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TESOL QUARTERLY

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Teachers of English to Speakers of Other Languages

The Current Discrepancy between Theoretical and Applied Linguistics*

David DeCamp

Until about a decade ago, theoretical and applied linguistics developed side by side, to their mutual benefit. Though relatively few language teachers were linguists, most linguists were also language teachers, and they set out with missionary zeal to prove that linguistics had a place in the language classroom. Applied linguistics has a long respectable history. It did not suddenly burst into existence on Pearl Harbor Day. Henry Sweet's *The Practical Study of Languages* appeared in 1899, Otto Jespersen's *How to Teach a Foreign Language* in 1904. Leonard Bloomfield's *An Introduction to the Study of Language* was published in 1914, nineteen years before his major theoretical book *Language*, and thirty-eight years before his *Outline Guide for the Practical Study of Foreign Languages*, a work that still appears on all reading lists for language teachers. During the 1940's and early 50's nearly every major linguist authored at least one language textbook. Bloch, Hockett, Haas, Fries, Twaddell—the bibliography for those years reads like a roster of the Linguistic Society.

But where are the language textbooks written by Chomsky, Halle,

This paper was presented at the TESOL Convention, March 1968.

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Postal, Klima, Fillmore, Ross, or even textbooks which seem to be very much influenced by them?

Until about a decade ago, the lag between theoretical discovery and classroom application was very short. Kenneth Pike's *The Intonation of American English* was published in 1946, but C. C. Fries was already using Pike's system in his *Intensive Course in English for Latin American Students* which was published in 1945. The Trager and Smith *Outline of English Structure*, with its famous nine vowels, three semi-vowels, four stresses, four pitches, and four junctures, appeared in 1951. The very following year, Martin Joos and William Welmers gave us the *Structural Notes and Corpus* for the ACLS TEFL series, incorporating the Trager-Smith system, and the next year, in 1953, we saw the first textbook in that series, F. B. Agard's *El Inglés Hablado*.

Chomsky's *Syntactic Structures* appeared in 1957, and the Jakobson and Halle *Fundamentals of Language* in 1956. Now, more than a decade later, where are the language textbooks in which pronunciation is taught in terms of Jakobsonian distinctive features?

Until about a decade ago, relatively few language teachers had studied any linguistic theory, but those few took what little they knew and put it into immediate practice. Many of us were English teachers before we were linguists. Some of us blundered into TESL without realizing that there was such a thing. I, for example, was

teaching remedial “bonehead” English at the University of New Mexico in 1948 when I accidentally discovered that the problems were somehow a little different in one class which was composed almost entirely of Spanish speakers. But we read the linguists—as soon as we found out about them—and we applied them. As soon as we heard about the phoneme, we started using minimal pair drills. When we discovered the idea of immediate constituents, we added substitution and pyramid drills. What little linguistics we knew, we used.

Now, after a decade of NDEA institutes, The Center for Applied Linguistics, in-service retraining programs, and required linguistics in the curriculum of teacher training, very few teachers are as ignorant of linguistic theory as we were then. As the study of linguistics became popular and profitable, the films and popularized textbooks on linguistics for school teachers have multiplied like oversexed hamsters. We even made *Time Magazine!* You have to look real hard today to find a language teacher who has never heard of Noam Chomsky. The generative-transformational theory has been fairly represented in these recent attempts to linguistically brain-rinse the language teachers. Granted that many such courses have been short-term affairs, miserably taught. Most teachers have been generatively baptized by sprinkling rather than total immersion. Most of them have received their transformations third hand and filtered through Paul Roberts or Owen Thomas. Yet they can at least manage cocktail-party chatter about deep structures and transformations, and that is more than

most language teachers knew about phonemes and morphemes in the 1940's.

Now, after a decade of missionary efforts to bring the alpha-beta-gammas of transformational theory to the heathen language teachers, the question is: What are they doing with it? Are they using it? Where are the transformationally-based language classes?

So here stands linguistics in 1968, plagued not only with a credibility gap—for far too many people now expect every linguist to be a guru with the keys to the universe—but plagued with an unprecedented applicability gap. The dominant theoretical approach today is unquestionably generative-transformational. A few linguists are still working with the same empirical structural approach which dominated the 1940's. A few are working with new and still relatively untested theories: dependency grammar, stratificational grammar, resonance theory, etc. But the papers presented at meetings of the Linguistic Society and in the leading journals are overwhelmingly transformational. In fact the major controversy today is not between generative and taxonomic-structural theories, as stated by *Time* (February 16, 1968), but between factions within the generative school: a conservative wing led by Chomsky and a rebel group led by Postal, Ross, and Lakoff. Generative theory now dominates machine translation and has begun to take over the teaching of English grammar in the schools, as one publisher after another comes out with a transformationally-oriented series of textbooks for high school English. Yet the effects of this the-

ory on language teaching have been negligible.

The innovations and advances in language teaching during the past decade—and there have been many of them—have been pedagogical rather than linguistic. We have seen Earl Stevick's elaborate electronic metaphors: UHF, microwaves, and modular courses. We have seen programmed courses, teaching machines, improved language labs, computer-assisted instruction. Most important, we have seen massive projects, supported with state and federal funds, bringing to hundreds of learners the modern methods previously available only to a favored few in select institutes. But the content of these vastly improved and expanded programs is still the English language as shaped by the linguistic theory of the 1930's and 1940's.

Indeed there have been a few contrastive analyses based on generative theory, e.g. the Stockwell, Bowen, and Martin *The Grammatical Structures of English and Spanish* (1965), several articles explaining generative grammar to language teachers and exhorting them to apply it, e.g., William C. Ritchie's articles in the last two issues of *Language Learning* (July and December, 1967). But there is no evidence that these appeals have had much effect, either on the preparation of teaching materials or on actual classroom practice. In 1963 we developed for use in our program for re-training English teachers in Taiwan a small set of transformational syntactic drills, which were later edited and published by Earl Rand. A few such drills also appeared in the later volumes of the *English for Today* (1964-67) series, and a few other pub-

lishers have followed suit. But this is scarcely a beginning in the application even of generative syntax, and generative phonology and semantics have yet to get even a foot in the door to the language classroom. Why?

There are several reasons. First is the attitude of the generative theoreticians themselves, most of whom have very little interest in promoting the classroom use of their theories. Few of them are also language teachers. They are preoccupied with the further development of theory and have little time to devote to application. They fear premature and improper application. A few of them even deny the relevance of generative theory to language teaching. Jerry Fodor is quoted by the article in *Time* as saying that it would be as foolish to teach a man linguistic theory as it would be to teach him the theory of the internal combustion engine so that he could learn to drive a car. One might point out that although a driver doesn't have to be an automotive engineer, he does have to know a certain amount about the mechanical operation of his car in order to be a good driver. And of course the best refutation of Fodor's quip is the fact that if a theory says that a language is one thing but a teacher is teaching it as something else, then either the theory or the teacher is probably wrong, and it's jolly well time we found out which. Nevertheless, the generative theorists have hardly been the most enthusiastic salesmen for generative grammar in the language class.

A second reason is that until now, the generative grammar of English has been relatively inaccessible to language teachers. It has appeared in bits and

pieces in scholarly papers (many of them unpublished and only privately distributed) or in superficial introductions like those of Paul Roberts and Owen Thomas. Furthermore these papers bristle with unfamiliar symbols, strange diagrams, and mathematical jargon. Conversations with generative theorists tend to be filled with such terms as "recursive function," "finite state," "Boolean condition," and "Turing machine." But be of good cheer; help is on the way. A solid but readable grammar of English by Rosenbaum and Jacobs is now in the page-proof stage, and another by Paul Postal is in preparation. Even the long-awaited *The Sound Pattern of English* by Chomsky and Halle will soon be available. The mathematical basis of generative theory is by no means pre-requisite to using a generative grammar—Fodor's analogy does indeed apply here. And the unfamiliar symbols are usually only a formulaic shorthand for comfortably familiar statements. A rule of the form $S \rightarrow NP VP$ loses all its terror when translated into the statement: "Underlying every sentence is a basic construction consisting of a subject and a predicate." Certainly no one suggests that the student learning English be required to read and write formulas, but the pattern drills by which he is taught the language should indeed be based on the truths which these formulas represent.

The main reason why generative theory has not been more extensively applied is simply inertia. It just hasn't been tried. Language teachers, like linguistic theorists, have been busy and preoccupied with other things. Many have laboriously mastered one

linguistic theory and resent having to learn a new theory. Anyway, they complain, generative theory keeps changing. Teachers worked their way through Paul Roberts or Robert Lees, with their kernel sentences and combinatory transformations, only to find that *Syntactic Structures* is now out of date, and that they must learn the new *Aspects* model with its deep and surface structures. If the Postal-Ross-Lakoff heresy is successful, they may have to learn yet a third generative theory. I indeed understand, though I cannot agree with, their reluctance to revise their textbook until the theoretical dust settles a bit. They feel betrayed by those specialists who will offer tantalizing but inadequate, vaguely programmatic suggestions for applying generative theory but then, once the article is published, never follow through but only retreat into academically greener fields of pure theory. Generative grammar is a general and unified theory of language and so does not lend itself very easily to eclectic application. The introduction of a few transformation drills into a course which is primarily based on the old concepts of phonemes, morphemes, and immediate constituents often results in inconsistencies and frustrating confusion. Furthermore, a generative grammar begins with the abstract and works towards the concrete. The core of every generative grammar is the deep structure, a set of abstract syntactic relationships. The surface structure, the empirically observable facts of the language—the sentences as they are actually spoken and heard, the things which the language teacher must use every day in the class from the very beginning—are presented in

the theory as being only a superficial consequence of the underlying abstractions. We can understand the despair of the teacher who simply cannot see how she can get such a theoretical structure inside the heads of her students with the tools available to her: her own voice, the blackboard, and the tape recorder.

What then can we teach transformationally? The syntax is probably the easiest. Long before Bloomfield and Trager and Smith, language teachers were using transformation drills for the passive, making the students convert "John killed the mongoose" into "The mongoose was killed by John." Within the past decade, several new textbooks have provided similar drills based on a few other simple transformations: changing positive sentences into negatives, statements into questions, and adding tag questions to simple statements. Such techniques should be continued and extended to many other important transformations. For example, the cleft-sentence transformation, which can change "The mongoose ate the rooster" into either "It was the mongoose that ate the rooster" or "It was the rooster that the mongoose ate." There is the pseudo-cleft transformation, resulting in either "What ate the rooster was the mongoose," "What the mongoose ate was the rooster," or "What the mongoose did was eat the rooster." The *there*-transformation, which equates "A mongoose is in the henhouse" with "There is a mongoose in the henhouse." The indirect object placement transformation, which takes "John gave the diplodocus to Sarah" and changes it to "John gave Sarah the diplodocus." There are many others

of this type, all better taught as transformational processes than as separate and unrelated sentence patterns.

Perhaps most important are the many complementizing and other embedding transformations. Given a pair of sentences like "Susan had bad breath" and "Someone noticed it," the student must learn how to combine them to get "Someone noticed that Susan had bad breath." Then he can passivize this sentence to "That Susan had bad breath was noticed," and then finally, by a transformation called "extraposition," he can wind up with "It was noticed that Susan had bad breath." In a transformationally-based course, infinitives, gerunds, and participles would never be taught as words or phrases but as processes operating on whole sentences. Given the sentence "We sat under an umbrella" and "We ate the yoghurt," the student must learn to produce "we sat under an umbrella to eat the yoghurt" and "We sat under an umbrella eating the yoghurt." Incidentally, this approach to infinitives and participles was recommended by Otto Jespersen, long before Chomsky.

Within the deep structure, the generative analysis of the English verbal auxiliary into three successive parts (tense, modal, and aspect) makes it possible to teach English verb forms by means of a simple substitution drill instead of working through long and complicated paradigms.

One of the most interesting of recent contributions to generative theory has been an unpublished paper by Sandra Annear, in which she transformationally links embedded relative clauses with conjoined coordinate clauses. A restrictive clause, she sug-

gests, is related to a preceding coordinate clause; a non-restrictive clause is related to a following coordinate clause. If we accept her theory, it would suggest a type of classroom drill in which the student would take a sentence like “Those women are wearing mink coats and they are English teachers” and change it either to “Those women who are wearing mink coats are English teachers” or to “Those women, who are English teachers, are wearing mink coats.”

These are only a few of the things that we could be doing, but generally are not doing, with generative syntax. What about pronunciation? Here the language teacher is most likely to be repelled by the fact that most of the phonetic features in a generative phonology are stated in acoustic rather than physiological terms. Terms like *grave*, *acute*, *compact*, and *strident* indeed seem far removed from the language classroom. Each term, however, has a physiological correlate. It doesn't help the language learner to tell him that the vowels /u, o, ɔ/ contain a distinctive feature of *flatness*, meaning that certain acoustic frequencies are musically flattened or lowered. For English, however, the teacher will be just as accurate in describing this feature as *lip-rounding*, for in English it is lip-rounding that produces the flattened tones. And lip-rounding is indeed a relevant classroom term.

The real difference between the old structural and the new generative phonology is whether the sounds are presented as unit entities, e.g., the vowel /a/ or the consonant /t/, or as combinations of pronunciation features, e.g., lip-rounding, voicing or nasality. In the old method, sounds are treated

as things, as little building blocks that can be moved about to different places in the word or that can be substituted for one another. In generative phonology the stream of speech is treated as if it were music played in harmony on an organ. Each segment of this music is a complex chord produced by depressing several keys on the organ simultaneously. As the music moves on to the next segment, one or more of the notes making up the chord is changed. When we speak the word *English*, we pass through six such segments, each time changing one or more features, but the feature of voicing we hold and do not change until the very last segment, like a sustained pedal note on an organ which is not released until the very last note.

In the language classroom this means we would not be teaching the vowel /æ/ as a unit entity. Rather we would teach the student to articulate “frontness” of vowel ([i, e, æ/ as opposed to /a, o, ɔ/) and “lowness” of vowels (/æ, a, ɔ/) as opposed to /e, ʌ, o/). When these three features coincide—vowel, front, and low—the result is the vowel /æ/. This is not a new idea. Both Sapir and Bloomfield noted that it is easier to teach a student a whole related series of new and strange sounds than it is to teach him one single new sound from the series. For the Mandarin Chinese speaker studying English, it is easier to learn how to voice all of his consonants than it is to learn to pronounce the English /d/ sound as a separate task unrelated to other sounds like /b/ and /g/.

It is in teaching assimilations, stress shifts, and other phonological processes that generative phonology can be most helpful. The weak “schwa” vowel

[ə] is not considered an independent vowel at all, but only a weakened or slurred variety of several other vowels. Thus in the word *telegraph* the second vowel is weakened from [ɛ] to [ə] because it is in a weak syllable. In the word *telegraphy*, it is the first vowel that is weakened from [ɛ] to [ə]. This is really a very old-fashioned approach successfully used both by linguists and by language teachers long before Bloomfield.

Old-fashioned teachers of German still teach their students to devoice consonants at the end of a word. Thus the word spelled *Weib* is pronounced [vaip], not [vaib]. More recently, influenced by structural linguistics, many teachers have approached this problem as one of substituting unit phonemes, i.e., substitute a /p/ for a /b/, a /t/ for a /d/, and so on for a long list of such substitutions. It strikes me that the old method with its simple generalization, "devoice the final consonant," is a lot more effective, and it follows the new generative phonology exactly. Similarly the student of English can be taught the processes of assimilation, often by a simple substitution drill. You can give him the word (or a sentence containing the word) intolerable and then a series of substitution cues like *proper*, *compatible*, *legible*, and *reverent*. As he practices making the new combinations *improper*, *incompatible*, *illegible*, and *irreverent*, he develops a feel for making the basic negative prefix *in-* assimilate to the following sound. This is far better than teaching him all these words as separate unrelated vocabulary words or making him puzzle through a whole series of substitutions of one unit sound for another.

If you teach pronunciation as it is described in a generative grammar, you can also stop apologizing for the English spelling system. Too many teachers precipitate spelling problems by berating our poor old writing system, calling it irregular and difficult, inferior to that of Spanish or some other language. Actually the system of English spelling is not bad, when you understand how it really works. If the French scribes and other, well-meaning but misguided scholars hadn't tinkered with it so much in attempts to reform it, it would be an excellent system. Generative linguistics has shown us that English spelling (or for that matter, Spanish or German spelling) is *not* comparable to a phonetic transcription, i.e., it never intended to represent each sound in the word, as we hear it, with a distinct alphabetic symbol. Rather it represents, and quite accurately too, the pronunciation of the underlying form of each morpheme, a pronunciation which is then modified by several processes like assimilation and weakening. Thus the words *telegraph* and *telegraphy* are both spelled with an *e* in the first two syllables, indicating that these syllables are pronounced [ɛ] when they are accented. When the syllable is weakened by loss of stress, the vowel is weakened, but it is not necessary to represent this weakening in the spelling, because every native speaker automatically and unconsciously performs this process of weakening. Your students may not know whether to spell the words *professor* and *manager* with an *er* or an *or*, but if you then teach them the words *professorial* and *managerial*, in which the problem syllable is accented and there-

fore has its full *e* or *o* value, the difficulty disappears.

