Learning A Foreign Language
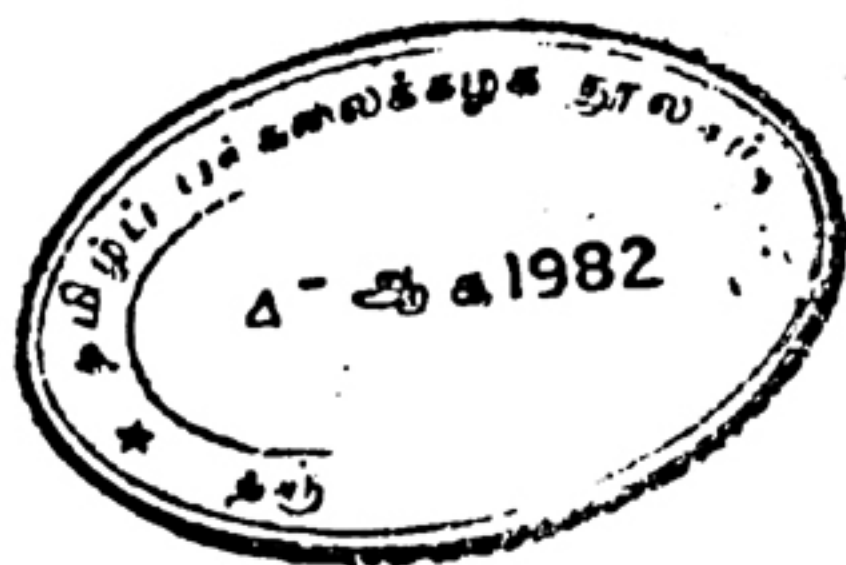
Eugene A Nida

Learning a Foreign Language

A Handbook for Missionaries

by

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PREFACE

This book on <u>Learning a Foreign Language</u> is designed especially for missionaries. Accordingly, the illustrations of linguistic problems are drawn principally from languages with which missionaries are primarily concerned and from the actual experience which missionaries have had with these languages.

The first three chapters treat the principles and procedures in language study and the following four chapters deal with some of the fundamental features of languages. In describing linguistic structure an attempt has been made to use nontechnical vocabulary wherever possible. In instances where this could not be done without considerable ambiguity or inaccuracy, every effort has been made to explain the technical words by simple illustrations.

In addition to its use as a guide for individual language study, this volume should prove helpful for elementary courses in linguistics offered in various seminaries, colleges, and Bible schools. However, teachers are advised to supplement the materials contained here by exercises and further illustrative data to be found in <u>Phonemics</u> (1947) by Kenneth L. Pike and <u>Morphology</u> (1949) by Eugene A. Nida. Both of these volumes are published by the University of Michigan Press, Ann Arbor, Michigan.

The following books and pamphlets have proved exceedingly valuable in the preparation of this volume:

> T. F. Cummings, <u>How to Learn a Language</u> (New York: privately published, Press of Frank H. Evory and Co., Albany, New York, 1916).
>
> L. Bloomfield, <u>Outline Guide for the Practical Study of Foreign Language</u> (Baltimore: Linguistic Society of America, 1942). Pp. 16.
>
> O. Jespersen, <u>How to Teach a Foreign Language</u> (London: Allen and Unwin, 1917). Pp. 194.
>
> H. E. Palmer, <u>The Scientific Study and Teaching of Languages</u> (London: George G. Harrap and Co., 1917). Pp. 328.

H. Sweet, <u>The</u> <u>Practical</u> <u>Study</u> <u>of</u> <u>Languages</u> (London:
　　J. M. Dent and Sons, 1926). Pp. 278.
Ida C. Ward, <u>Practical</u> <u>Suggestions</u> <u>for</u> <u>the</u> <u>Learning</u> <u>of</u> <u>an</u>
　　<u>African</u> <u>Language</u> <u>in</u> <u>the</u> <u>Field</u> (London: Oxford Uni-
　　versity Press, for the International African Institute,
　　1937). Pp. 39.

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CONTENTS

1.   LANGUAGES CAN AND MUST BE LEARNED

Everything was in turmoil. Some of the boys at the mission school were huddled in groups talking in low, angry tones while others stared bitterly toward the home of the mission superintendent. The native school teachers tried to reason with the students but with little success. Finally, the native teachers came to the missionary and endeavored to explain again the basis of the difficulty and resultant misunderstanding, and as they pleaded, they said, "There can be no real peace between us unless you really speak our language." The trouble had arisen primarily because this devout, consecrated missionary was unable to understand and speak the native language effectively.

Such a tragedy is by no means unique. In one area of Africa the natives came to the British governor of the province and asked him through Arab interpreters, "Just what are the missionaries in our tribe trying to tell us? They seem like nice people, but we do not understand them." These missionaries, who had been suffering untold hardships in order to pioneer in a remote, disease-ridden region, had not in eight years succeeded in learning enough of the native language to communicate their vital message. Furthermore, none of them had ever taken the time to learn enough Arabic to use it adequately with the natives who did have an elementary knowledge of that trade language.

1.1   Popular Excuses

There is no valid reason for tragic failures in language learning, for languages can be learned. Children of six years of age in all cultures are able to speak their mother-tongue intelligibly and to discuss many things which missionaries seem never able to talk about. Naturally, we may then ask ourselves, "Why do we not learn a language as well as a child?" The reasons for our deficiencies are not difficult to discover. In the first place, as adult missionaries we have already

acquired a set of language habits, and we have practiced them for fully twenty years, until they have become thoroughly a part of us. In the second place, we shelter our ego with all types of inhibitions and restraints. We are afraid of exposing our ignorance and of being laughed at, and as a result our speech becomes ridiculous. Of course, it is also true that we do not have native parents who fondly try to teach us, who never seem to tire of repeating words, and who praise us for our feeble efforts. Furthermore, we are not exposed to the taunting of other children who cruelly force conformity upon their playmates. In reality, we do not have many of the advantages afforded children, but, on the other hand, we have other advantages which come from analytical training and mature mental faculties. At times we tend to underestimate our childish woes and to forget the really strenuous efforts involved in learning to speak. Once the task is over, we forget any difficulties and assume that all was easy sledding.

Despite the many intricacies of strange languages, with their many peculiar sounds and utterly different grammars, missionaries have learned some of the most complicated languages in the world. For difficulties of vowels and tone no language appears to surpass Dinka in the Anglo-Egyptian Sudan, and yet Dr. Trudinger, translator of the Abwong dialect, has acquired an amazing facility in this extremely complex language. However, such ability has only come as the result of years of painstaking study and of constantly living and being with the people—sitting in the cattle kraals around dung fires, listening to stories of hunting exploits, fierce wars, and ancient lore, and then telling these ash-coated people the Good News as contained in the Book of books. Some missionaries have learned Eskimo with its long words and irregular forms, and others have mastered Navaho, with its highly involved verb paradigms consisting of stems and eleven sets of prefixes. No language is unlearnable, but languages do differ greatly in the degree and kind of complications.

There are many excuses given for missionaries' failures to learn foreign languages. One of the most common is the complaint of being too old before taking up the task. Of course, age is a type of liability, for habits become stronger as we get older, and our sensitive egos get more touchy; but the barrier of age has been greatly exaggerated. Old dogs can be taught

new tricks, provided they really want to learn and will take
the necessary steps to overcome their initial disadvantages.
Mental alertness and a communicative personality will out-
weigh almost any disadvantage of age.

Some potential missionaries assume that because they are
"tone deaf," they cannot learn another language, especially a
tonal one. In the first place, this so-called tone deafness usu-
ally means that one is not able to "carry a tune," but that does
not mean that the person is actually unable to recognize tone.
If one is able to distinguish the declarative "Yes." from the
interrogative "Yes?," he is not tone deaf. If, in speaking
English, one uses the conventional intonational patterns, then
he can also learn to make tonal distinctions in other languages.
Undoubtedly he will have to work at the task more if his ear
is less aware of tonal changes, but careful training can com-
pensate for apparent woeful lack of natural ability. One well-
known linguist, who has done considerable research in tonal
languages, began his career with the serious handicap of poor
musical aptitude, but by dint of persistent effort has succeeded
in not only overcoming a liability but has developed remark-
able acuteness in the analysis of tonal languages. People do
not actually "sing" a tone language, in the sense of hitting pre-
cisely the same note whenever the same word recurs. The
distinctions involve relative pitches, not absolute ones, and
with persistent intelligent practice even the poorest student
can make himself understood.

Some people assume that because they have never studied
any foreign languages before going to the field, they are there-
by handicapped for life. In some ways they may have some
advantages over others, for some traditional courses in lan-
guage teach many things which must be unlearned later. One
missionary, who used to pride himself on being a "trained
grammarian" (and he did have a number of years of traditional
schooling in language), proved to be a terrible failure in learn-
ing a native language in Africa. Because the language did not
conform to his idea of what a language should be like, he failed
to appreciate its structure and to master its idiom.

One of the most common excuses for language inadequacy
is lack of time. This is one very valid reason for language
failure, and one which must be seriously considered. So-
called technical missionaries, for example, doctors, nurses,

agriculturalists, and industrialists, have often felt that the employment of their skills is so strategic that language facility is relatively unimportant. Evangelistic and educational missionaries are supposed to supplement the technicians' inadequacies. To an extent this reasoning is based upon the appreciation of efficiency in specialization, but fundamentally it introduces a serious error. The true missionary, whether technical or nontechnical, is not in the field to give of his skills, but rather to communicate the life of his Master. Technical tasks can be performed by government officials and employees of purely scientific and philanthropic organizations. The missionary has a greater calling, and the effective transmission of his message both by life and by word is of utmost importance. If the skill of a doctor has opened up some previously hostile area to the preaching of the gospel, he is the most effective one to present Christ. It is true that he cannot take the required time to do all the teaching and preaching. Much of this will necessarily fall to the responsibility of others, but natives will look to the doctor for spiritual guidance, for it is he who has been instrumental in breaking down prejudice.

Every missionary, regardless of his specialization, must be equipped to communicate to others the substance of his objective faith and the reality of his personal conviction. To tell men about the truth and to reveal the heart which has made that truth live requires skill in speaking the native language.

1.2 A False Evaluation of Ability

The missionary who is continually congratulated by the natives for his language ability frequently assumes that he is getting along famously. The truth is usually quite the opposite, for such statements result from the missionary's obviously faltering attempts to make his audience understand, and they are trying to encourage him to do better. When natives finally cease to make such statements, it is either because the missionary has so mastered the language that their attention is no longer called to the language problem or because they have simply given up hope that the missionary will ever improve. One missionary who had rather congratulated himself on his language ability was made humble again by the remark of a

villager who, when asked whether he enjoyed the preaching service, said apologetically, "I'm sorry, your honor. You see I do not understand English." The missionary had actually been trying to speak the native's own language, and not English at all. A similar incident occurred to a German missionary in Japan who was unusually proud of his own rapid mastery of the Japanese language and so refused to use interpreters. One of the parishioners, however, revealed inadvertently how pitifully little was understood, when he commented to one of his friends, "The German language must not be too much different from Japanese." A most embarrassing rejoinder was made to a missionary who boldly asked his congregation whether he spoke their language intelligibly. "Well," replied one of the natives, "when you attempt to speak our language, we know at least that it is no other language which you are trying to talk."

Some missionaries have been deceived by the apparent understanding of the natives who live on the mission station and who become perfectly familiar with the missionary's own brand of the language. In actuality, they have learned the missionary's dialect, and in some cases they even imitate the missionary's speech to the point of developing a real mission-station jargon. Such localisms prove a real hindrance to effective evangelism, for the missionary often discovers that he cannot be understood beyond the limits of the immediate community. Often his reaction is to blame the extreme dialectal differences, though he may admit that the natives seem to get along all right in speaking with one another. In such circumstances one may be quite sure that the trouble lies with the missionary's mispronunciations and awkward grammatical forms.

1.3   What Real Language Ability Can Mean

The three keys to the Christian life are revelation, faith, and witness. The revelation is the Word of God; the faith is that God-given response which we make to the message; and the witness is the inevitable outflowing of our experience. To communicate this reality to others we must be able to speak. This does not mean just the ability to write out sermons and to deliver them in an intelligible form; it means the skill which enables one to engage in conversation with people, talking with

them about their problems, beliefs, fears, desires, aspirations, and longings. Being able to frame appropriate sentences for a sermon is actually less important on the mission field than being able to respond intelligibly and spiritually to the intimate problems of the heart.

Some missionaries have taken the easy way out and have used interpreters for practically all of their ministry. It has been particularly common for missionaries among Indians in the United States to fall back on the use of interpreters, and nothing has been so unutterably tragic. In some instances the mission boards have even legislated against the use of the Indian language, and as a result missionary work has been in many cases unalterably crippled.

If interpreters are not good, they are doubly bad, for they interrupt the flow of the message and fail to reveal its contents adequately. If interpreters are good, then they can more profitably be trained to do the speaking themselves, following the instructions and suggestions of the missionary. Only those who have been forced to use interpreters can understand the fatal effects of such a procedure upon the message, for it is not so much the words uttered by the preacher as the fire burning within his soul which actually kindles conviction in others. For the most part, interpreters cannot communicate this characteristic of the personality.

The constant use of interpreters sometimes means that the missionary lapses into completely irrelevant types of illustrations. The missionary administrator who addressed a Japanese audience through an interpreter on the theme of "The Ships of God's Navy" and proceeded to talk about "Friendship, Fellowship, and Stewardship," was blind to the problems of language differences. One unfortunate missionary discovered after a number of years that his favorite interpreter had been consistently translating "only begotten Son" as "only forgotten Son," for the word "begotten" was unknown, and "forgotten" had the closest phonetic resemblance. Naturally the natives found it hard to understand how God could love the world so much and at the same time forget about His Son.

Being able to speak a language well means that one has gone through the process of learning not only the words of a language but the appropriate themes which are significant to the life of a people. Instead of drawing illustrations from

urban American life, one may talk about the dangers that lurk along jungle paths, the essential processes in the planting of corn, and the strenuous requirements for success in hunting. Instead of trying to illustrate the wrong choice in a predicament by saying that "the man jumped from the frying pan into the fire," the missionary should know an equivalent proverb such as comes from West Africa, "The man was so afraid of the sword that he hid in the scabbard." If the missionary wants to talk about the epitome of human wisdom, there is no use speaking about Socrates or Einstein; but he can, if he is in some parts of the Gold Coast, speak about "an old man with but a single hair," for this is the metaphorical symbol of wisdom in those regions. Knowing a language should also mean knowing the people, and one must know people before it is possible to lead them into the truth.

Real language facility not only enables one to avoid the pitfalls occasioned by interpreters and to make one's message relevant to the life of the people, but it also helps to prevent those serious maladjustments and breakdowns which threaten the missionary's ministry. The deep frustration which many missionaries experience may be traced in numerous instances to poor language orientation. Being cut off from the sustaining social experiences of home and family are serious blows to one's personality integration, but if one fails to establish other vital links through free and intimate communication, sooner or later the personality tends to disintegrate or to find outlets which are meaningless or destructive as far as the Christian ministry is concerned. Maladjustments are particularly severe where a wife or a husband falls too far behind the other in language learning and through one discouragement after another finally gives up.

The learning of a language takes time, and some missionaries look upon such a period as almost an entire waste. On the contrary, they ought to be thankful, for those months and years before being thrown into the whirl of missionary activity and responsibilities make it easier to adjust to the difficult climate, the different foods, and the new and curious ways. Without such a delay in which one learns the foreign language and the customs, it is possible to ruin one's future work completely. Even in seemingly little things we can offend so easily. For example, in some parts of Africa and Latin America

it is considered very dangerous to compliment a mother on the beauty of her child. To do so is to incur the responsibility for the possible death of the child. Any such words of praise are regarded by the natives as calling the attention of the evil spirits to the attractiveness of the child; and the child's death, even months later, may be attributed to the malignant influence of the well-intentioned missionary. Equally misunderstood among some tribes of Central Africa is our practice of affectionately patting children on the head, for the natives in those areas regard such an action as a direct threat to the soul of the child and a clear indication of evil intent. In certain places of the Congo one cannot point at a person with a finger without being regarded as very lewd and immoral. In such places the approved way to point is by sticking out the lower lip and jaw.

Language learning is more than simple mechanical ability to produce acoustic signals; it is a process by which we make vital contacts with a new community, a new manner of life, and a new system of thinking. To do this well is the basic requirement of effective missionary endeavor.

1.4   Reasons for Failure in Language Learning

Lack of time is the most common reason for failure in language learning. Of course, there are those rare individuals who seem to soak up languages like a sponge, but most of us are not in that category. Even when languages are seemingly simple, they exhibit all kinds of complications when we really attempt to master them. Some missionaries and mission boards seem to assume that languages of so-called primitive peoples are so essentially simple that they can be "picked up" as one carries on other responsibilities. It is true that languages differ considerably in difficulty, but primitive languages are by no means simpler as a class than traditionally written ones. Those who have been content with a superficial study of such a language usually end up with a very superficial knowledge. In general they use only a small percentage of the grammatical forms, being content to stumble along with two or three tenses, when the language may have seven or eight, and missing completely the tones of words and characteristic intonation of the sentences. Failure to take the required time to learn a language is costly, for the efficiency and character of

one's life work is so largely determined by ability to communicate effectively.

Some of the failure to learn a language results from the wrong approach. Because of the traditional Latin-grammar approach to most European languages, it has been assumed that the same way of talking about and describing languages can be applied to any and all varieties of speech. Nothing could be further from the truth, for languages may be utterly different.[1] For example, in Muskogee, an Indian language of the south central United States, the numerals are conjugated just like verbs; in Maya, a language of Yucatan, Mexico, most of the words which appear to be conjunctions turn out to be possessed nouns; in Hupa, an Indian language of California, nouns may indicate tenses even as verbs do; and in Mongbandi, a Sudanic language of northern Congo, the tones on the subject pronouns show the difference between past, present, and future time. We simply must not force languages into the Latin mould and expect to understand their functioning.

Being taught the native language by some older missionary and without the constant presence of a native speaker can prove disastrous. The young missionary simply copies the probable mispronunciations and the idiosyncracies of the other missionary, rather than being guided constantly by what and how the native speaks. This does not mean, of course, that the experienced missionary cannot help tremendously in teaching the new missionary recruit. In fact, if the proper methods are used, exceptionally rapid progress may be made; but the important thing is to learn from the native, while the older missionary guides and directs the learning process.[2] There are unfortunately those missionaries who are so completely convinced of their infallibility in language matters that they insist on correcting the native speakers, even to the extent of contending that none of the natives actually pronounce their language correctly.

Another mistake in language learning is the habit of placing reading ahead of speaking. Undoubtedly there is much to

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[1] For a nontechnical treatment of these problems see Eugene A. Nida, Linguistic Interludes (Glendale, California: Summer Institute of Linguistics, 1947).

[2] See Chapter 3 for a discussion of ways to learn a language.

be gained by reading, but printed symbols are only graphic symbols standing for acoustic (sound) symbols, and to learn a language we must make primary use of the primary system of symbolization, i.e., the spoken form of the language.

Frequently the circumstances for language learning are not the best. The missionary may lack the opportunities to hear the language spoken. For example, living in the comparative isolation of a hill-top mission station, he is not surrounded constantly by the language as he would be if he were living in a native village. The ideal situation is, of course, to live with the people in the villages; and though this is not regarded as possible in some areas of the world (for example, in Negro Africa), yet some missionaries have lived in native villages and their linguistic proficiency attests to the great advantages. One of the principal reasons for the remarkable language ability of many of the old missionary pioneers is the fact that they lived so much with the people, since they did not possess the means of isolating themselves in more comfortable surroundings. We do not mean that the conventional patterns of missionary life in many places are completely wrong, but we do mean that special efforts must be made to break down the social and linguistic barriers that arise from this form of segregation.

Failure to appreciate the nature of real language proficiency may also militate against one's accomplishments. It is relatively easy "to get by," for the natives are so polite and so intelligent that they understand what we ask for in spite of our awkward grammatical constructions. We can probably best describe the progressive stages in language learning in terms of the following five degrees:

1. Recognizing a few words and phrases and being able to make known one's very elemental needs. This involves a vocabulary of probably two or three hundred words.

2. A practical use of the language in very restricted circumstances, such as giving instructions to servants in the home and buying at the market place. At the same time, one is able to follow the gist of speeches, provided the subject matter is very familiar, e.g., sermons on well-known texts.

3. Understanding speeches with fair comprehension, following conversation (if the topic is not too removed

from one's experience), and ability to make speeches, if one prepares carefully in advance, or if one keeps well within a limited range of experience.

4. Understanding rapid conversation on practically all subjects and being able to participate in such conversation on familiar themes. One does not have to grope for correct grammatical forms, and for all practical purposes one is fluent in the language, though not necessarily expert.

5. Exhibiting complete facility as evidenced by ability to joke and pun, and to employ specialized idioms and proverbial statements in their proper contexts.

Of course, there are many degrees of proficiency within these five steps, but it should be noted that conversational ability, not speech-making, is the sign of proficiency. It is surprising the number of missionaries who never advance beyond the third stage. This is even true of some who have undertaken to translate parts of the Bible into the language they have been studying. Some valuable missionary work has been done by those who have not advanced beyond the third stage, but how much more effective it would have been if they had acquired further skill is evidenced by the truly excellent work done by those who have paid the price to know the words which unlock the door to the native's heart.

Because natives do not frequently voice their strong resentment about a missionary's linguistic failures, some have assumed that awkward forms and mispronunciations do not actually matter too much. That is far from being the case. One native approached a visiting missionary executive in Latin America and rather timidly and apologetically said, "Why is it that after ten years our missionary has not learned our language well? He hurts our ears." A people's language is their most distinctive possession; it is the shrine of their soul. In order to enter and appreciate this shrine, we must be familiar with its intricate and meaningful forms.

The business man can often succeed by using merely the trade language or the restricted vocabulary of barter, for his purpose is to get from the people something which the rest of the world wants and to give something which the natives can be induced to buy, regardless of the value of the article to the natives' own lives. The missionary, however, has a greater

task, for he must convince men to accept the grace of God in
Christ Jesus, which conflicts with much that native tradition
holds dear and which demands complete allegiance. It is no
trinket which the missionary comes to sell, but a way of life;
and in order to explain the meaning of it, he must be able to
converse about the most important and intimate features of
native belief. The missionary finds that natives do not even
mention many important aspects of their lives when using a
trade language, even when they know such a language well.
Some Mongbandi people in northern Congo explained their fail-
ure to mention their native beliefs to the missionaries by say-
ing, "But how could we speak about that in Lingala?" Lingala
was the trade language of all the area, but it was just that, a
trade language, and not the language of their heart and spirit.
Only one who has heard natives "Oh" and "Ah" when they final-
ly understand the message in their own language can appre-
ciate the strategic importance of giving the Word in a man's
own tongue.

Expert language ability helps to identify the missionary
most effectively with the native society, and such identifica-
tion is essential to a truly successful ministry. As mission-
aries we must work in the field and not on the field. It is not
the geographical scope but the degree of cultural penetration
which marks truly effective missionary enterprise, and there
is no substitute for proper use of the native idiom. The native
language is not only a means of entrance into the life, but it
may be a defence against outside opposition. One missionary
working in an Indian tribe in Latin America was threatened by
the local priest, and the natives were instructed to drive him
out, but they defended their missionary friend by saying, "We
can't drive him away; he is one of us now. He speaks our
language." This missionary had gone out and lived with a na-
tive family, and in this way he had acquired an amazing facil-
ity in one of the most complicated Indian languages of this
hemisphere. His efforts were certainly not unrewarded in the
response of the people to him and to his message.

Chapter 2

2.   PRINCIPLES OF LANGUAGE LEARNING

Success in language learning requires close adherence to and thorough understanding of certain fundamental principles. These are not complicated, but they may seem strange, since they contradict so many traditional practices.

2.1   <u>Start</u> <u>with</u> <u>a</u> <u>Clean</u> <u>Slate</u>

Few people realize how very essential it is to drop all preconceptions about languages before beginning the study of a new one. It is a deceptive practice to teach the so-called "logic" of languages. Grammarians are forever giving "rules" for forms and trying to explain these rules by some complicated system of logical deductions. For example, we are told that the use of <u>shall</u> and <u>will</u> conforms to certain basic requirements of logic, but the rules are so complicated and arbitrary that no one follows them throughout. Furthermore, even the grammarians do not agree as to what should be done,[1] and they proceed to find so-called "glaring errors" in the writings of such men as Jowett, Wilde, Stevenson, Conan Doyle, Gladstone, Steele, Addison, Swift, and many others. It was actually not until 1765 that William Ward's <u>Grammar</u> <u>of</u> <u>the</u> <u>English</u> <u>Language</u> attempted to expound the rules on the basis of the "fundamental meanings" of the two words. The rules did not follow any described usage at the time, but were made almost entirely out of whole cloth. Far worse, however, than the multiplication of inane rules has been the tendency to vindicate all such statements by philosophical dictums about the logical structure of languages.

The relationships between words and the objects for which they stand as symbols do reflect some logical features, but we have made so much of this matter of logic and have attempted

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[1] See a complete statement of this problem in Charles C. Fries, <u>American</u> <u>English</u> <u>Grammar</u> (New York: Appleton-Century, 1940).

so to universalize the concept, that students find it exceedingly strange and disconcerting when they undertake the study of a language that does not coincide with what has been taught as being the "natural and logical" expression of the human intelligence. For example, in Tarahumara, an Indian language of northern Mexico, there are no plural forms of nouns. The word <u>towíki</u> means "boy" or "boys." There is simply no difference in form. Of course, certain adjective-like words can be added to mean "many" or "few," but Tarahumara simply does not distinguish singular from plural by anything added to the noun.

If, however, we examine English carefully we will discover that there are many illogical aspects. For example, the verb <u>to be</u> has three entirely different forms in the present: <u>am</u>, <u>is</u>, and <u>are</u>. There is no other verb like this, and certainly this could be considered as "illogical." Certain so-called auxiliaries: <u>may</u>, <u>can</u>, <u>shall</u>, <u>will</u>, <u>must</u>, and <u>ought</u>, never occur as complete verbs, and all but one of them, namely <u>ought</u>, are followed immediately by a verb form without the introductory particle <u>to</u>, e.g., <u>can go</u>, <u>may sail</u>, <u>shall remain</u>, <u>will try</u>, and <u>must enter</u>. <u>Ought</u>, however, must always be introduced by this particle, e.g., <u>ought to remain</u> and <u>ought to go</u>. It is quite illogical that all but one of the auxiliaries should occur with one kind of construction and <u>ought</u> with another. Furthermore, <u>can</u>, <u>may</u>, <u>shall</u>, and <u>will</u> have past tense forms: <u>could</u>, <u>might</u>, <u>should</u>, and <u>would</u>; but <u>must</u> and <u>ought</u> have no such corresponding past formations. We could go on and on pointing out the illogical and contradictory nature of English and all languages, but perhaps the following anonymous poem, entitled "Why English Is So Hard," will help to point out the difficulties more adequately, though less scientifically:

Why English Is So Hard

We'll begin with a <u>box</u>, and the plural is <u>boxes</u>;
    But the plural of <u>ox</u> should be <u>oxen</u>, not <u>oxes</u>.
Then one fowl is <u>goose</u>, but two are called <u>geese</u>;
    Yet the plural of <u>moose</u> should never be <u>meese</u>.

You may find a lone <u>mouse</u> or a whole lot of <u>mice</u>,
    But the plural of <u>house</u> is <u>houses</u>, not <u>hice</u>.
If the plural of <u>man</u> is always called <u>men</u>,
    Why shouldn't the plural of <u>pan</u> be called <u>pen</u>?

The cow in the plural may be cows or kine,
  But the plural of vow is vows, not vine.
And I speak of a foot, and you show me your feet,
  But I give you a boot—would a pair be called beet?

If one is a tooth and a whole set are teeth,
  Why shouldn't the plural of booth be called beeth?
If the singular is this, and the plural is these,
  Should the plural of kiss be nicknamed kese?

Then one may be that, and three may be those,
  Yet the plural of hat would never be hose;
We speak of a brother, and also of brethren,
  But though we say mother, we never say methren.

The masculine pronouns are he, his and him,
  But imagine the feminine she, shis, and shim!
So our English, I think you will all agree,
  Is the trickiest language you ever did see.

Even with all these irregularities, English is much more regular than many languages. Some people are, however, worried about such matters and insist on being told just why languages have such illogical formations. To find answers some people consult historical dictionaries of English, but that is no real help, for the irregularities do not vanish into thin air by projecting them backwards for several hundred years. Irregularities existed in Old English, in Proto-Germanic, in our reconstructed forms of Indo-European, and in what we know of Indo-Hittite. We cannot eliminate the illogical aspects of language by referring to their histories, nor blame them entirely on slovenly speakers or untutored children. In fact, if children had their way, they would regularize many features by such forms as foots, oxes, runned, fighted, and I is.

It is quite impossible for us to explain the "why's" of language. There is no reason, but a historical one, for any irregularities, and historical reasons are really not reasons. They are just statements that the irregularity has been in the language for a long time. It does not tell us just how the complexity arose. We do know something about these irregularities, namely, that they occur in all languages, that they are very persistent, especially if they occur in some frequently used form of the language, and that some irregularities are

constantly disappearing and others being introduced. For example, in Old English the verbs step, laugh, and glide, were so-called irregular verbs, having different stem forms for the present, past, and past participle, but now these verbs are quite regular. On the other hand, ring, hide, and fling used to be regular in their formation but are now irregular. Changes in language are almost as unpredictable as styles of dresses, hats, and neckties. Of course, the changes are slower and less perceptible, but they are dependent upon the same social factors, for the acceptance or rejection of linguistic innovation is a social matter and as unpredictable as people.

