiing this weekend or spend the time at home. What do you think?

(I think you should go skiing. It'll do you good to get away for the weekend.)

I can't decide whether to take political science or economics next semester. What do you suggest?

(I suggest that you take political science. You should learn more about the American system of government.)

In summary, the major point that has been developed in this paper thus far is that transfer depends in large measure on the perception and generalization of the principles and relationships inherent in the subject-matter field that one is studying. The discussion now turns to the question of precisely how this understanding can be developed, how the subject matter can be represented in order to assist the learner in perceiving and understanding relevant principles and relationships.

Modes of Representation

In a number of research projects under way in the instructional areas of mathematics, natural and social sciences, reading, and foreign languages, particular attention is being given to the way of thinking which characterizes the subject-matter fields. The way of thinking which underlies a discipline involves the particular set of assumptions, generative propositions, and typical problems of the special field.¹ The problem of finding ways of expressing the

¹ One such project, known as Project Literacy, coordinates research in the area of the acquisition of reading skills. The project is directed by Dr. Harry Levin of Cornell University.

ideas which are central to a discipline is sometimes referred to as the “psychology of a subject matter.” The question of the psychology of a subject matter is of great importance in instruction. Specifically, it is the question of how the underlying ideas and generative rules which give form and unity to a discipline can be represented to fit the developmental level and needs of the learner; or again, how the specialized subject fields can be converted to a form suitable to the learner.

In a paper delivered to the American Psychological Association in 1964, Bruner outlined the means or instrumentalities which lead to cognitive development. These instrumentalities are described as modes of internal representation and are called enactive, iconic, and symbolic representation. Enactive refers to psychomotor response patterns, iconic to visual images, and symbolic to logical propositions and internalized language. It is interesting to note that enactive, iconic, and symbolic representation are manifested in that order in the developing child. Bruner develops these ideas in greater detail in *Toward a Theory of Instruction*, in which he states that the “problem of finding embodiments of ideas in enactive, iconic, and symbolic modes is central to the ‘psychology of a subject matter’ ” (Bruner, 1966, 155).

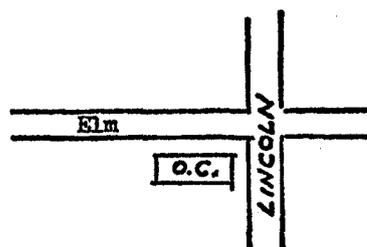
The first type of representation, enactive representation, depends on action. It is based on the learning of response patterns and forms of habituation. The following concrete example will serve to illustrate this. In making the change from a tricycle to a bicycle, a child faces a number of new problems, among which is that of keeping his balance. After several trials and some injury, the youngster generally learns to maneuver the bicycle successfully, and maintain his balance while moving forward. Should he start falling to the right, he turns the handlebars to the right in order to deflect the course of the bicycle along a curve to the right. This throws him out of balance to the left, which he counteracts by turning the handlebars to the left. He continues to maintain his balance by thus adjusting the curvature of the bicycle’s path (Polanyi, 1958, 49, 50). The child “learns” the relevant principles via experience. He feels his way to success. That is, he achieves success by following certain procedures, though he may not be explicitly aware of the procedures.

Audiolingual strategies of instruction have long stressed the importance of enactive representation. The emphasis on active practice and the building of verbal response patterns to situational and verbal cues has support from contemporary learning theories, especially of the behaviorist type. There is, however, some disagreement among theorists as to the relative merits of drill and explanation in second language instruction. It is the classic problem of “doing” versus “understanding.” While the two can be distinguished, they need not be opposed. Performance is an index of competence. It is only by observing the student’s performance that one can assess his level of understanding. The need for understanding, then, does not suggest a de-emphasizing of drill in second language instruction in favor of explanation; rather, it shows the necessity of finding types of exercises which give the student an intelligent control of the language. It leads to such questions as what types

of exercises are the most productive in language instruction, what types of exercises enable the student to achieve control of the underlying structure of the language, and what types of exercises lead to understanding.

Iconic representation has to do with perceptual organization. This mode of representation makes use of diagrammatic devices, summary images, and graphics. A thing may be represented in a nonfigurative sense, in which there is an inherent correspondence between the representation and the thing itself (Furth, 1968, 144). For example, the map of a city represents the outlay of the city; an architect's blueprint of a house represents the configuration of the house; and so on. The map and the blueprint are mediating instruments which represent the thing itself. Configurative representations can be utilized in instruction to highlight relevant semantic, syntactic, and phonological features of language. Spatial relationships, for example, can be brought out by means of line drawings:

Where is the Officer's Club?
It's at Elm and Lincoln.



Grammatical features, particularly those relating to linear order, concord, and the like, can be displayed by means of spacing, arrows, and columns. In the following illustration of question patterns, words which are grammatically similar are arranged in columns:

The Bell X-1 Research Airplane²

Designed and constructed: 1944-1946

Purpose: research on problems of transonic and supersonic flight

First piloted flight: October 14, 1947

Pilot: Captain Charles Yeager

Results of flight: demonstrated feasibility of piloted supersonic flight

Number of X-1 aircraft originality constructed: three

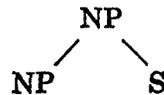
<i>wh-word</i>	<i>aux. subject</i>	<i>verb</i>	
When	did the first piloted flight	take place?	
what	did the flight	demonstrate?	
Where	can I	get	more data?
When	will we	see	the flight plans?
When	was the aircraft	designed?	
When	was the first supersonic piloted flight?		
	↓	<i>aux</i>	<i>verb</i>
	Who	was	at the controls?
	How many X-1 planes	were	constructed?

²The data are taken from E. Seckel, *Stability and Control of Airplanes and Helicopters* (New York: Academic Press, 1964), 443.

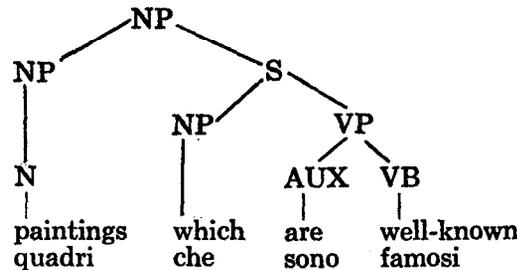
It should be noted that in the above display of question patterns, there is a continuity of theme. The understanding of a situation is important in the acquisition of a second language and critical to the proper use of the patterns.

The third mode or instrumentality is that of symbolic representation. A thing can be represented in a broad significative sense. For example, the letter *S* may be used to represent any sentence of English. Unlike the example of the map, the symbol *S* has no inherent nonfigurative correspondence with the thing for which it stands.

