for a few hours of that time. He may never, alas, have an opportunity to use his L2 for any practical purpose in school or out. Even the Filipino, however, has to learn his second language in a small fraction of the time he had at his disposal for learning his first.

The shorter the time available for instruction, the greater the responsibility of the teacher to see to it that full advantage is taken of every precious minute. The necessity for careful planning and timing is still further increased by the fact that, whereas the L1 teacher is responsible for only a tiny portion of his pupils' language experience, the L2 teacher is responsible for almost all of it. In the second-language classroom there is both much more to be taught and much less time in which to teach it. The teacher of the mother tongue can afford to devote a great deal of attention at an early stage to the mechanics of writing and at a later stage to the niceties of usage, but his second-language counterpart must first deal with much more basic elements of language. One of the chief concerns of the former is to build up his pupils' vocabulary; the latter can allow himself to introduce only a small, carefully selected stock of the most useful new words.

Because of the pressure of time, the L2 teacher can afford to use only the most economical and effective instructional techniques. There may be differences of opinion as to what these are, but I think almost no one would argue, with regard to the most elementary stages of teaching a second language, that it is either economical or efficient to allow pupils to flounder through long periods of trial-and-error activity. Such activity inevitably leads to the formation of incorrect speech habits, which then have to be unlearned. And few processes can be more time consuming than unlearning well established habits.
One of the essential differences between teaching a first and a second language is that the former is merely learned whereas the latter must usually be taught. This difference, while not absolute, still has enormous consequences. Although the "natural method" of second-language teaching is often championed, there is no way whereby the circumstances under which a child learned his mother tongue can ever be reduplicated for the learning of a second language. A discussion of the four stages of development in the first language (exploratory, imitative, analogical, and formal instruction) is followed by a discussion of the following points important to the teaching of a second language: (1) the time available for acquiring a second language, (2) the responsibility of the teacher, (3) the structuring of the lesson content, (4) formalized activities, (5) motivation, (6) the experience of life and development of concepts, (7) the sequencing of skills, (8) analogy and generalization, (9) the danger of anomie (alienation from one's own culture), and (10) linguistic interference. (AMM)
1. Introduction

In the letter in which he invited me to present this opening paper to the 1969 TESOL Convention workshops, Mr. Wardhaugh asked me to discuss the essential differences between teaching a first and a second language. He explained further: "I hope you will be able to indicate the key concepts that teachers of English to speakers of other languages must possess in order to do their job most efficiently.... I would like the participants to get excited about the possibilities linguistics opens up to them. Consequently, the task of the plenary speakers is one of giving these teachers a perspective on their task."

It may well be true that at least a large number of the key concepts of TESOL can be drawn out of a discussion of the essential differences between teaching a first and a second language. Pointing up the contrast between the two types of instruction also seems to be a good way of beginning our sessions because it provides a framework within which to consider the qualifications desirable in those who undertake to teach English to speakers of other languages.

The mere fact that a person is a native speaker of English does not qualify him as a teacher of the language. Nor does the usual training of teachers of English or the "language arts" prepare them adequately for TESOL work. These truths have been repeated so often in the past that they might seem to be the most obvious of clichés. Yet administrators attempting to
cope with the ever-increasing demands for ESOL instruction in the United States still tend to overlook them. I suspect that many of you are here today because you have become aware of the force of these clichés. You may be new to TESOL, may have sensed that your training is not altogether adequate for your new work, and may be trying to find ways to make up for the lack. Though little retraining can be accomplished in two days of workshops, perhaps we can at least help you clarify in your own mind the kinds of new knowledge, attitudes, and skills that you might find most helpful.

2. Acquiring the Mother Tongue

A very significant difference between the acquisition of one's mother tongue (L1) and adding a second language (L2) is that the former is merely learned whereas the latter must usually be taught. Though the difference is not absolute, it still has enormous consequences.