Generative semantics, like generative phonology, factors the meaning into a set of semantic features. Thus the words *pen* and *pencil* have all the same semantic features in common except one. Both are small inanimate objects used for writing or drawing, but one uses ink, the other lead. Because this analysis into semantic features pinpoints both the similarities and the differences in meaning between near synonyms, it makes the teaching of vocabulary much easier than if the meaning of each word is approached as a separate unique problem. It should even be possible, though no one has yet done so, to construct semantic minimal pair drills, analogous to phonological minimal pair drills.

I have suggested a few of the many aspects of generative theory which can and should be applied to classroom teaching. But such suggestions have very limited value if no one follows them up and turns them into actual classroom materials available to the teacher. How can we get this job done? We've been saying this sort of thing ever since 1962, when Leonard Newmark assembled a gaggle of linguists (or is it a pride of linguists?) at the NAFSA meeting in Columbus to talk about getting generative grammar into the classroom. Like the many previous speakers on this subject, I could always close in the best pep-rally manner by exhorting all of you to get out there and write! It happens, however, that I have one more specific suggestion. Like several others of you here today, I teach a graduate seminar in applied linguistics. This year I got tired of following the same old general

methods approach and set as the seminar topic this semester the preparation of transformationally-based teaching materials. Nineteen students enrolled, plus three auditors who agreed to share in the work. Four students dropped out when they discovered that I expected an understanding of Chomsky's *Aspects of the Theory of Syntax* (1965) as a minimal prerequisite for the course. That left us with eighteen. Each student chose the language with which he wished to work. Seven selected English; the other languages chosen include Spanish, Korean, Georgian, Arabic, French, Persian, Japanese, Javanese, and Bahasa Indonesian. Each student was assigned one component of the generative theory. His task for the semester: to prepare a set of transformationally-based materials for teaching the assigned aspect of his language. Assignments include the consonants of English, the word stress of Persian, the determiners of French, the pronouns of Spanish, the semantics of Chinese, etc. It is too early to say how many of these projects will be successful, but, as I have told the students, they will be making a real contribution even if they thoroughly explore one avenue only to discover that it is a blind alley. At least someone will have tried it. I will encourage each student to publish his results, and some already have plans to expand their projects later into full-length textbooks. And I promise that I will publish a general summary report of the successes and failures of the experiment.

Now I repeat: Some of you also teach courses in materials preparation. Why not try the same experiment? If on ten university campuses we could

have annual seminars in which students are actively working on such problems, we could systematically cover every aspect of the language and determine, once and for all, which

features of generative theory are really applicable to language teaching. We would finally be getting generative grammar into the classroom, instead of just talking about it.



The Reflexive in English and Spanish: A Transformative Approach *

J. Donald Bowen and Terence Moore

We should like to begin by clarifying our subtitle: a transformational approach. What does it mean to say that we are adopting the theoretical framework developed by Noam Chomsky? It might indicate that we intend to write out some dense, high-powered, abstract symbols which we might claim will enumerate, if you follow the rules of the linguistic calculus, all the well-formed reflexive sentences of English or Spanish. But however interesting this activity may be, it is totally inappropriate to the task of language teaching.

As there is more to mathematics than knowing the notation, so there is a great deal more to transformational theory than the clever juggling of formulas. In fact, over-concentration on formulaic abbreviation can obscure the underlying and fundamental notions

* This paper was presented at the 1967 Convention of the National Association for Foreign Student Affairs.

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Mr. Moore, Research Assistant in the Air Force English Syntax Project at the University of California, Los Angeles, is the author of articles on transformational grammar and, with Professor Bowen, co-author of a Spanish textbook for sixth graders soon to be published by Harcourt, Brace, and World.

that the theory seeks to represent. It is two of these notions, notions that are central to transformational theory, that seem to us to be of great importance to linguists applying themselves to the problems of language teaching. The first of them is usually discussed under the rubric *linguistic universals*. The second is the division of the field of linguistic investigation into two distinct but related areas; we study at one time the *competence* of a native speaker and at a different time the *performance* of a native speaker. In short, we maintain a distinction between the study of competence and the study of performance. Let us take each of these notions in turn and discuss them in general before relating them to our specific topic—the reflexive.

We can best characterize what a transformationalist means by linguistic universals by considering the process through which a child comes to learn his own language. It is reasonable to assume that a child who has learned his language has in some sense developed an internal representation of a system of rules. That he has mastered rules is clear from the so-called “mistakes” the child makes. The native English-speaking child who says “I writed in school today” inspires admiration for the logic and rationality he is bringing to the task of language learning, but at the same time regret that the illogicality and irrationality of

some language performance must also be taught. The set of rules he has mastered enables him to determine how sentences are formed, used, and understood. On the basis of primary linguistic data, a medley of correct and incorrect sentences, he has devised for himself a transformational generative grammar.

Moreover, the fact that children rarely fail to devise such a grammar despite wide differences in intellectual equipment, any more than they fail to learn to walk, very strongly suggests that the child approaches the task of language learning equipped with a set of initial, very tacit predispositions about the nature of language. These deep-down predispositions interacting with the particular speech community he finds himself in, gradually result in a specific and differentiated grammar of a particular language. Since it is clear that children are not predisposed to learn one language rather than another, it follows that these predispositions are not specific to any one language or even to any one family of languages, but belong to language universally.

Part of the task the transformationalist sets for himself is to try to specify in as richly detailed a way as possible a set of hypotheses about the innate abilities that enable children everywhere to learn their language. To the extent that the transformationalist is successful, and these are very early days in the development of the theory, he is in a position to explain why grammars of particular languages take the form they do take. In essence, our particular grammars are constrained by our view of what the universal grammar out of which they have been de-

rived might be. Out of an investigation of a number of natural languages, we expect to find similarities emerging that are attributable to the general form of language as such. Insofar as we can show that these similarities hold for languages everywhere, we can argue that the similarities are indeed linguistic universals.

The particular linguistic universal we are concerned with here is often referred to as *anaphora*. Of course, nowhere near every language in the world has been investigated, but a reasonable guess for a linguist confronted with what is for him a new language is that it will contain examples of the syntactic phenomenon *anaphora*. *Anaphora*, you will recall, is from the Greek *ana*—meaning “back”—and *pherein*—meaning “to carry.” Thus, *anaphora* refers to the everyday syntactic phenomenon that allows a word or words to refer back to another word or words already used. Thus in

Sam enjoys swimming and Mary does, too

does is understood as referring back to the predicate *enjoys swimming*.

We can't be sure that anaphora, or back reference, is a linguistic universal, but it seems a pretty reasonable working assumption. Certainly English and Spanish make extensive use of it. But our common-sense knowledge leads us to watch out for differences in the handling of anaphora in the two languages. In transformational terms, both languages may have a set of rules that are basically identical since they formalize the same phenomenon, but which nevertheless differ in the range of their application. Since anaphora covers all kinds of pronominal replace-

ment. and since our time is limited, we must confine ourselves to one particular form of it—reflexive anaphora.

Before recalling some essential facts about English reflexive anaphora as a basis for making a comparison of English and Spanish, we must make a few brief comments on other notion central to transformational theory that is relevant to our needs: the distinction between *competence* and *performance*. A way of keeping this distinction clear is to recall the analogy made by the man who is sometimes called the father of modern linguistics, the great Swiss linguist, Ferdinand de Saussure. De Saussure used to compare the difference between *la langue* and *la parole* to the difference between the score of a symphony and the actual playing of the symphony in a given concert by particular musicians on a specific night. However good, bad, or indifferent the playing may be on any occasion, the score of the symphony remains the same. What the score is to the playing, *competence* is to *performance*. When we study the *competence* of a language user, we are interested in the score; we abstract away from the effects of human frailties on language use and consider only how an ideal speaker in an ideal speech community might generate well-formed sentences and comprehend equally well-formed sentences generated by any other ideal speaker.

But note that this process of abstraction, a familiar one in any scientific activity, is a *starting-point*, not a *stopping-point*. We abstract away from what William James called the “bloomin’ buzzin’ confusion” of ordinary linguistic behavior in order to be able to state the simplest and most

general rules employed by the system that underlies language. Equipped with some fairly precise knowledge of that system, we can with some degree of confidence approach the actual *performance* of native speakers and ask first where and how their utterances differ from the well-formed sentences generated by a grammar of competence. When we know where and how actual utterances can differ from well-formed sentences, we can seek an explanation for this difference. We can try, that is, to build a better, more comprehensive theory of language that accounts both for the well-formed sentences of the grammar of competence, and also accounts for the systematic deviations from well-formedness that actual linguistic behavior demonstrates, i.e., the grammar of performance.

This distinction between competence and performance must be kept in mind. For example, we shall assume that given a sentence like *Zuker shaved Zuker* and given that Zuker and Zuker refer to the same individual, an obligatory rule of the grammar will require that the sentence be structurally changed to *Zuker shaved himself*. One could conceivably argue that such a rule is not obligatory since it is quite possible to say *Zuker shaved Zuker* even when the same Zuker is referred to. Literally speaking, this is true, but the ability of a speaker of English to do this on particular occasions is an important fact for a study of performance. However, in order to write a set of maximally simple rules that explain the underlying competence of a speaker of English, we tentatively assume there is an obligatory rule that changes *Zuker shaved Zuker* to *Zuker*

shaved himself. We defend this position by saying that working separately with the domains of competence and performance is fruitful. It leads to the formulation of interesting and testable insights about language.

In order to discuss the abstract system of reflexive anaphora in English and Spanish more concretely, we next consider the overt forms that help carry or mark that system.

An interesting question involving the concept of universality can be seen in back reference, since it is in the nature of human communication that a subject of discourse is not limited to a single sentence in a conversation. Must reflexive anaphora be specifically marked, or is it sufficient that a back reference be potential—even though ambiguous? Asked in other words, is marked reflexive anaphora a linguistic universal? Perhaps it isn't (Sweet claims that Old English used the same pronouns for reflexive and nonreflexive reference), but it is certainly widespread. Its occurrence is marked in both English and Spanish, the two languages we shall compare, but it is marked in ways that are interestingly different.

In English, reflexive pronouns consist of regular possessive or objective pronouns with *self* suffixed to singular forms, *selves* to plurals. First and second person forms are built on the possessive: *myself*, *ourselves*, *yourself*, *yourselves*. But third person forms are built on the objective: *himself*, *herself*, *itself*, *themselves*. The form *herself* is perhaps questionable, since *her* is both possessive and objective, and *itself* could conceivably be a case of a reduced double *s* from *its* and

self. *Him* and *them* are clearly objective, however, and in view of the complexity of the total pattern it should come as no surprise that there are speakers (both native and second-language students) who use the nonstandard forms *hissself* and *theirselves*.

These are the only reflexive pronouns in English, and they occur with verbs or after prepositions. They cannot appear as the primary constituent of a noun phrase used as a subject, but they can serve as appositive, in a function that is not reflexive anaphora in the usual sense of marking identity, but rather as an indication of emphasis, as in "I myself will do it." In this function, unlike the more usual appositive pattern, the *self* forms need not occur immediately following the antecedent, but may occur later in the sentence, typically last, as in "I will do it myself." Perhaps this freedom of occurrence is possible because the appositive relationship is marked by the *self* forms.

Spanish reflexive forms contrast in a number of ways. Spanish is more parsimonious with its forms, with only two exclusively reflexive pronouns: *se* used with verbs and *sí* with prepositions. Spanish specifically marks the reflexive only where there is a possibility of ambiguity in reference, which means only with a third-person subject. First- and second-person forms, which are uniquely identifiable from context, take an undifferentiated set of object pronouns with verbs; members of this set—*me nos te es*—may have reflexive or nonreflexive reference. Thus, for example, reflexive anaphora is marked in *me lastimé* not by the pronoun *me*, but by its occurrence with *lastimé*, both referring to first

person singular. In *me lastimó* the anaphora is not reflexive. When both subject and object are first (or second) person, the construction is *per se* reflexive. But when both subject and object are third person, reflexive anaphora cannot be assumed; it must be marked. Thus *lo lastimó* is nonreflexive and *se lastimó* is reflexive. All the Spanish reflexive must indicate its identity with the subject—there is no need to preserve either gender or number in the reflexive object since these are specified by the subject, and/or by the ending of the verb. Hence *se* can be translated as *himself*, *herself*, *itself*, *themselves* if these forms accompany a verb, while the same forms are translated by *sí* if they follow a preposition.

Perhaps we should point out that while anaphora indicates back reference, this does not mean that in a final derived sentence the linear order of items must necessarily have the anaphoric form following its referent. Transformations may place the form marked for anaphora before the item it refers to, as in the Spanish sentence *Se abrieron las puertas*, which shows an inversion that locates the subject *after* the verb and its enclitic reflexive pronoun.

In English and Spanish the back reference is marked in the object, since in normal order the subject comes earlier in the sentence. In Hiligaynon, a Philippine language, the subject normally comes last, after the object, and it is therefore the subject that is marked for a reflexive back reference. The form of the Hiligaynon reflexive is suggestive of the English pattern, with a noun meaning “self” modified

by a possessive. The pattern is shown in the following example sentences:

I washed myself		
Ginhugasan	ko	ang akon kaugalingon
Past-wash	me	the my self
Verb	Object	Subject
He hurt himself		
She hurt herself		
Nasaktan nia	ang	iya kaugalingon
Past-hurt	him/her	the his/her self
Verb	Object	Subject

Like Spanish, the Hiligaynon sentence may be rearranged by an inverting transformation, so that the marked reflexive phrase may actually precede the “antecedent” it refers to:

Ang akon kaugalingon ginhugasan ko.

Ang iya kaugalingon nasaktan nia.

But to return to the primary subject of our paper, it is apparent that the English and Spanish reflexive pronoun patterns are different in form. They are also different in distribution, as we shall see.

Let’s look at the following two sentences, which illustrate some important facts about the occurrence of reflexive anaphora in English:

- (1) Peter washed himself.
- (2) Peter washed him.

Native speakers will certainly agree that both sentences are grammatical, but that sentence (1) must be understood as a case of reflexive anaphora, and sentence (2) as a case of nonreflexive anaphora. In sentence (1) *Peter* and *himself* refer to the same person, but in sentence (2) *Peter* and *him* refer to different persons.

The six pairs of sentences, below, numbered (3) through (14), demonstrate that the same observation holds in more complex constructions:

- (3) Mother persuaded Peter to wash himself.
- (4) Mother persuaded Peter to wash him.
- (5) Mother persuaded herself to wash Peter.
- (6) Mother persuaded her to wash Peter.
- (7) Jane can take care of herself.
- (8) Jane can take care of her.
- (9) She sent herself a valentine.
- (10) She sent her a valentine.
- (11) This is the boy who hurt himself.
- (12) This is the boy who hurt him.
- (13) He pointed at himself.
- (14) He pointed at him.

Sentences (15) to (18) show that the process of reflexivization does not take place when the noun phrases that are identical are not within the same clause. The errors in (15) and (17) render them nongrammatical.

- (15) *Jane's uncle supported herself.
- (16) Jane's uncle supported her.
- (17) Helen went to the store. *Herself bought some avocados.
- (18) Helen went to the store. She bought some avocados.

Sentences (19) to (22) show that English does have a class, a very small class, of verbs that must take a reflexive form.

- (19) Martha prides herself on her cooking.
- (20) *Martha prides her on her cooking.
- (21) Bob absented himself from kitchen duties.
- (22) *Bob absented him from kitchen duties.

Because in these cases the selection of the reflexive is completely determined, there is nothing of very great interest to be said about the forms except that they need to be marked as obligatorily requiring the reflexive. Sentences (20) and (22) are ungrammatical.

Sentences (23) to (28) show that every silver lining has a cloud. There are problems here that appear to be counter-examples to the generalizations we can make about English reflexive anaphora:

- (23) Look at yourself.
- (24) Look at you.
- (25) He kept the candy near himself.
- (26) He kept the candy near him.
- (27) He looked around himself.
- (28) He looked around him.

Sentences (24), (26), and (28) ought to be ungrammatical; yet they occur. But if our analysis is productive, the points where the problems arise should be a route to a better solution, and some are discussed below. Setting aside temporarily the last group of sentences, we can make at least the following generalizations about English reflexive anaphora: (a) reflexivization occurs in English when two referentially identical NP's are contained within the same clause (within the same constituent S); and (b) reflexivization does not occur in English when two referentially identical NP's are not within the same clause (within the same constituent S).

Spanish can match all of the English reflexive rules. We can say, for instance:

- (1) Pedro se lavó.
- or (2) Pedro lo lavó.

As in English the first sentence is contextually complete, since the antecedent of the pronoun is within the sentence cited. The second sentence is not possible at the initiation of common focus, since the antecedent of *lo* is not within the cited sentence but must be presumed as previously identified.

All of the English sentences numbered (3) to (14) can be translated by Spanish equivalents with a reflexive pronoun in precisely the same position as in the English sentences cited earlier.

- (3) Mamá persuadió a Pedro a que se lavara.
- (4) Mamá persuadió a Pedro a que lo lavara.
- (5) Mamá se persuadió a lavar a Pedro.
- (6) Mamá la persuadió a lavar a Pedro.
- (7) Juana puede cuidarse.
- (8) Juana puede cuidarla.
- (9) Ella se mandó una tarjeta del día de San Valentín.
- (10) Ella le mandó una tarjeta del día de San Valentín.
- (11) Este es el muchacho que se lastimó.
- (12) Este es el muchacho que lo lastimó.
- (13) El se apuntó.
- (14) El le apuntó.

