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THE ROLE OF MEANING IN THE TEACHING
OF MODERN FOREIGN LANGUAGES

DISSSERTATION

Presented in Partial Fulfillment of the Requirements for
the Degree Doctor of Philosophy in the Graduate
School of The Ohio State University

By

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The Ohio State University
1970

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THE ROLE OF MEANING IN FOREIGN LANGUAGE TEACHING

INTRODUCTION

Whatever we may believe the educational process to be, we must all agree that it includes becoming acquainted with our physical and social environment. To get this knowledge of the world we must go either directly through our senses or indirectly through communication with other people, that is through language. These two ways of learning have been called learning through experience and learning through information (Palmer, 1960), or as in the following quotation from Carroll (1964, p. 202), inductive and deductive learning:

One procedure can be called inductive; it consists of presenting an individual with an appropriate series of positive and negative instances, labeled as such, and allowing him to infer the nature of the concept . . .

Another procedure for concept teaching may be called deductive and it tends to be the favored procedure in school learning. It is the technique of presenting concepts by verbal definition or description.

Experience itself is no more than a series of sensory impressions; experience does not become knowledge until these impressions are organized in some way. These organized sensory impressions are sometimes called concepts. Carroll prefers to call concepts "classes of experience"
that are abstracted and cognitively structured by the learning organism (Carroll, 1964, p. 181). For example, impressions of roundness, smoothness, shininess and redness are organized into our idea of an apple, so that when we have these or similar sensations we recognize an apple. Information on the other hand is knowledge acquired through the senses of another person rather than through one's own senses. It would be possible to learn the idea of an apple, if we had never seen one, by being informed by someone who had that an apple was a round, smooth, shiny, red fruit.

In the absence of learning by information, a learner will start to organize his own experiences, that is, to form his own concepts. This process is not necessarily a deliberate and conscious process. Concept-formation of this nature leads to knowledge that is better learned and more firmly retained since it has been obtained by the learner's unaided effort and therefore in a more meaningful manner (Noble and McNeely, 1957).

Although this process of concept-formation is the very foundation of knowledge, it is often a slow one, and more seriously, an uncertain one, since the learner, through inaccurate observation and incomplete experience, can easily form inadequate concepts. For example, unless a child has someone who can tell him that what he has decided to call an apple is really an example of that fruit, he may get the idea that oranges are also a sort of apple. If a learner
forms a wrong concept of this sort, he will sooner or later have to abandon or alter it, and this will be all the more difficult for him to do, because those concepts formed by the learner for himself are the most firmly retained (Noble and McNeely, 1957).

One of the teacher's main duties is to help the student form correct concepts economically and quickly. This can be done in two ways: by putting the learner in the way of receiving sensory experiences in a manner and sequence which will enable him to form correct concepts for himself quickly, or by the judicious giving of information.

Since the development of modern communications by sea, land and air by way of radio, film and television, the learner's potential environment has been extended to include almost the whole world. We are all subject in our daily lives to the influence of what happens on the other side of the globe and beyond our own earth's atmosphere. However, it is still impossible for us to have direct, unmediated experience of anything except a small part of this environment. An equally important part of our environment is the culture and history of our own community. Here again the amount we can learn by direct, unmediated sensory experience is limited and we have to rely on learning through information.

While modern communications have extended our environment, they have also in the process offered the learner a
way of learning about this environment through sensory experience; but with the difference that what the learner experiences in directly is selected for him and comes to him primarily through only two of his senses, sight and hearing. This mediated experience nearly always comes accompanied by information.

Up to this point it may seem that information and experience are in contrast to each other. However, they are usually complementary. It is rare that direct experience in the classroom is not accompanied or at least immediately followed by information covering the same field and organizing the sensory impressions just received.

Although information is normally mediated by language there is always the possibility that much of the already conceptualized information the learner receives is learned through other means such as diagrams, maps, charts, graphs or models. It is often true that these visual means of conveying information are more effective than verbally stated language. The fact that no one can learn the shape of a country from direct experience or describe the shape in words without great difficulty is an indication of the value of a map.

Direct experience and information usually come together in formal learning through the mass media of communication. In this way the learner develops new concepts or knowledge. Further understanding of his environment is
gained by a repetition of the same process when fresh experience and information combine with existing knowledge to form new and more generalized concepts.