One of the most persistent misconceptions about language is the belief that primitive languages are inadequate as means of communication. People have just assumed that since supposedly primitive peoples have a more or less simple material culture, they will of necessity have a restricted vocabulary, and that their language will reflect a general deficiency. A recent dictionary of Zulu[2] has approximately 30,000 entries and does not include thousands of regular derivative formations (e.g., verbs from nouns and nouns from verbs) which we would include in a comparable dictionary of English. Over 20,000 words have been listed in Maya and 27,000 in Aztec, but these figures are by no means exhaustive. Furthermore, extent of vocabulary is not necessarily a criterion of value. Shakespeare is said to have used approximately 24,000 different words, Milton some 17,000 and the English Bible only 7,200.[3]

Though some people will grant the fact that aboriginal[4] peoples have surprisingly large vocabularies, the conviction persists that such peoples could not have well-defined or complicated grammars. Note, however, the following forms in Congo Swahili:

ninapika "I hit"
nilipika "I have hit"

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[2]C. M. Doke and B. W. Vilakazi, Zulu-English Dictionary (Johannesburg, South Africa: Witwatersrand University Press, 1948).

[3]A. L. Kroeber, Anthropology (New York: Harcourt, Brace, and Co., 1948), pp. 230-31.

[4]"Aboriginal" means that a society has not had a traditional form of written language.

nilimupika "I have hit him"
wunapikiwa "you (sg.) are hit"
nilinupikaka "I hit you (pl.) a long time ago"
wutakanipikizwa "you (sg.) will cause me to be hit"

The parts that go together to make up these various words are:
ni- "I," na- "present tense," li- "perfect tense," mu- "him,"
-pika[5] "to hit," wu- "you (sg.)," -iw or -w "passive," nu- "you
(pl.)," -ka "remote past tense," -iz "causative," taka- "future
tense." These are just a very few of the thousands of combi-
nations of prefixes and suffixes which can go with any verb.
In fact, the structure of Congo Swahili is in many respects
much more elaborate than Greek or Latin. It is ridiculous to
talk about any primitive language as being inadequate. Not all
aboriginal languages put parts together to make long involved
words, but the grammar is there, whether the parts are co-
alesced into words or remain as separate units.[6]

The impression that natives throw their words together in
an indiscriminate manner is quite wrong. There may be al-
ternative ways of saying things, and the word order may be so
different from English that it seems totally illogical, but there
is always a basic pattern. Note, however, the following two
sentences in Ilamba, a Bantu language of Tanganyika:

1. ke·nto	kiakoe	keko·lu	kemoe	kiameke·la	eno·mba.[7]
"Thing	his	big	one	is greater than a house."	

2. lokani	loakoe	loko·lu	lomoe	loaoke·la	oo·ta.
"Word	his	big	one	is greater than a bow."	

These two sentences mean (1) "His one big thing is greater
than a house" and (2) "His one big (i.e., important) word sur-
passes (i.e., is greater in strength than) a bow." Note that the
noun is the first word of the subject expression, while in Eng-
lish it would be the last, and that each word follows in a def-
inite order, though different from English (cf. thing his big one
with his one big thing). Furthermore, the adjectives show
their agreement with the noun by the prefixes ki- or ke- in the

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[5]See section 5.3 for further discussion of this stem.
[6]These problems are considered in Chapter 5.
[7]The tones are not written on the words.

first sentence and lo- in the second sentence. Even the verbs show reference to the subject by the subject prefixes ki- and lo-. In the verb kiameke·la the prefix me- shows that a noun like eno·mba "house" is the object, and in the verb loaoke·la the prefix o-, just before the stem -ke·la, shows that the object is a noun such as oo·ta. A language such as this cannot be said to have a "deficient grammar."

Some people have the impression that aboriginal languages are subject to all types of rapid changes because they are not reduced to writing. Strange as it may seem, the written languages seem to change much more rapidly than unwritten ones. For example, in Yucatan we can determine that during the last three hundred years Maya has changed much less in its structure and pronunciation than Spanish has. Of course, Maya has adopted many Spanish words, but so has the Spanish of Yucatan. However, we are not speaking here of vocabulary but of the grammatical structure, and in this respect the reducing of a language to writing is no guarantee in the least against change. In fact, languages seem to change directly in proportion to the density of communication, and the more a language is used by a greater concentration of people the more rapid will be its change. The new missionary need not worry about a native language changing so rapidly that he cannot keep up with it, simply because it has not been traditionally written. On the contrary, he will probably be irked by the comparative rigidity of the linguistic structure.

There are people who consider that learning some aboriginal language is not worth while, for, as they contend, it is bound to die out in ten or fifteen years. Such estimates are almost always too optimistic, for languages do not die out so abruptly. Of course, under the pressure of our agressive American way of life, numerous Indian languages of the United States have died out, but that is far from the situation in Europe, where some minority languages have persisted for generations, e.g., Welsh, Irish (which is now being revived), Scotch Gaelic, Breton, Romansch (spoken in Switzerland)—not to mention scores of local dialects which have a thriving literature. It is true that trade languages are spreading rapidly in many areas, e.g., Hausa in Nigeria and contiguous parts of West Africa, Swahili in East Africa, Lingala in the Congo, Spanish in Spanish America, Malay in the East Indies, and English in the

Pacific Islands. But native languages will persist for many years as a second language and may even be revived with the turn of political events. For example, in Indo-China it was the policy of the French government to push Annamese at the expense of the Thai languages, but in the political upheaval following World War II, Annamese was thrust aside and native education was undertaken in the Thai languages, with French as a trade language. The natives of Palau in the South Pacific have had a succession of Spanish, German, Japanese, and now English as trade languages, but they have retained their own language as a vital part of their lives and an entire New Testament has been translated into their language to meet the spiritual needs of a growing church.

Aboriginal languages are held in contempt by some because they are thought to have no literature. The mistake has been in assuming that literature is to be found only in books. Actually, many primitive peoples have vast quantities of literature, but the way in which it is passed from one generation to another is by word of mouth and not by written manuscript or printed page. A number of native and European scholars have spent years in accumulating the Zulu oral literary products, and they are amazed at their wealth and volume. The San Blas Indians of Panama possess a prodigious quantity of stories, legends, and poetry. In fact, before being able to candidate for the chieftainship, a man must memorize enough of such materials (most of them in a type of poetic form) that several days would be required to recite them all. Even the Homeric poems, which are still considered to be the greatest epic poetry of all times, were passed on for generations through a purely oral tradition. Their being committed to writing was only a relatively unimportant part of their cultural significance.

One final misconception about languages must be considered before we can clear the slate for constructive thinking about language. This concerns the popular idea that there is some basic form to all languages or that at least all the primitive languages have some fundamental characteristics in common. Such ideas are exceedingly old and very prevalent. Many scholars of past centuries related all strange languages to Hebrew, especially if no one knew much about such languages. For example, James Adair wrote in his History of the American

Indian (London, 1725), "The Indian language and dialects [i.e., those of America] appear to have the very idiom and genius of Hebrew...both in letters and signification, synonymous with the Hebrew language. It is a common and old remark that there is no language in which some Hebrew words are not to be found. Probably Hebrew was the first and only language."

Such ideas have persisted to the very present. For example, some missionaries have related one of the Bantu names for God Lesa to the Hebrew stem El occurring in Elohim (Genesis 1:1). The -sa portion has been dismissed as not important, and they have attempted to explain the discrepancy between El and Le- by the fact that Hebrew is written backwards. An even more absurd deduction as to the Hebrew origin of African languages (as well as an identification of the Lost Ten Tribes) was made by a missionary who concluded that because some of her students were mirror readers and writers (a well-recognized difficulty even with many American children) Hebrew must necessarily have been the ancestral language of the people. There are other people who have vainly attempted to relate all the languages of Africa to Egyptian. Our minds seem to be plagued by the desire to organize things and get them together, but the linguist soon dismisses such flights of fancy and returns to the basic task of describing languages as he finds them. When he does so, he discovers that there is absolutely no single structural characteristic running through all languages, and that so-called primitive languages are just as diverse as any other. There are indeed some characteristics in common to all languages. For example, we speak with our mouths and not with our ears; we have vowels and consonants; and we change the pitch of the voice; but these are not means of classifying linguistic types. One pseudo-linguist, however, attempted to classify languages as (1) vowel languages, (2) consonant languages, and (3) tonal languages.[8] Of course this is absurd. It would be just as

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[8] What the man actually meant was that some languages have a predominance of syllables which end in a vowel and others are characterized by having many syllables ending in consonants, while certain languages are characterized by tonal distinctions. A classification on the basis of syllables is meaningless. Distinctive tones occur on all types of syllabic structures.

sensible to classify pies as consisting of three types: (1) crust, (2) filling, and (3) cheese. Naturally, all pies have crust and filling, and some are served with cheese. In the same fashion, all languages have vowels and consonants, and some make distinctions between individual words by means of tone.

It would be fine to be able to reduce all linguistic problems and language diversity to some simple structure or to find certain fundamental roots occurring in all the languages of the world, but the truth is that no such features exist, and so we are obliged to consider each language on its own merits. If we do, we shall discover amazingly usable devices for conveying important and subtle distinctions in meaning. If we fail to be understood, it will not be the deficiency of the language but our own ineptness in using its complex and highly refined system of symbols.

2.2 Listening, Speaking, Reading, and Then Writing Constitute the Fundamental Order in Language Learning

The scientifically valid procedure in language learning involves listening first, to be followed by speaking. Then comes reading, and finally the writing of the language. This is almost the reverse of the traditional methods. One of the reasons for this is that many teachers of foreign languages cannot themselves speak the language, and hence there is no chance to listen. Certainly the infrequent, clumsy, oral reading of the prescribed sentences in the textbook can scarcely be called speaking. What actually happens in so many instances is that the student begins by writing out sentences on the basis of the grammar rules. This is done almost from the first day, certainly before one has half a chance to become acquainted with the vocabulary or the flow of the language. We soon get involved in hundreds of intricate rules, some of them purely orthographic, e.g., in French and Hebrew, and we usually end up by "hating" grammar and detesting the language. But worst of all, we rarely learn to use the language, for though we may pass tests so as to graduate, our ability to carry on a conversation in the foreign language with a native speaker is almost nil. We even spend so much time with the Masoretic pointing of Hebrew vowels that we do not get a chance to read the language extensively, and in the end our

only contact with Hebrew may be an infrequent use of an analytical Hebrew-Chaldee lexicon.

Our primary trouble is that we have tackled the study of language from the wrong end. We are like the man who thinks he can learn to swim by reading books about swimming. In actuality, we learn by doing. The grammatical rules are valuable as we plunge into the language and need some assistance. In the same way, advanced instructions about swimming are helpful as we learn something from actual experience in the water. But reading books never makes a swimmer and learning rules never makes a practical linguist.

By setting up listening, speaking, reading, and writing in this order, we do not imply that one must be able to understand everything before beginning to speak. It does mean, however, that we learn to speak by hearing someone else speak, and not by reading orally on the basis of certain "rules of pronunciation." When we hear words and expressions from a native speaker, we should of course imitate just as closely as possible, so that speaking follows immediately upon listening. Reading may begin rather soon if one is studying a language such as Spanish or German where the orthography represents the meaningful distinctions in sound; but if the language is French or English, then reading traditionally spelled words is a great disadvantage at first. It is better to use some so-called "phonetic alphabet" first until one has mastered several hundred phrases. Only then should one read the traditional orthography. In the case of Chinese, it is probably better to put off the reading process for several months and until such time as one has a rather good conversational ability for simple situations. Many linguists advise mastering a vocabulary of two or three thousand words before embarking on the difficult and quite different task of learning the Chinese symbols.

Some people object to placing reading in third place in the language-learning procedure, for they insist that they are visual-minded and that they can learn vocabulary much more easily from seeing it than from hearing it. To an extent this may be true, for our entire educational process has been such as to place great importance on the eye-gate. On the other hand, there is a much closer relationship between the auditory impression of a phrase and the motor action of reproducing

this sound by the vocal organs than there is between the graphic symbolism on a page and the oral reproduction. The graphic symbolism must usually be transferred first into some type of corresponding acoustic impression before it can be uttered. Furthermore, auditory impressions are more frequently obtained in real situations, so that the expression and the environment are interrelated, and accordingly the recall is easier. Purely visual impressions are too often gained in artificial situations such as sitting at home reading a book, and hence the forms are not so easily associated with the action, as when we hear expressions used in connection with actual happenings.

Our special emphasis upon the auditory perception does not mean that we should set aside all the other factors in the memory process. We should listen to expressions (an auditory process), write them down (a motor process), read them (a visual process), and then pronounce them over and over (repeated motor processes). People differ in the importance which these various processes have in their memorization of materials. Some people find it very helpful to write a phrase several times. Others consider that seeing the phrase repeatedly is just as valuable for them. Still others apparently learn most rapidly by means of auditory impressions. Whatever one's special aptitudes are, these should be cultivated and improved. Nevertheless, one should constantly try to improve one's auditory memory. Our own civilization does very little for us in this way, for our training is predominantly a matter of sight. We are frequently astonished to find natives who cannot read and yet who can recite from memory entire books of the Bible. This is true of a number of people in Africa and the Orient. The auditory memory can be developed as well as any other, and anyone learning a language will do well to concentrate in so far as possible on improving this vital factor.

2.3   <u>Mimicry</u> <u>Is</u> <u>the</u> <u>Key</u> <u>to</u> <u>Language</u> <u>Learning</u>

People who mimic easily have a great advantage in learning a foreign language, providing, of course, they will mimic native speakers. However, some people who are good at mimicry become very self-conscious when they try to reproduce foreign sounds, and their natural ability may become relatively useless.

Language learning usually necessitates conscious mimicry. It means noticing carefully such matters as the position of the lips, the quality of the sounds, the speed of utterance, the intonation of the voice, the so-called "swing" of the sentences, and even the characteristic gestures. To mimic all such features may seem silly at first, but it is much sillier not to do so, even though one may make numerous mistakes. In general one must murder a language before mastering it, and part of the murdering process must begin at once. One of the great mistakes is thinking that the refining of the pronunciation may come later in the study, and that first one must get acquainted with the grammar and the vocabulary and acquire some conversational facility. Those who consciously delay their mimicry of foreign speakers will discover that they have acquired habits which remain with them for many months, and sometimes they are never overcome.

Mimicry consists of three phases: (1) acute and constant observation, (2) "throwing oneself into it," and (3) continual practice. The matter of observation will be treated in Chapter 4. What we must emphasize here is the necessity of throwing oneself into the mood. At first this conscious adopting of entirely different habits of speech may seem terribly awkward, in fact, even painfully displeasing. It goes against our grain, and we have a feeling that we may be offending people by the conscious way in which we imitate their every word and gesture. What seems odd to us is not, however, odd to them. Rather, our American manner of speech transferred into another language seems unutterably queer. Of course, there is the possibility that by our conscious and obvious mimicry we may offend some fastidious native speaker, but it is certain that failure to mimic would offend many more.

An important part of the mimicry process is continual practice. After a short time the mimicry does not seem so strange to us. In fact, it seems very natural, and we unconsciously find ourselves adopting entirely new speech "manners" when we begin to speak a foreign language.

2.4   Language Learning Is Over-Learning

Language must be automatic, or it is practically useless. The person who must stop to figure out the right forms or who

must grope constantly for words has not learned a foreign language. Expressions must be on the tip of the tongue.

To acquire an automatic language facility requires three processes: (1) memorizing, (2) drill and repetition, (3) thinking in the foreign language. Some people have the weird idea that language consists primarily of grammatical forms and that the vocabulary is more or less inconsequential. Both forms and vocabulary are essential parts, and neither can be neglected. However, there is no point in just memorizing long series of paradigmatic forms, e.g., Spanish compro "I buy," compras "you (sg. familiar) buy," compra "he, she, it, you (sg. formal) buy," compramos "we buy," compráis "you (pl. familiar) buy," and compran "they, you (pl. formal) buy," unless one understands how such forms are used and how they can be combined into sentences. Similarly, it is quite useless to begin learning a language by memorizing a dictionary, even one with only the more common words listed. Languages are learned by words in meaningful combinations (see Chapter 3), but nevertheless, the words and forms must be learned. Perhaps it would be better if we did not use the word "memorize," for it conjures up all types of unpleasant associations—mastering long lists of vocabulary in a Greek grammar or of relatively impracticable grammatical rules about certain prepositions taking the genitive, others the dative, and still others the accusative case. By memorizing we do not mean learning forms out of context as is so often the case in poorly constructed grammars, but we do mean having the facts of a language down pat.

One of the most effective ways to memorize is to drill. This means constant repetition either to oneself, or preferably to a native speaker. Drilling can mean taking a number of short sentences in a language and going over and over them, first slowly and then more and more rapidly until they are up to normal speed. In fact, our practicing should at times be a bit faster than normal speed, so that when we actually use the forms, they will sound right. If one is able to drill with a native speaker, then this person can say the sentence first and the student can repeat, sometimes three or four times, and then go on to another similar expression. It may take hundreds of repetitions, but that is not too many if by them one gains

automatic facility. Further instructions on drilling are contained in Chapter 3.

Thinking in a foreign language is absolutely essential. One cannot expect to speak with facility while going through the process of translating ideas from English into another language. Not only will the time required make the speech slow and jerky, but it is inevitable that the idiom and word order will be predominantly English, with the result that the sentences will sound extremely queer and foreign. One can practice thinking in a foreign language by making up imaginary conversations, constructing speeches, or recalling what one has heard or read in the foreign language. Even though one's vocabulary may be limited (for example, not more than a few hundred words), it is very important to experiment in formulating one's thinking by using the words and expressions of the language being acquired. At first, it may seem almost hopeless, but every time an English word or phrase pops into one's mind, it should be tossed out, and thinking should progress only as foreign words and phrases come to mind. One can begin by recalling the conversation when buying at the market. Or one may wish to construct some more effective arguments as to why the merchant should have come down further on the price. It is valuable to try to think through the sermon preached by the native evangelist or to construct another following some theme for which one has an adequate vocabulary.

In listening to someone else speak, we should attempt to think along in the foreign language, without attempting to translate the words into English. Despite our efforts to the contrary, we tend to translate automatically into English, so that a conscious effort to avoid this practice is absolutely necessary. One must let the foreign words have their own meanings and let them begin to "ring the bell" in one's thoughts.

We cannot overemphasize the necessity of complete automatic facility in a language. Speech must flow naturally and easily without any apparent mental contortions. Speech should be so automatic that one can say, "He let his mind slip into neutral while his tongue idled on."

2.5 Language Learning Means Language Using

A person never learns to play the piano simply by studying the mechanism of the instrument, observing the manual

skill of others, and learning how to read music. Piano playing is an art and a skill, and it requires practice. No amount of technical knowledge about music can compensate for the necessary hours sitting at the piano and practicing progressively more complex musical selections. Furthermore, the beginning piano student does not learn to play pieces just by practicing scales and chords. He must attempt to play real pieces if he is ever going to learn to play them.

The same thing applies to a person learning a foreign language. A great deal of technical information about language structure and even the mastering of the paradigms (comparable to scales in music) will not make a skilled speaker. To learn to speak, one must speak. Of course, this does not mean starting out with a sermon, any more than the aspiring pianist begins with a Bach fugue. It does mean, however, that the ivory-tower attitude toward language learning dooms a person to failure. We must become surrounded by the constant hubbub of language use if we are to learn.

One of the most common errors in language learning is the failure to practice hearing. We have become so accustomed to the book technique of learning anything that we consider our time most profitably spent studying in the isolation of our libraries. This is folly for the student of foreign languages. He must get out where the language is spoken and where he can speak. To do this, he needs to look for real situations where the language can be used. Once when a new group of missionaries were entering a country in Latin America, one of the members of the group gallantly volunteered to do the marketing while the others seemed to think that such time was lost from more important "study." It turned out, of course, that the one doing the marketing progressed very rapidly in the use of the language, for he had excellent opportunities to use his limited knowledge of Spanish since marketing involved constant haggling over prices.

Missionaries in Africa have found it very valuable to go out and sit with the old men or school boys around the smoking fires of the native compounds. At first, the missionary may not be able to understand a thing of what is being said, but gradually recurring expressions seem to jump out of the stream of speech and conversation. After a time, the missionary may be able to ask questions of the people in the group or

even contribute some tale from his own experience. <u>Only after one has learned to sit and listen can one profitably stand and speak.</u>

Another practical situation is visiting. This means simply chatting—about anything and everything. The missionary should not attempt to be preaching or arguing all the time. He must learn just to talk. His later evangelistic efforts will be much more valuable if he will only take the time to learn how to chat with people. Of course, this procedure does contradict many of our ideas about how a missionary should spend his time. Chatting with people may not seem very impressive to put down on a report to be sent to one's home constituency, but it is the indispensable introduction to the language and to the people.

We must not overlook the part that the missionary's personality plays in the learning of a language. Two young ladies working in an Indian tribe in Latin America showed conspicuous differences in practical language ability resulting from their personality contrasts. One of them was very vivacious, extrovertish, and talkative, but was considerably inferior in the structural analysis of the language and in the mastery of grammatical rules. The other was quieter, slower in speech, and much less inclined to express herself on every occasion and about everything that was happening. However, she was much the better technical linguist of the two. Nevertheless, as one may well guess, the first young lady learned to speak much better and more rapidly than the second. Being naturally talkative, interested in people and things, and feeling certain irrepressible desires to be communicative are great aids to language learning.

Some people are emotionally and psychologically incapable of not learning a language. One missionary wife complained when her husband insisted on transferring to South America during World War II. She had already learned French and Flemish, and she objected strenuously to the prospect of being required to learn Spanish. Her husband knowingly and humorously challenged her, "I dare you to keep quiet in any language." Sure enough, she also learned Spanish!

Language learning means plunging headlong into a series of completely different experiences. It means exposing oneself to situations where the use of the language is required. Making

a trip alone where one must obtain food and lodging is a marvelous way to acquire vocabulary. It is amazing how words learned under such circumstances stick with one. The missionary will do well to take on word-using responsibilities or make of his circumstances a classroom for language learning. Building a house with native helpers can be an excellent means of learning the language—listening to their constant chattering, chiming in where possible, repeating over and over the names for various implements, always making suggestions with the aid of newly acquired words. Such an experience can prove even more valuable than hours of poring over poorly constructed grammatical rules, for we only learn to speak by speaking.

WAYS OF LEARNING A FOREIGN LANGUAGE

When most of us think about learning a foreign language, our minds run to two extremes. One of these is of the poor missionary surrounded by cannibals gleefully sizing up their victim. We can imagine his desperate attempts to placate his captors and explain that he is really a very innocent person with perfectly friendly intentions. The other mental image of language learning is of a high school or college classroom where we struggled to answer questions about subjunctives, gerunds, ablatives, and supines—things that we never fully understood and never hoped to meet up with again. Numbers of potential missionaries have given up all thoughts of going to the foreign field simply because of their desperately distasteful experience with college French or seminary Greek; and many others feel certain that they could never go to certain areas of the world, for they are confident that they could never learn the language. Most of these ideas are based on complete misconceptions about language and the process of learning.

3.1 Popular Misconceptions

Most people have an exaggerated idea of the authority and value of a grammar and a dictionary. Some even think that they can learn a language by only these two books. Certain well-meaning souls have written to the Bible societies offering their services as Bible translators for work in their spare time. They admit that they do not know any foreign languages, but if the Bible Society will only send them a grammar and a dictionary of some language, they feel quite confident that they can translate the Bible, or at least portions of it, into that language. Such zeal is commendable, but the ignorance which such an offer reflects is unfortunate. Of course, the reason for this is the dominance of Latin study in our schooling. The only way in which we can learn Latin, Ancient Greek, and Hebrew is through books, but that is not true of living languages.

Even the best grammar of French cannot teach us to speak French, nor will it enable us to write good idiomatic French.

What frightens most missionary candidates about foreign languages is the thought of years of tedious, uninteresting study of some grammar and the slow painful reading of some insipid nursery stories, only to find that after all this he cannot understand a sentence of the language over the radio and cannot order a meal in a foreign restaurant. If after all that hard work there are no evident results, he wonders whether he could ever learn to speak a foreign language. Sometimes he builds up such a case against foreign language learning that he acquires a complex on the subject, and his protestations of inability are almost pathetic. He is like a person who has been forced to eat too much of some food and as a result acquires such an aversion for it that the very thought of having to swallow a small bit of it really makes him ill.

There are also those people who have been told that language learning consists primarily of reading the best literature. This, of course, can be a great help, but it is not the way to learn to speak. Furthermore, many of the literary productions of a language are in a very artificial dialect. One foreigner who came to the United States had concentrated on Shakespeare and the Bible as an introduction to the English language, but such phrases as "Unhand me!" and "When shall we depart from hence?" marked his speech as being odd, to say the least. Missionaries run the same risk of patterning their speech after Bible translations, for too often these translations are exceedingly awkward and stiff.

Some missionaries have felt obliged to learn only from the highly educated natives. It is admirable to want the "best," but it does not necessarily follow that a well-educated person is always a good teacher. In fact, some types of education, particularly the classical, conservative kinds, may make a person excessively pedantic. Furthermore, one who is desirous of being able to speak to all people must not restrict himself to imitating the speech of only the intelligentsia.

3.2   The Diversity of Language Learning Methods

There are numerous ways to learn a language. The missionary who finds himself among a tribe of people who do not

speak a word of a language which he knows, must start by pointing out objects and mimicking certain actions. By listening carefully to natives around him, he learns the words which designate such objects and actions, and gradually he begins to piece the language fragments together.[1] This is no small job, but it is not impossible. In fact, the pressures of having to be communicative in order to live among monolingual people make the language learning process much more rapid than one might suspect.

At the opposite extreme of language learning there is the linguistically trained native speaker who can guide one's study of the language and who can provide the necessary drills, the concise explanations of grammatical problems, the scientifically constructed vocabulary lists, and the general cultural orientation, which is so important in really understanding a language and a people. Such trained teachers are very rare, so that one's actual experience usually falls some place between the two extremes of learning from monolingual natives and from linguistically trained native speakers.

It would be impossible for us to describe all the ways of learning a foreign language, but there are three principal methods: (1) a course with a native speaker as informant and a linguistically trained person to guide the study, (2) instruction by a private tutor in a language having grammars and an extensive literature, and (3) learning an aboriginal language with the aid of a native speaker who can use some intermediate language.

3.2.1   A Course with a Native Informant and a Linguistically Trained Guide

During the Second World War it was necessary to teach hundreds of men to speak languages for which there were few, if any, linguistically trained native speakers. It would have been folly to have the students imitate the pronunciation and usage of a non-native instructor, for the students assigned from the various branches of the armed services had to

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[1] For a study of these monolingual procedures see Eugene A. Nida, Morphology (Ann Arbor, Michigan: University of Michigan Press, 1949).

acquire a practical use of the language. They needed to be able to communicate with native speakers of the language, and ability to do so effectively would mean life or death to themselves and to many others for whom they might act as interpreters. To meet these very practical needs a language program was worked out, and its results were highly successful. The following points are some of the most important features:

1. All forms and expressions are pronounced by the native speaker (i.e., the informant), and the students imitate his speech.

2. The linguistically trained instructor (actually just a "guide" for the course) points out the phonetic characteristics of the informant's speech and helps students overcome their difficulties in pronunciation by providing appropriate phonetic drills.

3. The course begins with simple words and phrases which may be used in actual situations, e.g., greetings, requests for directions, and means of identifying oneself to strangers.

4. The students write down words in a phonemic alphabet.[2]

5. The textbook materials are written in a phonemic alphabet (though in later sections of the book the traditional orthography may also be employed).

6. Grammatical explanations are introduced as required.[3] One studies the phrases and sentences first, and the grammatical explanations help one to understand what has been studied. This is opposite to the average grammar, which introduces grammatical rules first and

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[2] Such an alphabet is often called a "phonetic alphabet." Strictly speaking, however, a phonetic alphabet indicates all types of very minute differences in sound, while a phonemic alphabet only indicates those distinctions in sound which make differences of meaning in a particular language. These problems will be discussed more fully in Chapter 4.

[3] The introduction of grammatical explanations makes this system quite different from and decidedly superior to the Berlitz method, which rejects any and all types of grammatical discussion. For adults, who have been trained by educational maturity to analyze and synthesize, it is a great advantage to have grammatical explanations.

then illustrates the rules by sentences which are often rather inane or silly.

7. The successive lessons are built around relatively familiar topics and actual situations, e.g., meeting people, occupations, one's home country, the weather, renting a room in a hotel, dressing, eating at the restaurant, sight-seeing, shopping, traveling by train, visiting the beach, going to the post office, and cashing a check at the bank.[4]

   A number of textbooks prepared by linguists for the Intensive Language Training Program, sponsored by the Armed Forces, have been published by D. C. Heath and Co. and by Henry Holt and Co. These texts differ somewhat in value, but in many respects they are superior to other types of texts which on the whole give much less attention to learning to speak.

8. The sentence material in the text is generally in the form of dialogue. The student is expected to be able to carry on a similar dialogue with the informant and other members of the class.

9. The new vocabulary is introduced in meaningfully related groupings. For example, in a section on eating at the restaurant the necessary vocabulary is introduced so as to make conversation on the subject possible. This is quite different from many traditional grammars where words are introduced because they happen to belong to the first declension, the second declension, the first conjugation, the second conjugation, etc., rather than because there is some meaningful connection between the words.