Spanish also matches English in not allowing an interpretation that refers a reflexive to a preceding noun that is not the subject of the sentence. To translate the English nonsentence *"Jane's uncle supported herself" is impossible because the feminine gender of *herself* is lost in *se*. Thus

(15) El tío de Juana se mantuvo. can only refer *se* to *tío*, not to *Juana*.

Of course we can say:

(16) El tío de Juana la mantuvo. matching the English "Jane's uncle supported her."

The English pattern is identical with Spanish in the exclusion of reflexives as subject pronouns. Spanish can say:

(17) Elena fue a la tienda. Se compró unos aguacates.

But *se* translates "for herself." Neither *se* nor *herself* can function as a subject. If a subject is expressed in Spanish, it would be *ella*, but Spanish would likely not use a pronoun subject so soon after the referent had been mentioned. More naturally one would say:

(18) Elena fue a la tienda. Compró unos aguacates.

Spanish matches English in another pattern, in having certain verbs with which reflexive pronouns are obligatory. Thus we have:

(19) Marta se jacta de su don de cocinar.

and (21) Roberto se ausentó de la cocina.

It is not possible to say:

(20) *Marta la jacta de su don de cocinar.

or (22) *Roberto lo ausentó de la cocina.

Spanish is different from English only in having a very considerable number of verbs which must appear with reflexive pronouns, whereas these are relatively rare in English. Examples of exclusively reflexive verbs in Spanish are very common; some are *abstenerse*, *acurrucarse*, *arrepentirse*, *atreverse*, *dignarse*, *gloriarse*, *preciarse*, *quejarse*. Some of the equivalence patterns will be given below.

With sentences that include reflexive anaphora in prepositional phrases,

the English reflexive rule cannot be unequivocally applied. In some sentences English requires a reflexive pronoun in a prepositional phrase as the general rule predicts. Thus "He made fun of himself" equates *he* and *himself*, but "He made fun of him" specifically differentiates *he* and *him*. But you will recall that there is a choice in "He kept the candy near himself" and "He kept the candy near him." In this last sentence, *he* and *him* could well refer to the same person, but it is not necessary that they do so. The ambivalence is also apparent in "He looked around himself" and "He looked around him."

There is no question of choice in Spanish.

(25) El guardó los dulces cerca de sí.

can only mean "near himself,"
and

(26) El guardó los dulces cerca de él.

can only refer to someone else. This is likewise true of:

(27) El miró alrededor de sí.

and

(28) El miró alrededor de él.

The pattern is consistent in Spanish: reflexive pronoun means reflexive reference; nonreflexive pronoun means nonreflexive reference.

At this point we have to begin making some important distinctions between Spanish and English. While the rules we have cited for English can be applied almost without modification to Spanish sentence patterns, these rules do not cover the entire range of reflexive usage in Spanish. Spanish reflexive anaphora goes further in its application, to a variety of other patterns.

The first example is the use of reflexive pronouns with verbs that are normally considered intransitive in English. Thus Spanish says:

(29) Se sentó en la sala.

(30) Se alegró de oír la noticia.

(31) Se acostó a las once.

for "He sat in the living room," "He was glad to hear the news," "He went to bed at eleven." Perhaps one could say that intransitive verbs in a sense are inherently reflexive. If I go to bed at eleven, I am the one that is put to bed. English may assume this, Spanish specifies it.

Another pattern in which Spanish regularly uses the reflexive is in agent deletion. Notice the reflexives in the following three sentences:

(32) El plomo se funde fácilmente.

(33) La puerta se abrió sin ruido.

(34) Este traje se lava muy bien.

In English the equivalents are "Lead melts easily," "The door opened quietly," "This suit washes very well." The English speaker knows that lead doesn't melt anything, that something melts lead; likewise that somebody opened the door and someone washes the suit. The Spanish speaker uses reflexive pronouns not found in the equivalent English translations; still he knows that literally speaking lead doesn't melt itself, doors don't open themselves, and suits don't wash themselves. But he takes advantage of a specific application of the basic rule of reflexive anaphora in Spanish which differs in a substantial way from the English rule: The reflexive construction in English is limited to animate subjects; it is not so limited in Spanish. Hence where the English speaker expects the subject of a reflexive sen-

tence to have the capacity to carry out the action of the verb, the Spanish speaker exacts no such requirement. For him the reflexive pronoun merely says: identity with the subject. It is quite natural, then, to use the Spanish *se* in cases of agent deletion, since merely by deleting the agent we deny its importance. When we say, "This dress washes very well," we don't care who washes the dress; the important fact is that it gets washed and that it can be done well.

Notice that we say in English, "The dress got washed" or "The fence got painted." In English when we wish to suppress the agent, a favorite grammatical device to do so is the passive. We have two to choose from: the *got* passive and the *be* passive. The first tends to be favored in oral communication, the second in writing, especially on a more formal level. One disadvantage of the *be* passive is its ambiguity; it describes either an event or a resulting condition: "When the teacher came the work was done" may mean the teacher found out, like the little red hen, that if she wanted something done, she had to do it herself, or it may mean that she was pleasantly surprised that the work had been done earlier, so that at the time referred to it was finished. There is no such ambiguity in "The work got done." This refers to the event.

This is the key to a very important pattern in Spanish, one as frequently used as it is hard to teach to English speakers. It is often called the "reflexive for unplanned occurrences." Since these occurrences are unplanned, they seem to just happen, so we say:

- (35) *Se me olvidó la llave.*
I forgot the key.

- (36) *Se me rompió el plato.*
I broke the plate.
(37) *Se me perdió el dinero.*
I lost the money.
(38) *Se me cayó el nene.*
I dropped the baby.
(39) *Se me ocurrió una idea.*
I had an idea.

These become much easier to understand and to explain if we remember that there is no restriction against using a reflexive pronoun to refer back to an inanimate subject.

There is one other construction where Spanish uses a reflexive, again not usually matched by the reflexive in English. That is a use with a transitive or intransitive verb to indicate that the action was voluntary and therefore presumably carried to its logical conclusion. Note the following pairs of sentences, where the English translation tries hard to capture the meaning expressed in Spanish:

- (40) *Pedro se fue.*
Peter went away.
(41) *Por fin se subió al balcón.*
He finally managed to climb up to the balcony.
(42) *El reo se escapó.*
The criminal got away.

Or these examples with transitive verbs:

- (43) *Elena se comió la manzana.*
Helen ate the apple up.
(44) *Se lo bebió.*
He drank it down.
(45) *Se guardó la carta.*
He kept the letter.

One final and most difficult (for the English-speaking student) pattern is an extension of the agent deletion construction. In the Spanish sentence there is no subject expressed; in the

contrastive study *The Grammatical Structures of English and Spanish* by Stockwell, Bowen, and Martin (1965), this unexpressed and unexpressible subject was called "Person three plus zero." Not having a subject in a Spanish sentence is no surprise—the subject is regularly deleted when the information it would carry is supplied by context. But a speaker can readily restore it on request.

But the P3 + \emptyset subject doesn't really exist, because it was never identified. Thus one may hear or see:

- (46) Aquí se habla español.
Spanish spoken here.
- (47) Se recibe huéspedes.
Rooms for rent.
- (48) Se forra botones.
We cover buttons.

In these we can say Spanish is spoken or we can think Spanish speaks itself, to use in one way or another the word Spanish as a subject. But there is no such equation, however remote, even possible in sentences like:

- (49) Se trabaja mucho aquí.
- (50) Se vive bien en América.

English fumbles around for a translation, precisely because omitting a subject is not allowed in English. So we must try to find a subject that will be structurally useful and as far as possible semantically meaningless. We say, "You have to work hard here" or "We have to work hard here," trying for an indefinite reference. It is always possible to translate the indefinite agent with "one," but this is really too formal for conversation: "One lives well in America" or "A person can live well in America." Sometimes, as in the translation of *Se dice*

que los precios van a subir, we can use a third person with "They say prices are going up."

Some textbook analyses have attempted to present the Spanish pronoun *se* as the subject of the verbs *trabaja* and *vive*. This is not a satisfying explanation since, on the basis of English translation, it assigns *se* a unique function among Spanish reflexives. This indeed is a case of bringing the mountain to Mohammed.

To generalize, the passive construction in Spanish has a far wider application than in English. The Spanish speaker learning English is likely to overuse it. The English speaker learning Spanish may attempt to avoid it, at least in some places where he should use it. Let's look at some specific problems.

It is one thing to discuss the problems of two languages in contact. It is another thing to make a list of the specific problems that must be met when the locale of contact is a language classroom. First of all the list must have an order, and the sequence of that order will be expected to imply more than just a random inventory. One could list transfer problems in the order of their importance in the use of the language being taught, which implies some sort of frequency count. Or one could establish a hierarchy of difficulty based on the degrees of similarity and difference noted in the comparison of specific pattern sentences.

We propose to do neither, but rather to discuss from the point of view of structural transfer, listing first problems that arise in using reflexive constructions when they are needed and second in avoiding them when they are

inappropriate. We will enumerate and briefly discuss, then, selected problems of translation in the area of reflexive anaphora, when a speaker of English must accommodate himself to the patterns of Spanish.

1. There is no distinctive marker that all reflexive forms have in common. In fact, there are no exclusively reflexive first and second person pronoun forms. Only third person is distinctive. This is not a serious problem, but it complicates the identification of translation equivalents.

2. *Se* is undistinguished for gender, number, and dative-accusative case forms. The English speaker may feel his expression is inadequately specified.

3. The English-speaking student must get used, not only to a coalescence for number and gender, but to an unsuspected split for function. Used with verbs all the third person reflexives translate *se*; with prepositions the same forms translate *sí*. Furthermore *se* is weak-stressed, *sí* is strong-stressed. To achieve emphasis, it is often necessary to include both: *El se golpeó a sí mismo*.

4. The student must contend with an overlap of the reflexive *se* with an indirect object *se* (which is nonreflexive) in constructions like *Se lo di ayer*. Correlations with different person forms of the verb (almost nonexistent in English) further complicate the student's task. Spanish *di, diste, dio, dimos, dieron* all turn out to be "gave" in English.

5. One especially difficult problem will be getting used to employing reflexive pronouns with intransitive verbs, as in *Se salió, Se entró, Se durmió*, where translations give no hint of assistance.

6. Another problem is using *se* with certain transitive verbs to reflect translations of particles or adverbs in English, such as "He ate it up," "He took it away," which translate *Se lo comió, Se lo llevó*. Often there is nothing overt in the English sentence to cue the Spanish reflexive. *Se pararon en la puerta* translates "They stopped at the door." "He took a shower" becomes *Se dió una ducha*.

7. The English speaker must become accustomed to using the reflexive in sentences with inanimate subjects, such as *Se cayeron las peras*. One particularly common expression in Spanish is the use in reflexive sentences of phrase or clause subjects, as in *El lanzarse en paracaídas se cree peligroso* or *El que tengan que llegar temprano se considera de suma importancia*.

8. The English-speaking student must accustom himself to recasting certain sentences that have a possessive adjective into Spanish sentences a reflexive pronoun. "He took off his shoes," for example, becomes *Se quitaron los zapatos*.

9. The English speaker cannot depend on the lexical equivalence of *self = se*. The *self*-pronouns must be classified by function, with a separate translation for the emphatic appositive. "I myself will do it" becomes *Yo mismo lo haré*, with *mismo* as an important equivalent of myself.

10. *Se* in Spanish frequently must be equated with the English indefinite. Several English sentences, such as "One can't go out now," "We can't go out now," "People are not allowed out now," "It is not allowed to go out now," all translate *No se puede salir ahora*. The English anonymous report "They say. . ." is regularly expressed as

Se dice. . . When the English agent is deemphasized, the Spanish equivalent will almost invariably be reflexive, as in *Se celebra mucho aquí* for "There's always a celebration going on here."

11. The English passive, often the be passive and almost always the got passive, are expressed in Spanish by a construction with *se*. "It got lost" is *Se perdió*; "The doors were closed promptly at ten" is *Se cerraron las puertas a las diez en punto*.

12. The English speaker will have to remember always to show the identity of subject and verb or prepositional object and an appropriate reflexive. English may say, "He bought him a new car" or "He bought himself a new car." There is no such choice in Spanish; it must be *Se compró un coche nuevo*. In English one says, "He took it with him." In Spanish it must be *Lo llevó consigo*, never *Lo llevó con él*.

13. The English speaker must become accustomed to Spanish transformations which place the reflexive pronoun ahead of its antecedent, a pattern which never occurs in modern standard English. There is nothing in English to match the Spanish *Se mató el pobre hombre*. English must state its subject before it can serve as antecedent to an instance of reflexive anaphora.

14. The English speaker must be ready to incorporate his reciprocal expressions into the Spanish reflex. "The boys fought each other" becomes *Se pelearon los muchachos*, with *el uno al otro* added optionally only for emphasis or clarification.

In comparing the specific contrasts of two languages it could be considered reasonable to assume that the same

path that takes you from language A to language B will take you back to language A again. That is to say, the differences in the structures of the two languages are determined by the specifics of the two languages, that they stand in a constant relation to each other. Indeed this is the case where a vocabulary item in one language has a close translation equivalent in the other. The English speaker must substitute *lápiz* for *pencil* while the Spanish speaker substitutes *pencil* for *lápiz*. One substitution is intrinsically no harder than the other.

But in a full comparison there are relatively few one-for-one substitutions. More typically there are rule differences, rule-ordering differences, and item differences, so that any change made in transferring from language A to language B must be integrated into a whole pattern of differences, which go far beyond any single item. The English speaker going to Spanish substitutes *lápiz* for *pencil*, but he must also select the appropriate gender choice for the accompanying article and for any adjectives that appear, and must remember to make other system accommodations, such as an anaphorical back reference with the person three plus zero, since the *it* of the English pronoun reference disappears into the verb in Spanish. "The pencil? It's on the table" becomes in Spanish: *¿El lápiz? Está en la mesa*.

It is also easy to define a contrast in learning problems where two items in language A equate with one in language B. The language B speaker must make a choice based on a distinction that is grammatically irrelevant in his system, a process which is pedagogically difficult. The language A

speaker has a less demanding problem—he merely has the same equivalent for two of his items. His choice is easier, but it may leave him uncomfortable since he is unable to express a distinction that his linguistic experience tells him is important. The Spanish speaker learning English translates both his *pero* and his *sino* as *but*; his most difficult problem is to suppress puzzlement about how people who speak such an underdeveloped language can really express themselves adequately. The English speaker learning Spanish must make a choice which will be very difficult unless he remembers a distributional rule which really seems to him completely unnecessary, like addressing blue-eyed males as *you* and brown-eyed males as *ye*, or something similarly irrelevant and trivial.

Thus in comparing two languages the direction of movement is important. Necessarily many of the same pattern features must be dealt with in either direction, but the selection, sequence, and emphasis of contrasting items will be different. In the following discussion an attempt is made to list problems in an order of decreasing importance.

1. When the Spanish speaker learns English there are a considerable number of problems to be overcome in adapting to the patterns of reflexive anaphora. The most significant is probably the limitation of the English reflexive to animate subjects. English will not allow the freedom he is used to in Spanish.

2. The next problem is a consequence of the first: how to express the range of meanings expressed by the non-animate reflexive patterns of

Spanish. This will be a major problem, since the choices in English, while restricted, are seldom either simple or unique. To emphasize the goal and reemphasize the agent English uses the passive, with a choice between the *be-* passive and the *got-* passive, the latter usually but not always restricted to informal expression. Another possibility in English is agent deletion, where the object becomes the subject with no other grammatical mark, almost always limited to constructions with an adverb of manner: "Fords sell well this year," "The house paints easily," "This dress wore well."

3. The indefinitization of the subject is also accomplished by a variety of equivalents, mostly pronouns with deliberately non-specific reference but also nouns like *people*, and circumlocutions: "You mix the ingredients together and stir well," "They say it can't be done," "One might conclude it is not possible," "People are funny that way," "It is believed that all perished."

4. English firmly resists any attempt to form an equivalent to the person-three-plus-zero construction in Spanish sentences like *Se puede vivir bien en America*, *De aquí se ve muy bien*, etc. English demands a subject, and a circumlocution is the only solution: "It is possible to live very well in America," "We can see very well from here," "It's easy to see from here."

5. The Spanish speaker cannot count on the consistent operation of his reflexivization rule in the case of English prepositional phrases. In Spanish, an identity of subject and object in the same underlying sentence guarantees a reflexive pronoun, but in English there is a certain amount of inconsistency. In "She was beside

herself with anger" the reflexive is obligatory. In "He took it with him" the nonreflexive is obligatory. But in "I got myself a new car" or "I got me a new car" there is an option, perhaps correlated with degree of formality. This is pedagogically of less importance than patterns mentioned above because it is possible to choose one pattern for productive use and leave the alternative for recognition on the receptive level.

6. One mystifying construction for a Spanish speaker must be the use of reflexive forms for emphasis. Such sentences as "He did it himself" or "The President herself will do it" have translations in Spanish that are completely unrelated to the possessive.

7. Another problem for the Spanish speaker will be the association of English possessives with his own reflexive adverb of interest. *Se cortó el dedo* must be restructured as "He cut his finger."

8. There are several differences in form that will be learning problems. These must be learned first, since sentences can be made only when the correct forms are available, but they are probably not as difficult to master as the constructions already mentioned. It is true, however, that sometimes the supposedly minor problems can be surprisingly difficult, and that errors easily explained are anything but easy to generalize in one's speech habits. The most obvious contrast in English and Spanish is that English marks all pronouns for reflexive, not just third person. Furthermore it must be a problem for the Spanish speaker to keep gender and number categories marked in the third person forms. His *se* must be divided four ways, for *himself*, *herself*,

itself, *themselves*. Also it must seem arbitrary that the reflexive pronouns are built on possessives for first and second persons, but on objectives for the third.