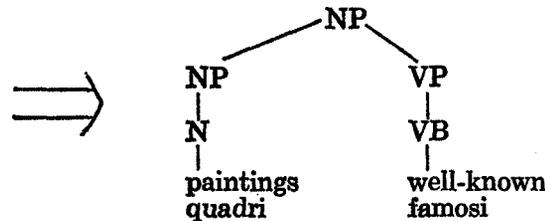
Let us examine certain aspects of relative clause structures in English and Italian via symbolic representation to demonstrate the value of this form of representation to bring out more abstract features of language structure. A relative clause is a sentence structure (S) embedded in a noun phrase (NP) to the right of another noun phrase. This may be represented as (S) in a tree diagram:



This relationship holds for both English and Italian. This tree can be developed in greater detail to include verbals (VB), which can be adjectives of verbs, and the copula auxiliary (AUX) yielding:



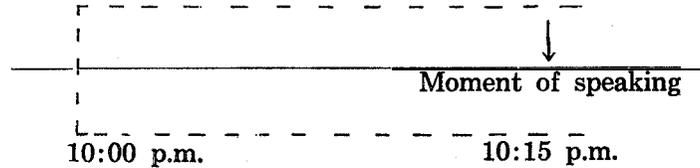
This structure can serve as the output for an English surface structure in the proper linear order. For either language, the structure can be the input for a series of transformations. Both English and Italian have a transformation that reduces the relative clause to a noun-verbal construction:



Contrasting sharply with Italian is the English requirement of a final transformation affecting the word order in the noun-verbal construction, yielding

well-known paintings. Except for a few adjectives of high frequency, this further transformation is generally blocked in Italian.

Let us consider another example of symbolic representation in which lines are used to represent time relationships.



The above representation can be used to bring out the time relationship inherent in the sentences: "How long have you been waiting for the bus?" "I've been waiting for fifteen minutes."

The neglect of any one mode of representation for the adult learner of language impedes the instructional process. Enactive representation remains the principal avenue of instruction. Nonetheless, language practice must be firmly grounded on understanding. This understanding can be mediated most directly by iconic and symbolic representation. It is essential in the teaching of English to utilize multiple embodiments of language phenomena via enactive, iconic, and symbolic representation. Furthermore, the mode of representation should be adjusted to fit the developmental level of the learner. Younger students benefit most from both enactive and iconic representation; adults require more abstract modes of representation as well as enactive and iconic representation.

Internalization of the relationship between language and its functions

The third theme concerns the establishment of meaningful, experience-grounded learning tasks which respond to the basic functions of language. Two factors are important in giving direction to learning: the establishment of goals and the utilization of learning tasks which are relevant to the goals. For a learning task to have direction, the objectives must be anticipated in some fashion. The establishment of small, meaningful communication goals for each task helps provide the learner with the needed motivation for continued exploration and learning.

There is considerable evidence to support the thesis that a knowledge of expected results promotes learning. In reporting some studies of pilot training, Fitts (1962) indicates that the understanding of flight problems via knowledge of results and appropriate cognitive expectance had a dramatic effect on promoting skill development. Tolman (1959) emphasizes that effective performance is motivated by cognitive expectancy.

It will be useful here to examine precisely what the essential functions of language are toward which instructional tasks should be directed. Communication is fundamentally directed toward the achievement of goals. Speech serves many purposes, pursues many ends. Roman Jakobson (1960) distinguishes six major functions of language: referential, emotive, conative, phatic,

poetic, and metalingual. These functions are derived from the constitutive factors involved in discourse. The speech act consists, in its essentials, of an addresser, an addressee, a contact, a message, a context, and a code. The addresser directs a message to the addressee. The message requires a context or referent to which the message refers; a linguistic code, shared by the addresser and the addressee; and a contact, a physical channel and psychological connection between the addresser and the addressee.

Jakobson views each of the six factors as accounting for a different function of language. Verbal messages, however, seldom fulfill only a single function. Each message has a set of functions and the verbal structure of the message is determined primarily by its predominant function.

The emotive function, focused on the addresser, has as its object the expression of the speaker's attitude toward what he is saying. The emotive or expressive stratum in language is represented most directly by interjections, although phonological, lexical, and other grammatical devices are utilized for expressive purposes. Such utterances as "Oh hell, the flight plans have changed—" and "Damn, it looks like rain!" exemplify the emotive function. The conative function, focused on the addressee, seeks to evoke behavior on his part. It finds its best expression in vocatives and imperatives, such as "Captain, get your crew together!" and "Call S-1 for your final orders!" The referential or "denotative" function, oriented toward the context, is the most pervasive function. It concerns the manner in which the language identifies or points to things. "This is the flight plan." and "Captain Walsh returned to New York on a TWA flight." are examples of the referential function. Certain messages serve to establish, prolong or to discontinue communication. Jakobson employs Malinowski's term *phatic* to label this function of language, focused on the contact. This set toward contact is illustrated by the expression "Hello, can you hear me?" uttered over a telephone to get attention and to check the proper functioning of the channel. Formulas spoken at the outset of a dialogue or to prolong a dialogue are profuse. The expression "Well. . . !", for example, is a common device to sustain communication. Whenever the addresser or the addressee focus their attention on the linguistic code as such, discourse performs a metalingual function. The expressions "Do you understand what I mean?" and "Will you define that term?" concern information about the lexical code of English; consequently, their function is metalingual. Finally the poetic function is a turning to the message for its own sake; that is, to the sign aspect of the message. Though the poetic function is a determining function of poetry, it enters in a subsidiary fashion in normal disclosure.

In the context of teaching English to speakers of other languages, it is imperative that the instructor focus on the relationship between linguistic structure and the multiple functions which it serves, and that instruction seek to simulate concrete communication situations in order to emphasize the functioning aspects of language. One illustration may serve to demonstrate the use of precise communication problems in instruction—problems which

are goal-oriented and which highlight the functional aspects of language. One illustration may serve to demonstrate the use of precise communication problems in instruction—problems which are goal-oriented and which highlight the functional aspects of language. The problem of how things are identified in English is posed. The student is shown a series of pictures of various types of aircraft and given the following information:

<i>Aircraft</i>	<i>Purpose</i>
Grumman AO-1 "Mohawk"	tactical observations and surveillance
Bell X-1 Research Airplane	research on transonic and supersonic flight
Sikorsky S-58 Helicopter	personnel and cargo transportation service

The student is asked to formulate statements on the model of:

This is a Grumman AO-1 Mohawk turboprop. It was designed for tactical observation and surveillance.

This is the Bell X-1 Research Airplane. It was designed for research on transonic and supersonic flight.

A Schema for Teaching a Point of Grammar

To recapitulate, I have suggested that instructional strategists concern themselves with the problem of maximizing positive transfer, of representing language in all its modes, and of stressing the purposive character of language behavior. In considering the design of an instructional program which is sensitive to these aims, I should like to propose the following schema for the teaching of a given point of language structure. The process can be mapped out in successive stages, beginning with the initial presentation of a point and concluding with its mapping into a cohesive system.

As the first stage unfolds, the syntactic pattern is brought into focus by means of contrasting examples, syntactic analogies, problem solving, explanations, and so on. Through such devices, the learner is made aware of the critical features of the pattern—semantic, syntactic, and phonological. Emphasis throughout is on the *critical* features.

The critical features of a problem are those which identify it and serve to distinguish it from other problems. Since the learner is already in possession of complex skills, "critical" applies primarily to those aspects of a new skill which are different from, or in contrast to, the total set of skill-features already in his possession. It would be inefficient to concentrate learning efforts on those features of a skill which are not critical, that is, those which do not contrast in some way with the learner's already existing total set of skill-features. For example, a person who can ride a bicycle and who is learning to drive a car does not need to be told that the direction of the car must be guided, that he must apply the brakes if he is to stop, and that he must stop when there is an obstacle in his direct line of travel, or that he must watch where he is heading. All these features have been acquired in the skill of bicycle riding. For the bicycle rider, the contrasting or critical features of driving a car are steering with a wheel instead of with handlebars, controlling a great deal more power and potential speed, and so on.