With the preceding background we can see more clearly where language enters into the learning process. Language is the means whereby ready-made concepts are communicated to the learner. Its object is to help the learner to organize the experience he has had and the concepts he has formed into new abstractions (Dale, 1954). It also gives him the linguistic means to discuss with others and to record the concepts he has acquired.

At this point it is well to consider that herein lies a danger. It is very easy for information to be supplied to the learner which he cannot relate to his own experience or to the knowledge he has so far acquired. He may then acquire the linguistic forms, usually lexical, without the concepts with which they should be associated which give them meaning. This is sometimes called verbalism and is characterized by the learner's using language which he does not himself fully understand and results in what is sometimes referred to as parrot-learning.

Comenius said about verbalism that no one should be allowed to talk about anything he does not understand. Certain procedures in second language teaching, as shall be seen later, tend to produce students who don't know what they are saying.
In the same passage Comenius goes on to say that no one should be allowed to understand anything without at the same time being able to express his knowledge in words. By this he meant that the process of learning about the world must always be accompanied by the ability to express his knowledge about what he has learned. This notion is also important because it stresses the way in which concept formation and language are inextricably mixed. We never hesitate to say that what distinguishes us from even the highest of the animals is our ability to form abstract concepts. We might also say that our power to form abstract concepts is the result of our possession of language. The two develop together in the growth and maturation of the individual (Lenneberg, 1967).

When someone learns a language, he is not gaining a knowledge of his environment. Language is not knowledge but a set of skills. The teaching of it, therefore, must be different from the teaching of a "content" subject like science, and the role of direct sensory experience in the learning of a language will also be different. The following chapters will develop the actual role of direct sensory experience in the development of the language skills.
CHAPTER I

MEANING AND THE AUDIOLINGUAL APPROACH

Historical Aspects of the Teaching of Meaning

In any consideration of language learning, the transmission of meaning must occupy a high priority since meaning is one of the most obvious aspects of language. The teaching of meaning presents at least two aspects—familiarizing the student with the relationship between a concept and its linguistic sign and acquainting him with the other linguistic, emotional and material associations of the sign itself.

Gestures and objects

As early as the fourth century A.D. the concept of situational context and verbal context was important in determining the meaning of a word as evidenced by St. Augustine when he wrote:

If I hear a word I do not know whether it is a word of not until I know what it means. Once we establish it link with things, we come to know its meaning.

Comenius, as reported in Kelly (1969) later contended that a classroom should be full of activity and that teacher
demonstration should be followed by pupil imitation. In language study he contended that, as a result of demonstration and imitation, new concepts and associations were being formed.

Active demonstrations then became one of the most important principles of the Natural Method of language learning in which it was believed that a child best learned language in the same way he learned it from his family and surroundings.

Later, in the work of Gouin (1912) mime and demonstration became an essential part of language teaching. In working with his cycles, he reinforced the impact of words by miming the action described and the student was expected to imitate also. Psychologists approved of his teaching methods since the link between meaning and activity was stronger if the action was being described and performed simultaneously.

The Direct Methodists, who differed from the Natural Methodists primarily only in their attempt to find scientific reasons for their techniques, adopted the idea behind the Gouin technique but not the techniques themselves. Both methods advocated the presentation of language to the pupil without resort to grammatical analysis. Direct Methodists however, were able to capitalize on newer concepts from psychology, phonetics, and a new type of structural analysis to build the course. Spatialization
became important in Palmer's (1917, p. 85) concept of language teaching. He felt that a word was best remembered by relating it to the place in which it had been learned, and if two words were learned in the same "place" confusion occurred; if learned in separate "places" they could be easily kept apart (Palmer, 1917).

During the last few years of this century the concept of situation has again caught the attention of language teachers as a result of the work of Saussure (1915, p. 99) in which words were said to depend on verbal and situational context.

The use of objects to teach meaning probably dates back to the very beginning of language learning. Before the Direct Method was used, objects were in the classroom to illustrate vocabulary which related to the students' own culture as well as that of the new language. The term realia was used to distinguish between objects of general relevance and those peculiar to the foreign culture. Translation was rejected as a means of establishing meaning on the grounds that it took the long way around. It was felt that there was no reason for the native word to intervene at all, so words were not learned separately from things, but rather through direct association with the object.