9. Finally, the Spanish speaker cannot maintain a distinction he is accustomed to for verb and preposition forms. Regardless of stress or emphasis *se* and *sí* are translated with the same set of forms.

These contrasts taken together will surely place reflexive anaphora high on the list of learning problems a Spanish speaker must meet and solve when he learns English, both for the difficulty they pose as structural and semantic non equivalents and for the frequency of their occurrence in normal English usage, spoken or written.

As teachers of English or Spanish, what should we do with all this information? Perhaps contrastive data of the type cited here, extended to the full range of English and Spanish grammar, could help us teach language skills more effectively. One possible application is to help in the determination of a teaching sequence, to order the learning problems on the basis of the similarity or difference, hence the ease or difficulty, of each teaching item. But other factors must be considered in establishing a valid pedagogical sequence, and no one best ordering has been demonstrated for any learning situation. There appears to be more than one road to Rome in language teaching. Furthermore, we can assume that each language has its own logical structure, a structure that includes implications for its analysis and description. Any deviation from this implicit structure could possibly

be justified on pedagogical grounds, but such deviation would, theoretically at least, constitute a distortion of the inherent structure, one that should be employed only with a good reason.

A more likely application is the identification of particularly difficult learning problems, which will be given special attention and emphasis when they occur on the pedagogical timetable. Drills designed to show very clearly how a semantic area is structured in two systems could effectively reinforce learning activities. Thus a single set of instructional materials could serve a general set of student language backgrounds, if it could be accompanied by a teacher's guide or manual containing supplementary drills and explanations for use in classes with students who speak some particular background language or languages.

Perhaps more significant in gaining long-term pedagogical goals, contrastive information can help both teacher and student understand just where the problems lie, so that grammatical explanations can lead to a clearer perception of different ways of organizing reality. To point out, for example, that reflexive anaphora in English implies an operating subject, while in Spanish the implication is an identified object should provide a satisfactory explanation for a complex pattern of differences in reflexive usage in English and Spanish.

By constructing drills which provide a meaningful context the English speaker will more quickly accustom himself to hearing and using such initially strange sentences as *Se me olvidaron las llaves* and *Antes se vivía muy bien en ese país*, and the Spanish speaker will learn to limit the scope of his reflexive, to avoid such strange sounding sentences as "He took it with himself" and "Mary took off herself the hat" and also to use the self-forms in emphatic apposition to produce "He himself let me in" and "She finished the report herself," patterns foreign to native Spanish.

Language is said to represent the genius of a people, its speakers. It is impossible not to lose content in translation. The student who would be fully successful must adapt himself to the molds of thinking the new language uses natively, to see the world as first-language speakers do, not through the filter of item, or even sentence, translations. For one who approaches the task of learning a second language after reaching intellectual maturity, the only reasonable way to proceed is with a conscious understanding of the total system and philosophy of the language he seeks to master. Specific contrastive information at the right time with specific appropriate language experience to reinforce new patterns offers the most attractive possibility of success.

Criterion-Referenced Testing of Language Skills

Francis A. Cartier

Five or six years ago, the term *instructional technology* was introduced into the professional jargon of the Air Training Command and, within a year or two, could be seen in Army and Navy training publications as well. The term was an outgrowth of programmed instruction, but has grown to have a far greater breadth of application and perhaps represents an even more fundamental change of instructional philosophy than programming. Its most important ramifications, in fact, have little to do with instructional media or methods, but more with determination of course objectives and with evaluation of whether the students have, in fact, achieved those objectives.

These new concepts were originally developed in a context of training for jet engine mechanics, supply clerks, and cryptographic technicians, so I would first like to describe how the concepts were applied in those courses. This will be relatively easy to do. Then I will discuss the more difficult task of applying a few of the concepts of instructional technology to the problem of teaching English as a foreign language.

It has long been customary to set training objectives on the basis of faculty estimates of what the student

ought to know. Now, however, industrial and military curriculum designers are placing less and less reliance on the judgment of school staffs, since master instructors too often want to include everything they have learned in twenty years of schooling, experience, and reading.

The present trend is toward making a careful on-the-spot analysis of what mechanics or supply clerks must actually *do* to perform adequately on the job. From this inventory of observed behaviors, the instructional technologist writes a set of training objectives.

It is almost invariably found that while this list of objectives is longer because of its detail, it represents a smaller training problem than the one written up on the basis of faculty judgment. This is because the vague, the abstract, and the presumed nice-to-know items are eliminated and the course is not inflated by the ego-involvement of the experienced expert.

Now, once the instructional technologist has, from observation, determined the actual behaviors necessary for adequate job performance, he begins devising a test which will tell him, with similar objectivity, whether or not a student is able to perform them. And since his inventory of the job presumably contains a description of every necessary behavior and contains nothing that is irrelevant to adequate performance, it is only logical to assume that every graduate of the school needs to be able to perform every behavior on the inventory before he can

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be considered ready to be assigned to the job.

Note that the instructional technologist is not interested in how well one student compares with the class mean score (the norm) at graduation, but solely in whether each individual student can demonstrate the ability to perform each and every one of the essential job behaviors (the criteria). The instructional technologist therefore speaks of his tests as being "criterion referenced" rather than "norm referenced." Students are differentiated from each other only by the amount of instruction they need in order to pass. When the amount of instruction needed becomes so great as to be uneconomical, the student is failed.

One of the most unusual aspects of this procedure is that the instructional technologist starts building his curriculum by preparing the final examination. He then builds a course that teaches the student to pass the examination. Such a procedure would be sheer insanity except for two facts. First, the test does not merely sample parts of the course, but covers *everything* the student must learn to do. Second, *every* student is expected to get *every* item right. Impossible? Not at all, though it is very difficult. However, such a procedure gives one the immeasurable advantage of being able to say to the organization that one's graduate goes to, "This man may not know everything there is to know about the job we have trained him for, but here is a list of things that we guarantee you he can accomplish, and accomplish according to the technical specifications of the job."

Now let's take a closer look at the

kind of test the instructional technologist uses that permits him to make that kind of guarantee. He calls it a criterion test. The best way to describe it is to contrast it with the traditional kind of norm-referenced test. (Each kind has its advantages, but in the interest of brevity, I will not discuss the advantages of the norm-referenced test.) There are eight points of contrast.

1. The traditional norm-referenced test is designed to produce a normal distribution of student scores. The criterion test, however, is not designed to produce even a range of scores. A distribution is not needed since students' scores are not compared with each other.

2. A norm-referenced test usually only samples the course objectives; it is *hoped* that the student knows more than he is tested on. A criterion test tests every essential behavior.

3. Norm-referenced tests are usually satisfied with indirect testing. That is, a printed multiple-choice test with an IBM answer sheet might be used to test what the student knows about repairing an engine. Insofar as possible, a criterion test requires the student to demonstrate the actual repair procedures.

4. A student can pass a norm-referenced test even though he misses a certain pre-determined number of items. Sometimes the passing score is even determined *after* the test has been given. The number of items the student can miss and still graduate is often as high as fifty percent. On a criterion test, each student is expected to get *all* the items right, though for practical reasons we often lower that to ninety percent.

5. In grading a norm-referenced test, one does not attempt to identify *which* items a student missed; one only counts them. So one never knows what misconceptions the graduate may take away with him. The concept of criterion testing requires that each student be given at least some remedial training on any item he missed, even if he got the passing ninety percent.

6. For obvious reasons, test security is a constant problem with the sampling-type, competitive, norm-referenced test. But since criterion tests actually test for on-the-job competence, the student can be given full information about the nature of the test at the very beginning of the course. Indeed, the ideal criterion test constitutes a statement of the course objectives.

7. Criterion tests are much more difficult to devise and administer, but the additional time and effort is easily justified by the reliability and validity of the information they provide about student ability.

8. The last point of contrast is perhaps the most important one. If an item on a norm-referenced test is missed by a great number of students, the item is revised. If an item on a criterion test is missed by a great number of students, the *course* is revised.

Obviously, the theory of criterion testing can be applied much more readily to training for simple, mechanical jobs than to the kind of training we do at the Defense Language Institute's English Language School—teaching foreign military personnel enough English to permit them to attend technical military courses in the United

States. The application of criterion testing to language training is, in fact, limited by three important factors. First, criterion testing assumes that a complete and unambiguous inventory can be made of all the behaviors necessary for adequate performance. Linguistic science is not yet sufficiently advanced to provide us with such an unambiguous inventory. Second, an inventory of only the most obviously essential English structures, term, and so forth needed to pursue technical military training results in several thousand individual behavioral objectives. A final criterion test with an item for each objective would be impractically long. Third, there are no empirically-determined standards of intelligibility, of syntactic accuracy, or of many other aspects of the language, which can be applied dogmatically to assessment of a student's capability of performing the duties assigned to him after he leaves the English Language School. We must still rely on subjective judgments of pronunciation, fluency, and so on. Furthermore, these judgments are made by the wrong people; they are made by sophisticated language instructors who have become quite skilled at understanding heavily dialectal English, rather than by the student's eventual instructors, classmates, and job supervisors.

Nevertheless, it is possible to apply the theory of criterion testing to a few very important aspects of English-language training, especially since, at the English Language School, we have one enormous advantage that most schools do not have. We know exactly where the student will go, what he will be studying there, and what kind of work he will be doing afterward. Also,

our job—our “mission,” as we say in the armed forces—is very clearly stated. It is to turn out a student who speaks English. What do we mean by that? We mean a student who can sit down beside an American student in a classroom and learn the same things the American is being taught. We have to teach what is essential, but economy dictates that we waste no time teaching non-essential knowledge or skills.

It has therefore been necessary (and, fortunately, our circumstances make it possible) to make an empirical study of the English used by a fairly broad sample of technical-course instructors and prepare a frequency rank distribution of the vocabulary. Like many other such lists, it shows that 93 percent of the vocabulary used is accounted for by about 1,700 words. The first few words rank much the same as in other lists. The first ten are: *the, of, and, to, a and an, is, in, that, and it*. These account for 26 percent of the vocabulary. (These same words account for 25 percent of the vocabulary in the study by Godfrey Dewey.) However, some differences show up as high on the list as the 43rd, 44th and 45th words, which are *hundred, engine, and pressure*. By adding some relatively infrequent but important words such as *caution, exit, and payroll, we* have come up with a list of about 2,300 words which will in time become the “core” vocabulary of our general English course. In addition, we have compiled similar “core” vocabularies for each of the technical specialties that our students will study when they leave the English Language School. These lists average a couple of hundred words. It is our intention to test

all these “core” words with criterion tests. I hasten to add that we hope to teach more than these words, but that we will continue to evaluate those additional objectives with traditional achievement tests. We will also attempt to set core objectives with regard to English structures and other aspects, but we are putting that off until we learn to cope with the much simpler problem of vocabulary alone.

Application of this philosophy results in several deviations from the traditional methods of teaching a foreign language that you and I were subjected to in college. Since we are concerned exclusively with what the student can *do* at the end of the course, we are very little concerned with what he knows *about* the language and have eliminated all but a very few grammatical terms.

Similarly, because we find that our graduates have far less need to write English than to read, hear, and speak it, we have reduced written assignments to a minimum in order to concentrate heavily on conversation and reading.

In general, then, the school drastically limits its objectives and then singles out those which, from statistical studies or direct observation, appear to be of greatest operational value. These high-value objectives will eventually be taught to criterion. We are gradually revising our curriculum in this direction. Since we use nearly 50 different volumes and some 600 different laboratory tapes, this will take a little time.

Now let me give you some idea of what a criterion test is like. Since a criterion test is supposed to elicit the actual language behavior called for by

an objective, multiple-choice items are used but rarely. Marking *a, b, c,* or *d* on an IBM sheet is not a language behavior. Multiple-choice items can test for discrimination and reading comprehension, of course, but we cannot justifiably use them to evaluate a student's ability to *produce* a word or phrase. Another objection to multiple-choice tests is the guessing factor, though the probabilities for passing by guessing are quite small when you set ninety percent as the passing score.

The theory requires that the test environment and circumstances approximate those of the work situation, which, for our students, may be a technical school, a maintenance hangar, an aircraft at 40,000 feet, and sometimes even somewhere ten fathoms deep. Those circumstances are pretty hard to duplicate, but it may be possible to set up situations in which the student must understand and respond in English under distractions and psychological pressure. And, of course, whenever the objective is comprehension of English speech, the item must be tape recorded. In fact, the great bulk of our tests have been presented aurally since long before criterion testing was ever heard of.

The new theory is forcing us to rethink the wording of individual test items, too. An item such as, "What is the meaning of the word 'hammer'?" which asks the student to think about the language, is now rewritten to read, "What do you use a hammer for?" The response might be the same in both cases, but the psychological set of the student is very different. The theory asks for more than this, though. It asks that the stem of the item be an approximation

of the job situation. So another item might read, "You need to drive a nail. What do you ask for?" Note that this item calls for the student to *respond* with *hammer* rather than *respond to* the word *hammer*. This item is not, therefore, interchangeable with the others. We cannot be certain that the student who recognizes a word can use it, or *vice versa*; both kinds of items are necessary.

The theory of criterion testing increases one's sensitivity to many of the common unstated assumptions about language testing. To give just one example, the assumption that an item should consist of a language stimulus followed by a language response is implicit in most tests. This would be valid only if we made a lot of other assumptions—for example, that the students were never expected to *initiate* communication. Analysis of the actual job requirements shows that it is necessary to teach—and therefore test for—ability to make a language response to a situational stimulus, and also to respond to a language stimulus with some meaningful action other than language. So, for example, a criterion test might have items such as, "Convert the angle on your answer sheet to a triangle." Or, "What is the average of 1, 3, and 8? Write your answer in the semi-circle on your answer sheet." Also, many items will use pictures of things and activities.

It will be apparent from these examples that a single item often tests for several objectives. This complicates the post-test diagnosis of a student's specific deficiencies, but is necessary if we are to test all core objectives in a test of practical length.

One problem raised by the theory of

criterion testing is particularly difficult to solve in language training. Criterion tests insist on actual behavior—which in our case is largely spoken English. Such tests can, of course, be given in the language laboratory, but the time required to score spoken answers on tape becomes enormous when the instructor must listen through each individual tape for each student. This is especially true since the recorded answers are spaced out by the time required for the recorded question. Two possible solutions seem worth considering. First, having the student record his answers on a recorder equipped with a voice-operated relay which will run only when he is talking, or second, training the instructors to listen to speeded playbacks. Both of these are theoretically possible. A combination of them might make it practical to test in this manner, especially if we do not attempt to use such scoring methods for fine judgments of pronunciation or supraseg-

mental features, but only for grammar and vocabulary.

Considering all the problems of applying criterion testing to language training, it is tempting to simply throw up one's hands in despair and rationalize that the state of the art is not yet sufficiently advanced for us to bother with it. But the economic and pedagogical advantages of this approach to the defining of objectives and evaluating their achievement by the student are so great that the effort is surely justified. If we continue to set vague, general, idealistic objectives on the basis of guesswork or "experience" rather than on an objective, systematic appraisal of the student's real and immediate needs, and if we continue to pass the student who learns only a certain arbitrarily determined percentage of the language without regard to which aspects he has failed to learn, we shall never be quite sure what we mean when we say of our graduate, "He speaks English, too."

Predicting Pronunciation and Listening Skills of Native Speakers of Spanish: An Exploratory Study*

J. Donald Ragsdale

One of the most persistent and perplexing problems facing teachers of English to speakers of other languages is the assessment of students' skills in using English. The conscientious teacher spends considerable time particularly in constructing, administering, and grading tests of pronunciation and of listening even in the relatively short space of a typical course. One of the most crucial stages in this assessment process is at the point where the student has mastered enough English to consider applying for entrance into an American college or university. Here, the testing of language skills plays a primary role in the selection of students for entrance. It is also used as the basis for assigning students to beginning or advanced classes or laboratory programs as well as for providing the instructor with some indication of initial needs. Yet any teacher who has faced the typical mixture of Latin Americans, Arabs, Chinese, Japanese, Thais, and so on knows that his students' problems are not only a matter of individual ability but also of native language background. Chinese students, for example, will generally have great difficulty in

differentiating between [l] and [r] when they speak, but Latin Americans generally will not. Hence for any claim to real accuracy in testing, the teacher must devise different test batteries for each language group. This is not only a time-consuming venture, but it raises the very real question of comparability of tests across language groups. To make the matter even more perplexing, one needs only to point out the difficulty of administering and scoring tests of pronunciation and listening which utilize oral materials.

Partially as an attempt to cope with some of the above problems and partially because of an interest in exploring some of the theoretical concepts associated with bilingualism, a study was devised to explore the relationship between the pronunciation and listening skills of native speakers of Spanish and types of bilingualism. Ervin and Osgood have suggested that *meanings* are not necessarily constant in second-language learning and bilingualism.¹ They point out that the "true" bilingual, who has learned and who uses a second language in a quite different environment from the one in which he learned and uses his native language, will tend to develop different mean-

* This study was supported by a Louisiana State University Graduate School Research Council Faculty Fellowship.