Stage	Purpose	Typical Procedure
1. Focusing on the linguistic feature in question and developing appropriate generalizations	-to develop an awareness of the problem -to develop an understanding of underlying principles	-Iconic and symbolic representation (syntactic analogies and contrast, problem solving, etc.)
2. Guiding language performance	-to familiarize the learner with relevant lexicon, sound units, etc. -to crystallize psychomotor response patterns -to guide the internalization of the rules of the language	-Enactive representation (dialogue development pattern drills, etc.)
3. Developing communicative skill	-to train the learner to function in diverse communicative situations -to convert abstract principles into patterns of experience	-Enactive, iconic, and symbolic representation (transfer-type tasks, role-playing, specific communication problems, etc.)
4. Relating the point to previously taught points	-to map out the relevant systems of the language and to show interrelationships -to develop the basis for evaluation of performance -to give cohesiveness to the program via general orientation schemas -to develop more generalized patterns of experience	-Iconic, symbolic, and enactive representation ("testing" procedures which develop the learner's ability to handle a variety of communication problems, etc.)

The second stage in the instructional schema is concerned with the shaping of psychomotor responses via the imitation of fixed models and other restricted language experiences. The major instrumentality used at this stage is that of enactive representation, that is, the habituation of motor response patterns and the shaping of "grooves of expression." The student is trained to seek out the relevant mechanisms, to respond to them, and to use them accurately and consistently.

The third stage highlights the communicative aspects of the point in question. It involves the simulation of concrete communication situations and the articulation of precise functional goals toward which the learner is oriented. Emphasis at this level of instruction is not on the molecular char-

acter of the structure, but rather on its “molar” or “functional” aspects. There is an increasing internalization of the point in question as the learner begins to experience the multiple possibilities of the language structure to meet his specific communication needs.

In the fourth stage, the syntactic pattern is related to points which have been taken up previously. There is an enlargement of focus from specific, restricted points (molecular perceptions) to more comprehensive, integrating patterns (molar perceptions). The learner is confronted with schemas with a more general orientation which serve as a guide in subsequent performance. Thus a piecemeal approach to language structure is avoided in favor of one which stresses the integrative and generative aspects of language. This final stage assures the learner of a constantly more comprehensive understanding of the ways in which sentences are built.

The model outlined above is recursive in nature in that each point reappears regularly in contrast to other points. The first and fourth stages are designed to develop cognitive awareness of the point in question. The fourth stage is expressly designed to provide cognitive feedback. The third stage stresses divergent solutions to problems; that is, the learner is put in the position of creating novel sentences according to the demands of the situation and his own intentions. In essence, every point is embedded in every other point to assure spiraling and unity.

Instruction at its best has a quality of reciprocity, involving a response to the learner and his situation and the participation in a common enterprise toward clearly established objectives. Tasks of a routine nature stifle curiosity and the will to learn. Instruction is vitalized not simply by involving the student in activity or relating everything to the familiar; but rather, by initiating the process of dialogue. The language classroom should be a place in which there is genuine concern for expression and dialogue. Bruner (1966) underlines the importance of reciprocity in the following passage:

I would like to suggest that what the teacher must be, to be an effective competence model, is a day-to-day working model with whom to interact. It is not so much that the teacher provides a model to *imitate*. Rather, it is that the teacher can become a part of the student's internal dialogue—somebody whose respect he wants, someone whose standards he wishes to make his own. It is like becoming a speaker of a language one shares with somebody. The language of that interaction becomes a part of oneself, and the standards of style and clarity that one adopts for that interaction become a part of one's own standards (124).

In short, what I have suggested throughout this paper is that the student has to know what he is doing at every stage in the instructional process and that he has to imagine that what he is doing is worth doing. Furthermore, the learner must be regarded as a center of consciousness and feeling, and not as a machine to be programmed.

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Summary and Discussion

The information in the preceding six papers is indicative of the present state of affairs in TESOL. While the points of view sometimes differ, the general conclusions are similar: we are still looking for answers to crucial questions regarding the nature of language; this, in turn, indicates that we do not have all of the answers to questions about how to teach language.

Anthony's paper is a clear statement of the "traditional" structural approach toward linguistic analysis and the behavioristic attitude toward language learning. At the outset he makes it very clear that his is "one way among many to look at language." His paper provides a good introduction to those that follow because it represents the widely held view of language acquisition as a matter of habit formation. Language teaching which developed from this view of language is the oral approach or the audiolingual approach. Anthony discusses contrastive analysis and its relation to problems of interference. He points out that, although an abundance of teaching materials has been produced in the areas of phonology and grammar, much remains to be done in the lexical or semantic aspect of language.

Norris' paper is probably the most practical of the six and could well serve as a model for future papers which might treat other aspects of language: composition, grammar, and so forth. Norris describes in detail what is involved in teaching reading at the advanced level from the theoretical point of view, then proceeds to cite actual textbook examples of the way in which the theory is implemented in the classroom. The result is an extremely useful presentation of the teaching of reading, a subject which is of untold importance to all learners of English as a second language.

The next three papers—those of Campbell, Di Pietro, and Wardhaugh—complement each other. All three deal in some way with the concept of competence and performance as set forth in the transformational-generative theory of language, but each writer approaches this idea differently. Campbell is concerned with competence and performance as it relates to the teaching of grammar, Wardhaugh as it concerns the teaching of phonology, and Di Pietro as it is implemented pedagogically—especially in the preparation of effective teaching materials. The ideas set forth in these papers are exciting, and they cry out for trial.

The last paper, that of Bosco, discusses recent psychological theories and their relevance to the preparation of language-teaching materials and to classroom pedagogy. He, like Campbell uses the teaching of grammar as an example of the application of his theoretical discussion to the teaching situation. His attempts are also an exhortation to new and exciting ways of presenting language to language learners.

Reading these papers, one is impressed by the broad scope of the six relatively short articles. One is also impressed by the convergence of

ideas which could perhaps be stated somewhat like this: We need to base teaching materials upon a sound linguistic theory, but we must never lose sight of the individual in developing such materials. Since linguistic theory is not as yet stabilized, we must do the best we can with what has already been set forth by linguists.

One notices a change in emphasis in these pages from that of former years. The treatment of contrastive analysis has shifted from what was observable surface structure to greater emphasis upon deep structure contrasts, reflecting, perhaps, the linguists' interest in language universals. The heralding of the audiolingual drill is less loud. As Campbell points out, drills are necessary: "The rules should be applied in much the same way that is characteristic of pattern practice techniques"; but these drills are conceived of as an aid to developing the kind of language competence that the native speaker has. Thus, materials need very careful sequencing and structuring. Di Pietro warns against teaching "unrelated bits and pieces."

Bosco echoes the ultimate concern evident in all of the papers with how students gain competence in language: ". . . the student has to know what he is doing at every stage of the instructional process. . . . He has to imagine that what he is doing is worth doing. Furthermore, the learner must be regarded as a center of consciousness and feeling, and not as a machine to be programmed."