10. The function of the linguistically trained instructor is simply to guide the study. He is there to suggest topics of conversation, supply necessary explanations of grammatically difficult points, indicate errors in pronunciation, and assist students to understand; but the students learn the pronunciation and the forms from the informant. The informant is the one who

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[4]One of the finest modern grammars is <u>Spoken</u> <u>and</u> <u>Written</u> <u>French</u> by Francois Denoeu and Robert A. Hall, Jr. (Boston: D. C. Heath and Co., 1946).

provides the drill and the practice in listening and in the practical use of the language.

11. Supplementary reading is encouraged, but not at the expense of daily drill and practical use.

12. The informant and the instructor provide information about the customs, attitudes, and cultural backgrounds so that the language may be learned as an integral part of the total life of a people.

This method of language study is in many ways very different from the traditional approach. The primary distinctions are (1) greater emphasis upon hearing the language as spoken by a native, (2) the requirement of learning by speaking, (3) the acquisition of meaningfully related words and phrases, and (4) the subordination of the formal grammar to the practical requirements of language usage. It is not necessary to employ precisely this type of approach, but the fundamental features of such a learning-by-doing technique are essential if one is to learn to speak a language in a classroom.

Programs of this general type are being carried on at a number of universities, e.g., Yale, Cornell, the University of California at Berkeley, and the University of Michigan.[5] For the most part the results have been extremely gratifying, not only in the superior performance of the students, but in their more receptive and more intelligent attitude toward language study.

3.2.2   Instruction by a Private Tutor in a Nonaboriginal Language

Missionaries desiring to learn such languages as French, Spanish, Portuguese, Chinese, Burmese, and Malay frequently engage a native teacher to tutor them. In some places there are schools operated by mission boards or designed especially for English-speaking people, but even in these circumstances each student is usually given some tutorial instruction. Where there is a school in operation, the student will probably find his time fully occupied, but a number of the following suggestions might be carried out. Where, as is so commonly the case, instruction is given to a single missionary or a missionary

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[5]Not all the foreign language courses at these institutions are necessarily conducted along these lines.

couple by a private tutor, it is imperative to make the best use of the time and attain the most rapid progress.

3.2.2.1   Difficulties with Foreign Language Tutoring

Some tutors are excellent; by their methods and their personalities they put across the subject with amazing ability. With the proper language orientation the missionary is able to make the best of such an opportunity. When, however, as is so frequently the case, the tutor is not good, the missionary must be able to compensate for certain deficiencies. To understand the problems we need to realize some of the reasons for difficulty.

Tutors make a common mistake by not speaking their own language enough. It is so easy for them to slip into the use of English whenever the slightest excuse is presented. The result is that sometimes the tutor learns more English than the missionary learns of the foreign language. In certain instances missionaries have discovered that the so-called "tutor" was really desirous of learning English, or at least of improving his knowledge of it, and had undertaken to teach as the easiest way to accomplish his purpose.

Much of European and Oriental learning is pedagogically traditional and filled with the memorizing of rules and lists of forms. Of course, memorizing rules about one's own language (one already spoken) is not so meaningless as memorizing rules about a foreign language. But often the result is that the missionary learns the grammar but does not learn the language. Rules can be very helpful, but unless they are presented in some meaningful, practical way, they are quite useless. One cannot take time to recite a rule mentally before uttering the next word in a sentence.

Frequently foreign language tutors use very old, traditionally constructed grammars. In many cases they use the very grammars which they themselves studied in school, but such grammars were probably constructed for native speakers and not for foreigners, and there is a vast difference. Such grammars may be very valuable in advanced studies, but they are almost worthless to the beginner.

Since the language teaching given to native speakers is oriented very largely in the direction of proper writing and

spelling of the language, tutors often carry over the same tendency in teaching foreign pupils. This seems particularly true of tutors in French, where the spelling is complicated and many educated people take considerable cultural pride in orthographic correctness. Tutors may also find that it is relatively easy to assign written exercises, for the correction of them is more or less mechanical. Also the student frequently seems to prefer such an approach since it agrees with the usual foreign language instruction in college, and he acquires a false sense of language accomplishment by improving his ability to work out written sentences.

The average tutor is very weak on phonetics. He has probably had no training along this line, and he cannot be expected to provide adequate explanations. What would happen, however, if an English-speaking missionary were asked to explain the difference between the p in peak and the p in speak? He would probably say that they are the same, but that is far from the case. The p in peak is followed by a relatively strong puff of air, called "aspiration," but the p in speak is not followed by a puff of air. The same contrasts exist in the t's of take and steak and the k's of Kate and skate.[6] These are kinds of phonetic facts about a language that are rarely noticed by native speakers, and it is very unusual to find a tutor who can explain such facts about the sounds of his mother tongue. Of course, he can tell us whether the sounds have a natural "ring" to them, but we must be prepared to supplement his lack of phonetic training.

Foreign language tutors are often more valuable for advanced students than for beginners. In some instances they lack the necessary patience to do the required drilling; and we can scarcely blame them, for drilling may be very monotonous unless the teacher has certain definite goals and takes interest in the quality of his students' pronunciation. It is commonly thought that more skill is required to teach advanced courses of a language than beginning ones. This is actually not the case. It does require greater knowledge, perhaps, to

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[6] To test these contrasts place the back of the hand within a quarter of an inch of the mouth and pronounce the words. The difference in the amount of air which follows the various p's, t's, and k's may be readily noticed.

lecture on literature and the historical development of a language, but teaching beginning language courses requires very specialized training, and this is often lacking in tutors. Another reason why tutors may be less valuable for beginners is their own primary interest in the more advanced stages. They are naturally more interested in pleasant conversation, literary features, and refining one's language facility; and hence, they prove much more helpful to the more advanced student.

If one is planning to spend a year in language study and cultural orientation in some country of Europe before going on to a colonial area, it is very profitable to have already taken an intensive course in some university which provides the <u>right</u> type of language courses. Having acquired some conversational ability in the language and a basic understanding of the structure, one is able to profit much more from the year's time in Europe. Rather than having to struggle along with tutors poorly equipped to teach beginners, one can be improving his language ability and making use of the precious months to get acquainted with the people and make those most important contacts with Europeans.

3.2.2.2 <u>What the Student Can Do to Help the Tutorial Program</u>

After all that has been said about the inadequacies of some tutors, one may well wonder if there is anything that can be done to improve on their methods, or lack of methods. Actually, there is much that can be done, but one must be tactful and considerate In most circumstances tutors will probably be delighted with any constructive suggestions, for more often than not, they find themselves floundering about trying desperately to do a good job, and realizing that in many instances they are not succeeding as they should.

3.2.2.2.1 <u>A Better Textbook</u>

In some cases it is possible to suggest the use of a better textbook. One should be sure, however, that it really is better, but since some antiquated language texts could scarcely be worse, one has a good chance of discovering a text which will be more adequate.[7]

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[7]See section 3.2.1.

3.2.2.2.2   <u>A Phonemic Alphabet</u>

In studying a language like German or Spanish, where one can always predict from the traditional spelling how the word will be pronounced, it is not necessary to have a supplementary phonemic alphabet.[8]   However, for a language such as French it is necessary to have some way of writing down words so that one can reproduce them with the appropriate sounds. The traditional spelling is only an approximate guide. In studying a language like Chinese it is absolutely necessary to have some romanized phonemic alphabet, for it is impossible to advance properly in language study if one tries to master the characters and the spoken language at the same time. For languages such as Annamese, where the native system of writing comes closer to representing the distinctions in sound, it is still necessary to develop some system of writing. These problems will be discussed more fully in Chapter 4.

3.2.2.2.3   <u>Phrases for Memorizing and Drill</u>

When the tutor does not provide drill materials, the student can prepare his own. He should begin with common, everyday, practical phrases such as, "Good morning."[9] "How are you?" "Where is the market?" "How much is the bread?" "Where is the railroad station?" "Can I help you?" "Thank you!" "I am very happy to meet you." "Please speak more slowly!" "I do not speak French." See Chapters 5, 6 and 7 for further suggestions.

One should make a collection of useful phrases which are encountered in studying the language. One may begin with anywhere from ten to twenty new phrases each day. However, one should not try to assimilate more new phrases each day than can be "linguistically digested," but should continue to add a number of phrases each day for a week's time. All the phrases should be reviewed ten or twenty times each day.

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[8]See Chapter 3, footnote 2.

[9]Of course, these phrases must not be translated literally into another language. It is the cultural equivalent which we must obtain, and by "cultural equivalent" we mean that expression which would be used by the foreign speaker in a corresponding situation.

That means that if one begins with ten phrases the first day, ten phrases more the second day, ten phrases the third day, and so on through the week, a total of sixty phrases will be studied by the end of the week. If one goes over each phrase at least ten times, the phrases adopted the first day will have been studied sixty times by the end of the week. When the next week begins, ten new phrases should be added, and the first ten phrases begun the first day may be dropped. Some students, however, should continue to accumulate and review expressions for two or three weeks before beginning to drop the ones first acquired. The basic procedure is to add a certain number of phrases each day and to drop a similar number that have been reviewed for the longest period of time. At the end of each week, however, one should review all the phrases. If any of the original phrases have been forgotten, these should be reincorporated into the active list again. By the time one has followed this procedure for six months, it will be amazing how many phrases have been learned.

In speaking about these items for drill, we have purposely not spoken about "words" but rather "phrases." One should not memorize words as isolated items, but in meaningful combinations. Furthermore, it is valuable to make all phrases complete sentences as far as possible.

3.2.2.2.4 Reading Aloud and Listening to Reading

One of the most helpful ways to get acquainted with a language is to read aloud while the tutor listens and corrects one's pronunciation. The tutor may then read the same paragraph or another while the student listens intently to understand the meaning and to note carefully the pronunciation. Newspapers generally provide the best materials for language learning. The vocabulary is alive (not dead scholastic "stuff") and the happenings (or the interpretations of the happenings) are culturally significant.

As one improves in language ability, it will be found that more and more time may be profitably given to reading the newspapers which represent all the various political views. Listening to reading can be valuable in learning to pick up phrases through the ears. Furthermore, the subjects mentioned in the newspaper can provide topics for simple

conversation. The student can ask in the foreign language for an explanation of some word or idiom, insisting that the tutor explain it, if at all possible, in the foreign language and not in English.

While it is very important to read outstanding books written in any foreign language that one is studying, newspapers, current magazines, and political propaganda may actually be more valuable to the missionary, for he must learn to understand and appreciate the contemporary problems of a foreign power. There is no substitute for newspapers and similar current materials to introduce one to the vital issues of the day.

3.2.2.2.5	Speaking the Language

The student should insist on speaking the foreign language with one's tutor on every possible occasion. One may even need to study in advance in order to ask appropriate questions about the lesson. One may also plan conversation with the tutor. For example, one may construct a series of sentences which will inquire as to the tutor's educational training, his home, his family, and his travels. One should insist that the tutor attempt to answer these questions in his own language; and even though many of the words are not understood, further questions should be used to keep the process going.

Another way of developing conversation is to plan certain comments and questions on subjects concerning which one has read in the papers. If the tutor's political affiliation can be discovered, then pertinent questions may sometimes stimulate a volume of interesting comments. Using the language in this way is worth much more than the mechanical recitation of rules or the correcting of one's copy-book sentences.

3.2.2.2.6	Criticism of Pronunciation

Inducing a tutor to be constantly critical of one's pronunciation is a big task. The tendency is to overlook the student's pathetic efforts to make some of the difficult sounds, and after a few weeks the tutor either becomes tired of trying to correct the errors or becomes so accustomed to the student's errors that they no longer seem to be quite so intolerable. Whatever the reason may be, one must not permit laxity about

matters of pronunciation. Wrong forms of words and awkward sentence structure can be forgiven if only a speaker uses a half-way decent pronunciation. Furthermore, the incorrect forms can be readily supplied by the listener, but bungling of sounds may make entire sentences unintelligible. We could very well understand a foreigner who said with good English pronunciation "My foots went sleepy," but this same sentence in correct grammatical form but with utterly foreign pronunciations of the consonants and vowels would be scarcely intelligible. No doubt all of us have had the experience of speaking with foreigners who have had a very good knowledge of English grammar and vocabulary but who could scarcely make themselves understood, simply because they missed the English sounds so badly. The very same thing is true of us as speakers of foreign languages. Chapter 4 deals further with many of these problems of sounds.

3.2.2.2.7   Supplementary Vocabulary

The vocabularies listed in many textbooks are very poorly designed since they are more frequently chosen because of their grammatical forms than because of their meaningful relationships. Accordingly, the student must often supplement these deficiencies. Two principles should guide him: (1) the choice of meaningfully related words and (2) the memorization of vocabulary in phrases.

Vocabulary should be chosen because of association. One can set up ten or fifteen different sets of initial vocabularies. These may include words about the kitchen, the bedroom, traveling on a train, going to an office, buying vegetables, going through customs, or asking one's way around town. Either by using a dictionary or asking one's tutor or those with whom one is living, one can get such words for the kitchen as "stove, pan, pot, knife, fork, spoon, bread, flour, rag, salt, coal, wood." The choice of words is dependent upon the articles which people actually have in their kitchens. Articles in the bedroom may include "bed, chair, washstand, water, glass, cup, closet, sheet, blanket, window." Here, again, the thing to do is to look around and get the words for the very things which are in one's room. Similar vocabulary may be developed for all the common experiences.

But these words should not be learned as separate items. They should be incorporated into phrases, so that they can be used. For example, for some of the kitchen items one may have the following phrases: "the stove is hot," "the pan is cold," "the pot is big," and "the knife is sharp." Instead of just learning the words for things, one ends up by learning much more of the vocabulary than one dreamed of at first. But there is no value in knowing words for things if one can say nothing about such things or is unable to understand simple, typical statements made about them. Furthermore parts of these sentences can be reshuffled, so that one can also say "the pan is hot," "the stove is cold," and "the knife is big." Putting words into new combinations is the essence of language use, but one cannot discover the framework of sentences without learning some of them.

3.2.2.2.8   Associating with Native Speakers

To room and board with a local family is a tremendous asset in language learning. Furthermore, living in the home of a national provides one with experiences and insight that cannot be gained in any other way. A week's living in a home is worth a month's reading about the life of a people.

In many countries the main meal of the day is quite a long, drawn-out affair, but it provides wonderful opportunities for conversation. One may ask questions about current happenings, inquire about customs and practices (not with any sense of superiority but out of sympathetic interest), or provide interesting bits of anecdotal material from one's own experience. Two things are, however, to be strictly avoided: (1) any criticism of foreign, non-American ways and (2) bragging about America. The student should conform in the matter of eating habits, for example, in the manner of holding the knife and fork, in using a napkin to wipe the mouth with ceremonial frequency, in saying the right things at the beginning and end of the meal. All these little matters are important indicators of culture and refinement. Of course, one will at first make many mistakes, but being willing to be the object of a certain amount of friendly derision will only endear a person to his foreign hosts.

One should be particularly thoughtful about making any

and all types of complimentary statements about a foreign country. There are always many very fine things to compliment, e.g., museums, old churches, fine libraries, attractive gardens, flower markets, exquisite needle work, beautifully bound books, and courteous manners. One should seek opportunities to talk about such things. The very mention of such matters will often start pleasant conversations.

In almost all European and Oriental households there is some elderly person who is potentially a wonderful language informant. Often they have all sorts of time to chat and talk, and they are flattered by attention and appropriate compliments. They really make wonderful friends and can be a real help to the missionary in understanding the language and the people. Their lives are often rich, and their cultural heritage is priceless. Visiting by the hour with such persons constitutes some of the most valuable language training possible. Frequently one is able to give new hope and life to such elderly persons as one tells them about the Good News, which has prompted one to be a missionary. One is a missionary whether in Europe or Africa or the Amazon jungle, and the proper type of missionary will discover innumerable ways to witness of his joy and faith.

3.2.2.2.9   Writing Down All New Words

At first, this type of injunction is impossible of fulfillment, for there are just too many new words; but one should never get into the lazy habit of continually guessing at what one is reading or hearing. In many instances it is helpful to read a great deal without looking up the meaning of each word, for the context alone teaches us the meanings of many words. On the other hand, we can deceive ourselves into thinking that we understand when we really do not.

There is also a value in taking the time to look up new words and to write them down. This helps us to fix the words in our minds, and by reviewing these lists frequently we can increase our vocabulary very rapidly. When writing down a word, however, it is important to include an entire phrase so that the word may have a context, and thus it will be much more meaningful and useful to us.

It is quite a nuisance to have a dictionary and notebook

with us all the time while riding in streetcars, trains, and busses, or waiting in stations. Hence, we can just jot the word down on a slip of paper and then look up its meaning later, or all new words and phrases in the newspapers or magazines may be circled with a red pencil, and then in the evening such expressions can be readily found again, looked up in a dictionary, and written down in a notebook. The value of this procedure is proved by the almost inevitable experience which follows. After looking up such a word and fixing it firmly in mind, it will be amazing how many times that very word is encountered within the next few days and how often one can use it in conversation.

3.2.2.2.10   Listening to the Radio

Listening to the radio may at first seem to be a sheer waste of time, for the sentences appear to be just one solid blurr of noise at a rapid rate of utterance. This is the impression left by any strange language. The radio seems much more difficult to understand than people with whom we speak personally. There are several reasons for this: (1) we cannot watch the speaker (we learn a great deal from facial expressions and gestures), (2) we cannot interpose any questions so as to understand the gist of the subject, and (3) we have no way of guessing the topic by sizing up the type of speaker.

As we continue to listen to the radio, we begin to pick out familiar words and phrases. We may find that the news commentator is easier to understand than anyone else because he is talking about things we have been reading about in the paper. A few key words may give us the clue to what is being said, and then we become all ears to pick out other phrases which we can almost anticipate from what we have read. After a time, we become so accustomed to the language that we begin to follow almost everything that is said, and we are rather amazed at how much "slower" the announcers seem to speak. What happens, of course, is that our ears become more perceptive.

The difficult thing about listening to a foreign language is our perception lag. We pick up two or three words, but by the time their meaning has begun to dawn on us, the speaker has gone on to something else, and we simply cannot fill in the

remaining portion. While we have been concentrating on one part, we have lost the subsequent words; and even though they may be perfectly familiar to us in reading, we just do not "hear" them. Because our auditory perception is slow, we cannot pick up meaningful units as rapidly as they are being uttered. Speeding up this process requires practice. We must learn to hear a language just as we must learn to speak, and both hearing and speaking must become automatic.

Some people insist that certain languages are spoken more rapidly than others. Scientific observations contradict this impression. Individual speakers may differ greatly in average speed of utterance, but the average speed of speakers of all languages is approximately the same. The reason we are impressed by the apparent speed of foreign languages is our inability to keep up with the flow of meaningful units.

3.2.2.2.11   <u>Going</u> <u>to</u> <u>Lectures</u> <u>and</u>
<u>Public</u> <u>Entertainments</u>

One of the finest ways of acquiring practice in hearing a language is to attend lectures given in a foreign university. Sometimes there is a slight charge, but often it is possible to get permission to attend as an auditor without fees. The subject which is being discussed is not of primary importance, though, of course, the broader the field, e.g., history, political science, art and literature, the more extensive will be the vocabulary employed. For those who have done graduate work in some specialized field in the United States, it is often possible to make profitable contacts with foreign scientists who are interested in the same area of study. Since so much of the technical vocabulary of specific sciences is common throughout all the Indo-European language area, it is sometimes possible to advance rapidly in language proficiency through concentration on vocabulary, the roots of which may be somewhat familiar.

Civic programs of all types provide good language opportunities. Political and dedicatory speeches are usually long, and their actual content may be somewhat boring; but as devices for getting practice in listening for words and phrases, they are hard to beat. For one who is learning a language there is no such thing as a really dull speech, for the speaker

who repeats himself is giving the missionary a grand opportunity to become fully familiar with new vocabulary.

Various types of dramatic performances have proved to be excellent aids for those learning a foreign language. The speech forms used are often quite different from the type used in formal addresses and in many ways much closer to that of ordinary conversation. The story of such dramas may also be very important in learning to understand the people, for the playwright in his plot is interpreting the aspirations, disappointments, and drives which account for much that one will find in the foreign culture.

3.2.2.2.12   Attending Church

It might seem unnecessary to encourage missionaries to attend church, but aside from the spiritual blessings received attendance has a very practical value. Religious vocabulary is often quite different from the vocabulary in colloquial use. Even the grammatical forms may differ. For example, in Spanish the pastor in speaking to his congregation may use the plural familiar forms, but that would not be done in most types of gatherings. Grammatical forms used in prayer may also be very different from the speech used in everyday situations. Hence, for the sake of vocabulary and grammatical forms, the missionary needs to be perfectly familiar with the religious language.

We must not think for a moment that specialized religious vocabulary and grammatical forms are found only in other languages. English possesses a very specialized religious vocabulary and characteristic grammatical forms used in prayer, e.g., thou, thee, sayest, and doeth. Such forms are so difficult for some foreigners in our own country that they frequently refrain from prayer in public because they are unable to use them. Certain English-speaking religious groups have almost made a fetish of such obsolescent grammatical forms, and hence we must not be too harsh in our criticism of the "religious language" of other cultures.

3.2.2.2.13   Reading the Bible

Many missionaries have found that reading the Bible is one of the best ways of picking up vocabulary quickly. In many

instances they use diglot publications with English on one page or in one column and the foreign language opposite. This saves looking up words in a dictionary. Part of one's missionary task is to become familiar with the Bible in the language of those people with whom he works. Accordingly, Bible reading as a means of language learning has a double advantage.

One must be cautioned, however, against using the Bible indiscriminately as a guide for the grammatical forms of the language. In the first place, the Bible may be translated into a rather archaic form of the language. This is true, for example, of the Cipriano de Valera version in Spanish. If one used such forms and idioms in conversation, it would seem as much out of place as it would if one tried to converse in English by using the expressions of the King James Version of the Bible. In the second place, translations rarely succeed in breaking away completely from the linguistic form of the language which underlies the translation. As a result, the word order may be somewhat awkward and strange. Many missionary translations of the Bible are particularly bad in this regard and are in need of revision. A little inquiry as to the available translations in any language will enable one to exercise caution about how far one is to assume that the forms are usable in modern speech.

3.2.2.2.14   Writing the Language

It may seem like an oversight that writing the language is to be discussed so late in the list of language-learning techniques. However, there is purpose in this. Writing down the language is very important, but laboriously looking up of word after word in the dictionary and checking these in the grammar to be sure of the form can be a boring and unprofitable task. It is something like the procedure in the courses in Greek or Latin composition which some of us had to take in college.

We should learn to write the foreign language, but not until we have learned to express ourselves orally. This is in keeping with the second principle discussed in Chapter 2, where we noted that the proper order is hearing, speaking, reading, and then writing.

In writing one should endeavor to select topics which have personal interest, e.g., "My First Impressions of Paris," "Getting Seasick," "Difficulties in Learning French," or "What I Think of American Foreign Policy." One should not attempt to produce a flowery style, but rather, a simple, straightforward explanation of events, impressions, and reactions. One's tutor can then go over such materials and point out the unnatural word order, the incorrect idioms, the mistakes in grammatical forms, and the spelling errors. At first, these will be distressingly numerous, for what seems to pass as acceptable in conversation looks glaringly bad when written down. However, as one continues to write more and more, the old mistakes will be overcome and gradually one will learn to express oneself in writing. It is particularly important to familiarize oneself with proper forms for letter writing, for one is constantly called upon to correspond with officials and business firms. Being able to use the proper salutations (some of which may be extremely long and idiomatic) may mean success or failure in such negotiations.

3.2.2.2.15   Keeping Up in the Language

Unused skills are readily lost, and this is especially true of language ability. Many missionaries study French or Portuguese in Europe and then go to colonial areas where they are required to carry on their work almost entirely in some native language. They may have very infrequent contacts with government officials or business men, but such contacts as they do have may be tremendously important. However, one usually does not use the French or Portuguese[10] enough to keep fully fluent, and hence the missionary's hard-earned facility is rapidly lost.

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[10]This same situation applies to Chinese, which one may have learned in Peiping before being transferred to Southwest China for work among aboriginal tribes. The same is also true of those who work among aboriginals of India and Latin America. Wherever there is a governmentally important trade language covering a native language community and the missionary's ministry is in the native language, this same problem will arise, and similar solutions must be found.

This problem of keeping up a language on the field may be solved in a number of ways, but it is very important to have had enough of the language before going to the colonial area. If one has only acquired a smattering of the language before discontinuing study in Europe and switching one's primary attention to a native language, there is too much of a tendency for the missionary to avoid possible contacts with French or Portuguese speakers, for he is painfully aware of his own limitations. Furthermore, Europeans readily sense this frustration and tend to avoid the missionary so as not to embarrass him. The result is disastrous, both from the standpoint of the missionary's language facility and from the standpoint of successful government relationships.

To keep up in the language the missionary should take the necessary time to read periodicals and newspapers printed in the European language, listen to radio broadcasts in the language, and cultivate the friendship of Europeans in the area. One missionary in Congo, whose ability in French and whose warm-hearted sympathy has led him to develop many friendships among Belgians, has a very important ministry among those people. Not only has he given great spiritual help to scores of officials and business men, but he has enriched his own life and benefited his missionary work in a remarkable manner. Another means of language practice is to speak the European language in the home or on the mission station among missionaries. This would not only benefit the missionaries and indirectly the natives who aspire to learn the language of the colonial power, but would do much to remove the suspicion which many government officials have concerning the activities of English-speaking missionaries.

Just as a matter of social etiquette missionaries should not speak English if there is any chance of a non-English-speaking person overhearing them. Constant use of the language of the country is essential in the cultivation of good relations. We Americans are often annoyed at foreigners who converse with each other in a foreign language. Some of us may suspect such people of making unkind remarks about us or of passing on secret information which may be harmful to us. In these days, when suspicions run rampant throughout the world, we must take every precaution; and in doing so, we shall be keeping up and improving our language ability.

3.2.3 Learning an Aboriginal Language from a Native Speaker

Missionaries are frequently required to learn an aboriginal language directly from a native speaker. If absolutely no previous linguistic work has been done in the language, the missionary should by all means take a preliminary course in linguistics.[11] In most instances, however, some preliminary work has been done,[12] but the quality of the work and the extent of the linguistic analysis differ very greatly.

3.2.3.1 The Typical Situation

Perhaps it is impossible to depict a typical situation, for it seems that the nature of the linguistic work in aboriginal languages differs with each language. Yet, there are some features which stand out as being quite typical, and in order to appreciate what the new missionary may do to improve the situation or at least make the best of it, we need to discuss the problem fully.

One will usually find a grammar which has been constructed by some older missionary. Sometimes it is far enough advanced to have been mimeographed, and in a few rare instances even printed. Some of these grammars are very good, but many of them are quite limited, that is, they

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[11]Such courses are offered at a number of universities, e.g., University of California, University of Indiana, Yale, Cornell, University of Michigan, Kennedy School of Missions, and the Summer Institute of Linguistics. This latter institution specializes in preparing missionaries for pioneer linguistic work and has published a number of textbooks specifically designed to aid missionaries in this task.

[12]Publication of the Bible or parts of it is now being carried on in approximately 650 languages, though the total of all languages which have received something of the Bible as of January 1949 is 1108. There are still at least 1000 languages which have nothing of the Bible and with which very little if any linguistic work has been done. However, in the larger language areas, in which the great majority of missionaries work, some language analysis and Bible translating has been done. This book is especially written for this latter group of missionaries.

only discuss some of the more obvious features of the language. A number of these grammars take Latin as the typical mold and fit everything into its pattern. Sometimes there are a number of out-and-out mistakes, which may even constitute the basis of the language examinations. In one area in Central Africa the natives who help teach the missionaries their language take pains to explain that some forms are "missionary language" but that other forms are the way they themselves speak. These native teachers have found it necessary to teach the "missionary language" because certain of the older missionaries have insisted that the forms of the grammar are "correct" regardless of what the natives say. Hence, they have required the younger missionaries to pass the language exams based upon the "missionary language." This tendency to regularize and organize the native speech is completely unjustified. Correctness of form is what native speakers say, not what some foreigner thinks they should say.[13]

In certain instances the native language is taught by some older missionary, and this is often done without the constant presence of a native speaker. The result is that younger missionaries imitate the mistakes of older ones, and there grows up a "mission station" dialect. Sometimes older missionaries do have native speakers present; but in certain of these cases the missionary instructor has so brow-beaten the poor informant that he has been made a mere puppet, repeating automatically the forms that are suggested to him by the instructor and even imitating the instructor's pronunciation. Of course, the situation is not like this everywhere. Some older missionaries make expert teachers and the new missionary is able to profit a great deal by their years of experience. However, the new missionary must sometimes undertake compensating study in order to avoid some of the deficiencies in the instruction given by older missionaries.

Even before a grammar has been formulated, missionaries usually construct a kind of elementary dictionary. Dictionaries can be very useful, but they need to be recognized

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[13]See a full discussion of these problems in Linguistic Interludes (Glendale, California: Summer Institute of Linguistics, 1947), pp. 40-61, and Bible Translating (New York: American Bible Society, 1947), pp. 11-30, 241-79.

for precisely what they are, namely, "elementary" diction-
aries. The discussion under any one word should not be ex-
pected to cover all the meanings or even many of the more
common idioms. Such dictionaries are not the final statement
on the language; they should be the jumping-off point for fur-
ther study and observation.