There is a great deal of interest today in finding out exactly how a child does learn his L1, and a large amount of research is being carried out in an attempt to discover just how and when the various components of language mastery are developed. Though few incontrovertible facts are as yet available for the guidance of the language teacher, the various stages in which the learning process takes place are coming to be understood with increasing clarity.

The first phase is often labeled the exploratory stage. Just as the new-born child instinctively exercises his limbs in order to develop them, he also exercises his lungs, mouth, tongue, and lips to produce sounds.
His early cries of anger, pain, fear, or hunger are soon supplemented by increasing amounts of babbling activity, apparently aimed at exploring the range of his own vocal possibilities. He often makes a wide variety of sounds which he can never have heard before and which he would find it very difficult to emit later as an adult: velar spirants, voiceless nasals, retroflex sibilants, or simultaneous labio-velar stops plus vowels.

The second phase of language learning has been called the imitative stage. There are signs that the infant is beginning to pay more attention to the speech sounds made by other people, and he may even become temporarily less vocal himself as he concentrates on listening to others. The sounds he produces become progressively more similar to those made by his elders, and he abandons many of his earlier sounds altogether. His parents find that, by giving him the benefit of every doubt, they can identify some of his sounds as the vowels and consonants of the mother tongue.

At first there are very few of these recognizable sounds, and each production of one of them may vary widely from other productions of what the infant and eventually his listeners come to think of as the same sound. Little by little successive productions of the same sound grow more standardized and the distinction between sounds is therefore clearer. What has happened so far can be explained in terms of B. F. Skinner's theory that a habit is formed by a shaping process involving successive approximations to a behavioral model. Perhaps the infant is motivated at this stage by his urge to imitate and the approval of his elders.

In his earliest efforts to speak, the child typically favors one vowel
and one consonant, seeming to prefer to produce them with the consonant first and the vowel following it; his first syllable is often recognized by his delighted parents as /ma/, /da/, or /ga/. The child may then split his general, all-purpose consonant into a stop and a continuant, learning to distinguish between a sound something like /ma/ and another a little like /da/. The general vowel may then split into a high vowel and a low vowel. The stop may split into a pair, one of whose members is voiced, the other voiceless. Somewhat as a primitive organism develops through the splitting of cells, the child's phonological system becomes more complicated as he learns to make use of the various features---such as voicing, aspiration, and nasalization---that are used in his mother tongue in various combinations to distinguish between sounds and between words.

He now has what can be thought of as a stock of words to which he can attach meanings. This is when he begins to produce one-word sentences and finds that they can effect more specific desirable results than can be effected by mere noise-making. "/ap/" may result in his being picked up and cuddled. He can obtain the box he wants to play with by articulating "/ba/". A good, clear "/dada/" will attract the attention of the male parent. More and more he relies on speech to fulfill his basic physical and emotional needs. His linguistic successes are immediately reinforced by tangible rewards.

Sometime during the child's second year he usually begins to enter the third phase of learning his mother tongue, the analogical stage. He has developed a small vocabulary of content words that symbolize people, things,
actions, qualities, places, directions, etc. He now draws on his innate language ability to try to relate these ideas one to another.

Still without any awareness that he is learning a language, he explores the various possibilities of patterning among words. When does one make a certain group of words end with a certain sound as his elders do? What is the effect of making one word precede or follow another? Or of pronouncing one word on a higher pitch than another? What is the meaning of those obscure little words that people seem to insert between important words? In other terms, he becomes aware of the existence and potential significance of inflectional and derivational endings, word order, stress, intonation, and function words as opposed to content words.

In experimenting with patterns he produces word forms that he has never heard before and, eventually, completely new sentences that no one has ever before uttered. His listeners detect only a few of these---those that violate the accepted norms of the local adult speech community. Many children independently invent such forms as feets, childs, brung, catched, and more better. I shall never forget some of the analogical creations of my own children. Upon being somewhat violently admonished to behave, one of them answered in an aggrieved voice: "But Dad, I am being have." Another replied to a warning about diving into shallow water with a memorable: "Yeah, I know. Many a people have cracken their head on the bottom of the pool."