These techniques of demonstration were submitted to experiment during the early part of this century. The
results indicate that foreign words were more easily learned if they were first taught by translation (Schweitzer, 1903). Later teachers, especially in the Army Specialized Training Program, adopted the idea with the exception that they were free to use their own ingenuity. Similar approaches were subsequently developed in the secondary classroom.

Pictures

The first fully thought-out scheme to teach vocabulary pictorially was that of Comenius, whose Orbis sensualium pictus first appeared in 1654. Each section of this work was headed by a picture and correlation between the text and the illustration was achieved by numbering the parts of the picture that were specifically referred to in the text. In his scheme pupils were to approach learning as an active process and as many senses were to be called into play as possible. In addition to the picture, the teacher was to show the pupils the real thing if possible and then they were to color in their own copies of the text (Comenius, 1648). The cost of the book was exorbitant, however, and few of the students were able to follow his scheme.

Wall charts do not seem to have been used very extensively except by the Oratorians in Paris in the seventeenth century (Escher, 1928). These charts were in color, however. With the advent of the Direct Method, the use of
charts increased so that by the third quarter of the nineteenth century, they were being produced commercially.

In spite of the availability of certain kinds of pictorial materials, teachers faced with special problems had to improvise much in the same way as is done today. In order to find suitable material to teach English to non-English speaking conscripts in the First World War, the United States Army language instructors were forced to make charts from available magazines with pictures and maps.

Few advances were made in the use of pictorials until after World War II when researchers at the Ecole Normale de St. Cloud and at universities in the United States worked to make pictures that could teach or drill structures. They found that certain situations lent themselves to teaching specific structures. The results ranged from wall charts without specific course integration to a series of filmstrips intended for use with tapes.

Though pictures had been intended to prevent translation, many teachers became aware that students would work out their own translation equivalents. This uneasiness over pictures was accentuated by the postwar consciousness of differences in the meaning of pictures, gestures and objects according to cultural environment. Lado (1957) dealt with this problem exhaustively. Others noted that audio-visual methods seemed to assume that everyone had
the same vision of the world. Kelly (1969, p. 23) cites examples of American and French experimentors using a method of language teaching based on comic strips. In addition to teaching word meaning, such textbooks acted as an introduction to composition.

Native language equivalents

One of the oldest techniques for demonstrating word meaning is found in the use of the native-language equivalent. During the twentieth century the avant-garde of language teachers have refused to consider translation as a valid procedure for teaching meaning. They feel that every time a language learner refers to his bilingual dictionary or to a native-language equivalent, his mind is switched out of the foreign language and he is encouraged to translate rather than think in the foreign language. Others have claimed that the native language word is useful if it doesn't become a permanent crutch (Chapman, 1958, p. 35). To date the controversy has not been resolved.

Nineteenth century language teachers, in general, saw translation as the only sure method of transmitting meaning. This was challenged first by the Natural Methodists, then by the Direct Methodists and, in fact, rejection of translation has become one of the trademarks of the Direct Method.
Use of target language

Twentieth century teachers in treating the foreign language sentence as the basic unit of instruction have given the student a base from which to infer the meaning of words which he doesn't know. Close connection with the situation involved in the sentence has become an important feature of methods developed by CREDIF and Encyclopaedia Britannica Educational Corporation in which all linguistic items are presented to the pupils by means of real situations.

In the twentieth century the names most closely connected with definition in language teaching are those of Michael West and C. K. Ogden. West adopted the idea that all adequate definitions could be based on a 1,500 word vocabulary. He contended that in order to survive in a foreign language environment, a person needs to ask questions about a broad range of necessities of daily life, not merely to make remarks about the commonplace based on frequency counts. This is the technique of definition used by many dictionaries. Ogden invented the idea of Basic English.

During the classical era etymology was considered to be the most accurate means of finding word meanings. The Renaissance saw a continuance of the interest in etymology as a tool in vocabulary manuals. Interest in
modern languages and the realization that Latin formed a base for Romance languages prompted the application of etymology to the problem of teaching French, Italian and Spanish.