One of the great difficulties entailed in learning a foreign
language from a native speaker is his relatively limited under-
standing and use of English or whatever intermediate language
is used. The informant probably finds it very difficult to ex-
plain or to illustrate many of the subtler distinctions in his
language; and furthermore, the intermediate language may not
indicate precisely all the differences in form which he may
make in his mother tongue, and vice versa. It is folly to ask
any informant, "Why do you use the subjunctive form in this
sentence?" It would be equally difficult for us to explain why
we say I think he is crazy and I move he be elected, in which
one verb requires is in the dependent clause and the other re-
quires be. There is no way of explaining "why" such things
occur either in English or in any other language. Rather, we
should ask the informant, "When do you use such-and-such a
form?" or "Do you use the form in the following sentence...?"
We should inquire "how" and "when," but never "why" a form
is used.

The missionary is often handicapped in learning an abo-
riginal language because he has no written materials in the
language except translated stories or Bible texts. Naturally,
the first thing which missionaries do is to translate what they
think the young, growing church will require, and they rarely
consider it valuable to write down native stories and legends
to assist them in studying the grammatical structure of the
language. As a result, the new missionary finds that the only
things which he may read in the language are translations
from English or some other European language, and often such
translations are slavishly literal. To overcome this difficulty
is not easy.

There is also the problem of dialects. This may be very
acute, for the differences may be great in various parts of a
tribe. However, missionaries tend to exaggerate such mat-
ters, largely because of their own inadequate knowledge of the
language. They frequently complain about the grievous

problems confronting them and cite their difficulty in being understood fifteen miles away from the station. In many cases one finds that the natives appear to have no difficulty whatsoever in speaking with natives of other dialects. What is frequently the trouble is the missionary's own imperfect use of the language, so that only those who live near the mission station and have had an opportunity to hear the missionary on numerous occasions can make out what he is saying.

However, there are many dialect differences in tribal languages, even as there are in all languages. In the United States we recognize differences in pronunciations of words, grammatical forms, and meanings. For example, certain dialects of the South and North differ markedly, and with only a limited knowledge of English we would find adjustment from one to the other rather complicated; but for those who know English well, there is no difficulty in understanding or making oneself understood. We realize that in some places a paper bag used in grocery stores is called a <u>poke</u>, in other places a <u>bag</u>, and in still other areas a <u>sack</u>. What some people call a <u>skillet</u>, others may call a <u>spider</u> or a <u>frying</u> pan; and what some insist is <u>corn</u> bread, others may call either <u>Johnny</u> cake, corn <u>pone</u>, <u>pone</u> bread, or <u>hoe</u> cake.

Rather than attempting to study several dialects at once, the missionary should concentrate on a single dialect and learn it well. By doing this he can make the transfer to other dialects with much less difficulty than if he attempts to compress dialect distinctions into his initial studies. Whether he selects one or another dialect to begin his study will depend upon a number of factors, which are primarily sociological and not linguistic. Some dialects have greater prestige and may be understood more extensively than others. If this is so, one will do well to concentrate on such a dialect of the language, but one should not be deceived by the protestations of natives who claim that their dialect and theirs only is the proper form of speech. The same thing is claimed by almost every group of people on earth. It is not so much the so-called intrinsic worth or correctness of a dialect that counts, but whether the dialect is used by those who carry on the affairs of the tribe. Similarly, English forms are not "correct" or "incorrect" simply because some grammarian claims them

to be so, but their acceptability is primarily determined by
those who carry on the affairs of the English-speaking world.[14]

3.2.3.2 What the Student Can Do to Learn a Language from a Native Informant

The procedure for the new missionary varies depending
upon the existence of some regular language classes or school.
When there is a program already worked out, the student must
compensate for the deficiencies by following some of the sug-
gestions listed below.[15] In the great majority of cases, how-
ever, the missionary is told in effect, "Here is the grammar,
and here is your native teacher; now you are to learn the lan-
guage." Most people thrust into such a situation without any
idea of how to proceed are in a hopeless dither. It should be
understood that we cannot outline the program from start to
finish, but some of the following steps in procedure may en-
able one to forge ahead and actually learn a language.

3.2.3.2.1 Reading Over the Grammar

This does not mean that one should attempt to memorize
the grammar. It simply means that one should become famil-
iar with what one is likely to find in the language. It is so
much easier to appreciate and understand a foreign country if
one has first read some travel guides. In the same way, a
grammar can be a travel guide for one's learning of a new
language. Such travel guides and grammars are not to be
memorized, but they will provide important information along
the route, and what may seem meaningless or arbitrary may
be seen to fit into the larger framework of the language.

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[14]For a fuller discussion of this problem see Eugene A.
Nida, Bible Translating, pp. 31–49.

[15]The new missionary should be cautioned against trying
to reform the language program from the start. His sugges-
tions, unless they are made with consummate tact, may not be
appreciated. However, if by employing some supplementary
devices himself, he can exhibit exceptional skill in the language
learning program, then there is a good probability that such
procedures will be incorporated into the regular course.

3.2.3.2.2   Obtaining Some Practical Expressions

Elicit from the informant at least 200 practical expressions such as: "What is your name?"[16] "I am glad to know you." "My name is ..." "Where do you live?" "Where do you come from?" "What kind of work do you do?" "How many children do you have?" "Is your father still living?" "Is your mother still living?" "Have you gone to school?" "Where do you go to school?" "What do you study?" "Where is the waterhole?" "Where is the trading post?" "Will you sell me some bananas?" "How much are the bananas?" "I am hungry." "I am thirsty." "I am tired." "I must go home now." "I hope I will see you again." "What day is it?" "Will you help me, please?"[17] "Thank you!" "I enjoyed the food very much." "You are very kind." "I am sorry that I cannot speak your language." "I am trying to learn." "What is the name of that?" "Repeat it, please." "Will you speak more slowly?" "The sounds are very difficult for me." "Excuse my bad speaking." "I will try to learn." "Will you please bring me the food?" "You are a very good cook." "I enjoy the food very much." "Where is the mission?" "Where is the church?" "Where is the school?" "Where is the hospital?" "What are you doing?" "May I help you?" "You work very well." "Show me how to do that!"

Upon arrival at the mission station one should construct about 200 practical expressions which one feels certain will come in handy. These should be written down on separate slips of paper, and drill should begin immediately. These expressions should be gone over with the informant, and the

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[16] One must use judgment in such anthropological matters as asking for names, for in certain areas it is not considered proper to inquire concerning a person's name, at least, not until one is very well acquainted. Similarly, all the forms suggested here must be adapted to the local situation.

[17] A number of languages do not have special expressions to indicate polite forms of requests, but one should be very careful to use them in languages where they do occur. Furthermore, missionaries will do well to address natives with polite forms, especially older natives, even though other Europeans, e.g., government officials and business men, do not use such forms.

pronunciation should be carefully checked so that it will be as close to the native speech as possible. One should note especially the intonation (i.e., the musical pattern) of the sentences. Particular care must be given to questions, for we as English speakers tend to raise our voices at the end of a question, and in many languages that is not done.

Some people may be concerned about this suggestion to learn some common expressions without first mastering the grammar that underlies them. Well, the grammar is to follow; first comes the practical use of phrases. We must get into the water before instruction in swimming does much good. So it is with language; we must begin to speak in order to learn how to speak.

In memorizing phrases we need to avoid associations which depend upon the order of items listed on a page. Some people have written out lists of words and phrases and then have always reviewed them starting at the top and going down the page. Sometimes the result is an ability to recall forms, once the list has been started, but these people have difficulty in picking out items apart from their association with other items on the list. To avoid this one finds that listing phrases on separate slips and then constantly reshuffling the slips will keep a person from being tied to one particular order.

Some students feel obliged to spend a long time concentrating on one particular form, believing that by prolonged concentration they can thoroughly rivet such an item in their minds. This may be true; but most people discover that it is more valuable to review an item briefly over a period of several days than to concentrate on a form for the equivalent amount of time on just one day. For example, to spend five seconds on ten successive days has much more value in training one's recall ability than to spend fifty seconds on just one day. Reviewing is the key to learning.

Memorizing sentences and drilling on them will not do any good unless one uses them. Furthermore, one must use them on every possible occasion. If the opportunities are not abundant enough, then one must go out around the mission station or village trying out these expressions. Of course, the natives may assume that one understands much more of the language than is actually the case, but "getting in over one's head" will not hurt anything but one's pride, and that

needs annihilation anyway. One can always explain apologetically that as yet the language has not been sufficiently learned, but it will be amazing how much can be assimilated from practical situations in which one is forced to try to speak and explain, even if it is only to admit one's ignorance.

3.2.3.2.3   Writing the Native Expressions in the Best Way Possible

The next chapter will deal with problems of phonetics and alphabets which one may use in transcribing the sounds of a language. Usually one finds that the system of spelling (i.e., the orthography) is inadequate. For example, there may be seven different vowel sounds that make differences in the meanings of words, but the alphabet used may indicate only five. Very often the language makes differences of meaning by differences of tones, and these may be neglected entirely in the traditional orthography. This does not mean that the missionary has to throw out the spelling already used and take up the complicated International Phonetic System. Of course, if he has mastered some such system of phonetic notation, he can use it to great advantage in his own language study, but one can usually employ the alphabet already in use and just add some marks to the vowels and consonants to indicate the necessary distinctions. For example, if one e sound is more like the vowel of bait and another is like the vowel of bet, then one can mark all the vowels that sound like the vowel of bait with an acute accent, e.g., é. These problems will be discussed at length in the next chapter. What we want to say here is simply that the various sounds should be marked so as to help in recognizing and reproducing them. The system one employs does not make any difference provided it is consistent.

The marking of the tones of a sentence may be much more difficult, but one can always write phrases with a broad, generalized indication of their "melody." For example, in writing the following Spanish sentences one can draw a line right through the words to indicate the rise and fall of the voice, and the acute accents may indicate the emphasized syllables:

La semána pasáda me llevaron a la pláya

"Last week they took me to the beach."

Dónde estarán nuéstros asiéntos

"Where will our seats be?"[18]

There are other possible melodic patterns for these Spanish sentences, but such alternatives should not prevent one from noting carefully the musical form of each phrase and imitating it just as much as any other feature. In some languages one must preserve very strict relationships between various musical levels. For example, in Mongbandi, a Sudanic language of northern Congo, the following sentence would be completely unintelligible without the proper tonal differences:

ha he mbi ge pe da   "Speak to me here behind the house."

Drawing lines through the words to indicate the rising and falling musical features is very clumsy, and in the next chapter we will discuss some other devices; but before one has analyzed the major tonal features of the language, these wavy lines are very helpful and should be used. Some people think that the intonation of a sentence will just naturally come after one has learned enough of the words and grammar, but that is not so. The sentence melody must be learned in the same way as any other feature, and it should be learned right from the start.

3.2.3.2.4   Practicing All Expressions Until They Are Up to Speed

We must constantly bear in mind three phonetic facts: (1) the consonants and vowels, (2) the musical pitch of the phrase, and (3) the speed of utterance. This may seem like placing too much emphasis upon speed, but by doing so we are only pointing out the necessity of speaking at the native's normal rate, and not with the stumbling, halting enunciation which so often characterizes our utterances if we do not force ourselves to attain automatic control and facility. Proper speed of utterance should be practiced from the first, rather than being left to later stages of language study. The reason for

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[18]See S. N. Trevino, Spoken Spanish (Boston: D. C. Heath and Co., 1945). There are certain alternate intonational patterns for such Spanish sentences.

this will become more evident when we consider in the next chapter how sounds spoken in rapid speech often differ from those in slow, interrupted speech.

3.2.3.2.5   Obtaining at Least 200 Simple
                         "Object" Words

In learning a language from an informant where there is no adequate textbook to guide one's work, one should start by eliciting the names for concrete things, e.g., tree, grass, sun, cloud, dog, goat, house, man, and woman. These objects can be pointed to, and they are likely to be as short as any words in the language. One should, however, group the words by areas of meaning. Instead of asking for such words as "head, pants, cow, banana" in this jumbled order, it is well to subdivide the words into such classes as body parts, clothing, objects about the house, relationships between people, articles used in native occupations, fauna, and flora.

Naturally one must ask for culturally relevant items. It would be ridiculous to inquire of some Amazon River Indian his words for "sand-storm, camel, and dates," but these terms would be very pertinent for one learning Colloquial Arabic in the Anglo-Egyptian Sudan.

One must avoid minute distinctions. For example, in asking for body parts, one need not distinguish "arm, biceps, elbow, forearm, arm-pit, wrist, hand, finger, and thumb." For initial lists of words it is quite enough to ask for "arm, hand, finger." Even so one may find that the distinctions are too minute, or at least not pertinent, for some languages use the same word for "arm" and "hand."

There are many culturally pertinent features which one should note in taking down lists of words. For example, in the Kiowa language the word for "floor" and "ground" is the same. In terms of the Kiowa aboriginal culture on the Great Plains it is no wonder that the same native word was used. In some languages a word may have a very wide meaning. For example, in many of the languages of central Africa the word meaning "to cut" in the primary sense of "to cut wood" is also used in the phrases "to cut water" (i.e., "to carry water"), "to cut a palaver" (i.e., "to judge a case"), and "to cut a job" (i.e., "to finish the work"). (See Chapter 7 for

further illustrations of problems connected with the meanings of words.)

We cannot suggest a list of words which is usable in all areas, but the following groups will give at least some idea of the types of words to elicit:

Body Parts: "head, hair of the head, nose, eye, ear, neck, arm, hand, finger, stomach, heart, leg, foot, toe, bone, blood, flesh."

Clothing: "hat, shirt, pants, blouse, skirt, sandals, beads, face paint, body paint."

Objects about the House: "knife, spoon, ladle, water container, animal skin, bed, hammock, fire, mush, bread, meal, grinding stone, banana, meat."

Relationships between People: "father, mother, daughter, son, sister, brother, uncle, aunt, brother-in-law, sister-in-law."[19]

Articles Used in Native Occupations: "machete (large knife), hoe, dibble stick, plow, seed, hammer, saw, forge, iron, axe, plank, vines for tying, canoe, paddle, bow, arrow, spear, gun."

Fauna: "horse, cow, ox, pig, dog, cat, sheep, goat, lion, tiger, jaguar, elephant, snake, monkey, eagle, buzzard, fly, flea, spider, ant, termite."

Flora: "tree, bush, grass, vine, flower, palm, fern, corn plant, wheat plant, banana tree, orange tree."

Geographical and Astronomical Objects: "river, stream, rapids, lake, hill, mountain, valley, forest, star, sun, moon, cloud."

3.2.3.2.6   Obtaining These "Object" Words in Possessive and Plural Formations

One of the ways in which we use "object" words is to possess them. We want to be able to say "my head, your (sg.)

[19]One is likely to have a great deal of difficulty with such words, for there may be distinct sets of terms depending upon (1) whether a man or a woman is speaking, (2) whether someone is younger or older than another person, and (3) whether the relative is on one's father's or mother's side of the house. One should not be too concerned if the native terms seem very irregular and strange. Further inquiry after one knows the language better will resolve most of the difficulties.

head, his head, our heads, your (pl.) heads, their heads." Similarly we combine such possessive pronominal elements with all types of words, e.g., "my hat, your skirt, his pants, her blouse, our sandals, their bed." Sometimes these possessive pronouns are separate words, and sometimes they are combined with the noun to form a single word. In Mongbandi the possessed forms for "heart" are as follows:

       bế mbī "my heart"[20]
       bế mǒ "your (sg.) heart"
       bế lǒ "his, her heart"
       bế ʔế "our heart(s)"
       bế ʔị̧ "your (pl.) heart(s)"
       bế ʔálà "their heart(s)"

From hearing a native pronounce these forms we cannot tell whether the expressions consist of one word or two, and we really do not need to know at first. (See Chapters 5 and 6 for a discussion of such problems.) We should, however, note that there are distinct differences in the pitches of the words and that the noun bế "heart" has the same form whether it is one heart or more than one heart. The word bế is either singular or plural. This may seem very strange, for we are so accustomed to making important distinctions between singular and plural nouns, but in many languages such a difference in the forms of the words is not to be found.

In Tzeltal, a Mayan language of southern Mexico, we find quite different types of forms from what we noted in Mongbandi, e.g..

       kot'an "my heart"
       awot'an "your (sg.) heart"
       yot'an "his, her heart"
       kot'antik "our hearts"
       awot'anik "your (pl.) hearts"
       yot'anik "their hearts"

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[20]The special signs in the Mongbandi words have the following values: [ɛ] is like the vowel in English bet; [ʔ] is a kind of catch in the throat (called a glottal stop); [̧] (a hook under the vowel) indicates that the vowel is pronounced partially through the nose; the acute accent [́] means that the syllable is relatively high; the grave accent [̀] means that the syllable is relatively low, and the horizontal accent [̄] means that the pitch of the syllable is midway between the high and the low syllables.

This series may seem very jumbled, for the first parts of the words are the same in the singular and the plural, but the second part is different with plural possessors. The part that means "heart" is -ot'an, but it is very difficult to get an informant to give this form, for "hearts" are normally spoken of as being possessed by someone or something. One does not encounter a lot of unpossessed "hearts" in Tzeltal.

The set of forms in Tzeltal is really quite regular, and practically all the other nouns which begin with vowels[21] occur with these same combinations of forms placed in front of the noun (i.e., prefixes) and other forms placed after the noun (i.e., suffixes). Students who enjoy analyzing such combinations (i.e., pulling the grammatical pieces apart) can do so, but for those who find it difficult or uninteresting to follow an analytical approach, the forms can be learned just as they are found.

We must not expect that all words will be possessed in the same way. If, for example, in Tzeltal we should ask for the possessed forms of k'ab "hand" we would get quite different forms:

> hk'ab "my hand"
> ak'ab "your (sg.) hand"
> sk'ab "his, her hand"
>   etc.

It may seem very arbitrary that words beginning with a vowel (with preposed glottal stop) should have one set of prefixes and those beginning with consonants (other than the glottal stop) should have other prefixes. Of course, this complicates the task of learning a language, but it is just as much a part of Tzeltal as the fact that the plural of English boy is boys and the plural of English child is children. Such irregularities are to be found in all languages.

In asking for possessed forms one must be quite certain that the informant understands what is being requested. When the missionary says, "How do you say 'your house'?" the informant may reply with a form meaning "my house." He has interpreted the question as referring to his own house, rather than to a translation of the form "your house." After a little

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[21]There is a basic glottal stop before all such so-called initial vowels.

explanation, however, and careful attention to the forms that are given, it is usually quite easy to untangle such complications.

We must ask for sensible forms. To ask a native for the plural of "sun" or "moon" may prove ridiculous. He may not know that the sun of our solar system is only one of many and that some planets have several moons However, he may be able to make up such forms even though he has not heard them. On the other hand, the word "moons" may refer to "months," and "suns" may be a designation of "days."

Similarly, one must exercise caution about certain possessives. A missionary once asked an informant for "my world," to which the native replied, "But nobody can own the whole world." If informants object to certain forms as being impossible, one should go on to other forms. It would be ridiculous to insist on an English-speaking person giving the plural of wheat. He would claim it is just wheat. Of course, he could make up the form wheats, but it would sound very strange to him; and a form which sounds strange to a native speaker is no form for a missionary to start using.

3.2.3.2.7   Obtaining Simple Verbs

In eliciting verb forms from an informant one should observe the following principles:

  a. Select simple, demonstrable words. For example, the native equivalents for "walking, running, hunting, jumping, seeing, hearing, smelling, speaking, hitting" are much more easily obtained than "thinking, trying, becoming, seeming, being."

  b. Employ full sentences. Never ask for infinitives, e.g., "to jump, to run, to walk." Rather, use third person singular forms such as "he is running, he is walking, he is jumping." One can then obtain forms for the other persons, e.g., "I am running, you (sg.) are running, we are running," etc.

  c. Begin with verbs which usually do not require an object.[22] For example, one may elicit such forms as

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[22] Verbs that do not occur with an object are called "intransitive," and those which occur with an object are "transitive."

"he is running, he is walking, he is swimming, he is falling, he is jumping, he is dancing, he is eating." After obtaining some of these verbs with various persons, one can elicit such expressions as "he is eating it, he is following him, he is seeing her, he is hearing him, he is hitting them, he is calling us." Such expressions can then be expanded to include all the different types of subjects and objects. Sometimes this is quite complicated, for the possibilities may be numerous and very irregular (see Chapter 5). Whenever a language combines both the subject and the object pronouns with the verb root, we can expect serious difficulties, even though the forms may not be too irregular. A glance at the following forms from Congo Swahili will show what some of the typical problems are:

ninakupika "I hit you (sg.)"[23]
ninamupika "I hit him"
ninanupika "I hit you (pl.)"
ninawapika "I hit them"
wunanipika "you (sg.) hit me"
wunamupika "you (sg.) hit him"
wunatupika "you (sg.) hit us"
wunawapika "you (sg.) hit them"
ananipika "he hits me"
anakupika "he hits you (sg.)"
anamupika "he hits him"
anatupika "he hits us"
ananupika "he hits you (pl.)"
anawapika "he hits them"
tunakupika "we hit you (sg.)"
tunamupika "we hit him"
tunanupika "we hit you (pl.)"
tunawapika "we hit them"
munanipika "you (pl.) hit me"
munamupika "you (pl.) hit him"
munatupika "you (pl.) hit us"
munawapika "you (pl.) hit them"
wananipika "they hit me"
wanakupika "they hit you (sg.)"

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[23]This is the present tense.

wanamupika "they hit him"
wanatupika "they hit us"
wananupika "they hit you (pl.)"
wanawapika "they hit them"

At first, one will want to find all these forms with a few verbs; and then if everything seems to be perfectly regular, one can easily make up the forms of other words on the pattern of these. It would be ridiculous to learn the full paradigms of all the verbs in any Bantu language, for there are thousands upon thousands of possible combinations of subjects, objects, tenses (the time of action), modes (the psychological character of the action, e.g., declarative, doubtful, potential, unreal), aspects (the type of action, e.g., continuous, frequent, repeated), and voice (the relationship between the participants and the action, e.g., active [where the subject performs the action], passive [where the subject is acted upon], reflexive [where the subject acts upon himself], and reciprocal [where the various participants act reciprocally upon each other]).

3.2.3.2.8 Obtaining Verbs with Different Tenses, in the Negative, and in Questions

Verbs may have many different forms to express many different relationships.[24] In the beginning stages of language study, we do need to be able to distinguish past, present, and future tenses, indicate a negative form, and ask a question. This is not, however, quite so easy as it may sound, for many languages do not distinguish between certain tenses. For example, in Pame-Chichimeca, a language of Mexico, the form laháo? means "I am drinking" or "I was drinking." This verb form indicates a continuous action but makes no distinction between the present or the past time. Similarly, in Zoque, another language of Mexico, the word kenpa means "he looks, he will look." In this instance there is no distinction between present and future. We must be prepared for all kinds of strange differences between languages, but in general we will find some way of distinguishing past actions, present actions, and future actions. In some languages we may even find too

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[24]For a full discussion of such problems see Eugene A. Nida, Morphology (Ann Arbor, Michigan: University of Michigan Press, 1949).

many distinctions—too many, that is, for our ease of learning, but excellent for distinguishing fine shades of meaning. For example, in Sukuma, a Bantu language of Tanganyika, there are four past tenses: (1) immediate past, (2) proximate past, (3) intermediate past, and (4) remote past:

1. từà·lólà "we looked (less than two hours ago)"[25]
2. từà·lólàgà "we looked (this morning some time)"
3. từà·lórìrè "we looked (yesterday, or the day before)"
4. từkàlòrà "we looked (any time prior to the day before yesterday)"

Sometimes the negative of a verb is very simply expressed by adding a negative particle. For example, in Spanish we may add <u>no</u> before the verb or the pronouns that go with the verb, e.g.,

tengo "I have"
no tengo "I do not have"
lo puso "he placed it"
no lo puso "he did not place it"

In English we use <u>not</u>, but usually with a so-called auxiliary verb, in a negative-verb phrase, e.g.,

<u>I</u> <u>came</u>
<u>I</u> <u>did</u> <u>not</u> <u>come</u>

In Congo Swahili there is a special set of forms for the negative, e.g.,

sitakupika "I do not hit you (sg.)"
hatakupika "he does not hit you (sg.)"
hatutakupika "we do not hit you (sg.)"
hawatakupika "they do not hit you (sg.)"

It seems quite irregular to have <u>si-</u> with the first person "I" and <u>ha-</u> used with all the other types of subjects, but that is just how irregular languages can be. One can and must expect anything and everything in languages.

Questions may be formed in a number of ways. In some instances just the intonation of the voice indicates a question, e.g., <u>John</u> <u>really</u> <u>came</u>? vs. <u>John</u> <u>really</u> <u>came</u>. Frequently there are little interrogative particles that tell us that the

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[25]See the tables of phonetic symbols in Chapter 4 (sections 4.3.1.10 and 4.3.2) for an explanation of the values of the symbols used.

sentence is a question. This is the case in Chontal of Tabasco, a Mayan language. In still other languages there may be special forms of the verb to indicate that the sentence is a question and not a statement.

If the missionary has a fairly adequate grammar of his language, many of the problems which we have been discussing will have already been explained, and much of the difficulty will be overcome immediately. It is always well, however, to check the statements of the grammar with the forms which an informant supplies, for there may be mistakes in the grammar. Furthermore, in the average grammar prepared by missionaries one usually finds that many forms are omitted.

If there is no such elementary grammar and if the missionary has had to elicit all these forms from his informant, it may seem that the mass of material written down is almost undigestible. This depends, of course, on the way in which it is written down. It is convenient to make out a series of forms on 3" x 5" slips of paper. One can get eight or ten forms of a verb on such a slip, e.g., all the persons in one of the tenses. These slips may then be used for memorizing purposes, may be shuffled and filed so as to group similar verbs together (see Chapter 5), and may also be used as a kind of practical grammar-dictionary of the language.

This emphasis on digging out so many forms may seem to contradict the principles cited in the previous chapter. There we insisted upon learning words in combinations and not as isolated units. The principles, however, still apply; and though we may have to do some exploration work in the language in order to discover something about its forms, it does not mean that we should sit down and memorize all the singular and plural forms of the nouns as so much sheer memory work. We must learn the forms, but not by memorizing lists of isolated words. It is much more meaningful to put such words into combinations. If no other easy construction suggests itself, one can drill on singular and plural nouns by putting them in combination with the phrase "I see..." Accordingly, the sentences will be

   "I see a horse"
   "I see horses"
   "I see a cow"
   "I see cows"   etc.

These singulars and plurals can, however, be combined in a number of ways, e.g.,

"The horse ran"
"The horses ran"
"The fine horse"
"The fine horses"
"We drove the horse"
"We drove the horses"
etc.

Not all of the combinations of words need to be full sentences, but it is very convenient and helpful to have them constitute sentences, for then we are learning complete utterances. What so often handicaps our practical use of a language is our tendency to learn isolated parts of sentences. We need to learn the frameworks into which such parts fit.

3.2.3.2.9   Obtaining Expressions Which Modify Nouns and Verbs

We can do a great deal of talking with just nouns, pronouns, and verbs. However, we also need to get some qualifying expressions in order to extend our ability to express ourselves. The qualifying words for nouns may be grouped as follows:

a. Numerals: "one, two, three, four, five, six," etc.
b. Pointing and location expressions: "this, that, near, far, (those) in the house, (the woman) by the well."
c. Quantity: "few, many, some, much."
d. Quality expressions: "good, bad, tall, short, big, little, expensive, cheap, strong, weak, wealthy, poor, red, yellow, green, blue, white, black."

Some illustrative qualifying expressions for verbs may be grouped as follows:

a. Numerals: "once, twice, three times, four times," etc.
b. Pointing and location expressions: "here, there, near, far, in sight, out of sight, (went) to town, (fell) from the tree."
c. Quantity expressions: "much, little, some, often, rarely."
d. Quality expressions: "well, badly, quickly, slowly, powerfully, weakly, loudly, quietly."

We would be inclined to consider most, if not all, of the first groups of words as adjectives, since they would modify nouns in English, and we would judge most of the second types of expressions to be adverbs. However, if we insist on these categories in other languages, we shall be badly mistaken in many instances. For example, as noted in section 1.4, in Muskogee, an Indian language of the United States, the numerals are really verbs and have all the basic forms that verbs have. Likewise in many languages the words that we consider as adjectives, e.g., "good, bad, tall, short, thick, thin" turn out to be verbs. In the Abwong dialect of Dinka, a language of the Anglo-Egyptian Sudan, the words which correspond to English "recently, not yet, quickly, earnestly, always" are auxiliary verbs. However, the equivalent of "slowly" is a regular adverbial particle. In Navaho the equivalent of Engligh "highway" is two verb expressions. The first is a dependent form, and the second the main verb. The Navaho expression translated literally would be "being-broad it-roads." The stems "broad" and "road" are basically verbs.

. It is not absolutely necessary for a person learning a language to analyze all the parts of speech. Such an approach may make language learning easier, but it is never a substitute for being able to manipulate the forms. Furthermore, regardless of how strange and unusual the grammatical constructions are, they are not just haphazard combinations of words. They reveal a system, and the only way to learn how to use such a system is to use it.

Like all other words attributives are to be mastered by learning them in combinations with other words. For example, we not only learn to count, but to count things, e.g.,

"one horse, two horses, three horses, four horses," etc.
"one house, two houses, three houses, four houses," etc.