Seldom is the child corrected for such "mistakes." He gradually learns to avoid them because his listeners do not understand him, laugh at him, or
simply never use those patterns themselves. In Skinnerian terms, the stimulus responses no longer occur because they are not positively reinforced.

Though sentences of this aberrant type, in which each departure from accepted norms can be justified by an impeccable analogy with acceptable patterns, do not persist long in the child's speech, the irrefutable fact that all normal children do produce such sentences may have great significance for the language teacher. It seems clear that a child does not learn to speak his mother tongue by imitation alone. Nor can such creations as "many a people have cracken their head" be satisfactorily explained as the result of a mechanical process of habit formation. The most convincing explanation of the child's ability to create new sentences appears to be that put forward by the current school of transformational grammarians: he acquires his competence by internalizing the rules that the grammar of his L1 prescribes for the generation of sentences. And he normally does this without ever knowingly formulating the rules himself or hearing them formulated.

When the child enters school, he begins the fourth and final phase of acquiring his mother tongue, the **stage of formal instruction**. Up to now he has merely been **learning** the language; it would be grossly inaccurate in most cases to say that he has been **taught** it. Now, for the first time, someone undertakes to teach it to him; but what remains to be taught? Charles C. Fries used to go so far as to say that nothing essential remains to be taught and that the child has already mastered his language before he goes to school.
Today we tend to regard such statements as considerable exaggerations, but there is certainly a large amount of truth in them. Fries was equating "language" with "speech." What he was really saying was that a pre-school child has already mastered the essentials of speaking his mother tongue: its phonological and grammatical systems. All that remains to be done in school is to enlarge his vocabulary and to teach him to read and write, to make him literate.

Many of us would not agree with his conviction that the spoken language is the language and that writing is merely an imperfect symbolization of speech. It seems more realistic and helpful for teachers to regard English speech and writing as two closely related but distinct linguistic systems each of which should be given equal priority in education for modern urban living.

Moreover, research such as that of Mildred Templin, Frederick Davis, and Jean Berko has shown that the average six-year-old is still far from having mastered many basic essentials of the spoken form of his L1. Phonemicization—the process described earlier in this paper whereby the child singles out certain sounds as the only distinctive sounds in his language—is far from complete at the age of six. Many children have still not learned to produce some of the rarer sounds in the mother tongue's phonological inventory. Many have not yet internalized some of the most basic rules of the grammar, such as that which in English governs the alternation among the three forms of the plural ending: /-s/, /-z/, and /-z/. 

Be that as it may, most pupils get very little intentional help from their teachers in their efforts to increase their command of the spoken language after they have entered school. In some well developed school
systems an organized attempt is made to augment the child's vocabulary through activities designed to lead him to form new concepts. But over most of the world teachers concentrate almost all their efforts during the first year or two of schooling on teaching their pupils to read and write. Henceforth, most vocabulary development takes place as a by-product of reading.

3. Teaching a Second Language

From time to time theoreticians have championed a so-called "natural method" of second-language teaching. The basic tenet of the method is that children should, in so far as possible, be allowed to learn their L2 in exactly the same way they learned their L1. This implies that there is no need for the teacher to concern himself with drills, or correctness, or organizing his subject matter. All he needs to do is to create situations in which the child will feel a sufficiently strong need to use the L2. He can then content himself with encouraging the child to persevere through a prolonged period of trial-and-error activity, and the language will eventually be learned. The method would seem to be about as sensible as trying to train a telegraph operator by giving him exciting news to transmit and then leaving him to work out the Morse Code for himself without benefit of systematic instruction.