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¹ Susan M. Ervin and Charles E. Osgood, "Second Language Learning and Bilingualism," in *Psycholinguistics: A Survey of Theory and Research Problems*, eds. Charles E. Osgood and Thomas A. Sebeok (Bloomington, Indiana, 1965), pp. 139-146.

ings for what are usually called translation equivalents, such as, in Spanish, "iglesia" and, in English, "church." This is certainly not surprising in view of the obvious physical dissimilarities of Latin American and American "churches." Such an individual might be called a *coordinate* bilingual, suggesting the coexistence, but not interaction, of two language systems.

In contrast to the coordinate bilingual is the *compound* bilingual. Such an individual is the usual product of second-language learning in the school situation where the environment is that of the native language. The student typically learns the second language as a system of translation equivalents for referents present in his native language environment. The two language systems interact, and meanings are virtually the same in both. Of course, positing these two types of bilingualism does not enable one to classify a particular individual in one category or the other. Rather, the two types represent two ends of a continuum along which bilinguals may be located.

Lambert and his associates have demonstrated the relationship between the second-language-learning environment and differences in meanings for so-called translation equivalents with English-French bilinguals.² They have further shown that coordinate and compound bilingualism can be indexed by the use of semantic differential D (distance) scores. Their procedure involved measuring the meanings of several common concepts, such as "house"

and "drink," in both English and French, calculating D's between the two sets of semantic differential responses, and averaging the D's across concepts.

The relationship between these two types of bilingualism and skills in using English is not entirely clear, however. Ervin and Osgood speculated that the more nearly alike two languages were in their meanings (compound bilingualism), the greater the chances would be that one set of language skills would interfere with the other.³ And Haugen has written that the compound bilingual is likely "to be constantly offending against the phonological, grammatical, and lexical rules of the new language."⁴

But Lambert and his associates have discovered that these speculations may be faulty. They investigated a group of American students enrolled in a six-week summer study of French at McGill University. The method of study there was one in which all class instruction and much out-of-class conversation was conducted in French, a technique which should have fostered coordinate bilingualism. Lambert and his associates' findings, however, "suggest that these American students, . . . do not keep their two languages functionally separated [as measured by semantic differential D scores]. Rather they tend to permit the two languages to interact. . . . Rather than encountering difficulty because of the interaction of their languages, these students are better able to ac-

² W. E. Lambert, J. Havelka, and C. Crosby, "The Influence of Language-Acquisition Contexts on Bilingualism," *Journal of Abnormal and Social Psychology*, LVI (1958), 239-244.

³ Ervin and Osgood, *loc. cit.*

⁴ Einar Haugen, "Bilingualism as a Goal of Foreign Language Teaching," in *On Teaching English to Speakers of Other Languages*, Series I, ed. Virginia French Allen (Champaign, Illinois, 1965), p. 68.

quire French by making use of interacting or compound linguistic systems.”⁵ Unfortunately, the measure of acquisition of French in this study was an average of the final grades in the four to five courses in which the student was enrolled. This average reflected skills in speaking, reading, and writing as well as knowledge of French literature. As Lambert and his associates point out, such a measure of acquisition does not permit generalizations about the relationship between type of bilingualism and individual skills such as pronunciation and listening.⁶

The present study was designed to investigate the specific relationship between type of bilingualism and pronunciation and listening skills with native speakers of Spanish. If the conclusions of Lambert and his associates are correct, then semantic differential D scores may well provide an index of these skills. Such an index would be particularly helpful in assessing the abilities of students about to enter American colleges and universities.

Method

Measuring Instruments.— An English and a Spanish version of a nine-item semantic differential were devised for the purpose of indexing type of bilingualism. Three bi-polar adjective scales were selected for each of Osgood’s three primary factors in meaning.⁷ Those selected were for the Evaluative factor— *good-bad*, *timely-untimely*, and *positive-negative*; for

the Potency factor— *heavy-light*, *strong-weak*, and *hard-soft*; and for the Activity factor— *hot-cold*, *calm-excitable*, and *active-passive*. One version of the differential used these English adjectives, while the other used their Spanish “equivalents.” Instructions for using the differentials were prepared in Spanish with the aid of a native speaker. Five common concepts were chosen for differentiation. They were “church,” “school,” “house,” “music,” and “friend.” The concepts were translated for use on the Spanish version of the differential into “iglesia,” “escuela,” “casa,” “música,” and “amigo.” Figure 1 illustrates one of the scales used in both English and Spanish. The concept appears at the top of the differential and is followed by the nine hi-polar

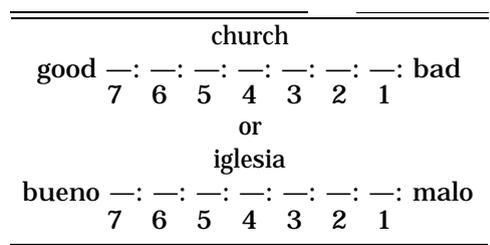


Figure 1.
General form of the semantic differential in English and in Spanish

adjective scales. On the seven-point continuum between each pair of adjectives, the subjects could indicate their meaning for each concept in terms of the nine pairs of adjectives.

A test booklet was made with the page of instructions followed by the five concepts and differentials in Span-

⁵ Wallace E. Lambert, R. C. Gardner, H. C. Barik, and K. Tunstall, “Attitudinal and Cognitive Aspects of Intensive Study of a Second Language,” *Journal of Abnormal and Social Psychology*, LXVI (1963), 368.

⁶ *Ibid.*, 361.

⁷ Charles E. Osgood, George J. Suci, and Percy H. Tannenbaum, *The Measurement of Meaning* (Urbana, Illinois, 1957). Complete details on constructing, using, and scoring such a semantic differential may be found in this book.

ish and those followed by five concepts and differentials in English. By the use of this sequence, each concept in English was maximally removed from each concept in Spanish. No indication was given that the subjects would differentiate the same concepts in English which they had differentiated in Spanish. The instructions warned against looking back at a differential which had already been completed.

A pronunciation test was devised to measure the subjects' freedom from Spanish phonetic influences on English. Five ten-word English sentences were prepared. Together the sentences contained a high frequency of occurrence of those English phones with which native speakers of Spanish have pronunciation difficulty, such as [ɪ], [ʊ], [θ], and [y]. Because of the constraints of structure and meaning, however, each sentence could not contain all types of troublesome phones. Each sentence had the same grammatical structure, an example of which is "The young Spanish boy learns English from the good book." The words used were chosen, for the most part, from Fairbanks' phonetic inventories for nonreading children and primary readers in order to insure a basic and familiar vocabulary.⁸

A listening test was devised along similar lines to measure the subjects' ability to perceive English phones. Five more ten-word English sentences were prepared using the same structure and vocabulary level as in the pronunciation test. A typical sentence was "The tall young man reads books in the school library."

⁸ Grant Fairbanks, *Voice and Articulation Drillbook*, 2nd ed. (New York, 1960), pp. xv-xix.

Subjects.— The subjects chosen for the study were thirty-six native speakers of Spanish from various parts of Latin America who were enrolled in college preparatory "English orientation" classes at Louisiana State University. These classes consisted of instruction in English phonetics and pronunciation, English grammar, and American culture. All of the subjects had been introduced to English in their native countries, but their backgrounds revealed a wide spectrum of learning experiences and environments. All of the tests were administered in the last two weeks of the ten-week course. The sample thus probably was typical of many native speakers of Spanish just embarking on a college career in America. Of the thirty-six, only two were females.

Procedure.— The conduct of the study required three consecutive class periods. At the first period, the subjects were told by the experimenter that they were going to participate in a three-day project designed to improve the teaching of English to speakers of other languages. They were then given the semantic differential test booklets and were asked to complete them according to the instructions on the cover. Warnings against looking back at a previously completed differential were verbally reinforced, and the entire session was carefully proctored. Because of its bearing on the future use of this type of instrument, it should be noted that the students appeared to enjoy the testing experience; several made remarks about the novelty of the technique.

At the second period, the subjects assembled together in their usual classroom. Then they were taken one-by-

one into an adjoining room and were asked to read the sentences prepared for the pronunciation test from a type-written copy. They were given several seconds to glance over all of the sentences, and they were told to read each only once regardless of errors. The responses were tape recorded.

At the third period, the subjects took the listening test. The sentences were read aloud by the experimenter one at a time. After each sentence, each of the students was given enough time to write down what he had heard. Since the goal of this test was a practical one, no attempt was made to provide a clinical, noise-free environment. The room, however, was rather quiet, and the sentences were read through a second time to allow the subjects to check their responses. In each reading, a normal rate and manner of speech was maintained. At the end of this session, all of the subjects were thanked for their helpfulness.

Results and Discussion

D scores were obtained for each subject from the semantic differential data by using the differential in factor scores between each concept in Spanish and its "equivalent" in English. The five D scores for each subject were averaged to provide an index of type of bilingualism. The larger the D score the closer the subject was to the coordinate end of the continuum; the smaller the D score the closer he was to the compound end. The possible range of such scores was from 0 to 10.39. The observed range was from .4 to 3.1661, and the average score was 1.4164.

The tape recording of the pronunciation test session was audited by the

experimenter, using noise-excluding earphones. Each failure to produce a recognizable English phone was tabulated as one error. Errors were tabulated only on segmental phones, and minor "errors," such as the substitution of [ə⁺] for [ə], were ignored. The observed range of errors was from 5 to 16, and the average number of errors was 10,

The students' transcription on paper of the sentences read in the listening test were also analyzed for errors. Word order was ignored, and the total number of correct words was tabulated. Spelling errors were also ignored when the result obviously could not have been another word. The correct responses were subtracted from the number of words in each sentence (10) to obtain the number of errors. This was done because some subjects recorded more than ten words in what seemed to be some sort of closure response. Such responses are clearly not errors in listening or auditory perception as usually defined. The observed range of errors was from 0 to 39, and the average number of errors was 13.7.

A Pearson product-moment correlation coefficient (r) was calculated first to determine the relationship between the semantic differential D scores (types of bilingualism) and the pronunciation errors. The resultant r of .293 could have occurred by chance only 5 times in 100. This indicated a significant relationship between the D scores and the pronunciation errors. A second correlation coefficient was calculated to determine the relationship between the D scores and the listening errors. The resultant r of .4206 could have occurred by chance only 1 time in 100, indicating a sig-

nificant relationship between the D scores and the listening errors also. In general, the higher the D score, or the closer to coordinate bilingualism, the greater is the number of both pronunciation and listening errors a subject is likely to make.

The results observed here, then, appear to support the findings of Lambert and his associates rather than the speculations of Ervin and Osgood and of Haugen. Regardless of the theoretical implications, however, semantic differential D scores appear to be predictive of both English pronunciation and listening skills of native speakers of Spanish. Though the differential is itself a somewhat time-consuming instrument to score and interpret, it would require considerably less time and care in both administration and

scoring than do present tests of pronunciation and listening. Because of its predictive power in the case of beginning students, it would seem to be a useful placement-type test. With further study of more subjects, norms could be established, so that students obtaining a D score below a certain level could be assigned to an advanced course or advanced work. Students scoring above that level could be assigned to a beginning course or remedial laboratory work. With the development of differentials for speakers of languages other than Spanish, these findings could be checked for their generality. While the findings here are limited, the implications are that the semantic differential is a rather powerful and useful tool for teachers of English to speakers of other languages.

Controlling Cultural Variations in the Preparation of TESOL Materials

Maurice Imhoof

One of the difficulties of producing skills materials or teacher-training materials for speakers of other languages is that extreme variations between the reader's culture and the writer's culture can cause serious interference in communication. Our vision is structured by the kinds of training, both formal and informal (folk, popular, mass media), which our own culture provides. It may limit or distort our observation of the foreign culture.

Ways of Looking at a Culture

The preparation of educational materials which attempt to avoid some of the cultural blocks to comprehension presumes an understanding of the ways of looking at a culture. Edward T. Hall, in a study which views culture as communication with a biological base, lists ten separate kinds of human activity which he labels Primary Message Systems.¹

These ten systems include:

1. Interaction (Speech is one form of interaction.)
2. Association (ways in which so-

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¹ Edward T. Hall, *The Silent Language* (New York: Doubleday, 1959), p. 53.

- cieties and their components are organized or structured)
3. Subsistence
4. Bisexuality
5. Territoriality (space and its use)
6. Temporality (biological and practical and arbitrary)
7. Learning (extended in time and space by language)
8. Play
9. Defense
10. Exploitation (meeting environmental conditions)

The importance of Hall's scheme is that each Primary Message System has a relationship with its adjectival counterpart. *Learning*, for instance, in a few combinations with its counterparts reveals the following organization of some aspects of culture.

1. The interfactional aspect of learning: the community lore, or what gets taught and learned.
2. The organizational aspect of learning: the learning groups or educational institutions.
3. The territorial aspect of learning: places for learning.
4. The protective aspect of learning: learning to defend oneself and to stay healthy.²

A hundred relationships within the culture, which in fact represent a description of the culture, are developed through the pairing of the message systems and the adjectival counter-

² *Ibid.*

parts. The comparison of any one of these one hundred relationships with the corresponding relationships within a different culture may reveal variations which cause difficulties in cross-cultural communication. For comparative purposes, statements can be made about American culture in regard to any of the hundred relationships. More importantly, the foreign culture may be studied with these relationships as check points for possible sources of difficulty in respect to language teaching.

A few examples based on experience in preparing TESOL materials for Afghanistan will perhaps show the singular usefulness of such a scheme for checking cultural difficulties.

A study of Afghan culture reveals several aspects of the learning situation which are at variance with American culture. The person preparing learning materials, in order to circumvent some of the cultural conflicts, must have made some of the following observations about the Afghan educational situation.

1. *The interfactual aspect of learning.* What gets taught and learned? The Afghan curriculum is very heavy at each grade level. From eleven to fifteen subjects may be studied each week. Subjects are introduced early and carried through several years rather than covered in depth in one year. Religious instruction is continued throughout the entire school attendance. Such an educational situation requires adjustments not only in the amount of material taught, but in the sequencing as well. A part of the interfactual aspect of learning may be at odds with the best language-

teaching practices currently followed in our culture.

2. *The organizational aspect of learning.* Organization of learning groups in Afghanistan is very similar to the organization of learning groups in American culture—basically, elementary, middle, and secondary; yet other organizations do exist, such as village schools conducted by a religious leader rather than a trained teacher. Religious classes are held in mosques. Although the organization of learning seems superficially similar, the variety of alternate organizations and lack of standardization in the quality of education within the organization limits the commonness of experience of students at a particular grade level. Assumptions as to past experience and knowledge must be made cautiously.

3. *The territorial aspect of learning.* Places for learning are of greater variety than in the American culture. Some facilities are comparable to American schools; others would be considered inadequate in housing, equipment, heating, etc. Many classes are held outdoors. Teaching practices stemming from important language concepts which are incompatible with some of the teaching facilities need continued emphasis.

4. *The protective aspect of learning.* Formal learning in this sense is very similar to American culture. Informal learning may be very different. Tribal people, nomadic people, remote rural people have different cultural patterns.

Implications for Materials Preparation

Observations about the culture are

only important in respect to the degree to which they influence the comprehension of learning materials, however. There is no need to give a complete description of the culture, but rather a need to observe the foreign culture, check the items at variance if they influence the particular set of materials being produced, and apply the necessary controls to the materials.

Vocabulary or semantic problems resulting from cultural variations either have to be replaced or explained. In addition, difficult colloquial styles and unfamiliar rhetorical devices employed by the writer must be adapted to the experience or language skill of the non-native reader.

Cultural variations are relevant, however, beyond the relatively simple problem of examples or illustrations found in the teaching materials. At least four interrelated spheres affecting the preparation of language materials for future teachers of English

may exhibit variables which hamper comprehension.

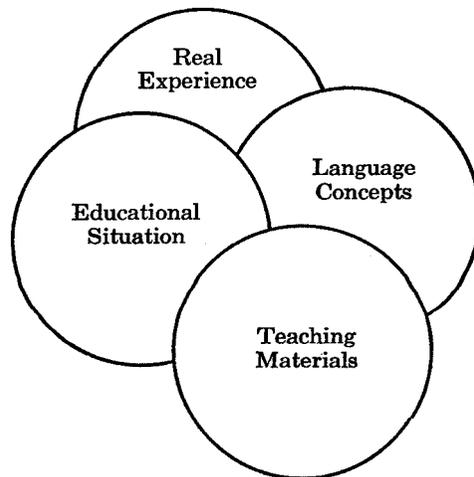
Variations between the writer's and reader's cultures in any sphere make the task of preparing materials more difficult. The teaching materials must be presented within an educational pattern familiar, or at least understandable, to the reader. At the same time, they must employ the devices—verbal or visual—necessary to make comprehensible the language concepts selected for teaching. And above all, they must rely on illustrations, examples, and vocabulary understood in the reader's real experience.

To the language teacher or teacher trainer, the interaction between these four areas means that a decision to write, to revise, or adapt must be weighed against the effect the material will have on the other three areas. The writer, in addition, must guard against his own cultural bias which may lead him to make decisions unhelpful to his reader.

Bereday devotes a long chapter in *Comparative Method in Education* to "The Significance of Cultural Bias" and how bias is reflected in the whole method of comparative studies. His remarks are challenging to the novice student of culture trying to make specific application to the preparation of materials.