Each of the writers agrees that much work still has to be done in adapting current linguistic knowledge to teaching materials. This is true at the semantic level, as Anthony points out; it is also true in phonology, as Wardhaugh says. Campbell states the problem well: ". . . future progress in the teaching of English as a second language will depend largely upon the success grammarians and linguists have in further explicating the rules of English (and other languages), and upon the success language teachers and textbook writers have in reducing those rules to meaningful explanations for learners of foreign languages."

It is abundantly clear from these papers that new ideas of what language is and how it is learned are opening up new avenues of thought. These ideas must be reflected in new kinds of teaching materials. While we are waiting for a thorough and complete statement of English grammar, those in the TESOL profession should be encouraged to experiment with new ideas, using suggestions such as those made in the six papers published here.

BWR

ERIC-TESOL Documents

The following are TESOL documents which have been selected from those processed by the ERIC Clearinghouse for Linguistics and entered in the ERIC system. Articles from *TESOL Quarterly* or materials which have been reviewed in *TESOL Quarterly* have been omitted.

Where indicated, hard copies (HC) and microfiche (MF) of the full text are available through the ERIC Document Reproduction Service, The National Cash Register Company, 4936 Fairmont Avenue, Bethesda, Maryland, 20014. Copies of documents must be ordered by the individual ED numbers. Prices are given for microfiche (MF) and hard copy (HC). Payment must accompany orders totaling less than \$5.00. For orders totaling less than \$3.00, add \$.50 for handling. In the U.S. add sales tax as applicable. Foreign orders must be accompanied by a 25 per cent service charge, calculated to the nearest cent.

ED 030 091 *Motivating Students for Second-Language and Second-Dialect Learning*. Charlotte E. Brooks. Paper presented at the Third Annual TESOL Convention, Chicago, Illinois. 14p. Mar 1969. MF-\$0.25 HC-\$0.80.

Natural and honest ways must be found to motivate disadvantaged students for second dialect and second language learning. Young children, actors, and foreigners seem to learn new dialects and languages easily because they have a strong motivation as a part of their environments. In order to motivate students, we must take into consideration the two functions of language—revelation of self and communication. Any motivation used with these learners must consider them as human beings who have already learned a first language that is a part of them, that defines them and communicates for them. Teachers need to be motivated to accept their students' first language or dialect, in both its verbal and non-verbal manifestations, and to expect success in learning another language or dialect. Once the teacher has communicated this acceptance and expectation to his students, he is ready to move on to specific varieties of motivation. The methods chosen must involve honesty on the part of the teacher and an attempt to recognize the students' culture. One suggestion is to present poetry and stories from the learner's language or dialect in such a way that the learner feels that the dominant community and the teacher want to learn about him. Then the learner is willing to accept and learn poems and stories in English or the standard dialect.

ED 030 095 *Whatever Happened to the Way Kids Talk?* Roger W. Shuy. Paper presented at the National Conference on the Language Arts, Philadelphia, Pennsylvania. 19p. Apr. 1969. MF-\$0.25 HC-\$1.05.

Language arts teaching is supposed to be based on the principle of starting where the child is and communicating to him through channels which he has at that point, in language which is familiar to him, and with illustrative concepts with which he is familiar. Beginning materials in this area, however, have made only minor strides to this goal and these strides are not yet based on a theory of the relationship between oral and written language. As a partial solution to this problem: (1) Textbook writers should provide beginning reading materials which use the syntax of the child's oral language

and avoid ambiguity and rapid shifts in tense or viewpoint. (2) Teachers should recognize a hierarchy of importance in children's reading and speaking errors. The child's errors in learning standard English should not be confused with his errors in learning to read. (3) Administrators should assess the classroom teaching situation to decide if the schools are putting restrictions on the normal use of oral language. They should also devote greater attention to matters of content in the curriculum. (4) Researchers should study the process of acquiring standard English. A "new language arts" is needed—one coordinated with a complete overhaul in the objectives of education. It will put considerable emphasis on self-instruction it will stress the innate abilities of its students; it will be problem oriented; and it will encourage self-knowledge.

ED 030 115 *Teaching English to Speakers of Other Languages, United States Activities: 1968*. Dorothy A. Pedtke, ed. 19p. Apr 1969. MF-\$0.25 HC-\$1.05.

This report, prepared by the English for Speakers of Other Languages Program of the Center for Applied Linguistics for the Tenth Annual International Conference on Second Language Problems, summarizes a number of United States activities in/or related to the teaching of English to speakers of other languages. The report covers roughly the year 1968; all of the programs reported are new or show significant developments during this period. While the report is not exhaustive, it provides information on the broad range of current involvements in the field. Contents are listed under (A) General Activities; (B) English Language Teaching and Teacher Training Overseas; (C) English Language Teaching and Teacher Training in the United States; and (D) Materials Development and Testing. Information was gathered from a variety of sources: reports from federal, state and city government agencies, universities, foundations, and other private organizations; articles and notices in newsletters and professional journals; brochures; and personal contact. The source of additional information on a project appears after each entry, and organization addressee are listed on the last page of the report. See reports for 1966 (ED 012 465, abstracted in *TESOL Quarterly*, September 1966) and 1967 (ED 018 788, abstracted in *TESOL Quarterly*, December 1968).

ED 030 119 *Teaching English to Speakers of Other Languages: The State of the Art*. Ronald Wardhaugh. 26p. Aug 1969. MF-\$0.25 HC-\$1.40.

This document has been commissioned by the ERIC Clearinghouse for Linguistics to provide an overview of resources, methodologies, and activities in the field of teaching English to speakers of other languages. The author points out the contributions made by various approaches to language teaching and the new insights into language arrived at by different schools of linguistic thought. He also stresses the need for greater research on many levels. His introductory review of the field of TESOL in the last twenty years is followed by: a list of historical reference materials; major bibliographic sources of information on teaching materials, texts, and articles on English language teaching; and a selected list of elementary, secondary, and adult level texts "which have been found to be useful by teachers." The second section of the paper, "Linguistics and Language Teaching," discusses in some detail the relationships between sets of model sentences in the light of transformational generative grammar. Following sections discuss "Psychology and Language Teaching," "Language Teaching Pedagogy: Linguistics, Psychology, and Pedagogy," "Teacher Training," and "Teaching a Second Dialect." Each section contains or is followed by references to materials of particular interest to the classroom teacher.

ED 030 122 *Curriculum Guide for Teachers of English in Kindergartens for Navajo Children*. Muriel R. Saville. 58p. July 1969. MF-\$0.50 HC-\$3.00.

In September 1969 the Bureau of Indian Affairs instituted a bilingual-bicultural kindergarten program on the Navajo Reservation. A major aim of the program is to develop and implement a curriculum in which Navajo is the primary medium of instruction and English is taught as a second language. While the teaching of English is only one part of the total kindergarten curriculum, it is a part upon which future school achievement and social mobility largely depend. This preliminary guide outlines the distinctive sounds of English which need to be mastered, the basic sentence patterns of the language, and a vocabulary sufficient for classroom procedures and beginning reading texts. The content and ordering of the language lessons are based on a contrastive analysis of Navajo and English, which allows the prediction and description of problems the speakers of one will have in learning the other. This curriculum outline will be the basis of forthcoming teaching materials being prepared by the author.

ED 030 845 *Advanced English; Lessons in Grammar*. Joe Darwin Palmer. 189p. June 1968. MF-\$0.75 HC-\$9.55.