There is actually no way whereby the circumstances under which a child learned his mother tongue can ever be reduplicated for the learning of a second language. The rest of this paper will be devoted to a consideration of the basic differences between acquiring an L1 and adding an L2. These differences will be classified under ten headings:
1. Time available
2. Responsibility of the teacher
3. Structured content
4. Formalized activities
5. Motivation
6. Experience of life
7. Sequencing of skills
8. Analogy and generalization
9. Danger of anomie
10. Linguistic interference

One of the most self-evident differences is the much more limited amount of time available for acquiring the second language. The child normally has at his disposal almost all the waking hours of whatever number of years he needs to master his mother tongue. During that time he can experiment with new sounds, try out novel structural patterns at his leisure. He constantly hears authentic models of the type of speech he needs to learn and can usually afford to listen or not as he pleases. If he doesn't understand a word the first time he hears it and it is really something he needs to know, he can be sure that he will have many further opportunities to grasp its meaning.

But, unless his circumstances are quite exceptional, he must learn his second language largely at school, within the brief hours set aside in the schedule for teaching it. The total amount of time available varies considerably from school system to school system. If he wishes to be a polyglot, the Filipino child is lucky. He will begin to study English at least one period per day in the first grade, and from the third grade on he may receive all of his instruction in English. He will probably hear it spoken and sometimes may even have an opportunity to speak it outside of class. On the other hand, the cards are stacked against the average American who wants to learn French. He will be fortunate if his school offers two full years of instruction in the language and if his teacher allows him actually to try to speak French.
One of the principal responsibilities, then, of the L2 teacher is to see to it that his pupils use correct language as often as possible. This does not mean that he must constantly correct them for the slightest error. That is seldom either feasible or desirable. Too many corrections by the teacher can render activities meaningless and reduce sensitive children to stubborn silence. What it does mean is that the teacher finds as many ways as he can to prevent the occurrence of errors. In other words, he begins by supplying the best possible model for imitation; he controls the language to be used. Then, little by little, when he is convinced that his pupils have mastered the material at hand, he relaxes his control to the extent that the absence of errors permits relaxation. The whole process, repeated each time new language material is to be taught, can be thought of as a gradual progression from the manipulation of language to communication through language.

Another consequence of the pressure of time is that the linguistic content of an L2 course, and even the content of each class of such a course, needs to be carefully structured. In an elementary L1 class, where attention is focused on developing the skills of reading and writing, there is room for a very large amount of spontaneity and improvisation. Structural controls are not essential in the reading selections, provided that the sentences are not too long and complicated. But the L2 teacher must be aware at all times of just what elements of the language he is teaching. There is a clearly determined inventory of sounds and combinations of sounds that his pupils must master. He cannot afford to omit or slight any of them, and he should observe an ordered sequence in introducing them.
Completeness and sequencing are perhaps even more important in his major task, which is that of making certain that his pupils have an adequate opportunity to master the basic structures and sentence patterns that the grammar of the language permits. The pupils must then be given a chance to internalize the various formulas whereby the basic patterns are expanded, shortened, transformed, and embedded in other patterns to generate more complex sentences. All this requires practice and more practice. If a basic structure is overlooked somewhere early in the sequence, there can be no assurance that it will sooner or later re-appear as a matter of chance sufficiently often to be learned. This is not to say that there is no room at all in the second-language class for spontaneity and improvisation. Without improvisation there is probably no true communication. It does seem to mean, however, that even spontaneity must be timed and rationed.

The rate at which a child acquires a second language probably depends above all else on the amount of time he spends in actually using the language. Whereas the L1 teacher can encourage pupils to speak one at a time and even allow them the option of remaining silent if they feel so inclined, the L2 teacher is forced to rely much more heavily on formalized activities in which participation is obligatory. He must have at his command an extensive repertory of drill techniques. These should range from purely manipulative drills in which all the child has to do is to imitate a model, through predominantly manipulative drills that require the child to supply certain linguistic elements within a framework provided by the model, through predominantly communicative activities over whose linguistic content the teacher still retains some slight degree of control, to purely communicative activities
such as free conversation and the writing of original compositions. Many L2 teachers feel that choral drills, in which groups of pupils or all the members of the class participate simultaneously, are an essential part of the repertory because they effectively multiply the amount of time each child spends in actually using the language.