Often counting is not so easy as one might think. For example, in Burmese the expression "one person" consists of lú tayau?, of which lú means "person," ta- means "one," and -yau? is a classifier used when one is counting human beings. There are twenty-one principal classifiers of this type, and the following are typical examples listed under the classifier and with the numeral "one."[26]

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[26] See William Cornyn, Outline of Burmese Grammar, Language Dissertation No. 24, (Baltimore: Linguistic Society of America, 1944), p. 27.

châun "long and slender things": khêdán tachâun "one pencil"

káun "animals": myau? takáun "one monkey"

khûn "words, utterances": zagâ takhûn "one word, sentence, utterance."

le? "tools, weapons": dâ tale? "one knife"

lôun "spherical or cubical things": tittá talôun "one box"

phe? "one of a pair": myessí taphe? "one eye"

pín "trees, hairs, threads": ?amwêi tapín "one hair of the body"

sháun "buildings": câun tasháun "one monastery"

thé "articles of clothing": bâumbí tathé "one pair of pants"

These same classifiers occur with all the numerals. In counting people one would use phrases as follows:

lú tayau? "one person"

lú hnayau? "two persons"

lú θôunyau? "three persons"

lú lêiyau? "four persons"

lú ŋâyau? "five persons"

etc.

Numerical classifiers are found in many Oriental languages. In fact, they have sometimes been considered as typical of Oriental languages, but their occurrence is not restricted to the Far East. In Maya, spoken in Yucatan, Mexico, there are similar types of numerical classifiers.[27] For example, in counting people or animals one says huntul "one," ka?atul "two," oštul "three," kantul "four," and ho?tul "five," This system does not go beyond five because the Spanish numerical system is used for higher numbers. If one is counting miscellaneous inanimate things, the numerals are hump'el "one," ka?ap'el "two," ošp'el "three," etc. The following classifiers, illustrated with the numeral "one," may be used:

-kul "trees": hunkul ša?an "one palm tree"

-to? "objects wrapped up in small quantities": hunto? ta?ab "a package of salt"

-lot "a handful": hunlot iši?im "a handful of corn"

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[27]Of course, this does not mean that Maya is thus related to Oriental languages. It is just an interesting parallelism.

-kuč "loads carried on the back": hunkuč čuuk "a sack of charcoal"

-c'it "one or more from a class of objects": hunc'it ha?as "one banana"

-p'is "a measurement": hump'is nok' "a measure of cloth"

-ten "occurrences": hunten "once"

-buh "things divided into equal parts": humbuh luč "one half of a gourd"

There are equally complicated features about many other types of attributives to nouns and verbs, some of which will be considered in Chapter 6. These illustrations should be enough to warn us against taking anything for granted. Differences are precisely the features which provide each language with its individuality, and make of it an instrument for conveying important ideas in an impressive way. Each language has its own subtle distinctions and refinements of meaning and form. To appreciate these qualities and to use them effectively, rather than to complain about their strangeness, will mean much to one's language progress and mastery.

3.2.3.2.10　Putting Words Together into Frames

We have already been illustrating a number of frames, but most of them have been of the substitution type. Substitution frames are sentences or phrases which will allow the substitution of some part. The portion which remains unchanged may be said to constitute the "frame," and the portion which changes is the "substitution." The following is such a frame:

"The man saw the child."
"The man called the child."
"The man chased the child."
"The man caught the child."
"The man whipped the child." ·
etc.

With such a sentence we could substitute at least three different portions:

1. The subject, e.g.,
"The man saw the child."
"The woman saw the child."

"The boy saw the child."

etc.

2. The object, e.g.,

"The man saw the child."
"The man saw the house."
"The man saw the horse."
"The man saw the dog."

etc.

3. The verb, already illustrated above.

Of course, it is also possible to substitute different qualifiers of "man" and "child," e.g.,

"A man saw a child."
"This man saw that child."
"Some man saw this child."

etc.

This last type of substitution frame makes more than one substitution at once, and hence may be technically called a multiple-substitution frame, in contrast to a single-substitution frame, illustrated above.

Another important type of frame is the "expandible frame." This consists of substituting different and more extensive expressions or of simply adding attributives to already existing parts of phrases or sentences. A typical expandible frame would be the following:

"The man saw the child."
"The old man saw the little child."
"The poor old man rarely saw the ragged little child."
"The rather poor old man very rarely saw the extremely ragged little child."

etc.

By substituting différent words as well as more extended phrases, one could construct the following:

"The man saw the child."
"The old fellow hit the poor boy."
"The stingy mean rascal almost destroyed the little house of blocks."

etc.

These last three sentences do not resemble each other very much, but they consist of precisely the same types of units, namely, a noun expression as subject, a verb expression, and a noun expression as object. Learning to build up

sentences in this fashion is a basic feature of language learning.

If a person tries to elicit various sentences like these from his informant, complications may arise because they do not seem to have any importance or meaningful relationship. Hence, it is very valuable to try to follow some central theme in the construction of a series of sentences having a related structure. For example, one may obtain the following type of series:

"The boy saw a monkey."
"The boy chased the monkey."
"The monkey stopped."
"The monkey screeched at the boy."
"The boy was afraid of the monkey."
"The boy fled from the monkey."
"The monkey chased the boy."
"The boy ran out of the forest."
"The boy cried."
"The monkey laughed."

This series of sentences follows a kind of narrative and is constructed on a very simple framework, namely, a subject expression and a verb expression, with or without an object or some type of locative[28] attributive. The forms in a native language might not be as simple as this, and the informant might insist that some connectives, such as "then," "therefore," "because," and "since" should be added. Such syntactic refinements are all the better. The important thing is to be able to use one's vocabulary in certain straightforward sentences. After a while, such sentence frames become second-nature, and then one actually begins to speak a language. But first one must elicit such series and notice the particular ways in which the words go together. By restricting oneself at the beginning to certain fixed structures employing a limited vocabulary, it is much easier to learn how to speak. In fact, if one must choose between a limited vocabulary but a thorough knowledge of some of the basic grammatical frames and an extensive vocabulary but without a practical mastery of such syntactic structures, one should always choose the first. New words and phrases may be rapidly added to known

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[28]That is, a form which indicates a location.

frames, but it is the ignorance of such frames which retards the language student so much. In Chapter 6 we will note some of the important differences between the frames used in various languages.

3.2.3.2.11   Writing Down Texts

In addition to providing oneself plenty of opportunities to hear natives speak, it is also very helpful to take down from dictation as many native stories, legends, proverbs, and conversations as possible. We need to be able to read over such texts and analyze their structure.

It is difficult to get such texts, for though an informant may be a superb story-teller as long as he is spinning his yearns to admiring listeners as they huddle around the camp-fire, he may ruin his tale by reducing it to a few prosaic sentences, once he is forced to dictate slowly while the student laboriously writes it down. With some practice, however, the informant will probably improve, especially, if his minor successes are praised, and fuller forms of expression are encouraged. One cannot begin the process of taking down text right at first. That is why we have outlined so many other preliminary steps. One must become accustomed to the sounds, many of the constantly recurring grammatical forms, and at least some of the basic vocabulary. Otherwise, a person becomes totally lost.

In writing down stories, it is best to let the informant proceed without any interruptions. To interrupt is often to spoil the continuity of the story and to dampen the informant's enthusiasm. When the story has been fully transcribed, one can go back over it phrase by phrase, correcting the transcription and finding out the meanings of the words and phrases. How these texts can be used to analyze the language structure will be indicated more fully in Chapters 5 and 6, but there are some observations which may be easily made, e.g.,

1. Where does the subject usually come in the sentence?
2. Where does the verb usually come in the sentence?
3. Are the sentences conspicuously long, or are most of them short?[29]

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[29] They are likely to be shorter in such dictation than in the average type of utterance.

4. Do the various kinds of words occur in a rigid sentence order, or do they seem to hop all around?

5. Are many of the words rather long (five or six syllables), or do most of the words consist of only a syllable or two.

6. Are there many connective words between sentences, e.g., "when, then, because, for, but, and, accordingly"?

Even these very elementary observations will begin to tell us a great deal about the language and the way the words go together. One of the big advantages of texts is that they reveal many additional frames which one may learn and then fill in with other words and phrases.

There are many different types of texts, and the variety should not be overlooked, for styles may differ considerably. The most common types of texts are greetings, conversation, personal narrative, traditional legends, poetry, and proverbs. Greetings are usually very highly formalized. Conversation often employs many clipped, shortened expressions. For example, in English we may say Howdy! in place of How do you do? and Smatter? for What is the matter? Similar developments occur in many languages. Personal narrative is usually the least specialized type of language form. Traditional legends may have many forms of expression which require an intimate knowledge of a people's history and ethnology. Native poetry may be very intricate with many archaic or pseudo-archaic expressions, so that one should not attempt to write down and analyze such forms until one has acquired considerable facility in the ordinary forms. Proverbs often tend to be very cryptic; in fact, they are sometimes intentionally so. It is very important to learn them for they are often an entering wedge to society and intellectual respectability. Certainly a knowledge of the proverbs of some African tribe will mean much more by way of prestige and gaining a hearing from the native peoples than any number of earned or honorary degrees strung after one's name. In fact, one's ability to employ the native proverbs at the appropriate time and place is the criterion of learning in some parts of the world. In central Africa it would be ridiculous to talk about "locking the barn door after the horse has been stolen" when one might much better use a native equivalent such as, "After the prince fell into the stream, they built a bridge."

3.2.3.2.12   Reading <u>Texts</u> and <u>Listening</u> to
<u>Them</u> <u>Read</u>

One of the difficulties about learning to "hear" a language is that we do not have the opportunity to listen frequently to the same types of material. By reading over texts several times we become familiar with the words and the forms, and by encouraging the native informant to correct us constantly we are able to improve our pronunciation. However, we also need the experience of having such material read to us, and read several times. By hearing the same thing over and over we begin to identify more and more of the meaningful units. By this means we are "tuning" our ears to the language.

When a text becomes rather familiar, the content should be made the basis of conversation with the informant. One may ask questions about the why's and wherefore's of the action, the customs alluded to, and other versions of the story. If the story has any parallels known to the missionary, it is helpful to attempt to tell this other story to the informant. People are always fascinated by some tale similar to their own, and it begins to strengthen the bonds of mutual understanding.

3.2.3.2.13   <u>Memorizing</u> <u>Stories</u>

One of the best ways to acquire a number of grammatical frames and to endear oneself to natives is to memorize some favorite tales. It will show them that the missionary has great respect for native patterns of life[30] and will provide an almost endless source of entertainment. Some missionaries have become locally famous almost overnight by reciting some ancient legend with all the traditional rhetorical trappings. Of course, the missionary is not concerned about being renowned, but knowing the cultural heritage of a people is basic to understanding them. Being able to recite native stories not only demonstrates such knowledge and accordingly engenders confidence, but it also provides the missionary with a wealth of sentence frames to be used in talking about other things much more important to himself and to the people as well.

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[30]With proper caution this need not in any way compromise the missionary's work or message.

3.2.3.2.14   Listening Constantly to the Language

One cannot learn without listening, but to provide oneself with opportunities for listening to a native language is not always easy. In Latin America and the Orient those who wish to learn a native language have usually had to go right out and live in the villages or in native quarters of large cities where they are constantly surrounded by it. This is really the only satisfactory procedure. In Negro Africa missionaries generally have felt that they could not live in native villages, though some missionaries have done so and certain of them have gained much in linguistic accomplishments as a result. Regardless, however, of the local obstructions and difficulties, a person must organize his program so that he can constantly hear the language. If he is in Africa, he can certainly do as many missionaries have, namely, sit around the campfires at night. It may mean squatting inside some dusty, smoky kraal near a fire of dried dung, but that may be the only way to hear the language for two or three hours each day. During working hours the people are usually scattered. The missionary on a station always has the opportunity to attend native services, and in many places there are various services during the day for workmen, schoolboys, house help, etc. In Africa one of the best places to listen to the language is at the native law courts. If one has been properly introduced to the chief, it is usually possible to get permission to attend. Hour after hour and sometimes day after day, the people plead their causes with all the subtlety of professional lawyers and all the accumulated knowledge of a hoary tradition. Anyone who wants to imbibe the wisdom of Africa can nowhere find it better presented than in the native courts.

Where it is possible, one should attempt to live with a native family. This is not only important for learning the language, but also for learning about the people. One of the principal difficulties, however, is the food, but as one missionary has said, "The one who claims that 'Where He leads me I will follow,' must also learn the meaning of 'What He feeds me I will swallow.'" Nevertheless, one should not impair health and future effectiveness by taking unnecessary risks about food and water. One should take reasonable precautions when living in a native household, but nothing is more rewarding

than living with a native family if one really wants to learn to speak a language. In many circumstances, however, it is not expedient to live and eat with native families,[31] but it is often possible to construct one's home in the native pattern and to live in a village. One missionary in West Africa has lived in various villages of his tribe by procuring a cluster of native huts (each family unit usually has two or three huts) from the chief. There have been a number of inconveniences, but such inconveniences have been insignificant as compared with the advantages of being right with the people, constantly hearing the language, and being in so far as possible an integral part of the village life. The missionary who lives in the comparative isolation of a hill-top will find that it takes much longer to acquire a language. Where the circumstances prevent living in a village, one can make it a practice to itinerate frequently, for camping out or staying in so-called "rest houses" (as for example in central Africa) is more like village life than living on the mission compound.

The use of mechanical recorders (wire, tape, and disc) have been very widely recommended. These can prove very valuable, if properly employed, but their helpfulness has often been exaggerated. The primary difficulty with learning a foreign language through recordings such as Linguaphone is that there is usually no one around to correct one's pronunciation. Our pronunciations may sound all right to us, but our ears have ways of deceiving us. We think that we are reproducing the sounds that we hear when in reality we miss them badly. However, recordings can be used to very good advantage. Their principal uses are three:

    a. Getting practice in listening to the language. It is very helpful to listen over and over again to native stories, legends, or sermons by native pastors. The repetition of the same material assists us in isolating a high percentage of the meaningful units.

    b. Studying the intonation of the sentences. In order to study the natural rise and fall of sentences and phrases, there is nothing better than a mechanical recording. So

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[31]This is generally true for languages considered under this third general procedure, but, of course, would not apply to most European and to some Oriental situations.

many times we miss the proper transcription if we must have the informant repeat an expression several times, for the intonations may change greatly in the artificial process of dictating slowly.

c. Making a recording of one's own speech for comparison. One may profitably recite a number of memorized expressions or read some native text and then have it played back. One will usually be shocked by one's "terrible accent." Such a procedure will point out the gross errors, and accordingly one can concentrate on eliminating them. A series of such recordings made each successive month will indicate whether or not one is improving. One of the best types of recordings is of a conversation between a native speaker and the student. Differences of pronunciation, intonation, speed of utterance, and facility in handling the grammatical frames of the language will be evident immediately.

Mechanical recordings are very useful tools in language learning, but they cannot substitute for putting forms down on paper.

3.2.3.2.15   <u>Using the Language at Every Opportunity</u>

Using a language often means forcing oneself to use it and planning one's work and activities in such a way as to give the best practice. One of the most effective means is to go visiting. At first it is best to have one's informant go along, so that when one's vocabulary gives out, the informant may take over. However, one should not use such help too much or for too long a time. Sooner or later (and better, sooner) one must launch out alone. At the beginning a person feels terribly foolish, for the words seem to get stuck in one's throat and one's ears become filled with a meaningless assortment of sounds. But soon the phrases will begin to make sense. There are two important rules to remember when one begins to use the language without the help of some ready interpreter:

     a. Use the words, disregarding the fact that the forms may not be entirely right.

     b. Keep up to speed.

Some people do not wish to say a thing until they are sure that all the forms are perfectly correct. This is a great mistake. One should dive right in and begin using the words in order to convey one's meaning. The refinements of grammatical form will come, but first must come the broad sentence structures. There are those who never care to master the finer points of the language, and this is a great mistake. They continue to "bully" their way through the language without regard for the cultural niceties of expression. On the other hand, one must not remain tongue-tied for fear of using a wrong mode or tense, for one will not learn how to use any form without having some practice in using it. The man who never used an ungrammatical form never learned to speak a foreign language.

Using the native language in the home is a great advantage. English-speaking missionaries too often make a habit of speaking only English in their homes. Of course, it is one's easiest language, and it helps to give one a sense of "homeness," but constantly making use of English in a foreign language community frequently leads natives to be suspicious of what is being said, and sometimes they understand far more than the unsuspecting missionary guesses. In many cases the use of the native language can be a great spiritual blessing to those around. For example, one missionary family in Latin America used to make it their practice to pray in English during evening devotions. An Indian servant one time asked, "What are you doing?" The missionary endeavored to explain that he was "praying," but the poor native persisted in understanding it as "reciting," for the English sounded like the meaningless Latin liturgy which he had heard on rare occasions in the far-off cathedral. Finally, the missionary explained that he was just "talking to God." The astonished Indian then asked pleadingly, "Oh then, speak to God in my language so that I may listen in." Some of our most effective means of witnessing as to the reality of our religious experience comes from the constant use of the native language in all the circumstances of life.

3.2.3.2.16   Making a Dictionary of the Language

The missionary who finds a good dictionary of his language, for example, such as the Zulu-English Dictionary by

Doke and Vilakazi, is fortunate indeed. But even the process of making a dictionary can be profitable. Writing out a slip for each new word and filing it away helps one to remember the form. Being constantly on the alert for various meanings of the same word will also whet one's linguistic appetite, and quick reviews of vocabulary based upon one's dictionary can be very helpful. Sometimes a project which we have to develop ourselves has much more meaning than one already worked out, so even the necessity of making a dictionary for our own use and the assistance of others can be a blessing in disguise.

We should not restrict our dictionary, however, to the mere listing of words. All types of idioms must be included under the key word or words. For example, if the language of our dictionary were English, we would want to list in the dictionary such idioms as "give him the cold shoulder," "pick a lemon," and "I'll be switched." These idioms are not describable in terms of the regular meanings of all the constituent parts. They are special types of expressions, and corresponding specialized figures of speech exist in all languages. For example, in Miskito, a language of Honduras and Nicaragua, the phrase "to scrape off the lip" means "to whisper," and the expression "the moon has caught hold of his mother-in-law" means that "the moon is eclipsed." To say that one is under another's care, one must use the idiom "he is in the shelter of his armpit." No language is fully learned until all such idioms have been mastered.

3.2.3.2.17   Seeking Constant Correction from Native Speakers

It is not easy to get natives to correct a person. The prestige of being a missionary and a white foreigner makes people very reluctant to correct errors in pronunciation or grammatical forms. One British official in Africa complained bitterly that the natives would not correct his Arabic, and only by using extreme pressure on his servants could he induce them to correct him. It was only then that he found that he had been mixing up the phrases "Open the window!" and "Close the window!" When the servants heard him give an order concerning the window, they always looked at the window first and

then proceeded to open it if it were closed or close it if it were open. For months the servants had played this little game, never presuming to correct the official.

Not only do some natives refuse to correct the white man, but some of them even imitate the white man's bad pronunciation of the native language. Just as some natives have thought that wearing shoes, shirts, shorts, and a tropical helmet would make them into new men and give them prestige, so some of them have even carried this imitative process to the point of mimicking the white man's errors in speech.

If one is going to be adequately corrected, a really determined effort must be made. One of the ways in which this can be done most easily is in the classroom. As the missionary is teaching, he should insist that the students stop him whenever he makes a grammatical mistake or pronounces words in such a way that they are difficult to understand. At first, students will be very reluctant to stop the teacher and correct him, but by highly praising the daring student who does interrupt, the teacher may induce the other students to participate in the process of correcting his speech. In the initial days and weeks, the instruction may be very slow indeed, for much of the time will be taken up with the corrections. However, over a period of months the missionary will undoubtedly put across much more because of the constant corrections than he would if he went bungling on, with the students actually missing much that he had to say. One guest professor in a university in Latin America followed this procedure in lecturing to his class in Spanish; and though the first few weeks were discouraging indeed, the results over the entire semester were much better than if he had gone blindly ahead using his imperfect Spanish.

Inducing people to correct one in conversation is not easy, but if one encourages corrections and takes time to express sincere thanks for help given, it is possible to make almost every conversation into a language-improving opportunity.

If there is no other way, one can hire informants to converse and correct mistakes. It is also possible to hire them to listen to one's sermons, lectures, and conversations, jotting down mistakes as they hear them, and then turning over such notes to the missionary. These notes should be carefully reviewed by the missionary at least three times. However,

one should not review the mistake, but rather the correction of the mistake. Fixing a mistake in one's mind is a hazard. We must direct our attention toward the correct form.

One of the reasons why we do not insist on being corrected is that we tend to be satisfied with our ability. Natives may say that we speak even better than they do, but, of course, we must discount all such remarks. They may have reference to some public-speaking ability, or they may be referring to the extraordinary way in which we coin new words and phrases— most of which are just translationisms from English, and some of them may be very bad. For example, one missionary wanted a word for "grace" to use in John 1:14, where the Word is spoken of as "full of grace and truth." The missionary coined a compound "living gift," because he argued that "grace" was not only a "gift," but more than that, it was a "gift of life," or as he put it "a living gift." The natives never quite understood it, even though they were duly impressed by the missionary's ingenuity. What they actually understood by the phrase "living gift" was "chicken," for the only live gifts which they gave to one another were chickens. They accordingly understood the passage in John 1:14 to mean that the Word was "full of chicken and truth."

The only worth-while compliments about one's language ability are those accidental statements which actually reveal the native speaker's reactions. For example, a young missionary from Spanish-America was talking in Spanish with some foreign students who had recently come to one of the large universities of the United States. The topic of conversation was schools and methods for learning English. After a while, one of the Latin American students asked the missionary, "Well, where did you study English?" The fact that the missionary was not a native Spanish speaker was not detected, and such a question was a real compliment.

One British linguist working in the Sudan was so proficient in reproducing the difficult sounds that the natives exclaimed, "Surely his mother could not have been white!" The natives thought that anyone who could master such strange sounds and peculiar forms must have been born of a Negro mother. Such a statement is a compliment of the highest order.

4.   MASTERING THE SOUNDS

The mistakes which one can make in pronouncing the sounds of a foreign language are numerous, ridiculous, and serious. In preaching about the children of Israel crossing the Red Sea and following Moses, one missionary became so confused about the tones and the consonants of one Bantu language that he declared, "The children of Israel crossed the red mosquitoes and swallowed Moses." Such an illustration could be multiplied thousands of times. Some are just funny. For example, certain missionaries were always asking people what their "broom" was rather than what their "name" was. The difficulty was simply that the two words had the same consonants and vowels, but the word for "broom" was pronounced with a high tone followed by a low tone and the word for "name" was pronounced with two high tones. Some of the natives of one West African language thought that Lot's wife became a pillar of a "wall" rather than a pillar of "salt," since the two words differed only in the type of o sound; and until the missionary learned to distinguish clearly between the words, the natives naturally interpreted the form as meaning "wall" since it made much more sense to them to talk about a "pillar of a wall" than to speak of a "pillar of salt."

One of the serious errors in pronunciation was the confusion in one of the languages of central Africa between the words for "poison" and "blessing." The differences were only slight distinctions in tone, but the missionaries had never learned to distinguish them properly. As a result, in the celebration of the Lord's Supper they said, "This cup of poison we do bless," rather than saying, "This cup of blessing, we do bless." The native church had constructed an elaborate explanation when the problem was simply a mispronunciation. Since the native pagan practices included the drinking of the poison cup to prove innocence, they concluded that the missionaries concocted a poison brew and then blessed it. Because none of those who drank of it died as the result, the

natives thought that this sacrament was a means of demonstrating the Christians' innocence of any major offense against the spirits. Most mistakes in pronunciation are, however, not so tragic, but it is amazing how unruffled some native congregations are when they hear a missionary make such a mistake as was made once in a language of central Congo: "The Lord will return in the glory of his Father, surrounded by <u>white pants</u>." Of course, the missionary had wanted to say "holy angels," but a little mispronunciation completely changed the meaning. Even though some congregations are surprisingly solemn at the time, the natives will often confess that they have no end of merriment among themselves mimicking the missionaries' errors and laughing uproariously about the mistakes in the recent sermon.

The sounds of a language are basic to everything else, and the sounds of every language are distinctive. Sometimes missionaries are confused by the similarity of the alphabet, and when they learn that Spanish has only five significant vowel sounds, they are delighted, for they know that English has many more such sounds. They imagine that they can just pick up the five closest English vowels and use them in Spanish. However, the Spanish vowels are not at all like English. Superficially, of course, there is a resemblance, but it does not take us long to recognize that a Spanish American who has just begun to learn English does not use English vowels. Exactly the same thing is true of the average English-speaking person learning Spanish.

One of the great difficulties is that native speakers of a language cannot tell us just how we should change our pronunciation to conform to theirs. They can easily detect that something is wrong, but they do not usually know how to help us correct the error. When we pronounce a Spanish <u>t</u> as we would an English <u>t</u>, it sounds queer to native speakers; but few teachers are sufficiently trained to tell us that we should put our tongue farther front in the mouth, in fact, right up against the upper teeth, and that we should eliminate the aspiration (the little puff of air) that follows the <u>t</u> when it is initial in the word. Because we cannot find native speakers who are able to give us the guidance we need in pronunciation, we should have some orientation in the study of phonetics (the science of sounds used in speech).

Some people think that the important thing is getting the words and grammar, and then gradually refining the pronunciation. As we have noted before, this is a false idea, for the early habits stick with us and soon become almost unbreakable. Some elementary phonetic training is usually invaluable. Of course, it is quite impossible to study all the sounds made by speakers of languages all over the world. But neither does the botanist undertake to study all the plants in the world before he begins to classify new specimens. He learns the fundamental characteristics and the way of going about his analysis, and then he is able to describe and identify forms that he has never studied before. The same is true with the student of phonetics.

One of the great difficulties in studying sounds from a textbook is that books cannot make noises. One needs a teacher who has heard such sounds and can reproduce them, or better still, a native speaker of a language which contains such sounds. However, a book can explain some of the problems and can make one aware of certain difficulties. If one learns to be a careful observer of sounds, at least half of the trouble is over.

4.1　Misconceptions about Phonetic Abilities

Some basic misconceptions about phonetic ability hamper some people's progress in a language. For example, there are those who claim that they have had no difficulty in learning the peculiar sounds of German because their ancestors came from Germany. This is nonsense. There are no hereditary gifts which enable one to acquire certain sounds and not others. In fact, any person of any race or tribe raised in any other part of the world can speak the language of that area without the slightest trace of "accent." Some people insist that the thick lips of Negroes account for some of the peculiar sounds in Africa and for their inability to acquire certain types of pronunciation of other languages. This is wholly untrue. There are Africans who speak French, Spanish, Portuguese, English, Arabic, and Afrikaans (a dialect of Dutch) in such a way that their speech cannot be distinguished from native speakers of these languages.

Certain tribes place disks in their lips and file their teeth or knock out certain teeth for the sake of adornment. One

would think that such disfigurements would modify the speech appreciably, but that does not seem to be the case. The Ngbakas who have their two front upper teeth knocked out (the normal practice in the tribe) do not speak appreciably different from those who do not have such teeth removed.

4.2 What Makes the Sounds[1]

Most speech sounds are made by modifying the air stream which comes from the lungs. We may conceive of the air stream as being forced out by a bellows consisting of our lungs. It may be set in vibration by the vocal cords and is modified by the various articulators and cavities through which it passes. To identify the various mechanisms one should examine carefully the diagram on the following page.

There are two principal types of functional parts: movable and stationary. The movable parts are the lips, lower jaw, tongue, velum (the soft palate that hangs at the back of the mouth, including the uvula), and vocal cords. The stationary parts are the teeth, alveolar arch, hard palate, back wall of the pharynx, and the nasal cavity. By various combinations and placements of these parts all the multitude of speech sounds are produced. To describe these parts we need to make some more minute distinctions. For example, we

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[1] The phonetic explanations in this chapter are very elementary; and some of the statements are slightly misleading because they do not attempt to cover all the possibilities. The student is advised to consult some of the following books on phonetics:

Henry Sweet, A Primer of Phonetics; Oxford, 1906.

Paul Passy, Petite Phonétique Comparée, Leipzig, 1912.

W. Rippmann, Elements of Phonetics, 2d edition; New York, 1903.

G. Noel-Armfield, General Phonetics, 4th edition; Cambridge, 1931.

Otto Jespersen, Lehrbuch der Phonetik, 2d edition; Leipzig, 1913.

Kenneth L. Pike, Phonetics; Ann Arbor, Michigan, 1943.