This grammar text was prepared especially for advanced students of English in the Somali Republic. The material consists for the most part of explanations and exercises in English generative-transformational grammar. Chapters treat the following aspects of English grammar: (1) the phrase structure of simple sentences; (2) the English noun phrase; (3) relative clauses; (4) nominalizations and modification; (5) verb inflection, pronunciation and spelling; and (6) the English verb phrase formatives. An introductory section explains and reviews elementary grammatical terminology. All material in the text appears in English only.

ED 030 848 *The Measurement and Evaluation of Language Instruction*. Stuart M. Shaffer. Paper given at the Third Annual TESOL Convention, Chicago, Illinois. 13p. Mar 1969. MF-\$0.25 HC-\$0.75.

Developing test instruments for the Pattern Drills Program in the Pittsburgh Public Schools has convinced the writer that the more test development activities and the teaching process reinforce each other, the stronger the program is. The Pattern Drills Program aims to develop bidialectism in non-standard English speakers by teaching standard English as a foreign language. The Drills reinforce and provide for "eventual automatic control of the standard pattern" by substitution practice. The contemporary psychophysics approach, described by Galanter in 1962 in terms of "detection," "recognition," "discrimination," and "scaling," can be used in testing for language development or for teaching language development. One reason for failure in teaching "correct standard English" is inappropriate measures. If a child cannot speak standard English at the appropriate time, we need to know whether it is because he cannot hear the difference, cannot mimic the difference, does not know the difference between different situations, or whether, although he has acquired all these "components," he just cannot combine them. Knowledge of this information would definitely have an effect on how we teach.

ED 030 864 *Cumulative Language Deficit Among Indian Children*. Norma I. Mickelson and Charles G. Galloway. Paper presented at the Seventh Canadian Conference on Educational Research, Victoria, British Columbia, Canada. 7p. Jan 1969. MF-\$0.25 HC-\$0.45.

The present language study, carried out by the University of Victoria and the Department of Indian Affairs during the summer of 1968, was based on the Deutsch "cumulative deficit hypothesis." (This theory has as one of its bases the idea that the lack of appropriate language stimulation in early home and school life makes success in school activities progressively more difficult with age.) A four-week pre-kindergarten, pre-school, and orientation enrichment program for Indian children living on four reserves in the southern region of Vancouver Island was taught by two faculty members from the University of Victoria, an American with experience in Head-Start programs, and six teen-aged Indian girls as teaching aides. The children enrolled demonstrated characteristics "common to the disadvantaged child and simultaneously to Canadian Indian children currently living on reserves." Attention was focussed on language development within the framework of a "total verbal-immersion" approach. A model of pre-school education based on Ellis' 1967 model was used. The data presented in this study "suggest that language deficiencies tend to remain in the verbal repertoire of the child." The data "also support the hypothesis that these phenomena can be corrected." Available from Canadian Council for Research in Education, 265 Elgin St., Ottawa, 4, Canada (Single copy \$0.15, two copies \$0.25, ten or more \$0.10 each. Payable in advance).

ED 030 876 *Las Escuelas Bilingues: The Peruvian Experience (Bilingual Schools: The Peruvian Experience)*. Christine Bratt Paulston. Paper presented at the Third Annual TESOL Convention, Chicago, Illinois. 14p. Mar 1969. MF-\$0.25 HC-\$0.80.

The Summer Institute of Linguistics runs several bilingual schools in the Andean and Amazonian regions of Peru. These are the only public bilingual schools in the country serving the Indian population, a majority of whom do not speak Spanish as their first language. Although public education is now available to some 80 percent of all children, the school completion rates in rural, monolingual-Spanish schools are less than ten percent. In the Summer Institute of Linguistics schools, the teacher is always bilingual and of the same tribe or region. Typically, the student first learns to read in his native language while studying Spanish orally. After learning to read Spanish as well, the student transfers to the second grade of a monolingual-Spanish school. Evaluation of the efficiency of bilingual schools depends on the criteria used (religious, political, social) and the evaluators (missionaries, government officials, teachers). Objective evaluation is also hampered by the lack of local or national statistics. Preliminary findings based on the achievement of children from bilingual schools transferring to monolingual schools indicates that they have a higher rate of achievement. The author concludes that foreign language learning and second language learning may be much more dissimilar psychological experiences than we have previously supposed them to be. Further interdisciplinary research and cooperation is essential.

ED 030 877 *Interrelatedness of Certain Deviant Grammatical Structures in Negro Nonstandard Dialects*. Riley B. Smith. Revised version of a paper read at the annual meeting of the American Dialect Society, December 28, 1968, New York City. 7p. Mar 1969. (Document not available from EDRS.)

The phenomenon of "cross-code ambiguity" is offered as one explanation of the persistence of such Negro Nonstandard English (NNE) sentences as "The man he did it." In NNE the string "The man did it" is felt to be ambiguous, referring to either "The man who did it . . ." or, as in Standard English (SE), "The man did it." The use here of the pleonastic subject pronoun "he"

removes the ambiguity by marking the non-relativization of the following verb phrase, a function stabilized by the regular deletion of the relative pronoun in this dialect. This process is analogous to the process in SE whereby the ambiguous string "I see the men do it" (either "I see they do it" or "I see them do it") is made unambiguous by using or deleting the clause marker "that" ("I see that the men do it"). Similarly, "It was a man under the bed" is ambiguous in NNE, reflecting the SE equivalents "There was a man under the bed" and "It was a man under the bed (who + VP)". It is important, therefore, for English teachers to realize that some of their cross-dialect communication problems with NNE speakers are due to ignorance of ambiguous structures in the unfamiliar dialect. Available from *Journal of English Linguistics*, Western Washington State College, Bellingham, Washington, 98225 (\$3.00 single issue).

ED 030 878 *The Relevance of Linguistics?* H. A. Gleason, Jr. *The English Quarterly*; v2 n2 p7-13 June 1969. Paper presented at the Ontario Council of Teacher of English Convention, Toronto, March 17, 1969. 7p. Jun 1969. (Document not available from EDRS.)

One of the central and defining features of man is language; there can be no deep understanding of man without some understanding of language. Linguistics is the "orderly examination of language in terms appropriate to itself." The central task of linguistics is grammar, the study of the patterning that brings together sounds or symbols with meanings. Such notions as "grammar is a simple closed system," "there are no open questions," or "grammar is simply an unorganized set of rules from which a curriculum planner can choose at will what he will teach" form a mould into which any kind of grammar can be forced. The same stultifying anti-intellectualism that has ruined traditional grammar is at work on its competitors. The best of the new "linguistic textbooks" can be used profitably; the worst are menaces. But ultimately it is not the textbook that counts. The students must be helped to look deeply at language, learn what to look for, and how to interpret what they find. Above all, they must look on language as patterning, interrelated, interacting, and intricate. Disciplined attention to language should begin near the start of schooling with children who are in, or have just emerged from, their greatest adventure with language—the learning of their mother tongue. Available from Canadian Council of Teachers of English, Miss Jennie Wilson, Secretary-Treasurer, 441 Covert St., Oromocto, New Brunswick, Canada (\$2.00 single copy, \$5.00 annual membership includes subscription).

ED 030 879 *Language: The Great Barrier.* Keith S. McKenzie. *The English Quarterly*; v2 n2 p37-42. 6p. Jun 1969. (Document not available from EDRS.)