Since formalized activities tend to be boring if they are continued for too long, the L2 teacher must learn to move from one activity to another in a rhythm that provides sufficient drill for mastery but that also moves fast enough to give the pupils a sense of achievement. As Earl Stevick has pointed out, this probably involves skill in recognizing technemes; Stevick defines a techneme as a classroom technique that pupils will react to as being different from a previously used technique.

Most of the remaining basic differences between acquiring an L1 and adding an L2 arise not so much from the fact that a more limited amount of time is available for the L2 but that the child usually begins to learn his second language at a more mature stage in his general development. Perhaps the most far-reaching in its effects of these differences is the difference in motivation.

Recent research has been rather inconclusive as to the importance of some of our cherished methodological dogmas, such as our preference for presenting grammar inductively rather than deductively and our earlier insistence that structural patterns be drilled to the point of over-learning. On the other hand, all the pertinent research that I am aware of, particularly that of Wallace Lambert and his colleagues at McGill University in Montreal, has clearly demonstrated the central importance of motivation.

The child learns a great deal of his mother tongue without awareness that he is learning. His most basic drives---hunger, fear, the need for
affection—urge him to communicate. His very existence depends on his ability to make his needs known in some way to those upon whom he is utterly dependent. It is hard to imagine how stronger motivation could exist. As he grows older his degree of independence of course increases, and he is certainly aware in school that he is being taught how to read and write. Even so, his motivation usually remains fairly high: it is not hard to comprehend the value of becoming literate, and many children really do discover that reading is fun.

But how inferior is the natural motivation for learning a second language! Instead of being a tool for the satisfaction of immediate needs, it may seem more like a questionable superfluity. It may be associated with unsympathetic foreigners or an objectionable social group rather than with the learner's family, peers, and favorite people.

Obviously, the L2 teacher must bend every effort toward supplying at least a portion of the natural motivation that is lacking. He must try to show that native speakers of the language are an interesting and even an admirable lot who have said and written many things that can enrich anybody's life. He may be able to convince his pupils that mastery of the language will open doors to professional advancement that would otherwise remain closed. Above all he will need to make sure that his pupils often experience that simplest and most solid of the satisfactions that accompany the successful learning of an L2, the pleasure of being able actually to communicate thought in a language other than one's own. He certainly cannot allow them to conclude, basing their judgment on what goes on in the classroom, that most of what is said in the second language is empty verbiage unrelated to reality. Even manipulative drill can be made meaningful.
A second consequence of increased maturity is a wider experience of life. The L2 teacher has less need than does the L1 teacher to provide his pupils with new, non-linguistic experiences. A child normally brings to learning his second language a larger stock of more sophisticated concepts than he brought to acquiring his first. This is one reason why readers in English, for example, that have been written for American children are not usually suitable for, say, Filipino children. Such texts tend to be too difficult linguistically and too simple conceptually. Unless this difference is kept in mind, L2 drills prepared for adolescents and adults may turn out because of the simple-minded language in which they are written to be an insult to the intelligence of the learners.

Almost inevitably the native speaker of a widely written language learns the skills involved in mastering his mother tongue in a certain fixed order: first hearing, then speaking, then reading, then writing. Is this sequencing of skills equally inevitable in the teaching of a second language? There is a great deal of evidence that it is certainly not inevitable and, indeed, that it may sometimes not even be desirable. Every year thousands of graduate students in American universities learn to read French or German, because they must do so to fulfill advanced degree requirements, without ever having spoken either language. It may be argued that they do not really read but merely decipher with the aid of a dictionary. I am not sure that this is anything more than a verbal quibble. It cannot be denied that they do manage to get meaning from the printed page. And if that is all they need to do with their French or German, then it hardly seems justifiable to criticize the method on the grounds that this is not the way in which children learn their mother tongue.
Perhaps it is wise to maintain, except in cases of special need like that of the graduate students cited above, that the pupils in an L2 class should generally speak only what they have first heard and understood well, should read only what they have spoken, and should attempt to write only what they have read. This seems to be a particularly wise policy in a school system like that of Kenya or the United States, in which English is almost universally the medium of instruction at all levels. In the lower grades of such schools teachers—and parents—tend to measure achievement in terms of reading alone, and the pressures to begin reading early may therefore become nearly irresistible. If, however, the children are required to read large amounts of material with which they have not earlier familiarized themselves in oral form, they have no other recourse than to parrot, to mouth words without understanding their meaning. In time parroting may become a fixed habit, a besetting sin that imperils the mental development of the child. Anyone who has worked in the schools of Kenya or who has studied the problems of Spanish-speaking children in American schools will recognize the reality of the danger.