Diedrich Westermann and Ida C. Ward, Practical Phonetics for Students of African Languages; Oxford, 1933.
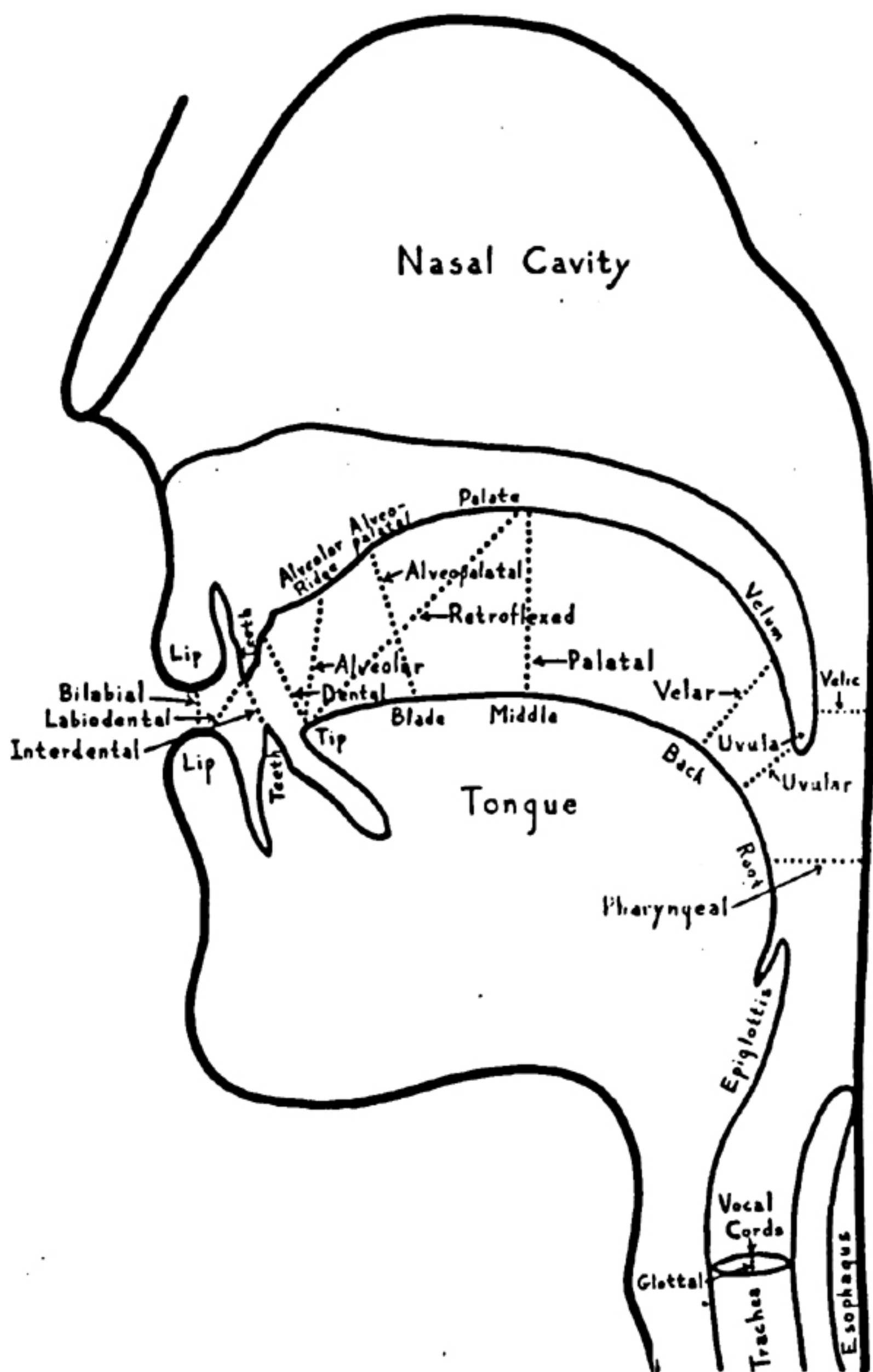
Figure 1. The Vocal Organs.

distinguish the various parts of the tongue into tip, blade (just a little further back), middle, back, and root. We also distinguish various points along the top of the mouth as dental (the back part of the teeth), alveolar (along the alveolar arch), alveopalatal (the transition zone between the alveolar ridge and the hard palate), palatal, velar (along the mouth side of the velum), and uvular (at the very extremity of the velum). The back side of the velum, where it touches the back wall of the pharynx and thus closes off the nasal passage, we call the velic.

The lips may assume several different shapes all the way from flat to oval to round. Examine the following diagram and then pronounce the vowels as found in the following words: key, Kay, cat, caw (the onomatopoetic representation of the sound made by a crow: caw-caw), coat, and coo. Note the different forms of the lips.

(as in key)

(as in Kay)

(as in cat)

(as in caw)

(as in coat)

(as in coo)
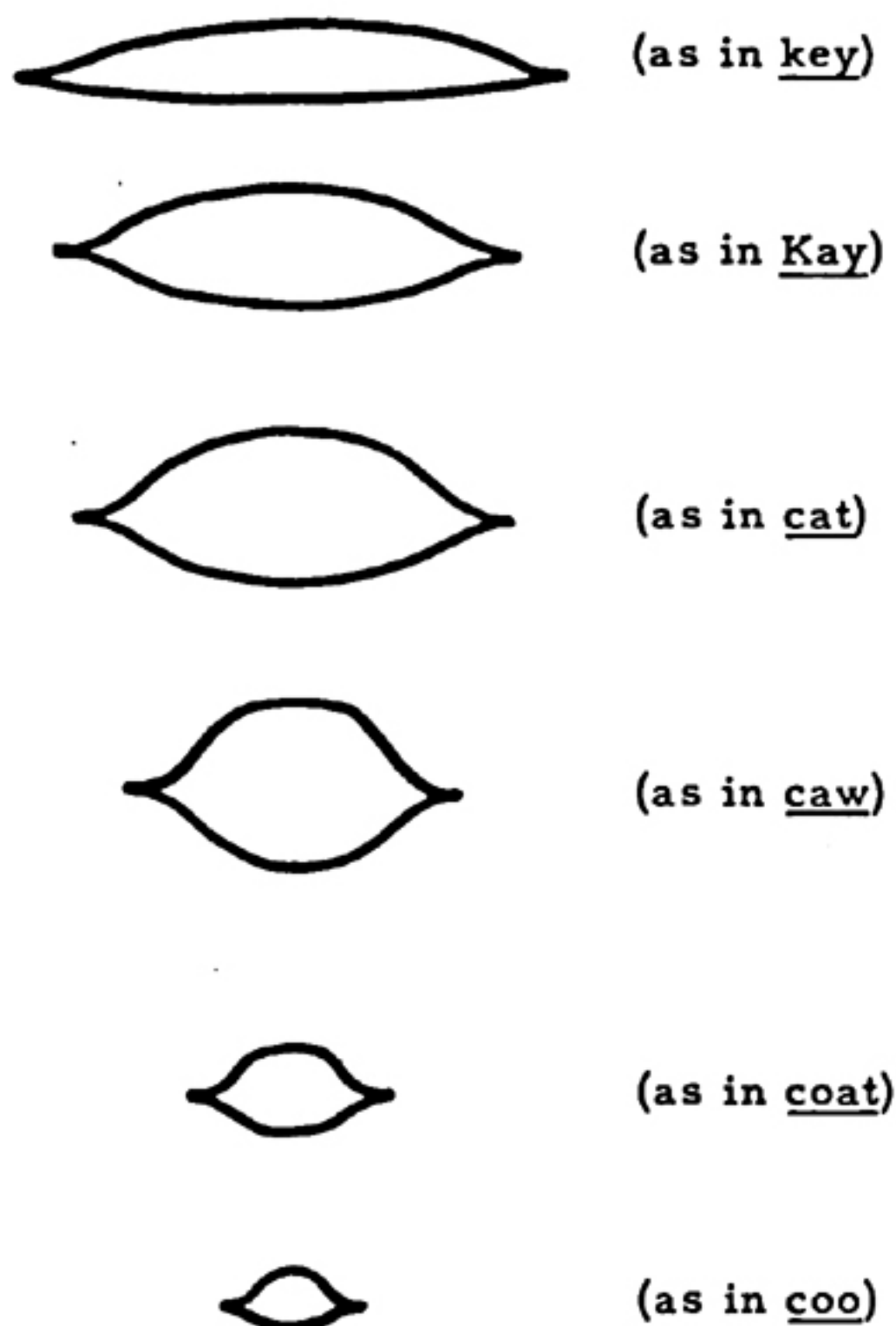
Figure 2. Degrees of Lip Rounding.

The tongue also may assume a great many different shapes. It may be flat as in the pronunciation of the exclamative Ah-ah!, deeply grooved as in the pronunciation of s, shallowly grooved as in the pronunciation of sh, "cupped" and drawn back (i.e., retroflexed) as in the pronunciation of r, humped up in the back in the pronunciation of coo. These are just a few of the tongue's possible positions, and our description of the form is somewhat inexact, for we are using words which are relative, and at the same time more or less nontechnical. We will note more of these shapes as we consider the ways in which various vowels and consonants are produced.

4.3   The Principal Types of Speech Sounds

For convenience we may divide sounds into their traditional classes of consonants and vowels.[2] This does not mean that some sounds which we list as consonants will not act like vowels, e.g., the r-sound in the Western American pronunciation of bird. In fact, we find all kinds of apparent exceptions in languages, but for the sake of describing the phonetic characteristics the usual distinction between consonants and vowels is helpful.

4.3.1   Consonants

Consonants (with the exception of certain clicks) interrupt the airstream coming from the lungs or materially affect its steady flow. The various results are called stops, fricatives, frictionless consonants (including nasals, laterals, and centrals), and vibrants.

4.3.1.1   Stops

Stops consist of a complete stoppage of the airstream at some point or points.[3] The diagram of the alveolar stop [t] would appear as on the following page.

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[2] The distinction between contoids and vocoids is technically preferable (see K. L. Pike, op. cit.), but for our purposes the traditional distinction is more helpful.

[3] Clicks, as will be seen, are a type of minor exception to this statement.

Broken line
indicates voicelessness
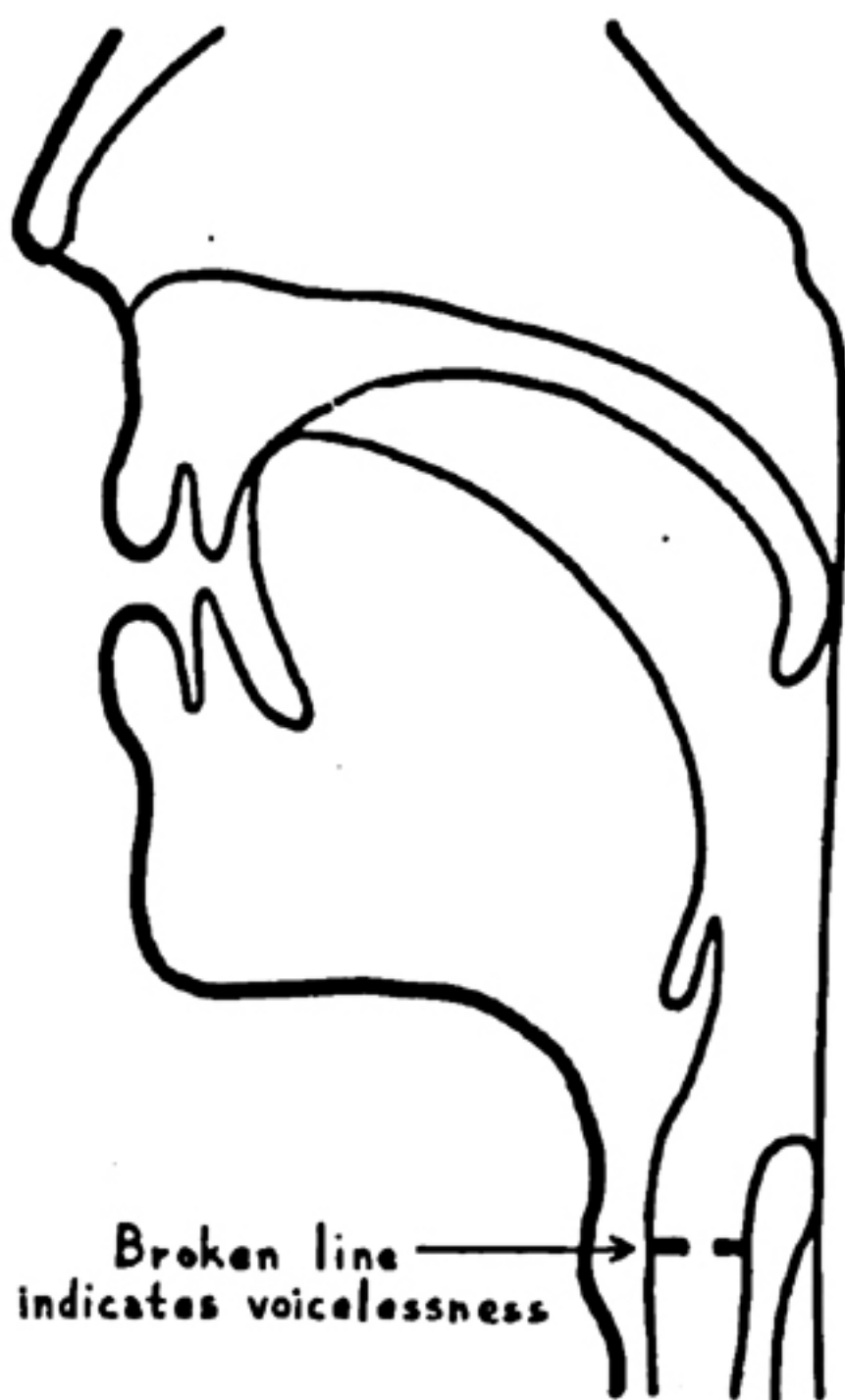
Figure 3. Production of [t].

The types of stops are partially identifiable by the point in the mouth or throat where some articulator (movable part) stops off the air stream. A stop made by the lips is called bilabial (e.g., English p); one made by the tongue against the teeth is called dental (e.g., Spanish t̪); one made by the tongue against the alveolar ridge is called alveolar (e.g., English t̲); one made by the mid part of the tongue against the hard palate is called palatal (e.g., English k̲ as in keen); one made by the back of the tongue against the soft palate (or velum) is called velar (e.g., English [k] as in caw-caw); and one made by completely closing the vocal cords is called glottal (e.g., the catch in the throat which occurs in the middle of the negative interjection huh-uh). If the vocal cords are vibrating during the time of a stop (this may occur except in the case of a glottal stop), we say that the sound is voiced. If the vocal

cords are not vibrating, the sound is voiceless. We may chart the sounds which we have described as follows:

	Bilabial	Dental	Alveolar	Palatal	Velar	Glottal
Voiceless	p	ţ	t	ķ	k	ʔ
Voiced	b	ḍ	d	ģ	g	

The traditional Roman alphabet does not provide us with enough symbols to designate the various principal sounds, and so we must use some diacritical marks and new symbols. The curve under a letter means that it is relatively farther front in point of articulation, and the top part of a question mark indicates a glottal stop.

As will be noted in the case of sounds for which the tongue is the principal agent, the front part of the tongue usually touches the front part of the mouth, the middle part of the tongue touches the middle part or the roof of the mouth (the hard palate), and the back part touches the velum. Sometimes, however, the tongue turns back (i.e., becomes retroflexed) and the tip touches the hard palate. This occurs in the so-called domal sounds that exist in some of the languages of India. To designate such a retroflexed sound we may use a dot beneath the letter, e.g. [ṭ] and [ḍ].

4.3.1.2   Double Stops

In some languages the sound is stopped at two points in the mouth at the same time, e.g., Ngbaka (a Sudanic language of northern Congo) gbɔ̀gbɔ̀ "lion" (cf. gɔ̀gɔ̀ "tooth"). (The vowel indicated by [ɔ] is like the vowel of English saw and the grave accent [ˋ] indicates that the tone of the syllable is low.) In the word gbɔ̀gbɔ̀ one does not pronounce [g] and then [b], as the orthography would seem to imply. The lips are closed, and the back part of the tongue is up against the velum at the same time. When the stop is released for the following vowel, the impression is just as though one had been saying a [g] and a [b] at the same time, which, of course, is precisely what does occur. The combination kp also exists in Ngbaka, e.g., in the word kpōkpò "mat."

4.3.1.3   Clicks

The clicks of South Africa are a very special kind of stop consonant. For a good description of these sounds one may read D. M. Beach, The Phonetics of the Hottentot Language (Cambridge, 1939) or C. M. Doke, The Phonetics of the Zulu Language (Johannesburg, 1926). Anyone who must learn a language containing clicks should by all means study such detailed descriptions. However, we may note briefly some of the principal facts about their formation. First, the back of the tongue is in contact with the velum and is drawn down and back rapidly while an anterior part of the tongue closes off the mouth at another point. The process of drawing the back part of the tongue down and back forms a vacuum, so that when the fore part of the tongue is released from the stop position, a little bit of air pops into the vacuum, making the click sound, just before the back part of the tongue is released for the following sound. All this sounds very complicated, but we are all able to make certain clicks. For example, a kiss is a type of bilabial click; the sound of admonition symbolized as tsk tsk is also a type of click; and the similar noise made by people driving horses is likewise a kind of click.

4.3.1.4   Aspirated Stops

In some ways it would be very nice if languages limited themselves to the basic, unmodified types of stop consonants which we have noted, namely, [p, ṭ, t, ḳ, k, ʔ, b, ḍ, d, g̱, g].[4] What complicates the situation so greatly is the number of phonetic "additions" which these consonants may have. In the first place, these sounds may have little "puffs" of air added to them. In fact, in English all voiceless stop consonants which are initial in words have these puffs, which are called aspiration. (See section 3.2.2.1.) We are not aware of these aspirated consonants, for the occurrence or nonoccurrence of aspiration never makes differences in the meanings of words. But in some languages aspirated consonants contrast with unaspirated ones. Compare the aspirated and unaspirated consonants in the following words in Yipounou, a Bantu language

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[4]In order to indicate purely phonetic values of symbols, they may be enclosed in brackets.

in the Gabon: kala "a long time ago" and k^{h}ala "a crab," or tatila "to cry out" and t^{h}atila "to cry out to me."[5] In Mazatec, a language of Mexico, the contrast between aspirated and un-aspirated consonants may be illustrated by k^{h}i^3 "it appears" and ki^3 "he went." (The raised numerals indicate tones from the highest, marked 1, to the lowest, marked 4.) There are also pre-aspirated consonants in Mazatec, cf. ^{h}ti^4 "fish," t^{h}i^3 "round," and ti$^{3-4}$ "boy."[6] (Two raised numerals joined by a hyphen indicate a glide from one tone level to another.) These three words have differences of tone as well as differences of aspiration, but in order to be understood in Mazatec one must be exceedingly careful about such aspirations. To carry over one's habits from English would be disastrous. In some of the languages of India the voiced stops occur with aspiration, e.g., [b^h, d^h, g^h]. (The symbol [ɦ] indicates a voiced h.)

Aspiration may also occur with click consonants. Compare, for example, the Zulu words tsà·tsá "to scrape a wound" and ts^{h}a·ts^{h}a "to shell beans." (The wedge indicates a click sound, and the combination [ts] means that the click sound has an s-quality. The marks over the vowels indicate tonal differences, and the raised dot denotes a long vowel.)

4.3.1.5   Affricated Stops

In addition to being aspirated, stop consonants can be af-fricated. This means that following the stop there is a fric-tion sound[7] made at approximately the same point of articula-tion and as a kind of off-glide from the stop position. The common affricates are as follows;

[pf], as in German Pferd "horse."
[bv]
[ts], also symbolized as [c] and [ƫ], as in German Zeit "time."

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[5] Tones are not marked on these words.
[6] Kenneth L. Pike and Eunice Victoria Pike, "Immediate Constituents of Mazatec Syllables," International Journal of American Linguistics, Vol. 13, No. 2, pp. 78-91.
[7] Affricated stops are combinations of stops plus fricatives (see section 4.3.1.7) made at the same general point of articu-lation. Students should read section 4.3.1.7 and then return to this description of affricates.

[dz], also symbolized as [ʒ].

[tθ], a combination of [t] as in t<u>in</u> with [θ], the initial sound of <u>thin</u>.

[dd], a combination of [d] as in <u>den</u> with [d], the initial sound of <u>then</u>.

[tš], also symbolized as [č], the initial sound of <u>chin</u>.

[dž], also symbolized as [ǰ], the initial sound of <u>gin</u>.

[tɬ], also symbolized as [ƛ], a combination of [t] plus a voiceless [ɬ]. This sounds like t<u>l</u> to English ears, but the <u>l</u> is "breathy" and without any accompanying vibration of the vocal cords.

[dl], also symbolized as [λ]. The sounds [tɬ] and [dl] are called lateral affricates because the off-glide is a lateral. (For a discussion of laterals see below.)

[kx], a combination of [k] plus a voiceless fricative [x]. (See section 4.3.1.7)

[gɡ], a combination of [g] plus a voiced fricative [ɡ]. (See section 4.3.1.7)

4.3.1.6   Glottalized Stops

In addition to aspirated and affricated consonants,[8] we also find glottalized consonants.[9] In the production of such consonants the glottis (i.e., the vocal cords) is closed during part or all of the time that the stop closure occurs. The glottis may be released simultaneously with the release of the stop or it may be released just after the stop is released. This glottalization tends to give a very throaty quality to the sound. Sometimes the larynx (i.e., the voice box, popularly called the "Adam's apple") remains relatively stationary, so that the resultant sound seems just a little emphatic, e.g., as in the Ngbaka words d'ànì "sore" and b'àná "will remain." In some instances, however, the larynx is raised, and this compresses the air between the stop closure and the closed glottis, so that when the consonant is released there is a noticeable

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[8] There are also some other "added" characteristics, for example, palatalization, nasalization, and pharyngealization, but these are beyond the scope of this elementary discussion.

[9] Glottalization may also occur with continuants, but it is predominantly associated with stops and affricates.

pop of air coming out of the mouth, but it is much shorter and more abrupt than occurs with aspirated consonants. This contrast may be seen in the Zulu words k'à·k'á "to encircle" and kʰá·kʰà "to be acrid." It is also possible to lower the larynx, and in that case a rarifaction of air occurs in the mouth so that when the stop is released the air first pops in and then the following sound comes out. If we need to distinguish between a glottalized sound in which the air pops out in contrast with one in which it pops in, we may write the former as [k?] and the latter as [kˤ].

In some instances there is a strange kind of two-way movement in the glottis. For example, the larynx may be drawn down, thus forming a partial vacuum in the mouth, but at the same time a little air may be going past the vocal cords, thus setting them in motion. The result is a glottalized, implosive (meaning that the air pops in after the release), voiced stop. Stops of this type occur in some of the Mayan languages of Mexico and Guatemala and in certain Bantu languages.

4.3.1.7 Fricatives

Fricatives are continuant sounds which occur with varying degrees of friction. This friction is produced by obstructing the oral passage in such a way that only a relatively small amount of air can pass. This air is set into a very irregular series of vibrations which are best described as just plain "noise." These fricatives may be made at many different points, and the quality of the sound differs depending upon the precise kind of channel through which the air escapes. For example, the initial sounds of sin and shin both have an s-like quality, but we sometimes describe the first as sharper and the second as flatter. By these terms we are describing in general acoustic terms what is physiologically a difference in the channel through which the air escapes. These differences may be diagramed as on the following page.

We cannot go into a complete description of all the fricative sounds, but the following are the most common:

[ɸ], an f-like sound, but with the air escaping between the two lips.

[β], a v-like sound, but with the air escaping between the two lips.

Roof of Mouth

[s]

Upper Surface of Tongue

Roof of Mouth

[š]

Upper Surface of Tongue
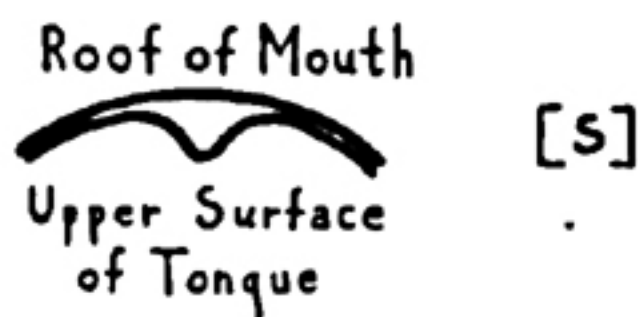
Figure 4. Channels for Production of [s] and [š] (front view).

[f], the initial sound of English <u>fine</u>.

[v], the initial sound of English <u>vine</u>.

[W], the initial sound of English <u>wheat</u>. The capital letter indicates a voiceless sound. The principal difference between [W] and [p] is that the first is made with rounded lips and the second with unrounded lips.

[w], the initial sound of English <u>weep</u>. Compare [b], made with unrounded lips.

[θ], the initial sound of English <u>thin</u>.

[d], the initial sound of English then.

[s], the initial sound of English <u>sin</u>.

[z], the initial sound of English <u>zip</u>.

[š], the initial sound of English <u>shin</u>.

[ž], the final sound of English <u>rouge</u>.

[Y], the initial sound of English <u>huge</u>. This is a regular [y], but without any vibration of the vocal cords.

[y], the initial sound of English <u>yes</u>.

[x], a "scraping" sound made by placing the middle or back part of the tongue against the hard palate or velum. This occurs in German and is written as <u>ch</u>, e.g., <u>ich</u> "I," <u>acht</u> "eight," and <u>Buch</u> "book." If we need to distinguish a front from a back variety, we may place a curve beneath the palatal fricative, e.g., [x̌].

[g], the same basic type of sound as [x], but with the vocal cords vibrating.

[h], the initial sound of English him. This is a glottal fricative.

[ɦ], a glottal fricative like [h], but with the vocal cords vibrating. Compare the Zulu hē·há "to entice" and ɦè·ɦǎ· "to split open someone's head."

Having examined these fricative sounds, it becomes much more evident what the affricates are, namely, combinations of stops plus fricatives made at approximately the same points of articulation.

4.3.1.8   Frictionless Consonants

There are three types of frictionless consonant sounds: nasals, laterals, and centrals. The nasals, e.g., m and n, are common to us. The laterals are l-like sounds, and the centrals are r-like sounds.

4.3.1.8.1   Nasal Consonants

Nasal consonants result from a closure at some point in the oral passage and an opening at the velic (the passage behind the velum leading out through the nose). The various points at which the oral passage is stopped off provide the characteristic distinctions between the various nasals. The principal differences are symbolized as follows:

[m], the first sound of English meet.

[n], the first sound of English neat.

[ñ], the second nasal sound in Spanish mañana "tomorrow." In the production of this nasal the tongue is in the alveopalatal position. It sounds to English ears like the [ny] cluster in canyon, but it is much more of a unit sound than the English sequence [ny].

[ŋ], the final sound in English sing. Compare English sin.

These same nasals also occur without voicing and may be symbolized as [M], [N], [Ñ], and [N�]. The acoustic effect is like an h coming out of the nose followed by a very short voiced nasal.

4.3.1.8.2   Laterals

Laterals are made with the tongue touching the roof of the mouth (either the front or the middle part) and with the air flowing past one or both sides of the tongue. When the sound is voiced we write it with [l] and when voiceless with [ł]. This voiceless [ł] is frequently called the Welsh l and is written in Welsh as ll.

A palatal l, e.g., as occurs in the Italian word figlio "son," may be written as [ļ].

4.3.1.8.3   Centrals

Central frictionless consonants are r-like sounds such as occur in English. These may be voiced (as they occur in English) or voiceless, in which case we may symbolize the sound as [R]. Note that these central frictionless consonants are quite different from the flap r sounds which are discussed in the following section.

4.3.1.9   Vibrants

Vibrants consist of flapped and trilled consonants.

4.3.1.9.1   Flaps

In the production of most flapped consonants the tip of the tongue flips up against or in passing quickly by some point in the front of the mouth, touches it. If the tongue is grooved, the sound resembles r. If the tongue is arched, the resultant sound resembles l. In many Bantu languages of Africa there is just one flap consonant, and sometimes it sounds like l and at other times like r. In such cases it would make no difference how it is written, for the different acoustic effect (i.e., the audibly perceptible differences) never distinguishes words. We may symbolize flaps by placing a wedge over the symbol, e.g., [ř] and [ľ]. Sometimes the tongue is perfectly flat in the production of a flap consonant, and the acoustic effect is like a [d]. Some missionaries have been very concerned because the speakers of a language seem to mix up r, l, and d indiscriminately, while in actuality the difficulty was not with the natives at all, but with the hearing of the missionary. Rather than noting the significant feature of the sound,

namely, the flap, the missionaries were interpreting the various unessential characteristics in terms of the nearest English equivalents.

A labial flap occurs in Ngbaka. In the production of this sound the lower lip is first drawn in behind the upper teeth and upper lip. It is then drawn out rapidly past the upper lip against which it flaps. The sound occurs in the word kàkábǎ "crow."

4.3.1.9.2 Trills

Trills may be regarded as multiple flaps, that is, one flap after another in rapid succession. There are three principal types: bilabial [p̃] and [b̄], (cf. mb̃unga "odor" in Yipounou, a Bantu language of the Gabon), alveolar [R̃] and [r̃] (cf. Spanish pero [pér̃o] "but" and perro [pér̃o] "dog"), and uvular [R̃] and [r̃]. The uvular trill may be practiced by imitating gargling and then cupping the tongue to give the r quality. The uvular trill occurs in many languages, including French, German, and Dutch.

4.3.1.10 A Chart of Consonants

As a summary to our analysis of some of the more common consonants, we may examine a chart of their phonetic types:

Type of Consonant[10]

	Bilabial	Labio-Dental	Inter-Dental	Alveolar	Alveo-Palatal	Palatal	Velar	Uvular	Glottal
Stops									
Simple vl.	p			t		k̯	k		
vd.	b			d		g̯	g		
Aspirated vl.	pʰ			tʰ			kʰ		
vd.	bʰ			dʰ			gʰ		
Affricated									
Centrally									
Released vl.	pf[11]		tθ	ts(c)	tš(č)		kx		h
vd.	bv[11]		dđ	dz(ʐ)	dž(ǰ)		gɣ		ɦ

[10]This chart does not include clicks, double consonants, and glottalized consonants. Glottalization may occur with all types of simple stops, affricates, and continuants, though it occurs less frequently with the last. The abbreviation vl. stands for "voiceless" and vd. for "voiced."