The author comments on the lack of sufficient interest in the education of Indians and Eskimos in Canada. Although he feels that the process of the acculturation of the Indian into white society is "ongoing, irreversible, and destined to continue no matter what anyone desires," it is "neither the task nor the prerogative of the dominant society to force its value systems upon the minority groups." The minority groups should be able to function effectively within the context of the larger society without being forced to abandon their own cultural identity. According to the Department of Indian Affairs of Canada, almost 60 percent of the Indian children entering schools in Canada lack fluency in English. The remaining 40 percent are generally below the white school beginners. The Indian children have a higher medial age in every grade, a clustering of pupils in the lower grades, and a "marked

thinning out" in the higher grades. Educators seem to agree that lack of competency in English is the main problem. From programs underway in the United States, two significant and relevant facts emerge: (1) it has been established that Indian children will benefit from pre-school language instruction and (2) an aural-oral linguistic program presented in a sequential fashion from kindergarten to Grade 6 can provide competence in English necessary for greater academic success. Available from Canadian Council of Teachers of English, Miss Jennie Wilson, Secretary-Treasurer, 441 Covert St., Oromocto, New Brunswick, Canada (\$2.00 single copy, \$5.00 annual membership includes subscription).

ED 030 660 *Criteria for the Selection of ESOL Materials*. Harvey Nadler. Paper presented at the Third Annual TESOL Convention, Chicago, Illinois. 14p. Mar 1969. MF-\$0.25 HC-\$0.60.

The author discusses the criteria to be considered in evaluating textbooks for classes of English for Speakers of Other Languages (ESOL). They are: (1) the age and proficiency level of the students; (2) the amount of time allotted for ESOL classes; (3) the treatment of the four language skills and all subject areas; (4) gradation and presentation of grammar, vocabulary and reading, pronunciation, and visual aids; and (5) the amount of practice drills provided. He warns that "the textbook that deals with form, syntax, and function without treating meaning fails both the student and the teacher." He concludes that any textbook is only as good as the teacher using it.

ED 031 689 *On Teaching the Disciplines to Disadvantaged Mexican-Americans: A Linguistic Approach*. Alanso M. Perales and Lester B. Howard. 6p.; Paper given at the Third Annual TESOL Convention, Chicago, Illinois, March 5-8. 1969. MF-\$0.25 HC-\$0.40.

Traditional teaching methodology and materials are founded on the premise that all U.S. born citizens speak English as the mother tongue. Precedence is given to the development of reading and writing at an early level. The disadvantaged Mexican-American lacks the necessary linguistic experiences in the English language to assure him success in school—evidenced by the large number of dropouts among this group. Most teachers have been accustomed to "insight building," which has been developed in the child at home through a healthy adult-child interaction. This approach is not applicable to the disadvantaged pupil coming from a home where there is "limited verbal orientation." Because disciplines such as the social studies, science, and mathematics are traditionally taught through the lecture method with the teacher doing most of the talking, the disadvantaged Mexican-American child is not involved in oral English communication at all. These students need to achieve as much course content as their counterparts, and at the same time overcome their linguistic obstacles so as to be able to compete on all levels of education. The content materials of these courses may be structured to utilize a variety of audiolingual techniques providing maximum opportunities for verbalization. The "Inquiry Approach" for a fourth grade science lesson is illustrated.

ED 031 690 *Community Involvement in the Bi-Lingual Center*. Natalie Picchiotti. 5p; Paper given at the Third Annual TESOL Convention, Chicago, Illinois, March 5-6. 1969. MF-\$0.25 HC-\$0.35.

A bilingual elementary school for Spanish-speaking children in Chicago, Lafayette Center, is described in this paper. The primary concern of the Center has been parent involvement, with home visits to the parents by school

community representatives before and after enrollment and an Open House in December. This function was well attended by community leaders and other officials, but not particularly by parents, partly, it was felt, because the parents are happy with the Program and do not feel the need to come to the school, and partly because of the expensive public transportation in Chicago. The Puerto Rican community, in which the Center is located, is enthusiastic about the Program. The Mexican community while approving the Program, resents that a second center was not opened in their community. Both resent the fact that the Program is limited to the poor; all the children who need it are not included. The non-Spanish-speaking community of European background is, to varying degrees, "indifferent, resentful, or hostile," because bilingual centers had not been provided for their parents or grandparents, who were under pressure to acculturate. There must be, the author stresses, a total community acceptance of a new approach to the education of our Spanish-speaking students and a recognition of their community rights concerning their children's education.

ED 031 700 *Conversational English*. Thomas H. Brown and Karl C. Sandberg. 333p. 1969. (Document not available from EDRS.)

This text, an intensive course in oral American English, is intended especially for those foreign students attending American universities who may read well and have a good grasp of grammar but still need more oral practice. Each of the 20 lessons, designed for the classroom, contains a short dialog centered around everyday situations which foreign students will encounter many times. Structural items introduced in the dialogs are practiced in a variety of graded pattern drills, followed by question-answer exercises, controlled conversation, and "free situations." Occasional notes on American culture appear throughout. Pronunciation and intonation guides are provided in the beginning lessons; controlled composition exercises are introduced in Lesson 12. A special feature of the volume is the description of the sound system of American English which appears in the Appendix. Tape recordings of the exercises accompany the text. Available from Blaisdell Publishing Company, Division of Ginn and Company, 275 Wyman Street, Waltham, Massachusetts, 02154.

ED 031 701 *Attitudinal Aspects of Second Language Learning*. Bernard Spolsky. 27p.; Paper read to the Psychology of Second Language Learning Section of the Second International Congress of Applied Linguistics, Cambridge, England, September 8-12. September 1969. MF-\$0.25 HC-\$1.45.

The author feels that this study reaffirms the importance of attitude as one of the factors explaining the degree of proficiency a student achieves in learning a second language. Four groups of students representing 80 countries were administered (1) a direct questionnaire on which they were asked to rate the importance of 14 possible reasons for their having come to the United States and (2) an indirect questionnaire consisting of four lists of 30 adjectives such as "busy" and "sincere." Each student was asked to say how well he thought each adjective described him, how well it described the way he'd like to be, how well it described people whose native language was the same as his, and how well it described native speakers of English. For each student, the score on an English proficiency test was known. Using the criterion of the direct questionnaire, no more than 20% of the students could be considered integratively motivated; and there was no significant correlation between this motivation and proficiency. The indirect questionnaire showed a third of the students to be classifiable as considering speakers of English to be a more

desirable reference group. The correlation of various parts of the indirect questionnaire with English proficiency was also examined to explore in detail what the nature of integrative motivation might be.

ED 031 702 *Reduced Redundancy as a Language Testing Tool*. Bernard Spolsky. 17p.; Paper read to the Language Testing Section of the Second International Congress of Applied Linguistics, Cambridge, England, September 8-12. September 1969. MF-\$0.25 HC-\$0.95.