Can such cultural bias be avoided? Probably it cannot, but it can be minimized. Since instructional practices and standards are only just emerging, there is yet no common cultural denominator against which the educational aspirations and actions of the divergent cultures could be accurately judged . . . There remains the fact, however, that the same evidence, even when surveyed by men of similar train-

SPHERES OF CULTURAL VARIATION IN THE PREPARATION OF LANGUAGE TEACHERS



ing and allegiance, appears different from different vantage points.³

An added complication is the present necessity of preparing professional teacher-training materials in English, a language which ideally the non-native reader will know well but whose cultural experiences are quite different from the writer's whose native language is English. Fries states the problem thus:

Our language is an essential part of every portion of our experience; it gets its meaning from our experience, and it is in turn our tool to grasp and realize experience. Every language is thus inextricably bound up with the whole life experience of the native users of that language.⁴

The unhappy alternatives to preparing the materials in English, at least for the present in emerging countries, are to have no professional teacher-training materials at all or to use locally produced translations which are either inadequate or untested.

The necessity of preparing the materials in English and the necessity as well as the limitations of being a cultural observer suggest the following steps in the control of cultural variations which could be employed in the

preparation of teacher-training materials by a person knowledgeable about the culture of the learner.

1. Selection of concepts or principles which are held to be relatively universal by experts in the field.

2. An investigation of the writer's treatment of these universal concepts to determine possible areas of cultural conflict using Hall's culture map. (One may be reviewing his own writing or evaluating or adapting the writing of another.)

3. Deletion of non-essential, culturally difficult material.

4. Substitution of more universal examples or illustrations. (It would be pedagogically preferable to use examples from the learner's own culture, but this would limit the usefulness of the materials to one language community or one culture.)

5. Expansion of the writer's cultural examples which are relevant to the study of language concepts in order for the student to make comparisons with his own culture. (For example, it may be necessary to explain the mobility of Americans in order to discuss the coinage of American English words for different types of roads.)

At all times, through the frame of reference of a particular culture or educational situations, the center of attention must be on the important linguistic concepts to be taught and the adaptation of materials suitable for teaching these concepts to the students of that culture.

³ George Z. F. Bereday, *Comparative Method in Education* (New York: Holt, Rinehart and Winston, Inc., 1964), p. 10.

⁴ Charles C. Fries, *Teaching and Learning English as a Foreign Language* (Ann Arbor: The University of Michigan Press, 1945), p. 57.

Adapting and Composing Reading Texts

Andrew MacLeish

In teaching reading in the second-language classroom there are a number of considerations which should precede analysis of content, or at least be taken into account along with it. The approach demands consideration of a complex of overlapping matters: the achievement of graphemic-phonemic contrasts, the sequence of association in the process of reading, and the control of sounds, grammar, subject matter, and cultural content of the text.

The achievement of across-system graphemic-phonemic contrasts is the first step, and the one most frequently neglected. Historical reasons can be given for the shape of graphic symbols and for their use to represent certain sounds, but they are neither rational nor philosophical explanations. The only explanation is convention; people have agreed that certain graphic shapes will symbolize certain sounds and sound sequences in spoken language. This is true for both "difficult" and "easy" orthographies.

The complexity of the symbol has nothing to do with its function, in spite of the widespread notion that simple symbols have correspondences with sound, while complex symbols represent ideas. The readers of all written languages are "getting" sounds

from the printed page. Even so-called wordwriting, such as Arabic symbols for numbers which speakers of many languages see the same but read differently, evokes an oral response to the graphic stimuli.

One of the criteria and evidences for automaticity in the hearing-speaking skills is that the form, or phonetic shape, of the speech sinks below the threshold of attention. The same situation prevails in the reading-writing skills to a more complex degree. As the reader reads, two systems of symbolization sink below the threshold of attention: the graphic representation of sounds plus the phonetic representation, vocalized or internalized, of the meanings or content. Writing as a system of secondary representation for meaning and sound as a primary representation for meaning are functioning simultaneously, although the reader is aware only of *what* he is reading, the content. This is what Fries called the "Stage of 'Productive' Reading."¹

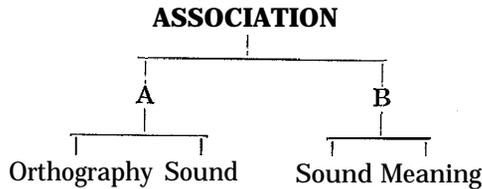
A writer encodes from meaning to sound, oral or silent, and then from sound to orthography. The reader decodes from orthography to sound, oral or silent, and then from sound to meaning.

It is apparent, then, that there are three systems of associations functioning in the act of reading—one between orthography and sound, one between

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¹ Charles C. Fries, *Linguistics and Reading* (New York: Holt, Rinehart and Winston, Inc., 1963), p. 205.

sound and meaning, and one, the hierarchy of association, between the two basic systems:



It is wrong to believe that in a serious attempt at language communication the orthography-sound association skill is learned independently of the sound-meaning skill. It must not be separated from any of its component aspects. The reader of the orthography of any language participates in a highly complex system of representations and associations which he learns by bringing the component aspects into coordination with each other.

Since we are interested in reading pedagogy, we must concentrate on the fundamental "see-say-think" sequence of association. Since sound is the important connecting link between orthography and meaning, we can only agree with Lado who says, "The student should not be asked to transcribe whole utterances or even read them without having heard or imitated them"². . . and with Samuel Martin: "The student should not read the comprehension material before hearing it. If he does, most of its value is destroyed."³

The crux of our discussion, then, is that in preparing beginning and intermediate reading texts for use in the overseas ESL classroom we must exercise close controls. We will not suggest

² Robert Lado, *Language Teaching* (New York: McGraw-Hill, Inc., 1964), p. 52.

³ Samuel E. Martin, *Language Study Techniques* (New Haven: Yale University Press, 1951), p. 7.

the principles upon which we build this control, assuming that graphemic-phonemic contrasts have been made so that a Romanized text can be reasonably well read. But we cannot assume, as many books do, that the "language" of the text has been mastered before the students meet it in the reading lesson. Thus, we are here interested in the control of sound and grammar patterns, and in the control of cultural context, whether it be the context of the first or second language, and in the control of subject matter within this context.

We pose two problems. First, we will examine how we can *adapt* the still-rather-conventional uncontrolled text to some degree of control over sound and grammatical patterns. Second, let's assume an ideal situation in which we can *compose* our own reading text with the necessary controls built into it.

The first situation is illustrated in a sample reading lesson from a well-known "direct method" text widely used in Asia and Africa.

A PICNIC

Mrs. Brown: What are we going to do today?

Jack: Let's go fishing.

Mrs. Brown: What do you want to do, Mary?

Mary: Can't we go to the cinema again?

George: She wants another box of chocolates.

Mary: No I don't. Let's go for a picnic.

Mr. Brown: Look at those black clouds.

Mrs. Brown: Never mind. We can shelter somewhere if it rains.

So they went for a picnic in the woods. Mr. Brown carried a heavy basket. The sun was shining when they left the house, and at the end of

their walk they were glad to be in the shade of the trees. While George and Jack were making a fire to boil the water, Mrs. Brown got the things out of the basket, and Mary played with Rose.

"Did you forget anything this time?" Mr. Brown asked.

"No, nothing," Mrs. Brown replied. "Let me see—bread, butter, cups, plates, knives, spoons, cake, sugar—where's the milk?"

"At home, perhaps," said Mr. Brown. "No, it isn't. Jack was carrying it. Here it is."

When the water was boiling, George filled the tea-pot, and soon they were sitting on the ground having their tea.

"You can carry the basket home, Jack," Mr. Brown said. "It's quite light now. And don't forget to put the fire out."

The format of this lesson is a mixture of a dialogue and narrative, and the length, I think we'll agree, is about the maximum. The cultural context is British, as evidenced by the vocabulary and syntax. I do not include the exercises which follow since it is not my intent to analyze the whole lesson. We merely need to point out that there are too many problems in the reading passage to enable efficient teaching.

Let's assume that we are to adapt this text for a Thai secondary classroom—where it is actually used. Step One: decide upon the phonological targets. A contrastive analysis shows us some of the consonant and vowel problems in this lesson.

<i>English</i>	<i>Thai Substitution</i>	<i>Examples from the Text</i>
/ʃ/	/s/, /ç/	fishing, she
/i/ before C	/iy/ + C	picnic, sitting
/ay/ before C	/ay/ + ø	shining
/aw/ before C	/aw/ + ø	Brown
/kl/ initial	/kr/ initial	clouds
/ps/ final	/p/ final	cups
/əy/ before C	/əy/ + ø	boiling
/s/, /z/ final	ø	let's, rain
/ð/, /θ/ initial	/d/; /t/ or /s/	they, things

All English final consonant clusters constitute a major problem for Thai learners of English because consonant clusters never occur in syllable final position in Thai. The Thai speaker learning English will omit the final cluster, or his attempt at it will result in a compromise.

Quite obviously, this is too much for one lesson. We must choose two or three phonological targets, and these choices must be made on the basis of their frequency of occurrence in the second language and in the text, what has been taught previous to this lesson, and how well our students have mas-

tered these problems. Here is the choice of targets, and they are all contrastive. Even these may be too many. At any rate, we concentrate on the chosen targets and ignore the rest. This is all we can do.

I. Initial /ð/, /θ/

<i>English</i>	<i>Thai Substitution</i>
/ðoz/	/doz/
/ðey/	/dey/
/ðer/	/der/
/ðis/	/dis/
/θiŋz/	/tiŋs/, /siŋs/

II. Final /z/, /s/

English	Thai Substitution
/klaudz/	/krauts/
/reynz/	/reyns/
/wudz/	/wuts/
/rowz/	/rows/
/wənts/	/wənts/, /wənt/
/kəps/	/kəps/, /kəpt/

Step Two is to understand the grammatical problems in the text and choose the ones we wish to concentrate on. Our contrastive analysis shows us the problems of underdifferentiation, overcorrection, confusion of affixes and pronoun forms, interference of native language habits, distribution, and so forth. Here are just a few of the grammatical problems encountered in the text.

- (1) Subject-Verb agreement, particularly when MV and Aux are present. The concepts of the meaning of Aux are difficult.
- (2) Inflectional suffixes of number and tense:
 - (a) underdifferentiation: *she want*
 - (b) confusion of unfamiliar affixes: *breads, butters, sugars, cakes*
 - (c) overcorrection: *you wants, we cans shelter*
- (3) Confusion of personal pronoun forms: *Her* wants a box of chocolates. *Their* walk.
- (4) Underdifferentiation of determiner significance: *the/a* ground; *the/a* basket; *those* clouds
- (5) Answering the negative question *Can't we go?* the Thai has the habit of using the incorrect introductory *yes/no*: *No, we can; Yes, we can't.*
- (6) Modification structures: *clouds black; basket heavy.*
- (7) Problems in question formation:
 - (a) Omission of the Aux: *Go we to the cinema? Forget you anything?*
 - (b) Selection of the incorrect form of the Aux: *Do you forget anything?*
 - (c) Wrong word order: *We go can.*
- (8) Present and past continuous tense formations are difficult. The sentences in the narrative are too long to introduce the past continuous. They should be broken into shorter sentences.
- (9) The negative contraction: *can : can't*
- (10) *forget* and *want* + infinitive

Clearly the number of problems and their complexity is appalling. Yet this is, in a very real sense, the confusion that faces the Thai student confronted with this text. Again, on the basis of frequency of occurrence, previous teaching, and student progress we must choose two or three grammatical targets.

forget + infinitive: 1 occurrence
want + infinitive: 1 occurrence
 past continuous: 5 occurrences =
was shining, was carrying, was boiling, were making, were sitting

Step Three is to pull the vocabulary on which we wish to concentrate. The criteria here are not only phonological ones, but also cultural. The list of words concentrates not only on supplementing the phonology of the lesson but also on frequent words from Western culture which are not common in rural Thailand. And the list includes

those Briticisms which are not common in the American teacher's usage.

picnic	butter	woods
basket	plates	fire
shine	spoons	nothing
shade	knife/knives	quite
boil	light	cinema

While I do not mean to slight the important and difficult problems of teaching vocabulary, I leave it by suggesting the obvious: in both adapting and composing texts we do well to have reference, at some point, to Michael West's list and to those words marked A or AA in the Thorndike list.

To complete our adaptation we should pay close attention to the drills. In many texts which teach reading at beginning or intermediate levels there is too much initial emphasis on the content of the dialogue or narrative. Further, grammar drills, when they occur, often confuse the student by asking for rearrangement of distorted sequences, by asking for phrasal rather than for word-order rearrangement, or by presenting questions which can utilize two or more of the responses suggested in the question instructions. Or drills may require abnormal changes or unnecessary multiple changes which can get in the way of learning.⁴

If I have suggested nothing else in the foregoing, I hope I have suggested that many standard reading texts, particularly those which have been current overseas for a number of years, need adaptation from the point of view of current thinking about the sequence

⁴ See Andrew MacLeish, "Composing Pattern Practice Drills," *On Teaching English to Speakers of Other Languages*, Series 111, ed. Betty W. Robinett (Washington, D. C.: Georgetown University, 1967), pp. 141-148.

in the process of reading. And a good contrastive analysis can enable us to come directly to grips with our students' problems and begin the job efficiently. A contrastive analysis is not absolutely essential in cross-language teaching, of course. We can listen. But the analysis saves time by enabling us to predict problems; thus we can quickly judge the desirability of a specific text or lesson and make reasonably valid decisions on what to do with it.

The second situation is the one in which we can compose our own reading text with the necessary controls built into it. This situation is illustrated in an elementary reading lesson for Hawaiian schools. Here the basic problem is the same, though we are not yet very sure of the best way to write cross-dialect lessons, in this case Standard English-Island Dialect. Many people believe that contrastive analysis as a basis for cross-dialect materials preparation is unnecessary. Recent discussions and demonstrations, however, indicate that contrastive analysis may be actually more valuable in cross-dialect than in cross-language teaching.⁵

Here is the narrative portion of the lesson for the Standard English curriculum on the island of Hawaii.

Jeff traveled from Illinois, on the mainland, to the Big Island. The jet trip took ten hours. He stopped in San Francisco. His father came

⁵ This premise was discussed among linguists, psychologists, educators, and Island teachers in a conference at Hilo, Hawaii in June, 1966. By June, 1967 all the targets in the lessons at the Hilo Language Development Project were based on Standard English-Island Dialect phonological and grammatical contrasts.

with him and they visited a friend in Honolulu on the way to Hilo. Jeff likes the Big Island and sees many things he never saw in Illinois. He's talking with his friend Jim.

The Standard English lesson contains both a narrative and a dialogue; the latter, reproduced below, is at the end of the lesson. The dialogue is easiest to write; we can get a larger number of complex structures into a dialogue in a natural way than we can get into a narrative or exposition. Thus the dialogue contains the grammatical targets.

As we compose our own text we can, if we are careful, include in it structures to be taught for the first time. Notice the absence of continuous tense forms in the primary grade Standard English lesson. Our adapted text is rich in its variety of complex tense patterns which, in that case, must be presented before the reading lesson is begun.

The subject matter of the Standard English lesson is basic to mainland culture as well as to the culture of the island of Hawaii. Step One is to decide upon the phonological targets we wish to include.

Final V or C + /z/:

he's	canefields
hours	foods
sees	lichies
things	was
his	as
cornfields	

Final V or C + /d/:

mainland	glad	good
visited	did	head
friend	island	hard
travelled	had	

The problem of final vowel or con-

sonant plus /z/ occurs six times in the narrative portion of the lesson. The problem of final vowel or consonant plus /d/ also occurs six times in the narrative portion. These are italicized. This is a high frequency of targets for such a short narrative, but we've focussed on only two problems and kept others to an absolute minimum, if we haven't eliminated most of them.

Step Two is to decide upon the grammatical target.

Statement —————> Wh-Question

When did you come?

What do you like?

Which island foods do you like?

What do you think. . . ?

Grammatical structures other than the focal one are kept within the range of the young Island Dialect speaker.

Step Three is the introduction of new vocabulary. Note here the relative simplicity of the vocabulary for beginning students and the small number of new words introduced. This short list also supplements the teaching of phonological problems.

visited	brought
lakes	rubbing

Step Four, the focus on spelling patterns, graphemic-phonemic contrasts, is almost impossible to achieve in adapting a reading text. But it's easy to do when we compose our own.

cornfields	head	mahimahi
canefields	lead	papaya

Here we've concentrated on two words which look and sound almost alike, a minimal pair, and two Hawaiian words which are difficult to spell. Another useful pattern for drill, which is not included in this lesson, would be words containing one sound which is repre-

sented by several different graphemes or grapheme sequences. The several ways of spelling /iy/, the high-front tense vowel, is an example.

Step Five is writing the dialogue.

Jim: I'm glad you came to Hilo.
When did you come?

Jeff: I came on Wednesday. I came here with my father.

Jim: What do you like best on the Big Island?

Jeff: In Illinois we had lakes and lots of cornfields, and it was cold. Here I like the ocean, the canefields, and the warm weather.

Jim: Which island foods do you like?

Jeff: I like the mahimahi and papaya; they're good. But I don't like lichies; they're icky.

Jim: What do you think of coconuts?

Jeff: One of them hit me on the head. They're hard as lead.

The dialogue fulfills several purposes. It provides a more natural format, one which is different from the narrative containing the sound problems. And it introduces the grammatical target in a different format after the sound problems have been drilled. There is a total of four occurrences of the grammatical problem in this short dialogue. And it serves as a review of the sound problems; there are nine occurrences of final /d/ and six occurrences of final /z/.