There is a great and, it seems to me, insufficiently recognized difference between sequencing skills in terms of the linguistic material contained in one lesson or unit of lessons, as described at the beginning of the preceding paragraph, and sequencing them in terms of the total skills. Some methodologists, basing their judgment on the analogy with first-language learning, have gone so far as to say that the L2 teacher should not ask his pupils to begin to speak until they have learned to hear the differences between all the sounds that the language distinguishes, that pupils should not be allowed to read before they have mastered all the essentials of the spoken language,
etc. Such a doctrine seems to ignore the well established fact that, as children mature, they tend rapidly to become more visually-minded. That is to say, they find it increasingly difficult to learn and remember a word without having seen it in writing. There is evidence that prolonged postponement, over a period of months or even years, of all contact with the written form of the language in an L2 class may be definitely counter-productive. Therein may lie another basic difference between acquiring an L1 and adding an L2.

As his maturity increases, a child also becomes more capable of learning through analogy and generalization. We have noted that in his linguistic development he begins to make good use of these processes as early as his second year. It seems reasonable to assume that they can be even more useful in teaching him his second language than they were to him in learning his mother tongue. We are not yet sure whether it is better actually to formulate the rules that govern the generation of sentences in the L2 or merely to lead the child to internalize them without overt formulation. There are also differences of opinion as to whether the formulation should be done by the pupils or by the teacher. But rules can obviously provide a short-cut to learning. This belief is in harmony with the modern view of language as rule-governed behavior rather than as the result of a mechanical process of habit formation. Provided that the rules are phrased in the simplest and most non-technical language possible and that learning them is never confused with being governed by them, it is difficult to see how formulating them could be other than helpful.

By acquiring his L1 a child relates himself more closely to his own speech community and culture. When he learns an L2, he is in danger of anomie,
or alienation from his own culture. How can the danger be avoided or at least minimized, especially in a situation in which the L2 is begun early and eventually becomes the medium of instruction? This is one of the most significant problems of second-language teaching. Unless it can be solved, English may in time lose much of the favor it now enjoys in many of the world's newly independent countries. The spokesmen for ethnic minority groups within the United States are becoming increasingly insistent that it be solved in American schools. The search for a solution is made more difficult by the teachers' conviction, already alluded to in this paper, that a language cannot be well taught apart from the culture of which it is an expression and that adequate motivation for learning an L2 is impossible unless the pupils are favorably disposed toward those who speak the language natively. Part of the solution may lie in dividing instruction into two phases, in africanizing or hispanizing the subject matter dealt with during the first phase, and in postponing any attempt to explain British or traditional American culture until the second phase. Until a more complete solution is worked out, second-language teaching will continue to be characterized and bedeviled by the need for serving two apparently contradictory sets of goals.

I have saved until last the difference that is perhaps of most interest to linguists, the difference that arises from the linguistic interference which affects every element of teaching a second language. Whereas the child acquires his L1 without prejudice or predisposition toward certain forms of language, when he comes to add his L2 he must do so against the ingrained and often misleading influence of his mother tongue. I have saved this point until last so as to be able to surprise you pleasantly by the brevity with which I am going to treat it. Its importance is so obvious and it has so frequently been discussed at length that it hardly seems necessary to consider it further here.