Redundancy in language reduces the possibility of error and permits communication where there is interference in the communicating channel. The relationship between creativity (the basic distinction between language-like behavior and knowing a language) and redundancy has been clearly established. Knowledge of rules is the key factor in creativity and is also the principal factor in the understanding of messages with reduced redundancy. In this paper the author discusses the three techniques that have been employed to test a subject's ability to function with a second language when noise is added or when portions of a test are masked. They are the cloze, clozentropy, and the noise tests. In the cloze test, portions of a written or oral test are blanked out and the subject is called on to provide the missing word or words. The clozentropy procedure measures a subject's performance in terms of a group norm. Thus, foreign students are scored according to the extent to which their responses agree with the normal responses of native speakers. The noise test originally consisted of a number of sentences to which noise had been added at signal to noise ratios of 1, 4, 7, 10, and 50 decibels. Recently, a multiple choice version has been prepared. The author feels that these practical studies have shown the value of language testing techniques based on redundancy.

ED 031 704 *Language, Thought and Memory in Linguistic Performance, A Thought View*. Robert Lado. 17p.; Paper given at the Third Annual TESOL Convention, Chicago, Illinois, March 5-8. March 1969. MF-\$0.25 HC-\$0.95.

The contrasting views of Saussure and Bloomfield ("mentalistic" versus "mechanistic"), the hypotheses of Whorf showing the influence of language on certain habits of thought, and Chomsky's notion of generative transformational grammar in the context of language use are reviewed. The author notes the limits of these systems and suggests that in dealing with linguistic performance, time and speed, length and memory, and non-linguistic thought (five factors which Chomsky does not deal with) are involved and relevant. He posits the following hypotheses that go beyond Chomsky's view of competence: (1) Thought and language are distinct, and both are involved in performance. (2) Thought is central and language is a symbolic system that refers incompletely to it. (3) Immediate memory works with utterances and texts; longer term memory works with thought. (4) If (3), then translation will show greater interference across languages than delayed recall. (5) If relating thought and language simultaneously at normal speed and under normal thought density constitutes performance, then exercises that involve such performance should increase learning and motivation in foreign language teaching. This tentative "thought" view is presented in its present form in the hope that it will be "stimulating and thought provoking."

ED 031 707 *Non-Standard Speech and the Teaching of English*. Language Information Series, 2. William A. Stewart, Ed. 37p. 1964. MF-\$0.25 HC-\$1.95.

This document brings together three papers dealing with the teaching of standard English to speakers of substandard varieties of the language, as

well as of English-based pidgins or creoles. The first two papers are by linguists. The essay "Foreign Language Teaching Methods in Quasi-Foreign Language Situations" by William A. Stewart is intended to serve as a general introduction to the problem. "Non-Standard Negro Speech in Chicago" by Lee A. Pederson is a summary of a partial study in depth of the Chicago situation and supplies a more detailed illustration of one specific case. The last paper, "Some Approaches to Teaching English as a Second Language," is by an English teacher, Charlotte K. Brooks. Her practical concern with the teacher's attitudes toward non-standard speech and its users becomes especially meaningful once the linguistic aspects of the situation are understood. What is especially noteworthy, however, is that all three papers express the same basic conclusion as to what should be done. Number 1 of the Language Information Series, *Second Language Learning as a Factor in National Development in Asia, Africa, and Latin America*, dates from 1961 and is available from the Publications Section of the Center for Applied Linguistics, 1717 Massachusetts Avenue, NW, Washington, D.C. 20036, for \$0.50.

ED 031 708 *Some Aspects of the Teaching of English in Viet Nam*. Le Van Diem, 10p.; Paper presented at the Regional Seminar of the SEAMEC Regional English Language Centre, Singapore, June 9-14. June 1969. MF-\$0.25 HC-\$0.60.

In regard to the teaching of English, which is replacing French as a foreign language, Viet Nam presents some unique aspects and some individual problems. More secondary school students are selecting English as their foreign language choice; English departments in the universities are expanding rapidly; the teacher shortage is increasing. One result is a large number of "improvised" secondary school teachers who teach by the grammar-translation method. Their students, upon reaching university level, have problems in comprehension, conversation, and writing. In one effort to remedy this situation, the University of Cantho selects native-speaking English teachers from various English-speaking countries and uses English as the medium of exchange, exclusively. All aspects of the program of English studies are linguistically oriented. Skills in reading and comprehension, vocabulary and writing are carried over from the spoken lessons—students learn, for example, that punctuation is a representation of the factors of stress, intonation, and juncture. Senior students receive courses in descriptive linguistics and literature. In addition to the language, the students learn about the various cultures of their English teachers. The author feels that social environment can be created around schools as an appendant to the classroom, library, and laboratory.

ED 032 517 *ESOL and the Adult Learner*. Timothy F. Regan. 7p.; Paper given at the Third Annual TESOL Convention, Chicago, Illinois, March 5-8. March 1969. MF-\$0.25 HC-\$0.45.

Problems of adult basic education in the United States, symptomatic of the connection between poverty, poor education, and unemployment, have forged for the disadvantaged adult most of the links in the unbreakable chain of deprivation, frustration, and despair. The problem of ESOL (English for Speakers of Other Languages) instruction is complicated by the changing relationship between education and the ability to obtain employment. The treatment of the Mexican-American particularly, in trying to achieve acculturation rather than assimilation, has resulted in the wholesale dropout

of two generations of students, now adults, who must be molded into functioning members of society. Compared to children, adults have a much larger native language vocabulary and have already developed abstract concepts in their first language. Also, if they are literate in their own language, they can usually make conscious and deliberate use of grammatical generalizations and apply them to new language experiences. Because of these two factors, the following features of the audiolingual method represent a conflict of learning theory and are pedagogically inappropriate for the adult education student in ESOL: (1) dialog-centered lessons; (2) inductive learning of grammatical patterns; (3) avoidance of the native language; (4) withholding the written form; and (5) natural speed of presentation.

ED 032 514 *The ADD Test—Auditory Discrimination in Depth*. Charles H. Lindamood. 5p.; Paper given at the Third Annual TESOL Convention, Chicago, Illinois. March 1969. MF-\$0.25 HC-\$0.35.

The ADD (Auditory Discrimination in Depth) Test measures the auditory perceptions basic to grasping the logic of the English writing and reading system. If the level of a subject's auditory perception—his ability to discriminate the phonemes of English and his ability to code phonemic sequences in both non-syllabic and syllabic units—can be determined, it can be estimated how much developmental work is going to be needed before the writing and reading task will become comprehensible to him. The ADD Test gives both diagnostic and prognostic information in this respect. This requires the subject to manipulate colored blocks to indicate his perception of the relationships of sounds in oral patterns. The three categories involved are designed to check the ability to (1) discriminate isolated phonemes in sequence; (2) perceive phonemic relationships in a simple protected syllable; and (3) perceive phonemic relationships in complex syllables. Informal norms suggest that if auditory perceptual judgement is functioning, four-year-olds can handle Category I, first- and second-graders can handle Categories II and III. Difficulty with Category I after five or six years of age is uncommon, but even some adults cannot handle Categories II and III. This deficiency has been reflected in almost every instance in poor word attack in reading and poor spelling skills. (See related document ED 028 430, abstracted in *TESOL Quarterly*, III, 4, December 1969.)

ED 032 519 *TEBRET SOL: The LEA (Teaching Beginning Reading to Speakers of Other Languages: The Language Experience Approach)*. Stanley Levenson. 12p.; Paper given at the Third Annual TESOL Convention, Chicago, Illinois. March 8, 1969. MF-\$0.25 HC-\$0.70.