We include no drills after this lesson since it is short enough for the student to memorize in a reasonable length of time. While there is widespread disagreement on the virtue of memorizing both native and target language material, we must agree that it is a valid

approach if only because there are hundreds of things in every language that people say often, and always in the same way, things which might just as well be memorized at the very beginning of language study. Here, the targets are obvious, and interfering problems are few. If drills are necessary, they can be used to reinforce what has been learned in the text. There is no necessity for content questions.

In our adapted text, the Thai lesson, the drills are an initial learning device. They are necessary in order to isolate the target problems from all the others. But at least we've tried to focus on language problems as we also consider questions of content.

We ought to get beyond questions of content in teaching reading at beginning and intermediate levels. The need is a practical one, and the demand is upon us from ministries of education overseas. The foregoing suggests a way of making the reading text do a lot more language teaching than we are accustomed to ask of it. It has been my experience, and the experience of overseas teachers whom I have trained, that these methods of adaptation and composition are workable. And the result in either case is an interesting partner to, if not a replacement for, drills in isolation from all that the reading lesson contains.

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The Role of the Volunteer in Teaching English to Educated Foreign-Born Adults*

Joseph J. Brain

In 1953, a Project for the Integration of New immigrants from Eastern Europe was organized within the framework of the Welfare and Health Council of New York City. The project was established at the request of the Ford Foundation. The purpose was to make available to highly educated escapees from Soviet-dominated countries and their families community services which would facilitate their adjustment to life in the United States.

In the fall of 1954, the funds dried up. The Junior League of the City of New York was then asked by the Welfare and Health Council to take over the teaching of English to these educated foreign-born. Miss Mary C. Hurlbutt, Director of the Council's Project, believed that under technical direction, volunteers could do a valuable job teaching fundamental English.

There were many volunteer English-teaching programs and public school classes available for most refugees. But a special program was needed for the educated. For many reasons, all of them financial, our public schools were not prepared to accept a challenge in which English could be taught in

classrooms of maximum registers of ten to fifteen students.

We knew that the highly educated foreign-born immigrant students had particular characteristics. They brought with them mature, rich academic and linguistic experience. By virtue of this excellent cultural and educational background, they were able to grasp concepts more readily and learn more quickly than the average immigrant. However, these students had either been without employment in this country or had been placed in jobs that were not in keeping with their formal education. They were therefore apt to develop handicaps of prejudices and fears created by their dislocation. Those who had very menial jobs became fatigued and despondent, thus challenging the ingenuity of the teacher in retaining their interest in classwork.

There was also another vital factor—our country greatly needed their professional skills. Our policy was to give these professionals the highest immigration priority. When they arrived, they could not function in their fields because of insufficient background in English. License examinations had to be taken in English. Professional review courses had to be taken in English. In many cases we required them to take additional courses, and these in English also. You could be a good wage-earner if you were a shoemaker,

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tailor, carpenter, or steel worker, almost upon immediate arrival in our country, even though you had a limited amount of English. But only the exceptional professionals could function with a limited amount of English; the average could not.

This unique program is now in its twelfth year of operation, and we can still say that no other agency in New York, or perhaps in the entire country, provides such a service. With the help of League volunteers, highly educated foreign-born adults can receive concentrated, high-level instruction in English to enable them to improve their economic and social well-being and to obtain employment more nearly commensurate with that in their countries of origin. Classes which are limited to adults with university degrees range from eight to fifteen students. Our teacher volunteers serve two hours per week, while students are required to attend four hours. Definite time schedules are set up. Classes meet on Monday and Wednesday 6:00-8:00 p.m. or 8:00-10:00 p.m., and are graded for three levels of literacy: beginners, intermediates, advanced. Each room is furnished with a chalkboard, chalk, eraser, chairs, and tables. Supplementary texts, audio-visual equipment, pencils, paper, newspapers, and other materials are supplied by the office when needed. The students purchase the textbooks from us at a discount of ten to twenty percent. There is no other expense or tuition fee.

Over the last twelve years the New York Junior League has trained and used over 500 volunteers who serve as teachers, substitute teachers and/or administrative assistants in teaching English to foreign-born adults. Over

this period these volunteers accumulated a joint aggregate total of 40,000 service hours. A quick computer calculation tells us that this is equivalent to approximately four and a half solid years of time accumulation.

Our total student body attendance averages 6,666 cumulative hours per year. Again, using the same computer, we find that over the twelve-year period our students accumulated about 80,000 clock hours.

Now that you know a bit about our program, let us digress and briefly discuss the role of the volunteer. This will not be the complete story of the problems and crises which volunteer English-teaching programs for adults must surmount. I cannot be certain that I will be painting an entirely accurate picture, but this is what it looks like from my experience.

Our country has many kindred adult souls who, because of reasons of their own, serve as volunteer teachers. A great many such teachers are freely giving their services in some form of English teaching. They teach or tutor non-English-speaking or English-speaking illiterates. Some work with children, others with adults. One thing is *certain*, they all achieve a creative satisfaction from giving service to others. Some even come from families which have a long tradition in this type of service. Some are affiliated with an organization, and others serve purely on their own. The *uncertain* factors are whether they are doing right by their students and whether they are doing the best possible job. Having a self-determined, general, noble aim for serving as a volunteer in a community activity is one thing. Being certain that your service is of

the highest quality is another.

The volunteer literacy teacher of English to adults has some very special problems. These teachers can be found in most large and many small cities. The largest numbers are in the industrial centers. The volunteer's specific aim is identical to that of the professional teacher's: namely, to assist an adult who is illiterate in English to learn to communicate in the oral and/or written form of English so as to earn a better living and to take advantage of our halls of learning for himself and his family; to enable him to communicate more intelligibly with his neighbors; to help him understand American culture better; and to help him become a worthwhile, productive, and concerned American citizen. Any person with so noble an aim deserves to be helped and recognized.

Unfortunately, only one published research survey has been brought to my attention which attempts to inform us through a scientific procedure exactly what kind of people serve as volunteer teachers. Richard W. Cortright, the Director of Education for the Laubach Literacy Fund, made such a study several years ago. He studied the volunteers who were participants in the Washington, D. C., Literacy Council's Workshops. The workshop was a training program for volunteers who wanted to learn how to begin teaching adults with limited reading ability. No attempt was made to recruit participants of any specific age, occupation, religion, social position, educational background, or prior volunteer participation in adult education. In brief, some of his significant findings were the following:

1. The mean age for men was 42.7, for women, 42.9.
2. 66.0% of the men were in a profession; 30% were female members of a profession.
3. The mean educational achievement of participants was more than a bachelor's degree. Very few had only a high school education or less.

In summary, these volunteers were people in early middle age who were fairly well educated.

The problems involved in setting up a program for volunteer teachers are many, but certainly not overwhelming if approached properly. There are numerous churches, unions, business establishments, national groups, social philanthropic groups, hospitals, health centers, and library centers which use only amateur teachers or partially staff themselves with such teachers. They serve as teachers of classes or groups, as tutors, assistant teachers, and even as administrators. Examples of such organizations are The National Council of Jewish Women with several hundred such volunteers over the nation, Midtown International Center with 265 volunteers, American Council for Emigrés in the Professions with 48 in New York City, The Junior Leagues of America with about 400 such volunteers. The American Council for Nationality Services has 37 member agencies, and they each have from 2 to over 1,000 volunteers. As a matter of fact, it is considered by many competent observers that the voluntary organization is the single most influential adult educative setting in our society. The national organizations alone number some 5,000.

One can well understand the tremendous influence, interest, and impact these programs have in many

communities. These programs grow out of a community need. Some do, but most do *not* get financial assistance from a government or business agency. Most of them are self-supporting, chiefly through contributions. It is rare that a fee is charged the student.

None of these organizations is in competition with the university, college, private or public school of a community. It is a known fact that in many parts of our land the public schools frequently provide help and leadership in training volunteers in the methods of adult education. They set up program-planning clinics and leadership-training institutes. Many adult students attend English classes in a formal school setting during the day and a volunteer program at night with the hope that they will learn to understand, speak, read and write that much sooner and better. The students have little money to spare. Some are ill, hospitalized, or aged and cannot get to a distant private or public school. Some work during the hours when these schools hold scheduled classes. Others have compelling home and personal problems. Some are on welfare. The volunteer program also serves those who attend trade or professional schools for courses other than English. The sponsoring agency can arrange classes or individual tutoring to meet almost every situation, whereas a school rarely can provide this kind of highly personalized attention.

Once the need is established within the community for such classes or groups, the problem of a sponsoring agency comes into being. The sponsor must be prepared for an immediate outlay of funds to be used for space, supplies, books, and perhaps a salaried

administrator. The sponsor is also responsible for establishing and maintaining good community-school-teacher-student rapport. The sponsor must also believe firmly that this program and the amateur teachers who serve it are the best they can possibly supply for their particular students.

The problem of where to hold classes must be faced quickly. Classes of this type are held in almost every known variety of available space: in rented halls and rooms; in the apartments of the teachers; in stores, clubhouses, hospital corridors, church assembly rooms, and warehouses. Some have comfortable surroundings and furnishings; others use hardbacked benches, improvised tables, and old kitchen chairs as part of the furnishings. In some cases, a blackboard is a luxury. The quality of ventilation, heat, and light also runs the gamut. Some do and some do not have lavatory facilities. Many are in nonfireproof quarters. But, however comfortable or uncomfortable the decor may be, the teachers are there to give quality instruction in English to the best of their ability. The larger the sponsoring agency, the more comfortable the quarters are apt to be. Unfortunately, many of the organizations are very small.

A sponsoring organization is usually plagued with the question of where to get amateur teachers and how to select and train such people. Some organizations depend on retired professional teachers whose experiences vary from nursery school teaching all the way to teaching at the university level. Others depend on housewives, university students, high school students, retired or active businessmen, and people in the professions. There are others who de-

pend on semi-trained college students who are interested in making a career out of teaching English to foreign-born or American-born illiterate adults.

The Junior League of the City of New York's English Teaching Committee requires every member assigned to its program to serve two hours per week for a forty-two week semester. They are permitted only two unexcused absences. Most of the women are below forty years of age, and very few have had any teaching experience of substantial measure prior to joining the program. The teachers are selected on the basis of their interest, English speech pattern, and a knowledge of another language. The last point is important because we want volunteers who have some familiarity with the pains of learning another language, thereby being better equipped to understand their students' problems in the learning of a new language. The curriculum is controlled by the director through a sequential master plan technique.

Unfortunately, most other sponsoring organizations are not as careful in selecting teachers, and many of them will employ almost anyone who speaks English and shows an interest. The result of this type of selection is frequently an amateur teacher who may hinder the student's progress rather than advance it.

The type of training which some of these amateur teachers receive frequently comes from a variety of sources. The training will vary from nothing at all to a well-planned and supervised training program, as is found at the Junior League of New York and the Citizenship Council of Cincinnati, Ohio. The National Coun-

cil on Naturalization and Citizenship frequently arranges conferences and workshops, and observations. The success of the training does not depend upon which type or variety of training technique is used, but rather upon how it is planned and carried forward to completion.

Training at the Junior League of New York requires a minimum of ten two-hour sessions and includes workshops, observations, tutoring experience, substitute teaching experience, critical evaluations by the director, study of bulletins, and administrative training. Some of this training will take place while the teacher is actually working with her class. This training in depth is necessary because all of our students have at least an undergraduate degree from a university in a foreign land and must have worked in their professions prior to arrival in this country. Our students are directed to us through thirty-six cooperating agencies, or the students and alumni themselves refer their friends and relatives.

Most of the volunteer agencies consider themselves as teachers of "Conversational English." Methodology will vary greatly from translating to the most contemporary in applied linguistics. Some programs will only engage their students in conversation with a little work in pronunciation and sentence pattern drills; others go all out and teach all aspects of the language arts.

Not all agencies have classes as such. As a matter of fact, most of them only do tutoring on a one-to-one or one-to-two basis. Those which maintain classes usually arrange them by language background or in homogeneous

groups according to the students' literacy ability in English.

One of the most important steps in all of these programs is the selection of the director. Some are volunteers who have had some professional teaching experience. Others are formally trained, experienced, professional administrators who are specialists in this field of English teaching and are paid. Still others are people who have been volunteers themselves but have more experience in the field than others. And finally, you have the category I fall into. I served as a volunteer amateur teacher, as a professional teacher, supervisor, and administrator in the public schools.

Some of the pressing issues involved in the role of the volunteer teacher of English to foreign-born adults are those of leadership, communication, and financial aid.

Leadership in volunteer work is wide-open to opportunity, but somewhat disorganized. Most of the national organizations involved in volunteer work belong to the Council of National Organizations of the Adult Education Council. It would perhaps be wise to organize *local* chapters of this Council and enable some of our

church and community centers who sponsor such classes to join. This would also be an instrument for effective deployment of both professional educational personnel, volunteers and agency resources in the improvement of local participation, leadership and membership training, and educational programming.

In regard to communication, barriers still exist between professional adult educators and those who function as teachers of adults in voluntary organizations. A strong effort must be made to eliminate these barriers.

Finally, almost all of the volunteer programs are undersupplied financially. The larger educational institutions (be they public or private) might benefit greatly from open and strong support of the work done by the volunteer. This does not mean to imply that the volunteer should be paid. But, he would like to have more guidance and leadership from a professional institution, a good room to use when he works, adequate textbooks and supplies, and information about and use of programming materials. Some organizations such as my own have been successful in securing funds from philanthropic organizations. Others might also be able to do the same.

The Application of Audio-Lingual (Oral) Technology to Beginning Reading

Paul and Eva King

It is a well-known fact that a child's success or failure in school and also in adult life is tied to his ability to communicate—to listen, to speak, to read, to write. The earliest school years—the primary years—are often crucial to later success.

Reading specialists, language specialists, and primary teachers all agree that there is a strong and intimate link between oral language communication and written language communication. By the time he starts school, the five- or six-year-old communicates orally quite adequately, yet he often has great difficulty in linking his oral speech with the written symbols which he is now expected to acquire. There are today some hundred-odd reading methods in use, none of them considered significantly superior to any other; and there are some hundred-odd remedial programs, indicating that no program is as fully successful as hoped for. Why? Could it be that some of the solutions will have to come through new avenues for learning rather than through yet another method of teaching reading? This much we already know:

(1) We know that communication skills develop in a definite sequence.

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Man has communicated with fellow man through speech for perhaps half a million years; yet, for barely five thousand years has he used graphic symbols. The child parallels the experience of the race: he first listens and speaks, and only years later does he read and write. And once again this sequence reappears when the six-year-old begins to read: he first listens while being read to; he then mimics and copies the model, repeats; and finally he relates his first set of symbols—oral speech—to his second set of symbols—written speech.

(2) We also know that there exists a large gap between the six-year-old's already developed skill of listening and speaking and his not-yet-developed skill of writing and reading. There is a sharp contrast between the child's meaningful and often rich oral language, and the limited and often meaningless language of the textbook "readers," whatever they may be, good or bad. They offer, therefore, little motivation to the child.

The divergent speaker is at a particular disadvantage; he must bridge the gap from his regional dialect or his first native language, via the detour of so-called "standard" English, and continue all the way to the new *third* set of graphic symbols—reading and writing.

(3) We also know that reading, which is "speech written down" is a multisensory, not a monosensory, skill. Beginning reading cannot be taught

and cannot be learned without constant audio-lingual practice, i.e. the use of ear and mouth. When we include writing—as we must—we know that a simultaneous and correlated approach is needed for perfecting a multi-sensory skill involving eyes, ears, mouth, and hands.

(4) We are also beginning to realize that there exist striking similarities in what it takes to master both of these skills, i.e. oral language and beginning reading: (a) reading, like oral language, needs extensive, repetitive, out loud practice; (b) reading, like oral language, needs extensive listening practice, and out loud mimicry of spoken models; (c) reading, like oral language, must be practiced out loud, and in short bits or frames; and finally (d) reading, like oral language, must become “automatic” to fulfill its true function as a means to an end, i.e. as a vehicle of thought communication.

(5) We are also beginning to realize that this common requirement of extensive audio-lingual practice—i.e. of practicing aloud—needs a one-at-a-time performance. This conflicts sharply with the limitations of today’s classroom in primary education: “In a class of 30, 29 are idle while one is busy,” said Alfred Hayes.¹ How much opportunity does the young child really have for active oral response in the classroom? One minute a day? Or is it two minutes? Research indicates that teachers, not children, use seventy-five percent of the school day for talking. In addition, in trying to adjust to these outdated classroom limitations, curricular programs have in

effect capitulated to them by sacrificing audio-lingual practice techniques. In this way, the gap between oral and written language widens even further.

(6) Yet, we also know that for the past twenty years a new education technology has been able to make significant contributions to reducing classroom limitations on high school and college levels by providing language students with added opportunities for active audio-lingual practice. We asked ourselves: Would not young children make similar gains if they were provided with similar increased opportunities for language participation and practice—oral and graphic—in a systematic way?

What we did not know was whether what worked with teenagers would also work with the young five-to-six-year-old. Was it reasonable to assume that the very young child would meet the conditions inherent in programmed technology—self-study, individual participation, sustained attention? The first clues came to us during our just completed USOE Research Project in New York City, *Bilingual Readiness in Primary Grades*, and these came from the five-and six-year-olds themselves.