[11]These affricates are actually combinations of bilabial stops plus labiodental fricatives. The strictly bilabial affricates would be [pp] and [bb].

Type of Consonant

	Bilabial	Labio-Dental	Inter-Dental	Alveolar	Alveo-Palatal	Palatal	Velar	Uvular	Glottal
Laterally									
Released vl.				tl(ʎ̯)					
vd.				dl(λ)					
Fricatives									
Central Flat vl.	p	f	θ		Y	X	x		
vd.	b	v	d		y	ʑ	ɤ		
Grooved vl.				s	š				
vd.				z	ž				
Rounded vl.	W								
vd.	w								
Frictionless									
Nasal vl.	M			N	Ñ		N̦		
vd.	m			n	ñ		ŋ		
Lateral vl.				ɬ			ɫ̦		
vd.				l			ɫ		
Central vl.				R					
vd.				r					
Vibrants									
Flapped vl.				R̄					
vd.				ř,I					
Trilled vl.	p̄			R̦				ɤ̄	
vd.	b̄			r̦				ɤ	

This chart does not attempt to be exhaustive. For a more exhaustive and slightly different type of classification see Kenneth L. Pike, <u>Phonemics</u> (Ann Arbor, Michigan: University of Michigan Press, 1947).

The International Phonetic System is considerably more complicated in the types of symbols employed. These symbols have been chosen because they are more simply written and more easily reproduced on the typewriter.

4.3.2   <u>Vowels</u>

Consonants are complicated enough, but vowels are even more so. We can usually detect rather easily what is happening in the production of consonants, for the movements of the organs are more evident and more easily described. In the production of vowels there are so many fine shades of distinction and so much depends upon relative position and shape rather than upon definite stopping, subsequent puffs of air, popping noises, and distinctly audible frictions.

The description of vowels is most generally made on the basis of three types of factors: (1) the front, central, or back

position of the tongue, (2) the high, mid, and low position of the tongue, and (3) the rounded or unrounded position of the lips. For example, in the production of the vowel sound of English beat, the tongue is described as front (i.e., the narrowest stricture through which the air passes is made by the front of the tongue near the alveolar arch), and high (i.e., the tip of the tongue is relatively close to the alveolar arch), and unrounded (i.e., the lips are relatively flat). The following is a diagram of the production of such a vowel:

Wavy line denotes vibration of vocal cords.

Figure 5. Production of [i].

In the vowel sound of English boot we say that the tongue is back, and high, and that the lips are rounded. The production of this vowel would be diagramed as on the following page.

Figure 6. Production of [u].

The following is a chart of the more common vowels:

		Front		Central		Back	
		Un-rounded	Rounded	Un-rounded	Rounded	Un-rounded	Rounded
High	Close	i	ü	ɨ		ï	u
	Open	ɪ					ʊ
Mid	Close	e	ö	ə			o
	Open	ɛ		ʌ			
Low	Close	æ	ɔ̈				ɔ
	Open	a		ɑ			ɒ

The basis for this type of chart may be seen in the following diagram:
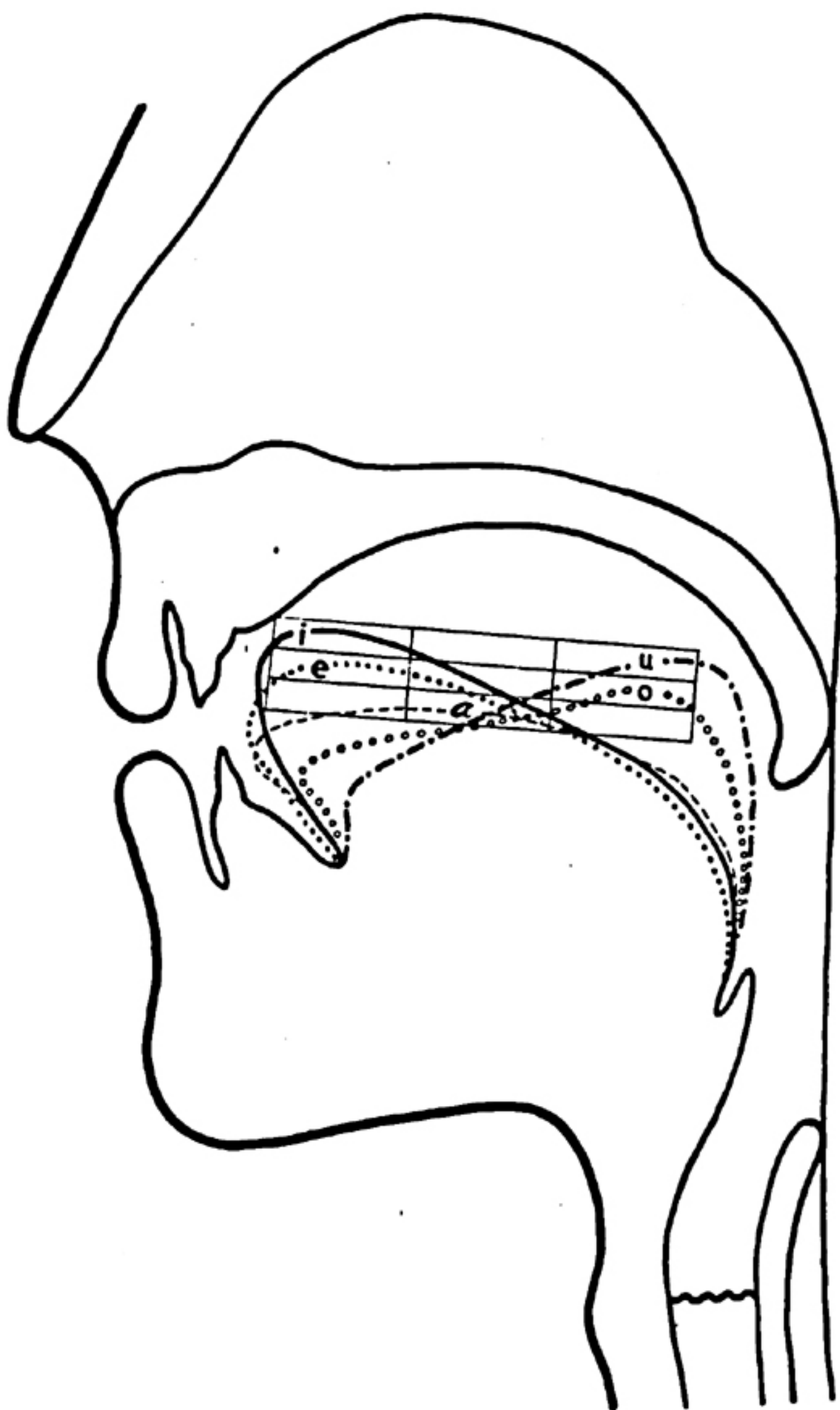

Figure 7. Basis of the Vowel Chart.

We may illustrate the values of the more common symbols by some sounds from English or other relatively familiar languages:

[i], as in English <u>beat</u> [bi^yt].[12]

[ɪ], as in English <u>bit</u> [bɪt].

[ɛ], as in English <u>bet</u> [bɛt].

[æ], as in English <u>bat</u> [bæt].

[ɑ], as in English <u>father</u> [fɑdɹ̩]. (The stroke beneath a consonant indicates that it has the phonetic character of a vowel in the particular syllable.)

[ɔ], as in English <u>bought</u> [bɔt].

[o], as in English <u>boat</u> [bo^wt].

[ʊ], as in English <u>put</u> [pʊt].

[u], as in English <u>boot</u> [bu^wt].

[ʌ], as in English <u>but</u> [bʌt]. In some dialects of English there is a distinction between the mid close central vowel as in (<u>he</u>) <u>just</u> (<u>came</u>) [ǰəst] and an open mid central vowel as in (<u>he is</u>) <u>just</u> [ǰʌst].[13]

[ü], as in German <u>Tür</u> "door." The vowel sound has the tongue position of an [i] and a lip position of [u]. To learn to make this sound, pronounce [i], and then, without changing the position of the tongue, gradually round the lips to the [u] position.

[ö], as in German <u>Söhne</u> "sons." The vowel sound has the tongue position of [e] and a lip position of [o]. To learn to make this sound, pronounce [e], and then, without changing the position of the tongue, gradually round the lips to the [o] position.

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[12]Note that certain vowels of English, namely, [i, e, o, u], are not the same throughout their duration, but the last part of the vowel glides off toward a [y] or a [w]. The result is phonetically [i^y, e^y, o^w, u^w]. The consonants [y] and [w] are written above the line in order to indicate that they are not fully consonantal in sound but that the vowels glide in that direction. Unless otherwise stated, the dialect represented in these transcriptions is Western American.

[13]In the phonetic writing of English elsewhere in this text we shall not attempt to distinguish between the various low open vowels [a, ɑ, ɒ] or between the two central vowels [ə, ʌ] but throughout shall use [a] and [ə] respectively.

With these readily identifiable points in the vowel chart one can distinguish various other types of vowel sounds. Of course, there are many more symbols which could be introduced, but these are the sounds which most commonly occur. If one is having difficulty assigning the phonetic value to a particular sound, and if the quality does not seem to be the same as indicated here, it is always possible to use certain extra symbols to assist in determining fine shades of phonetic distinction. For example, if the vowel appears to be more or less like [ö], but a little higher and slightly more central, one may indicate this fact by two extra wedges pointing in the direction of this positional difference, e.g., [ö᷈]. Such symbols are, of course, never to be used in a practical orthography of a language. They would only be of use to a missionary attempting to indicate minute phonetic distinctions.

4.3.2.1   Nasalized Vowels

One of the most common modifications of vowels is nasalization. We are accustomed to hearing that French has such nasal vowels, but there are many other languages which make distinctions between words on the basis of nasal and nonnasal vowels. For example, in Navaho s̱í "I" and s̱į́ "summer" are distinguished only by the nasal quality of the vowel. (Nasalization may be indicated by a wavy line over the vowel (as in Portuguese) or by a hook beneath the vowel (as in Navaho and in most scientific analyses). In Mazatec there are four unnasalized vowels and four nasalized vowels. Compare the following words: k^{h}i3 "it appears," k^{h}į2 "far," c?e4 "his," c?e̱4 "bad," s̆a1-3 "work," s̆a̱1-3 "liquor," c̆ẖo3 "you (pl.) write," and c̆ẖo̧4-2 "woman."[14]

Nasalized vowels differ from unnasalized ones in the fact that during the production of nasalized vowels the velic is open. This means that part of the air coming from the lungs goes through the nose. Whether a vowel is nasal or not may usually be detected by pinching the nose shut and then listening to the vowel. A nasal vowel has a distinct nasal "twang" to it.

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[14]Kenneth L. Pike and Eunice Victoria Pike, op. cit.

4.3.2.2   <u>Glottalized</u> <u>Vowels</u>

Sometimes vowels are pronounced with simultaneous stricture in the glottis. Frequently, the vowel is interrupted for a moment by a complete but light glottal stop. This may be symbolized as V?V, in which V stands for any vowel. In other instances the second syllabic element is very weak, sounding as though it were an "echo" vowel. We may sumbolize this as V?ᵛ. In still other cases the glottal quality continues almost evenly throughout the length of the vowel. This type of glottalized vowel occurs in Totonac, e.g., <u>paša</u> "he bathes" and <u>pášá</u> "you (sg.) bathe." In Maya, words with glottalized long vowels are written as V?V, e.g., <u>ha?as</u> "banana," <u>no?oč</u> "chin," and <u>ku?uk</u> "squirrel," but in some dialects of Maya that which we write as a glottal stop is not a complete stop, but rather a glottal quality of the vowel. Such glottalized vowels occur in many languages and are very difficult to detect accurately since they may sound quite different in various combinations.

4.3.2.3   <u>Long</u> <u>Vowels</u>

When traditional dictionaries and grammars speak of long vowels in English, they usually have reference to different qualities. For example, they say that a long <u>a</u> sounds like [eʸ] as in <u>fate</u>, and a short <u>a</u> is like [ə] as in <u>sofa</u>. When, however, we speak of long vowels in phonetic terminology, we have reference only to their duration. A short vowel we say consists of one unit of length, called a "mora." A long vowel consists of two moras, and an extra-long vowel may have three moras. Employing different lengths of vowels to distinguish different meanings is very common in languages. For example, in Kissi, a Sudanic language of French Guinea, the difference between "to weave" and "to hit" in certain tense forms is just a matter of length, e.g., <u>à lɔ ndʊ sísà</u> "you (sg.) weave it now" and <u>à lɔ· ndū sísà</u> "you (sg.) hit it now."

In Navaho length of vowels also distinguishes meaning. Compare <u>bîtà?</u> "between them" with <u>bîtà·?</u> "his father," and <u>bîtîn</u> "his ice" with <u>bîtî·n</u> "his tracks," and <u>?àc?ôs</u> "feather, downy" with <u>?àc?ô·s</u> "vein, artery."

In Zulu the ideophones (little particles that symbolize different kinds of actions and states of being) exhibit four

different lengths. Compare bò "of a strike in the small of the back," bè· "of the roaring of a grass-fire," ǰǎ: "of lying down," and wǐ:· "of a big noise." (The marks over the vowels indicate different tones, and the dots after the vowels indicate the number of additional moras, not denoted by the writing of the vowel itself.) Even in the plural of some Zulu nouns there are vowels of three moras, e.g., î·mp'í "army" and î:mp'í "armies," î·nǰá "dog" and î:nǰá "dogs," î·mbvú "sheep" and î:mbvú "sheep (pl.)."

Pairs of words that differ in meaning just on the basis of long or short vowels may be difficult to distinguish at times, but they are far less troublesome than the complex sequences of long and short vowel syllables. Note the following sentence from Zinza, a Bantu language of Tanganyika: ba·hoya izo·ba rya·ba rya·gwa ba·ragira "they chatted until the sun went down and then ate supper." (Tonal distinctions are purposely not written on these Zinza forms.) A syllable with a long vowel takes approximately twice as long to pronounce as a syllable with a short vowel. One should practice reading such a sentence, first slowly, and then more rapidly, preserving the proper length of syllables. The chances are that the average beginner will have difficulty. To help correct one's difficulties, one may construct the following exercise, based upon the same syllabic sequence:

ba·baba aba·ba ba·ba ba·ba ba·bababa

One should tap the time out either with the finger or with the aid of a metronome so that one can get into the swing of the sequences. If a person has trouble with matters of syllabic timing, he should construct a number of phonetic exercises, first using just one consonant and vowel, and then gradually using more and more complicated syllabic patterns. One should mark the length in these exercises of nonsense syllables and then attempt to read them correctly. Later, one may have a friend mark and read some. The student can then try to write down just what has been said. The following are illustrative:

tata· ta·tata tata·ta tatata· ta·ta·tata ta·ta·ta·
di·di di·di·di· dididi· di· didi didi· di·didi·di·
zozo· zo·zo· zozo zozo zo· zo·zo zozo·zo zo·zo· zo
bula· bitu· pu·wa·ri somu·la gu·hipo sisi·sa· tua·

English-speaking persons must be cautioned against substituting stress (i.e., emphatic pronunciation) for length. Long vowels do sound louder to us as English-speaking people, so that we must be sure whether in another language it is actually a long vowel or a stressed vowel which is prominent in the word or phrase. To confuse these two will result in a very bad pronunciation of a foreign language.

4.3.2.4 Voiceless Vowels

We are so accustomed to thinking that vowels are the conspicuously loud part of any syllable that we overlook the fact that vowels can be voiceless. For example, the only differences between some words in Comanche are the voiceless vowels. Compare 'tĭ·pE "mouth" and 'tĭ·pI "stone." (The voiceless vowels are written as caps, and the upright raised bar marks the onset of stress.) Such voiceless vowels are usually final in the word, but not always, e.g., 'surïkï se? "he."

4.3.2.5 Breathy Vowels[15]

Breathy vowels must be distinguished from voiceless vowels. Breathy vowels are voiced, but at the same time there is an accompanying breathy quality. The result is similar to a so-called "stage whisper." In the Abwong dialect of Dinka, a language of the Anglo-Egyptian Sudan, there are breathy counterparts to all the fourteen qualitatively distinct vowels, and sometimes this breathy quality is very difficult to hear without considerable practice and careful attention to distinctions. The words rɪn "meat" and rɪn "run," and wʊt "ostrich" and wʊt "village" differ in the occurrence or non-occurrence of breathy vowels.[16] (The subscript dots indicate breathy quality.)

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[15] There are two other types of vowels which could be distinguished, namely, (1) pharyngealized vowels, resulting from the tensing and narrowing of the pharynx and faucal pillars, and (2) tense and lax vowels, resulting from the general tenseness or laxness of the vocal organs during the production of a sound.

[16] There are also differences in tonal classes, but these need not concern us here.

4.3.3 <u>Prosodic Features</u>

Up to this point we have discussed the various segments which comprise speech, i.e., the sequences of consonants and vowels. There are three prosodic (literally "singing") features which occur together with these consonants and vowels. These are length, tone, and stress. Length may affect both consonants and vowels of a syllable, but since length is generally associated with vowels, this problem has already been discussed above. In the following sections we shall consider only pitch (including tone and intonation) and stress.

4.3.3.1 <u>Tone</u>

Tonal languages are those which make distinctions in the meaning of words by employing pitch contrasts.[17] All languages, however, make some use of pitch contrasts since no language is spoken on a complete monotone. In English, for example, we may make distinctions between declarative and interrogative sentences by differences in the pitch of the final syllable or syllables of the sentence, e.g., <u>John</u> <u>went</u> <u>home.</u> (with falling intonation) vs. <u>John</u> <u>went</u> <u>home?</u> (with rising intonation). These differences in pitch do not make English a tone language, for the tones belong to the entire phrase or sentence, while in tone languages each syllable tends to have its own characteristic tone. For example, in Ngbaka, a Sudanic language of northern Congo, there are three words: <u>lí</u> "face" (with high tone), <u>lī</u> "name" (with mid tone) and <u>lì</u> "water" (with low tone). The only differences between these words are the different tones.

To an extent tonal languages are like music, but there are some very important distinctions. For example, the high, mid, and low tones in the Ngbaka words <u>lí</u>, <u>lī</u>, <u>lì</u> are not always on the same musical pitch. Women's voices are, of course, higher than men's voices, and the voices of individuals, both men and women, differ greatly in their range. What counts in tone languages is not the absolute pitch but the relative pitch. A word with a high tone is relatively higher than surrounding words with mid or low tones. Similarly, a word with a low

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[17]Any student who expects to encounter a tone language should by all means consult Kenneth L. Pike, <u>Tone Languages</u> (Ann Arbor, Michigan: University of Michigan Press, 1948). This is a comprehensive and fully authoritative work.

tone is relatively lower than surrounding words with mid or high tones. Even in tone languages the whole pitch of the sentence (the intonation) may go up or down, and the relative tones on the syllables follow these rises and falls. Furthermore, we cannot predict just how far apart these tone levels will be in any language or in any particular situation. When, for example, a Ngbaka speaker is talking in normal conversational style, the differences between high and mid and between mid and low may not be much more than a single note on the musical scale. However, in the animated speech of argument or discussion the tonal differences may be three or four notes.

There are two principal types of tone languages:[18] contour tone languages and register tone languages. The contour languages are characterized by having pitch differences that for the most part consist of glides, e.g., long, short, gradual, abrupt, rising, falling, rising and falling, falling and rising. Furthermore, the end points of these glides (i.e., the beginnings and the ends) cannot be described as starting and ending at certain relatively fixed points. Register tone languages, however, have tones on certain levels, either two, three, or four,[19] and they may have all different types of glides between these levels. We may liken contour tone languages to a roller coaster, where the glides are long, short, abrupt, falling, rising, etc., but where the top and the bottom points of the glides are not describable as related to certain fixed levels. The register tone languages are like stairsteps, with two, three, or four basic steps, and with glides (usually on long vowels) extending from one step to another.

4.3.3.1.1   Contour Tone Languages

Contour tone languages occur in Asia. These include such languages as Chinese, Burmese, Siamese, and Annamese.

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[18]There are some intermediate types, but these are not considered here.

[19]Languages with more than four distinctive tone levels have not been found. Some African languages have been described with five levels (e.g., Ibo), but these five levels take into consideration the sentence intonation. Doke has described Zulu with nine tones, but these nine tones reflect certain nondistinctive variations. Both Ibo and Zulu appear to have only three basic registers.

Black Thai,[20] spoken in Indo-China, is a typical contour tone language. The following tones are arranged in a line to show their relative positions and the extent and direction of the glides:
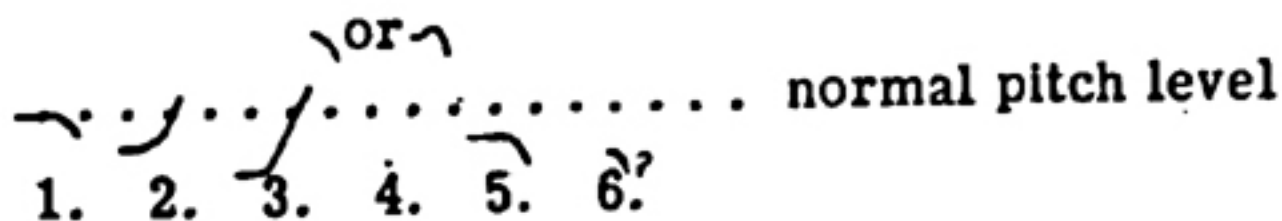
Every syllable in Black Thai occurs with one or another of these tones. Sometimes the same combination of consonant and vowel occurs with all six, e.g., ma^1 "dog," ma^2 "to soak," ma^3 "profit," ma^4 "to come," ma^5 the name of a particular river, ma^6 "horse." Tone 6 ends in a giottal stop, and in some dialects tone 4 may occur with glottalization of the vowel and with a slight rise before the fall.

In Burmese there are only four basic tones: (1) low, level, and long; (2) high, long, and falling toward the end; (3) high, short, and falling, with a slow glottal closure; and (4) high, extremely short, with a sharp glottal closure.[21]

Mandarin Chinese also has four basic tones, with a fifth neutral tone, but the contours of Mandarin Chinese are different from Burmese. Certain other dialects of Chinese, e.g., Cantonese, have several more tones.

In learning a language with contour tones, one must be sure to note the tone on every syllable. Furthermore, some of the tones may change when words come together in various combinations. For example, the Mandarin Chinese word bu "not" occurs with the fourth tone when it precedes words with first, second, or third tone, but when it precedes a word which has a fourth tone, then the word bu has a second tone.[22] Tone languages constantly exhibit these arbitrary kinds of changes.

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[20] These data are supplied by M. Jean Funé, a missionary translator in Black Thai.

[21] William Cornyn, Outline of Burmese Grammar (Baltimore: Linguistic Society of America, 1944), p. 9. Cornyn also distinguishes a neutral tone, which may constitute a kind of fifth tone.

[22] C. F. Hockett and Cheoying Fang, Spoken Chinese (New York: Henry Holt and Co., 1945), p. 8.

4.3.3.1.2 Register Tone Languages

All the tonal languages of Africa (with the possible exception of Bushman and Hottentot) and the Western Hemisphere appear to be register tone languages. Such languages are much more numerous than some people have thought, for fully ninety percent of all the languages of Africa south of the Sahara are tonal languages. There are dozens of tonal languages in the Western Hemisphere, including for example, Apache, Navaho, Chipewyan, Yellow-Knife, Mixteco, Mazatec, Cuicatec, Zapotec, Chatino, and Chinantec.

A typical register-tone language is Mbanza, a Sudanic language of northern Congo. It possesses three registers, and the following words illustrate these differences: dùdù "mortar," dūdū "spear," and dúdú "hole (for animals to fall into)." When a person hears these words for the first time, he will not find that the two syllables of dùdù "mortar" are pronounced on exactly the same pitch when the word is spoken in isolation or final to the phrase. It so happens in Mbanza (as well as in most register tone languages) that in isolation (a type of phrase-final position) the tones fall off, thus marking the end of an utterance. Actually the second syllable of dùdù "mortar" is noticeably lower than the first, but this is true of all phrase-final syllables. Similarly, in dūdū "spear" the second syllable is lower than the first, but it is not as low as a low tone would be in that position. Also, the second syllable of dúdú "hole" is lower than the first, but it is not as low as a mid-tone syllable would be. This falling off of the second syllable occurs with all final tones of all words, and hence it is not distinctive in making differences in meaning.

Ngbaka, a Sudanic language of northern Congo, is also a register tone language.[23] All the verbs have four principal forms. Verbs with low tones may indicate present time, e.g., sà "is calling," gbɔtɔ "is pulling," with mid tones past time, e.g., sā "called," gbōtō "pulled," with high tones imperative, e.g., sá "call!" gbótó "pull!" and with a low tone followed by a high tone future time, e.g., sǎ· "will call" and gbɔtó "will pull." Notice that verbs consisting of a single syllable have a rising glide on a long vowel, but verbs of two syllables have a low tone on the first syllable and a high tone on the second.

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[23]Note the illustrative data cited above in section 4.3.3.1.

Most Bantu languages have two-register systems.[24]   The following examples from Chiluba (also called Luba-Lulua) are typical contrasts between words: dî·ná "name" and dí·nà "hole"; dyû·lú "nose" and dyú·lú "heaven"; mpátà "a five franc note," mpátá "doubt," and mpàtá "plains"; mâ·ñî "a lot of something," má·ñî "palm oil," and mâ·ñí "leaves." There are not only these types of minimally different pairs,[25] but a difference in tone goes all the way through the verb system and in most cases is the only means of distinguishing the second person singular from the third person singular, e.g.,

1. údí úsùmá "you (sg.) are biting"[26]
2. ùdí ùsùmá "he is biting"
3. wâ·kúsùmá "you (sg.) bit (past indefinite)"
4. wà·kúsùmá "he bit (past indefinite)"
5. účìdí úsùmá "you (sg.) are now biting"
6. ùčìdí ùsùmá "he is now biting"
7. wá·sùmá "you (sg.) kept biting"
8. wà·sùmá "he kept biting"

Register-tone languages may have two, three, or four registers.[27] Two-register tone languages include Navaho, most central Bantu languages, and such Sudanic languages as

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[24]Some in South Africa, e.g., Zulu, have three-register systems.

[25]Words that differ only in one feature.

[26]The tone marks which we write here do not distinguish the absolute phonetic pitches, but the distinctive differences of tone. A final high tone following a low tone does not have as high a pitch as a preceding high tone. Phonetically we could diagram form (1) as ‾ ‾ ‾ ̱ ‾ . Note that the three highs in a row tend to fall off in the phrase. If, however, instead of a final high we had a final low, the phonetic relationships between the forms would be approximately as follows: ‾ ‾ ‾ ̱ ̱ ̱ A final low would be much lower than a final high. The tone ‾ marks which we write only indicate the distinctive differences, not the ones that are conditioned by where they occur in the phrase. See the discussion below on phonemics, section 4.6.2.

[27]The following lists are by no means complete, and some of the languages included in the general language classifications have not been fully investigated. Accordingly, there may prove to be some inaccuracies.

Maninka-Bambara (French West Africa), Loma (Liberia), and Zande (French Equatorial Africa and the Belgian Congo). Three-register languages include certain Mexican Indian languages, e.g., Mixteco, Cuicatec, and Chinantec; most Sudanic languages; the Nilotic languages; certain Nilo-Hamitic languages, e.g., Masai and Kipsigis, spoken in Kenya; and some Bantu languages of South Africa, e.g., Zulu. Four-register tone languages include Mazatec, spoken in southern Mexico, and Gweabo (Jabo), spoken in Liberia.[28]

Two-register languages have four important tone possibilities: high, low, low to high, and high to low. In extra-long vowels, one may find low-high-low and high-low-high. But in general, we are confronted with only four types of tonal distinctions on individual syllables. In three-register systems there are nine possibilities. These may be diagramed as follows:

$$
\begin{array}{c}
C\acute{V} \\
C\bar{V} \\
C\grave{V}
\end{array}
$$

In four-register systems there are sixteen possibilities:

$$
\begin{array}{c}
C\acute{V} \\
C\dot{V} \\
C\bar{V} \\
C\grave{V}
\end{array}
$$

Fortunately, not all such level tones and glides occur on any one syllable, but in Mazatec there are five different words, distinguished only by tonal differences: te[1] "he will dance," te[2] "he dances," te[2-3] "I dance," te[4-3] "wide," and te[3] "ten." Of the sixteen theoretical possibilities in Mazatec for level tones and one-direction glides, only twelve actually occur. The nonoccurring glides are 1-2, 2-1, 3-1, and 4-1. Of course, there is no special reason why these glides are missing. It just happens that way. However, Mazatec makes up for this

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[28]See E. Sapir, "Notes on the Gweabo (Jabo) Language of Liberia," Language, Vol. 7, No. 1 (1931), pp. 30-41.

slight simplification by having two two-directional glides on single syllables. These are 4-2-4, e.g., $\underline{vha^3ntiai}$4-2-4 "we (exclusive) travel," and 4-2-3, e.g., $\underline{va^{4-3}ntia}$4-2-3 "I travel."[29]

Missionaries must give-the greatest of care to mastering tonal languages, for mistakes can be made so easily. For example, in one language the only difference between "chief" or "boss" and "devil" is the matter of a glide. $\underline{N\bar{a}\bar{\imath}}$ with a level tone means "boss" and $\underline{n\grave{a}\bar{\imath}}$ with a rising glide means "devil." The missionaries told the natives about the director of the mission, using what they thought was the term for "boss," but they discovered that they had been talking about the director as "their devil." Of course, such statements from the missionaries' own lips only added confirmation to what the local priests had already said, namely, that the missionaries were out there under the auspices of Satan himself.