Children exposed to the Language Experience Approach are able to conceptualize that what they think about they can say; what they say can be written or dictated to the teacher; what has been written can be read; and that way they can read what they have written, and what others have written for them to read. It is recommended that child first begin the reading program in his native language with the help of a bilingual teacher or teacher aide. When ready, he begins the reading program in English. Initially, he expresses his experience in some graphic form such as drawing, painting, or clay work, and then tells his experience to the teacher and the other children. He dictates his story about the picture to the teacher in his own words, with the teacher writing the story about the picture in his language, the way he says it. He begins to write by tracing over the teacher's writing and eventually writes out his own stories, which are bound and become part of the basic and supplementary reading program. In his discussion of this approach to

teaching reading in a bilingual preschool program the author describes the basic assumptions, the advantages, and the flexibility in organization and scheduling. He concludes with several stories representing various levels of English proficiency, written by bilingual children in California and Massachusetts.

ED 032 526 *Readings from Samuel Clemens*. The Audio-Lingual Literary Series I. Shigeo Imamura and James W. Ney. 116p. 1969. (Document not available from EDRS)

This text and the other two volumes in the series (see ED 032 527 and ED 032 528) are intended for advanced courses in English for speakers of other languages and are designed to provide students with practice in the language skills necessary for college-level studies. The 22 lessons in this volume are based on two moderately simplified selections from Samuel Clemens: "The Celebrated Jumping Frog of Calaveras County," a short story, and "Jim Runs Away" from *Huckleberry Finn*. Each lesson is based on a part of a reading and contains various drills and exercises: (1) a pronunciation drill contrasting phonemes in minimal pairs, words, and short sentences (2) a vocabulary exercise in which the student must replace the word in the cue with the synonym used in the mailing; (3) a structure drill of the binary transformation type; (4) a question and answer drill; and (5) a composition exercise in which a paragraph must be rewritten by combining sentences according to the instructions given. Each lesson is closely related to those preceding and following it. At the end of each of the two parts, the original version of the reading is given followed by supplementary exercises to help the student on his own. Available from Blaisdell Publishing Company, 275 Wyman Street, Waltham, Massachusetts 02154.

ED 032 527 *Readings on American Society*. The Audio-Lingual Literary Series II. Shigeo Imamura and James W. Ney. 155p. 1969. (Document not available from EDRS.)

This text contains 11 lessons based on an adaptation of the 1964 essay "Automation: Road to Lifetime Jobs" by A. H. Raskin and 14 lessons based on an adaptation of John Fischer's 1948 essay "Unwritten Rules of American Politics." The format of the book and the lessons is the same as that of the other volumes of *The Audio-Lingual Literary Series*. (See ED 032 526 for a description and ED 032 528 for the third volume in the series.) The pronunciation drills in the second part of this book deal with sentence intonation patterns. Available from Blaisdell Publishing Company, 275 Wyman Street, Waltham, Massachusetts 02154.

ED 032 528 *Readings in the Philosophy of Science*. The Audio-Lingual Literary Series III. Shigeo Imamura and James W. Ney. 115p. 1969. (Document not available from EDRS.)

This book contains two reading selections: "Science and Human Life" by Bertrand Russell and "The Unwritten Rules of American Politics" by Hugh Stevenson Tigner. Each selection is presented first in a moderately simplified version to provide a basis for a limited number of phonetic and syntactic problems, with questions on content, then in its original form with supplementary exercises. (See ED 032 526 (Volume I) for a description of the format and ED 032 527 for Volume II.) Available from Blaisdell Publishing Company, 275 Wyman Street, Waltham, Massachusetts 02154.

ED 032 530 *The Discipline of Teaching English as a Second Language: A Theoretical Framework*. Francis C. Johnson. 20p.; Paper read at the Regional English Language Seminar, Singapore, June 1969. MF-\$0.25 HC-\$1.10

The author plays the role of "devil's advocate," stating that present language teaching methods and techniques are not based on "linguistic theories." Transformation exercises, including conversions, transpositions, reductions, and expansions, were part of the language teachers' stock-in-trade fifty or a hundred years before a theory of transformational grammar was developed. It is dangerous to accept the imposition of linguistic theory as the basis of effective teaching methodology. The goal of the linguist, who works in a framework of ex post facto analysis of data, is the description of language; the goal of the language teacher, who works in a framework of experimentation where outcomes are not predictable, is the development of language skills in the learner. Those teachers who have inherited students who have passed proficiency tests in English and are unable to cope with communication in an English-speaking environment can testify to the inadequacy of the assumption that the ability of a student to reproduce the symbols of the English language is both necessary and sufficient to effective communication in English. Suggested as a focus of attention is not improvement within the present view of language teaching and learning, but the restructuring of the present view, to accomplish the goal of communication. Prime areas of research are discussed.

ED 032 534 *Constructing Dialogs*. Earl Rand. 158p. 1969. (Document not available from EDRS.)

This volume consists of 86 structured, patterned drills based upon rules which reflect the competence of native speakers to pronominalize, nominalize, delete, and otherwise transform English sentences in the context of other English sentences. These drills are designed to be used in English courses for foreign students and for speakers of nonstandard dialects. They presuppose an elementary knowledge of standard written English and are intended for use in colleges, universities, upper secondary schools, special classes, and tutorial sessions. The material, providing practice for the student to learn how English sentences are transformed within simple English dialogs, is concerned with the problems of proper pronominalization, verb tenses, nominalizations, and deletions, all within two-to-four-line dialogs. The student is required to generate sentences that are not only grammatically correct, but that are contextually correct as well. The drills, which are also designed to provide for individual differences, are presented in a semiprogrammed format so that the student can be assigned drills on the structures he is having difficulty with and can practice them at his own rate. Available from Holt, Rinehart and Winston, Inc., 383 Madison Avenue, New York, N.Y. 10017 (\$2.95).

ED 032 538 *Foreign Language Innovative Curricula Studies*. Summary Report. 21p. 1969. MF-\$0.25 HC-\$1.15.

The Foreign Language Innovative Curricula Studies (FLICS) was a three-year curriculum development project sponsored by Title III of the Elementary and Secondary Education Act. The emphasis of Title III was upon innovative and exemplary programs which could be used to develop and demonstrate curriculum constructs most needed in various areas of the total school curriculum. The Foreign Language Curriculum Committee defined four problem areas: (1) the larger number of children entering Michigan schools speaking

a language other than English which was being lost through lack of use; (2) the emerging impact of hardware upon the foreign language classroom without appropriate software to result in effective teaching; (3) the need to insure that once an innovative program is created, the atmosphere and resources within a school system are conducive to the maintenance of such change; and (4) the lack of appropriate materials and approaches available in advanced language courses and the need for a humanities approach in this area. A description of the Bilingual Curriculum Development Program, the Learning Laboratory Program, the Associated Staff Training Program, and the materials produced by the FLICS Project are presented in this report. For further information on this project, write: Dr. James McClafferty, Humanities Teaching Institute, Michigan State University, East Lansing.

Correction:

The following description should be substituted for the document abstracted in *TESOL Quarterly*, III, 3 (September, 1968) under Accession Number ED 012 903:

ED 033 248 *Bilingual Readiness in Earliest School Years: A Curriculum Demonstration Project*. Mary Finocchiaro and Paul F. King. Hunter College of the City University of N. Y. Dec 1966. MF—\$1.25 HC—\$13.70.