When we needed to extend a curriculum which had proved highly meaningful and motivating in content, but which was limited through scheduling to fifteen minutes a day, we designed a system of electronic “satellites”—a term originated by the children—which incorporated tape recorders, headphones, and cartridge tapes with recorded versions of the live-presented bilingual stories, songs and rhythm games, and made them available to the children, whenever they wanted them,

¹ Alfred S. Hayes, *New Media for Instruction* (4) (Washington, D. C.: U.S. Office of Education, OE-21024, 1963). p. 16.

as reinforcement in both English and Spanish.

What we observed was that their attention span expanded well beyond age expectations; they concentrated intensively for extended periods of time; they thrived on repetition of the programs and of the language patterns within the program; they showed a technical readiness often surpassing that of their teachers; and finally, we observed that these five- and six-year-olds started to sing along, respond, answer their literary story friends—on tape—even though, with headphones alone, they lacked the facility to really do this. It was soon obvious to us that the children were ready in every way to step beyond the experiences of passive listening into active oral interchange and participation with the tape.

We, therefore, welcomed the opportunity for expanded experimentation which presented itself when the Virgin Island's Department of Education wished to include a Pilot Project on Audio-Lingual (Oral) Technology and Beginning Reading in their Language Communication Project.

The children on St. Thomas are dialectically divergent speakers of English; the children on St. Croix are also dialectically divergent speakers, and in addition, well over fifty percent of all first graders are second-language learners, Spanish being their native language. A typical first grade class averages thirty to forty children.

The problem of limited opportunity for oral language expression and beginning reading practice is being tackled through appropriate technology and supportive programming. By providing more of the vital one-at-a-time practice, we are increasing the ratio of child

participation. In the eighteen participating Grade 1 classes, every child has the opportunity: (a) to listen and to speak in undisturbed, uninterrupted, and concentrated privacy for at least ten minutes every day and for increasingly longer periods later on; (b) to practice all the skills—audio-lingual and visual-manual—basic to correlating oral language and beginning reading practice: to mimic and repeat, to speak and respond; to sense and discover the tie-in between oral language and its written symbols; to practice, in a correlated manner, auditory and visual perception and discrimination; to decipher and to read; in short, to experience language in all its forms.

We call our technological corner the ALR (Audio-Lingual Reading) Mini-Lab. There are two sections: a teacher's position and six to ten student positions. The program, which is first presented "live" and then recorded on a tape cassette, passes to the children's position electronically, via headphones and microphones, i.e. in individual privacy.

Each child sees the teacher and all visual materials presented. Each child hears the teacher (live or taped) and also hears himself, but he does not hear his classmates, and they do not hear him. Thus, all six or eight or ten children participate, speak and read out loud, at the same time, yet individually, without interfering with each other or waiting for each other.

The children may also be linked to each other for inter-group participation (discussion, choral work, group reading, and so on). There are no controls at the pupils' positions.

As the children work orally at an increased rate, they must also be super-

vised. A series of buttons, one for each child, permits the teacher or teacher's aid to be in instant contact with the children, individually or as a group.

The teacher can record any child without interfering in his activity, in fact without the child's knowledge.

Now this seems like a lot of new avenues—but are they really solutions? Education technology is without value unless programmed with content of sufficient significance to make a difference. Jerome Bruner says, "The art of programming a machine is an extension of the art of teaching."² This means that only to the extent that there are good teachers in the classroom will there be good programmed lessons. An artfully programmed lesson goes well beyond isolated skill items—oral or graphic; it is whole and complete in itself, with sequenced and related parts leading to the next step. Mere practice of unrelated parts is useless; for effective storage of information, the human brain requires structured order and meaningful connections in order to function effectively later on during retrieval. In reading, just as in oral language, letters, words, and sentences must lead to the ultimate goal of thought communication.

There can be no compromise in this area. *Technology amplifies mediocrity.* The captured sound, imposed upon a young child, is fraught with danger; it pinpoints, it shows up equally the bad and the good. What may pass as a fleeting oral presentation in the classroom, simply does not pass when captured and framed electronically.

Of course, we are aware that educa-

² Jerome S. Bruner, *The Process of Education* (Cambridge: Harvard University Press, 1966), p. 83.

tion technology is just as new to the teachers as it is to the children. Along with the old three R's there are now also the new three T's: Teachers, Tools and Training. The eighteen teachers in our Pilot Project are also simultaneously learners in an innovative enterprise. As they attempt to create a lesson script, they learn once again what a lesson really is; they re-evaluate what teaching actually entails; and they gain new insights into how learning really might take place. Only if a teacher goes through the labor pains of creating a programmed lesson—a task quite different from making an overall written lesson plan outline—only then will she make the new opportunities of education technology her own.

Some of the efforts of our eighteen classroom teachers are already paying off. To quote Jerome Bruner again: "A good program has the effect of making one highly conscious of the sequence in which one presents problems, and of the aims of the sequence."³ Among our teachers there is developing an awareness that if new avenues are opening up for learning, then teachers must be also prepared to open up new avenues for teaching. As education technology forces the actual creation of better lessons, these better lessons are brought back by our teachers into the classrooms.

As for the effects on the children, our observations indicate that the non-verbal child, who has remained unresponsive in the conventional classroom, speaks and participates in the privacy of the lab; that there is increased attention and concentration by

³ *The Process of Education*, p. 84.

all the children; and that there is a realistic, de facto, dialogue involvement with a "human" tape and correlated graphic materials. In addition, the child's natural love of repetition and play makes for a self-motivating and sustaining avenue of learning. The young child's readiness to step into the world of fantasy makes possible a creative, motivating and imaginative form of audio-lingual programmed instruc-

tion for beginning reading through education technology.

This is how a seven-year-old recently defined education: "Education is how kids learn stuff." If the apparent concentrated attention, the obvious joy at being able to fully interact as an individual even in a large classroom, is any indication, then there is good reason to expect that "kids will learn stuff."

Preparing Navajo Students to Read

Hadley A. Thomas

The non-English-speaking Navajo student has particular problems in learning to read English. He has for six years been busy learning a language that is not relative to school. He enters school—everyone talks to him in a language that he does not know. He starts learning about things that are not at all familiar to him. He is shown a picture that is not familiar to him conceptually and then asked to say a foreign word for the picture. Many times he may learn to say the name for that picture but not know what it means.

It would seem that certain needs peculiar to this particular kind of student must be met before a reading program can be started. The student must have experiences that will bring about cultural understandings before English can be meaningful. These experiences must be vicarious due to the artificiality of our school systems as language teaching centers. He cannot begin as a child again and learn English from his mother's knee.

The student must be able to function in a school environment. He needs to be able to express his needs, to ask for assistance, to talk about his immediate, meaningful environment, to learn his own name, the names of people, rooms, students, and objects in his room. These are needs that take precedence over other areas.

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They must be met soon and taught through experience and rote learning. These experiences can be incorporated into the classroom routine easily and with meaning.

There are cultural values about self that are important in English. The traditional Navajo student needs to know that saying his name is a common, essential practice in English. The proper use of *he*, *she*, *his*, and *her* are essential, for in Navajo, "he," "she," and "it" are represented by the same symbol in verb paradigms. The same thing is true for conjunctive possessive pronouns; *bi* means "his," "her," or "its." There is also a duo-plural for just two, and a distributive plural for three or more.¹ Personal greetings such as "Good morning," "How are you?" need to be taught and practiced, for they are lacking in normal Navajo conversation.

There should be a concentrated effort to teach the sounds of English, for some of the sounds are non-existent in Navajo. For example, the student needs to be able to hear that in English there are two sounds /d/ and /t/, but in Navajo only a /t/. The sounds need to be taught in structured lessons that include hearing, saying, and discriminating. Consonant sounds should be taught with all of the vowels, in initial, medial, and final positions. All of the vowels should be taught in similar and different environments.

¹ Specific information in this paper regarding the Navajo language is taken from I. Goosen, *Navajo Made Easier* (Salina Springs, Arizona: Navajo Book Shelf, 1967).

Consonant blends and clusters in initial and final positions can be a problem for the Navajo student. The names of the letters need to be taught. The Navajo student is not used to seeing written Navajo and is not familiar with orthographic symbols. If the student learns the name of a letter and is familiar with oral sounds, it should be easier for him to associate the sounds with the symbols.

The structural differences in Navajo and English cause some very real problems for the student. These differences are pointed out in great detail by Robert Young.

One simple example of these differences is in the use of tone. In English we use intonation contours as a part of the overall phrase or sentence. In Navajo, a difference in tone in a single word may denote a different meaning. For example, *ni* (regular tone) means "you," but *ni* (high tone) means "he says."

The student needs to be able to talk about his family and his extended family, identifying English concepts about them. Culturally, he needs to know that a sister of his mother, in English, is always called "aunt" instead of "mother," and that children of his mother's sister are always called "cousins" instead of "brothers" and "sisters." In English, there are no maternal controls on how you must address someone. In Navajo, women use one term for their children or their sister's children, such as *shiyaazh*—"my son"—and *shich'é'é*—"my daughter," but men can only call their son *shiye'* and daughter *sitsi'*.

R. W. Young. *English As A Second Language For Navajos* (Albuquerque, New Mexico: Bureau of Indian Affairs, 1967).

When a teacher works with vocabulary, she must make it clear that in English the mother's mother and father's mother are both called "grandmother"; that the mother's sister and father's sister are both called "aunt"; and that the mother's brother and father's brother are both called "uncle."

The student needs to be able to understand English meanings of words for houses, for his hogan is a single-roomed dwelling. The teacher needs to teach that most houses or apartments are multi-roomed dwellings, and that bedrooms are sleeping rooms, kitchens are cooking rooms, living rooms are visiting rooms. He will need to know the type and variety of furnishings for a multi-roomed house and their functions.

The student needs to be able to talk about the community helpers and know what they do for people. He needs to know about a doctor, nurse, dentist, fireman, postman, policeman, and how these services change from rural communities to cities. For example, Navajo families do not have their mail delivered to their door by a postman. Students understand about letters, but don't know about postmen and mail service in a city or town. The teacher could start with the local mail service and then develop an understanding of how mail is handled in the town and city.

There are cultural meanings in English associated with wearing apparel that are important for the student. Underclothing is worn under regular clothing and consists of certain garments. Night clothing is of a different nature and is used for sleeping. Students need to learn, for example, that

night clothes would not be worn for work.

When the student has had these types of experiences with English, then perhaps he can be expected to begin the complicated process of reading English. He can associate strange symbols with less strange pictures and concepts.

However, it would seem that maybe a continuation of the system of learning oral expression before reading could be a part of the total reading program. It would require the teacher to devote additional time to the introduction of a particular story. It is not unreasonable to start two weeks ahead of the reading lesson. The following story is taken from a pre-primer in a reading program.

Play

Come, Dot
Come and play
Play with me, Dot
Come and play
Run and play with me

Dot can play
Jim can play

Tag can play
See Dot and Jim play
See Tag look and look
Tag can not play

Look, Dot, look
Look at Tag
He can run and play
See him run and play
He can play with me
Look at Tag
He can play with me.³

The picture illustrates a typical story for English-speaking students about a boy, a girl, and their dog.

In working with reading selections, the teacher should use the following steps:

First, she should ask herself what phonemic patterns in the story should cause problems for the Navajo student. Some of the obvious possible problems in the story are these: /d/ in initial position, /t/ in final position, /θ/ or /ð/ in final position, /j/ in initial position, and /k/ in the final position.⁴ Pronunciation drills could be developed for this lesson in reading by using some of the following items:

<i>Sound</i>	<i>Initially</i>	<i>Medially</i>	<i>Finally</i>
/t/	tag, tea, ten	city, water	pat, cat, eat
/d/	dog, dot, do	rider, under	hid, bed, lid
/t/ & /d/	tan-Dan	writer-rider	sat-sad
/č/	chair, chess	butcher, nature	catch, teach
/j/	jar, jam	enjoy, major	page, edge
/č/ & /j/	cheep-jeep	etching-edging	rich-ridge
/k/	can, keep	baking, picking	ask, neck
/g/	go, get	again, began	rag, big
/k/ & /g/	goat-coat	bicker-bigger	back-bag

³ C. Sloop, H. E. Garrison, and M. Creekmore, *Tag* (Oklahoma City, Oklahoma: The Economy Company, 1958). This reading was chosen simply as an illustration. The same process can be applied to any reading material.

⁴ Mary J. Cook and Margaret A. Sharp, "Problems of Navajo Speakers in Learning English," *Language Learning*, Vol. XVI (September, 1966) 21-29.

Reviews

READING AMERICAN HISTORY. ALBERT L. WEEKS, JR. (Saxon Series in English as a Second Language, McGraw-Hill, 1963, 335 pp.).

THE UNITED STATES OF AMERICA: *Readings in English as a Second Language*. GORDON E. BIGELOW AND DAVID P. HARRIS (Holt, Rinehart and Winston, 1960, 286 pp.).

The purpose of *READING AMERICAN HISTORY* is primarily to teach reading and only secondarily to teach history. The typical chapter contains four pages of text and eight pages of exercises, including nine exercises in word study. (Professor Grant Taylor is credited with having written most of the vocabulary exercises.) As the author states in his preface, he has structured his paragraphs as models for composition and aids to outlining. As a matter of fact, many of the paragraphs are brief and terse enough to be put into sentence outline form without much further condensation. This tightly controlled, sparse style makes for an accessible "paragraph outline" of the major names, places, and events of American history from its beginning up to 1962, in 115 pages of text (exclusive of the exercises). An unfortunate corollary is the loss of readability, high interest level, and most important, interpretation and perspective. Nevertheless, the text is useful as a simplified source for the major facts, with a few graphs, charts, and historical maps, and a time line of world and American history in the appendix.

For special ESL courses in American history, this text would, at least, be

far less formidable than a standard history text, but it would have to be extensively supplemented with audio-visual aids, lectures, and teacher-written outlines to point up causal relationships and attempt to derive basic concepts of American government and society. For the more usual ESL course in reading and composition, one or more chapters of *READING AMERICAN HISTORY* will provide a quick overview of a period of history to serve as background for the literature, biography, and political and social commentary provided by the other readers.

This reviewer used this book as a basic text in an experimental required course in American history in a junior college. The high question density provides ample material for study, oral work, and check on comprehension. The sentences in the vocabulary exercises serve a double purpose by reviewing some of the historical facts. The lists of events and names in each chapter under "Discussion Topics" and "Identification" are also useful for review and testing. However, there is so little material in the text on the "Discussion Topics" that it is better to assign oral and written reports from the supplementary readers.

For advanced students, *THE UNITED STATES OF AMERICA* has much to commend it whether as a basic text for reading and composition, as a supplementary book in history courses, or for special assignments. Ideally, it would be a good choice for the second semester of a two-semester course or as a supplement to *READING AMERICAN*

HISTORY. This reviewer has made special assignments in *THE UNITED STATES OF AMERICA* as enrichment for more able students.

The literary and descriptive styles and interpretative perspectives of the essays offer much to broaden the cultural understanding and appreciation of the student. The sections on "Five Regions of the Nation" and "American Way of Life" are particularly valuable for significant areas of needed information, as well as their selections from the work of well-known contemporary writers. The definition glossings are a commendable feature. (Short selections from the work of excellent, professional writers, thoroughly glossed, is much to be preferred to simplified,

edited versions and to the unnatural style of original writing rigidly controlled for vocabulary and patterns). The vocabulary exercises are varied but not extensive; to apply the word forms and synonyms to context, the teacher will have to go beyond the exercises as given in some chapters. The reading comprehension questions call for inferences and make good assignments for written answers. The composition topics cover quite a sophisticated and provocative range, drawing upon the varied backgrounds of the students.

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TEFL: A Bulletin for the Teaching of English as a Foreign Language, II, 1 (December, 1967), American University of Beirut: Center for English Language Research and Teaching.

TESL Reporter, I, 3 (Spring, 1968). Laie, Hawaii: English Language Institute, The Church College of Hawaii.

Announcements

Future TESOL Conventions-

- 1969—Chicago (Pick-Congress Hotel). . . . March 5–8
 - 1970—San Francisco (San Francisco Hilton Hotel). March 4–7
 - 1971—New Orleans (Jung Hotel) March 3–6
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The Cambridge University Press announces publication of *Language-Teaching Abstracts* beginning in January, 1968. Its purpose is "to keep teachers and others professionally concerned informed of the latest research and developments in the study of modern languages." Edited by the English Teaching Information Centre of the British Council and the Centre for Information on Language Teaching, the volume price by subscription is \$3.00. Available from: Cambridge University Press, 32 East 57th Street, New York, New York 10012.

The International Conference on General Semantics sponsored by the International Society for General Semantics and the Institute of General Semantics will be held at the Denver Hilton Hotel, Denver, Colorado, August 5–9, 1968. Elwood Murray, Director of the Institute of General Semantics, is Program Chairman, Papers should be sent to him in care of the

Department of Speech, University of Denver, Denver, Colorado. Paul Hunsinger and Harry Maynard are serving as Conference Chairmen. Dr. S. I. Hayakawa is the Honorary Program Chairman. Prior to the Conference a seminar, "Basic Formulations of General Semantics," will be offered from July 30 to August 5. Following the Conference, the seminar, "Advanced Formulations," will run from August 9 to 15. These courses are being offered for academic credit through the Department of Speech of the University of Denver. There will also be an evening lecture series by Dr. Hayakawa offered for academic credit. In all, a person can receive up to seven quarter hours of credit for participation in the intensive seminars and the conference. For more information regarding the conference and the seminar courses, write to: Paul Hunsinger, Conference Chairman, Department of Speech, University of Denver, Denver, Colorado 80210.