Sometimes missionaries do not get tangled up in such obvious errors, but they so fail to get the proper tones that the people miss practically everything that is said. One group of missionaries working in a three-register tone language had so bungled the task of reducing a language to writing and of learning to speak it intelligibly that many of the boys attending their school for three years could not readily read a simple sentence of new material. These missionaries had never learned how to distinguish between "he" and "you (pl.)," forms that differed only in the matter of tone.

There are some Bantu languages of Africa which have lost their distinctive tonal contrasts. One of these is Swahili, which undoubtedly used to make differences between words on the basis of tone, but now there is no tonal distinction. The only prosodic feature is a stress on the next to the last syllable of each word. Because of this observed fact in Swahili many missionaries have assumed that their languages also had this same type of stress, for there is a tendency in many Bantu languages to lengthen the next to the last syllable of each phrase. One must not, however, be deceived by this feature of length, and assume that it is automatically the kind of stress which we have in English.

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[29]See Kenneth L. Pike and Eunice Victoria Pike, op. cit., p. 89.

In Zanaki, a Bantu language spoken on the east shores of Lake Victoria in Tanganyika, there is an amazing development of tone. The tonal patterns have been preserved somewhat, but they no longer distinguish the meanings of words. All words of the same length have identically the same tonal patterns. The following forms illustrate the patterns:

2-syllable words: CV́CV́ [30]
3-syllable words: CV̀CV́CV́
4-syllable words: CV̀CV̀CV́CV́
5-syllable words: CV̀CV́CV̀CV́CV́
6-syllable words: CV̀CV́CV́CV̀CV́CV́
7-syllable words: CV̀CV́CV́CV̀CV̀CV́CV́
8-syllable words: CV̀CV́CV́CV̀CV́CV̀CV́CV́
9-syllable words: CV̀CV́CV́CV̀CV́CV́CV̀CV́CV́

Notice that a 6-syllable word is like two 3-syllable words, that a 7-syllable word is like a 3-syllable and a 4-syllable word, that an 8-syllable word is like a 3-syllable and a 5-syllable word, and that a 9-syllable word is like three 3-syllable words.

In learning a tone language one must be sure to learn the tones of words just as one would any consonant or vowel. It is quite impossible, however, to assume that the tones will always remain the same, for in the same way as consonants and vowels change when forms come together, so tones also change. This may appear very confusing, but we will consider such problems in the next chapter. (See section 5.6.)

4.3.3.2   <u>Intonation</u>

No language is spoken on a monotone. That means that there are always some "modulations" of the voice, and in all languages such modifications of the pitch of the phrase or sentence become more or less conventionalized, that is to say, they become standardized and acquire certain meanings. But we must never assume that the intonation of one language is like that of another. That was, however, precisely the mistake

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[30] C stands for any consonant or consonant cluster and V for any vowel. A combination CV therefore stands in this case for a syllable. The final high tone always becomes low when the word ends a phrase.

which one missionary was making during her teaching of public speaking to some Bantu young women in Congo. She was insisting that all declarative sentences should fall at the end and that all questions should rise. The trouble was that the native language simply did not work that way. It was a tonal language, and whether the individual tones were high or low at the end depended upon the particular words. Almost all sentences, whether declarative or interrogative, tended to start high and gradually drift down. Of course, the missionary never succeeded in teaching her students to "intone" their sentences like English though she tried desperately hard to do so. When she finally realized that it was quite unnecessary—in fact, entirely wrong—to attempt to do such a thing, she was relieved; but the tragedy of her prolonged, frustrated attempts should have been avoided and could have been if she had had just a little introduction to some of the basic principles of language study.

Few of us are aware of how complicated the intonational patterns of English actually are, and one of the best ways of conditioning ourselves for the study of other intonational systems is to become somewhat familiar with the features of our own. For example, in English there are four basic intonational registers,[31] with many subtle differences depending upon the types of final glides. Compare some of the following more common patterns:

1. $\overset{3-}{\underline{\text{I'm}}} \underline{\text{going to}} \overset{°2-4}{\underline{\text{go}}}.$ (the normal, declarative pattern)[32]

2. $\overset{3-}{\underline{\text{I'm}}} \underline{\text{going to}} \overset{°1-4}{\underline{\text{go}}}.$ (emphatic declaration concerning the action)

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[31]See Kenneth L. Pike, The Intonation of American English (Ann Arbor: University of Michigan Press, 1945).

[32]The superscript numerals mark the four intonation levels, with 1 marking the highest and 4 the lowest. The hyphens show the relationship of register-points to the contours. The degree sign [°] marks the onset of the sentence or phrase stress.

3. ^o1-   ^o-4
   I'm going to go.   (emphatic declaration concerning the subject)[33]

4. ^o2- ^o2-   ^o-2
   I'm going to go.   (pompous, oratorical style)

5. 3-   ^o3-1
   I'm going to go?   (normal, mild question)

6. 2-   ^o2-1
   I'm going to go?   (question implying "Is that what you mean?")

7. 1-   ^o1-4
   I'm going to go.   (petulant declaration)

8. 3-   ^o3-2
   I'm going to go...   (implying that something else is to follow)

9. 3- ^o3-1
   Am I going?   (normal question)

10. 2- ^o2-4
    Am I going?   (insistent question)

11. 3- ^o4-3
    Am I going?   (sarcastic question)

Tonal languages do not exhibit so many types of intonational contrasts as nontonal languages, but even tonal languages can be intonationally very complicated. For example, in many of the Sudanic languages which have three registers there is quite an abrupt falling off of phrases in normal discourse. For example, in Ngbaka the final mid tone in à tɛ̄ wà fɔ̄ē "he is weeding the garden" is actually lower phonetically than the initial low tone, for the entire sentence descends in pitch. e.g.,

Mastering the intonation of a language takes infinite patience and determination to mimic constantly and consciously. Until we have spoken a phrase with its proper intonation, we have not spoken it correctly. The intonation of a language is often one of the last features to be mastered; but in many ways it is the most important, for it is the one great distinguishing mark of language proficiency. If need be, it is better to

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[33] The glide from 1- to -4 is spread over the entire sentence. It could also occur on a single word, e.g., ^o1-4 Yes!. Sentence 3 differs from 2 primarily in the placement of the sentence stress.

sacrifice a few correct grammatical forms in order to acquire a naturalness of utterance. Proper intonation is not just a linguistic elegance. It is a basic part of making oneself understood. How often we have had the experience of hearing some foreigner speak English with perfectly intelligible consonants and vowels and with standard grammatical forms; and yet we have had the greatest of difficulty in understanding because the intonational patterns were entirely unnatural and strange to us. The very same thing is true of our learning to speak a foreign language. Proper intonation contributes a high percentage to the total intelligibility of speech.

4.3.3.3 Stress

We as English-speaking people rarely have difficulty with languages which exhibit distinctive stresses, for such stresses occur in English. For example, compare the following nouns and verbs:

Nouns	Verbs
rébel	rebél
ímpact	impáct
íncrease	incréase
ínsult	insúlt
ínsert	insért
cóntest	contést
prótest	protést
cónvert	convért
próject	projéct

Of course, the difference in the stressed syllable is not the only distinguishing feature of these words. For example, there is a different vowel in the first syllable of the pair cóntest (n.) [kántɛst] vs. contést (v.) [kəntɛ́st]. However, the most obvious difference in these words is one of stress. Though we do not mark the stress when we write English, yet we must learn the syllable which carries the "accent," or the word is sometimes completely unintelligible. This arbitrariness about the placement of the stress in English proves very difficult to foreign speakers.

In Spanish the stress usually occurs on the next to the last syllable, called the penultimate syllable. When the stress

is on some other syllable, it is usually marked. Compare carta "letter," and hablo "I speak," with papá "papa," interés "interest," ejército "army," and telégrafo "telegraph." This system of noting the stress in Spanish makes that feature of the language much easier to learn. The marking of stress also helps to distinguish words. For example, hablo (stressed on the first syllable) means "I speak" and habló (stressed on the second syllable) means "he spoke." Similarly, papá means "papa" and papa (stressed on the first syllable) means "potato" or "Pope."

In some languages definite stresses exist, but they never distinguish between words. Rather, the stresses serve to mark off words. For example, in Kekchi, a Mayan language of Guatemala, the stress falls on the last syllable of every word; and in Miskito, a language of Nicaragua and Honduras, it falls on the first. These features help in determining the length of the word units.

In the Isthmus dialect of Zapotec, a language of southern Mexico, there are high and low tones, with rising and falling glides. But in addition to these distinctive tones there are stresses, though the stresses never distinguish between words. Their position is determined by the phonetic nature of the word. For example, if there is a sequence in the word composed of V?V (vowels with a glottal stop between), the first of these vowels has the stress. If there is no such V?V combination, any long nonnasal vowel gets the stress; but if there are two such vowels, the first is stressed. If neither of these features (i.e., V?V or V·) occurs in the word, the first syllable is stressed. There are certain other minor exceptions involving glottal stops. But with all these complex conditions which determine where the stress occurs, it is no wonder that learning to pronounce accurately a word having distinctive tones plus these nondistinctive stresses is no small task.

At times it is very difficult to know whether a particular prosodic feature is really tone or stress. In Pame-Chichimec, a language of Mexico, both tone and stress seem to be present as a kind of combined element, and this tone-stress distinctiveness must be marked on every syllable which has the higher tone and greater loudness. Compare such phonetically similar words as ndo?wíugn "he gave" and ndo?wíúgn "he swept."

In some languages there is no distinctive or fixed stress. For example, in the Barrow dialect of Eskimo the word tautugakṣigigiga "I ought to see him" would usually be stressed on the penultimate (next to the last syllable) or the antepenultimate (second from the last syllable). It would rarely, if ever, be stressed on the last syllable. But the stress is not necessarily restricted to the penultimate or antepenultimate syllable, for other syllables can also be stressed. Languages with such nondistinctive, movable stresses are not common.

4.4   Types of Phonetic Problems

We as English-speaking people have certain types of phonetic problems because of our particular language habits. It is only natural for us to carry over to another language those sounds which seem to approximate the foreign sounds, but in this we must be very careful. We are confronted with three types of phonetic problems: (1) sounds which are very similar to English and yet different, (2) sounds which have some resemblance to English sounds but which reflect an entirely different phonological system, and (3) sounds which are utterly different from those in English.

4.4.1   Similar Sounds

Some of the sounds of two different languages may be similar, but they are never completely identical. For example, such Spanish words as café "coffee," fácil "easy," médico "physician," and pluma "pen"[34] seem to some people to be very similar to English and to have almost identically the same vowel sounds as our corresponding words cafe, facil, medical, and plume. But this is by no means true. Our pronunciation of the word cafe is phonetically more or less like [kæféᵞ]. The Spanish pronunciation may be symbolized as [kafé]. The Spanish vowels are level, clear vowels, and they lack the off glides toward [ʸ] and [ʷ]. The English pronunciation of plume usually has a definite postvocalic rounding of the lips and may be symbolized phonetically as [plúʷm], while Spanish pluma [plúma] lacks the [ʷ] offglide.

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[34]Compare English plume, meaning "feather."

As English speakers we tend to substitute lax, lower vowels for unstressed tense vowels[35] in French. For example, in pronouncing the French word dicter [dikté][36] we substitute our [ɪ], as in bit [bɪt], for the French [i]. Since the phrase stress in French comes on the last syllable of [dikté] (i.e., when pronounced in isolation), we tend to hear the English lax vowel [ɪ] rather than the unstressed tense vowel of French. We also make the mistake of pronouncing the French final [e], with a [ʸ] off-glide. Our pronunciation of the French dicter [dikté] is thus approximately [dɪktéʸ]. This mispronunciation is encouraged by the fact that we have a similar word dictate. But even where there is no such cognate word, we tend to substitute our lax vowels for French unstressed tense vowels. When the French vowel [i] is stressed, e.g., in vous avez dit "you have said" [vuzavedí],[37] then English-speaking people frequently substitute the high front vowel English equivalent with the [ʸ] off-glide, the type of vowel which occurs in beat [biʸt]. Such details of pronunciation may seem rather small and insignificant, but they are tell-tale features of foreigners' speech and often hinder our being intelligible.

In English we tend to slight the voicing of the voiced stops b, d, and g. For example, in our pronunciation of robe we pronounce a longer vowel than in rope, but the final b is sometimes entirely voiceless. We can test this voicelessness of b by pronouncing the word while having our fingers in our ears. It will then become obvious that the voicing stops sometimes in the middle of the lip closure and sometimes even before the lip closure. The voicing practically never continues throughout the lip closure. In the French pronunciation of robe [r̄ɔb][38] the [b] is voiced throughout. To our English ears this word sounds as though a final, short, mid central vowel [ə] were added, e.g., [r̄ɔbə]. In some dialects there

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[35]Tense vowels are made with relatively tensed vocal organs, and lax vowels are made with relatively relaxed vocal organs.

[36]The acute accent indicates the placement of the phrase stress. French has no distinctive stress for individual words.

[37]Such a phrase is pronounced as though it were a single word.

[38]Notice that in French there is a different vowel, and the initial consonant is a velar trill or fricative.

is such a final vowel, but in others it is just the full voicing of the [b] which gives us this impression. If we pronounce a partially or completely unvoiced final stop, the impression to French ears is often as though we were pronouncing [p].

One of the most obvious difficulties which we as English speakers have with French and Spanish is our tendency to aspirate all the initial voiceless stops. In English such words as peak, take, and kill have strong puffs of air after them.[39] In French and Spanish such initial stops do not have aspirations. The English word pan is pronounced as $[p^h æn]$, but the Spanish word pan "bread" is pronounced as $[pan]$.[40] To our ears this initial unaspirated stop sounds almost like [b]. To speak either French or Spanish decently we must eliminate the aspirations after voiceless stops, or we shall be accused of "puffing" at people all the time. In fact, when Latin Americans try to mimic Americans one of the usual devices is putting in frequent strong puffs of air to imitate the sounds which we so frequently make in speaking Spanish.

Some languages have stops which are sometimes voiced and other times voiceless. For example, in Kipsigis, a Nilo-Hamitic language of Kenya, there are no contrasts between p and b, t and d, č and ǰ, and k and g. Sometimes, for example, one seems to hear [k] and at other times [g]. In word-initial and word-final positions and juxtaposed to a voiceless continuant, the voiceless varieties of stops tend to occur. In other positions the voiced consonants occur, but never does the contrast between voiced and voiceless consonants make a difference in meaning. We must therefore make certain that in such a language we do not introduce our English aspirated

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[39]To test this, place a small piece of paper in front of the mouth and watch it move as the result of the aspiration, or pronounce the words against the back of the hand and feel the air as it comes out. The aspiration will be very easily noted, particularly if one compares the words speak, steak, and skill, which have no such aspirations following the stops.

[40]In some dialects it is pronounced as [paŋ] when phrase-final.

consonants and thus attempt to introduce differences which
are completely nondistinctive in the native language.[41]

Another common habit which we have as English speakers
is the reduction of unstressed vowels to [ə]. For example,
our pronunciation of Spanish <u>semana</u> "week" is often approxi-
mately [səmánə]. The first and last vowels are reduced to
[ə] because they are unaccented. The result is that the word
is practically unintelligible. In Spanish it is extremely im-
portant that each vowel be pronounced with its full qualitative
value. There is no "neutralizing" of vowels in Spanish as there
is in English.

One of our great difficulties as English speakers is in the
pronunciation of nasal vowels. The trouble is that we intro-
duce a nasal consonant when we should have a pure nasal vow-
el, and then we nasalize vowels when they should not be nasal-
ized. For example, in pronouncing French <u>enchanté</u> [ǫ̃šǫ̃te]
"delighted,"[42] we tend to say [ǫⁿšǫ̃ⁿteʸ]. We insert a little
[ⁿ] following the nasalized vowel. We also add the [ʸ] off-
glide. On the other hand, practically all vowels in English
which are contiguous to nasal consonants tend to be nasalized.
Such nasalization is stronger in some dialects than in others,
but it can be readily noticed if one pinches his nose while pro-
nouncing the word <u>enemy</u>. We do not have three nonnasal vow-
els and two nasal consonants. Rather, we partially nasalize
all of the vowels. On the other hand, French <u>ennemi</u> [ɛnmi]
"enemy" has two nonnasalized vowels. Our tendency to pro-
nounce this French word as [ɛ̃nmɨ] gives the impression to

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[41] In the orthographies of Nandi and Kipsigis (closely re-
lated languages) missionaries have tried to distinguish voiced
and voiceless consonants, with the result that the spelling is
very inconsistent and the native speakers are completely un-
able to follow any system for distinguishing <u>p</u> and <u>b</u>, <u>t</u> and <u>d</u>,
<u>ch</u> and <u>j</u>, and <u>k</u> and <u>g</u>· Accordingly, such words as <u>tukat</u> "store"
(borrowed from Swahili <u>duka</u>) is written in every way, e.g.,
<u>dugad</u>, <u>dugat</u>, <u>dukat</u>, <u>tukat</u>, <u>tugad</u>, <u>tukad</u>, <u>dukad</u>, and <u>tugat</u>.
Where there is no phonemic basis of distinction (i.e., mean-
ingful contrast) in the native language, it is practically im-
possible to teach a consistent spelling.

[42] The phrase stress is not marked, but would, of course,
occur on the last vowel.

French persons that English people speak through their noses, while that is precisely what we conclude about the French. The trouble is that what is distinctive in French, the difference between nasal and nonnasal vowels, is not distinctive in English. As a result nasalized vowels sound like vowel-plus-n to us, and we pass over our own nasalized vowels, being quite unaware of them. These are the very types of problems which will concern us in the next section.

4.4.2 Similar Sounds but with Different Values in Other Languages

As we have noted above (section 3.2.2.1) both aspirated and unaspirated consonants occur in English, but we never distinguish words by means of such differences. In Yipounou, a Bantu language of the Gabon, the occurrence or nonoccurrence of the aspiration does make a difference in words. Compare the following forms: pu·ŋga[43] "wind" and pʰuŋga "fibre"; tatila "to cry out" and tʰatila "to cry out to me"; kala "a long time ago" and kʰala "crab" (cited in section 4.3.1.4). We have already pointed out other contrasts in Zulu and Mazatec (see section 4.3.1.4). The difficulty which we have as English speakers is in hearing these differences accurately. Frequently missionaries have spoken a language for years and never noticed such differences as kala "a long time ago" and kʰala "crab." We tend to hear only those distinctions which we make in our own language. If the distinctions are noted, they are sometimes confused. For example, kala would sound almost like gala, but -gala is the stem of the verb "to deny." In English we have three different sounds: [g], as in gill, [k], as in skill, and [kʰ] as in kill. However, the last two never distinguish between words, for their occurrence is "conditioned" by the surrounding sounds, in this case by the preceding [s]. In Yipounou, however, there are three types of sounds and all are distinctive: -gala "to deny," kala "a long time ago," and kʰala "crab."

In some instances English makes more distinctions than other languages. For example, in Spanish there is no

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[43]Tonal differences are not written. The first pair are not minimal, since there is also a difference in length of vowel.

distinction between [s] and [z]. The word mismo "same,
self" may be pronounced [mísmo] or [mízmo]. The word
means exactly the same thing whether it is pronounced with
an [s] or a [z]. This change from [s] to [z] may also occur
when words are pronounced as a single unit. For example,
eres bueno "you are good" may be pronounced [érezbuéno].[44]

One of our linguistic "besetting sins" is to substitute
stress for tone. The stressed syllables of English are ordi-
narily on a higher pitch than the unstressed syllables. Hence,
when we hear syllables which are higher than other syllables,
we immediately interpret this distinction as one of stress.
For example, in listening to Mongbandi, a Sudanic language of
northern Congo, we might assume that gbiŋga "to translate"
is accented on the first syllable when the subject is mbî "I,"
but accented on the second syllable when the subject is ?è
"we." A native speaker might understand us, but he would
undoubtedly be confused, for Mongbandi does not have such
stressed syllables. The distinctions are ones of tone, and they
are quite complicated. The following illustrate some of the
forms:

1. mbî gbíŋgà "I translated"
2. ?è gbíŋgá "we translated"
3. mbī gbìŋgā "I am translating"
4. ?ē gbìŋgā "we are translating"
5. mbí gbīŋgā "I will translate"
6. ?é gbīŋgā "we will translate"
7. mbí gbíŋgà "I would translate"
8. ?é gbíŋgá "we would translate"

The pronouns change their tones to indicate different
tenses; past (1-2), present (3-4), and future (5-8). The verbs
change their tones to agree with singular and plural subjects
and to indicate differences in tense and aspect: completive
(1-2, 7-8), continuative (3-4), and future (5-6). If we combine
a future tense form of the pronouns (7-8) with the completive
form of the verb (1-2, 7-8), we obtain a potential form of the
verb, translated "would..." To try to explain all these differ-
ences as merely stressed and unstressed syllables would be
hopeless. We must not confuse our stress distinctions, which

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[44]No attempt has been made to distinguish between differ-
ent qualities of vowels when stressed and unstressed.

include some tonal differences, with tonal languages, in which the distinguishing features are differences in pitch, and stress may be quite irrelevant. That is to say, just as in English pitch is irrelevant in distinguishing words (though pitch does occur in the intonation), so in Mongbandi (and similar tonal languages) stress is irrelevant in distinguishing words. The two languages possess a degree of phonetic overlapping, in that stress syllables in English tend to be higher in pitch and high-tone syllables in Mongbandi tend to be uttered with slightly greater stress (at least they are more perceptible to our ears). But we must not mistake the overlapping of pitch and stress features for identity, since the two languages have utterly different basic systems.

When a language possesses the same types of sounds but makes more distinctions than we do in English, we are usually in for trouble unless we give very close attention to details. For example, in Shilluk, a Nilotic language spoken in the Anglo-Egyptian Sudan, there are five different nasal continuants. The following are the combinative forms of nouns before the adjective ñàn "new": kwā̱m[45] "chair," yɪ́ṇ "ear," pyɛ́n "bed," wáñ "house," and pū̱ŋ "jar." The nasals are successively bilabial, interdental, alveolar, alveopalatal, and velar. We may detect the alveopalatal sound, for it strikes us as being like English [ny], but in this position it is very difficult to hear. The interdental nasal continuant usually escapes the notice of English-speaking persons at first. What we "hear" is just a simple alveolar n.

Sometimes the "extra" distinctions (i.e., ones which English does not have) so affect the surrounding sounds that they are more easily detected. For example, in Quechua there are two types of back stops: palatal and velar. English possesses both palatal and velar stops, in fact, several different back stops, extending from the palatal to the velar position. The [k] of beak [biʸk], following a front vowel, is palatal; and the [k] of balk [bɔk], following a back vowel, is velar. Compare the k's in the following words: beak, bake, back, Bach, balk. There are several different points of articulation depending upon the preceding vowel. In Bolivian Quechua there are two principal positions: palatal and velar. Minimal

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[45]Vowels with dots are "breathy."

contrasts may be illustrated by the words <u>kaka</u> "dirty" and <u>qaqa</u> "cliff."[46] The velar stops, however, considerably modify the contiguous vowels, even as in English the contiguous vowels modify the back consonants. In Quechua the high vowel sounds [i] and [u] become [e] and [o] respectively when they are juxtaposed to back consonants. Compare, for example, the following sets of forms: [k'usu] "wrinkle" and [q'osu] "animal which is finicky about its food," [kʰuya] "to have pity" and [qʰoya] "(a) mine," [kilʸa] "moon" and [qʰelʸa] "lazy."[47] In writing Quechua it would be perfectly proper to employ only three vowels <u>i</u>, <u>a</u>, <u>u</u>, for the vowel sounds <u>e</u> and <u>o</u> are always conditioned in occurrence by the presence of a contiguous velar consonant. However, at present Spanish words are sometimes borrowed with their vowel values intact. That means that Quechua is adding to its vowel inventory the mid vowels <u>e</u> and <u>o</u> of Spanish, and thus it is acquiring a five-vowel system. With some missionaries, however, there is a tendency to pronounce a word such as [qʰelʸa] "lazy" as [kʰela]. The velar consonant, which is "foreign" to English usage, is changed to the more familiar [k], but the [e] is retained since that corresponds to an English phoneme. Such a pronunciation makes the form [kʰela] different from [kilʸa] "moon," but it misses the mark in reproducing the Quechua sounds. The persistent tendencies for us to carry over our English habits of speech must be constantly combatted.

One error which we as English-speaking people frequently make and which causes us no end of trouble in being understood, is the tendency to use our intonational patterns when speaking a tone language. When we are somewhat in doubt about a word, we tend to raise the final intonation, and that just makes matters worse. For example, in Habbe, a Sudanic language of French West Africa, if we question the word for "mud" (which is <u>pɔnū</u>), the chances are that we will say something which will be interpreted as <u>pɔnú</u>, which means "pants." We unconsciously superimpose our intonational pattern for interrogation and end up by changing the word completely. We

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[46]Stops occur in three series: unaspirated, aspirated, and glottalized, e.g., <u>tanta</u> "equal," <u>tʰanta</u> "rag," and <u>t'anta</u> "bread."
[47]L. M. Shedd, <u>Quechua Grammar</u> (New York: Bolivian Indian Mission, 1931).

can also make mistakes in languages which have entirely different intonational patterns. For example, in Futa-Fula, a language of French Guinea, the expression <u>gertogal</u> <u>mo?d'yàl</u> with falling intonation (marked by grave accent on the last syllable) means "a good chicken." The same expression with a high tone on the last syllable means "not a good chicken," i.e., "a bad chicken." The only distinction between many positive and negative expressions is just a difference in the pitch of the final syllable.

We have syllabic nasals in English, even as many Bantu languages have, but our syllabic nasals are never initial to a word or phrase, while most Bantu syllabic nasals are. We have no difficulty in pronouncing a syllabic nasal [m̩] in <u>trip 'em</u> [trɩpm̩], and [n] in <u>button</u> [bə́tn̩][48] However, in pronouncing such Chichewa words as <u>mbó·mba</u> "judge" and <u>m̩ná·si</u> "friend, neighbor,"[49] English-speaking people tend to say [əmbó·mba, ʊmná·si] or [ɩmbó·mba, ɩmná·si]. What we can pronounce in a noninitial syllable seems very difficult for us in an initial syllable, and hence we introduce a short [ə] or [ɩ].

Sometimes one encounters a medial syllabic consonant in Bantu languages. For example, in the Zulu word <u>úmm̀·mbá</u> "beast given to the bride's mother" the medial <u>m</u> is long and has a low tone. In every way it acts just like a vowel. There is no need of marking the syllabic character of the nasal by a bar beneath the letter since the grave accent denotes that it is syllabic. Unless we are careful, we either overlook such syllabic nasals, and accordingly shorten the word until it is unrecognizable, or we tend to put in a little [ə] just before the syllabic consonant.

4.4.3   <u>Strikingly</u> <u>Different</u> <u>Sounds</u>

Strangely enough we do not seem to have as much difficulty with the strikingly different sounds as with those which

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[48]The nasal continuants [m̩] and [ŋ̍] act just like vowels. We can make certain that there are actually no vowels in the second syllables of these words since the lips do not normally open between the [p] and [m] and the tongue is not drawn away from the top of the mouth between the [t] and the [n].

[49]Mark Hanna Watkins, <u>A Grammar of Chichewa</u> (Baltimore: Linguistic Society of America, 1937), p. 25-26.

are deceptively similar to English. However, some of the "exotic" sounds (i.e., exotic from our viewpoint) do cause us trouble. For example, in Kekchi, a Mayan language of Guatemala, there are not only front and back k̲'s, but there are two types of such k̲'s, glottalized and nonglottalized. The palatal glottalized stop is explosive, i.e., the air between the glottis and the palatal closure is compressed. Accordingly, in the word cik̲' "bird" the air pops out after the release of the k̲. However, in the word k̲'ak̲' "fire" the air between the velum and the glottis is rarified by drawing the larynx down, and as a result the air pops into the throat immediately upon the release of the stop consonants. It is quite necessary to distinguish between glottalized and nonglottalized forms, for k̲ak̲ means "our pig" and k̲'ak̲' means "fire."

In Kekchi there are three other glottalized consonants: č̲' as in č̲'oč̲' "ground," t̲' as in t'ant'o "fallen" and p̲' as in k̲ap̲'. The glottalized č' and t' are definitely explosive, but what we write as a glottalized p̲' is actually implosive and sounds very much like [ʔb] in certain positions.

Sometimes the distinctions in sounds are exceedingly subtle. For example, in Futa-Fula there are many glottalized consonants and glottal stops which occur frequently. The results are sometimes very confusing when we begin to listen to a language. Compare the following three verbs: hab'uʔgol "to fight," haʔb'uʔgol "to tie," and habbuʔgol "to wait."[50]

We have already mentioned the double consonants that occur in many of the Sudanic languages. At first, they tend to sound like glottalized consonants, or just emphatic consonants, but a little experimenting and practice will soon enable one to detect the distinctive quality.

The clicks are the most famous "queer" sounds. Perhaps it would not be so bad if there were only three of them: (1) with dental articulation and sibilant off-glide, (2) with lateral release, and (3) cerebral, with the tip of tongue against front part of palate. The difficulty in Zulu is that these three basic varieties have four subtypes: (a) nasalized, with the velic open during the pronunciation, and voiced, (b) voiced and nonnasal, (c) voiceless, and (d) aspirated, with a puff of air

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[50]The glottal stop before [g] is frequently lost in fast speech.