In spite of the interest in etymology for teaching modern languages, it was regarded as more important in the classics. The two centuries following the seventeenth century saw the concepts of the "root" holding a key position in the expansion of vocabulary.

Direct Methodists treated etymology with some respect, though there was little place for it in the method. Some twentieth century teachers, on the other hand, have found that incidental references to philology arouse and hold the interest of students and have given a rational background to difficult spellings and to semantics (Prince, 1954, p. 78). The technique has tended, however, to remain a scholastic discipline and has not been integrated into the language teacher's range of techniques except in a few cases such as in Modern Spanish (Klinger, 1966).

Summary

Thus the teaching of vocabulary and its meaning has passed from the classical and medieval approaches, based on definition and etymology, to the "modern" methods of associating word and thing. To the verbally oriented ways of the previous fifteen centuries, the Renaissance added object lessons, and generalized the first tentative uses of translation. (Kelly, 1969, p. 33)
The next few centuries found translation holding a prominent place as a technique of conveying meaning. The advent of the Natural and Direct Methods saw a refutation of many of the accepted techniques and the reintroduction of others that had been conceived four hundred years before.

Currently in vogue are many of the same techniques described above, including translation, inferences from context, use of objects, pictures, action, explanations and paraphrase. Never has an attempt been made to have an integrated approach to the teaching of meaning based on past and present practices since the procedure has been to reject one technique in favor of another.

The Problem

Since a theory of meaning applicable to foreign language learning does not now exist, the writer's task will be to find or develop one that is linguistically and psychologically compatible, then to propose techniques to implement the proposed theory in the foreign language classroom.

Of all the problems connected with a theory of language, none is more general, more involved or less well understood than that of meaning. One of the principal tasks of teachers at all levels of education, and especially in foreign language teaching, is to teach words and the meanings and concepts they represent. The teacher must
teach the meanings of unfamiliar words and idioms; he must help the student recognize unfamiliar ways of using familiar words, he must teach the meaning conveyed by grammar; and, at the more advanced levels of language study, he must make the student aware of possible ambiguities in meaning and teach him how to resolve them. Often, it is the teacher's task to create completely new concepts in the minds of students. More frequently, however, he must expand, restrict or reshape existing concepts.

Carroll (1964, p. 178) believes that "whether the teaching of words, meanings and concepts is done by the teacher, the textbook writer or the programmer, it is generally done in an intuitive, unanalytic way." Because of the enigmatic complexity of language meaning, it is many times difficult to give an answer to the queries "What does this mean?" and "What do you mean?" It is even more difficult to analyze the operation by which the answer is given. Yet it is necessary to attempt an answer and an analysis if language teaching is to be understood and improved.

Only in recent years has the foreign language teaching profession started to show concern for the role of meaning and meaningfulness in language teaching. Carroll (1965) has observed that neither of the two most widely used theories of psychology of language teaching has taken adequate account of the fact in verbal learning that the
more meaningful the material to be learned, the greater
is the facility in learning and retention.

He contends that the audiolingual habit theory tends
to play down meaningfulness in favor of producing auto-
maticity of production and concludes that what is needed
is a profound rethinking of current theories of foreign
language teaching in the light of contemporary advances
in psychological and psycholinguistic theory. His asser-
tion is that the audiolingual habit theory is no longer
abreast of recent developments and perhaps should go in
the direction of joining with it some of the better ele-
ments of the cognitive code-learning theory.

Saporta (1966), in criticizing some of the current
audiolingual practices, writes that some way of incor-
porating meaning into the teaching of foreign languages
must be found. His conclusion is that the best and
easiest way is by using the learner's native language.
Others, such as Brooks (1964, p. 121) and Lado (1964, p.
121) give psychological and pedagogical reasons for
being cautious with translation as a means of establish-
ing meaning. They agree that students should not be
given the impression that meaning is merely the equating
of different language symbols.

Bolinger (1968, p. 41), taking a different point
of view, argues that the supposed weakness of audiolingual
teaching has not been a weakness of theory but of practice
and proportion. He agrees with Powers' (1967) statement that "to say that audiolingual teaching consists of no more than the development of habits of imitation is quite wrong, unfair."

The question of native language use as opposed to non-use of the native language to establish meaning is not the only point of contention among methodologists. Conflicting ideas exist also on whether words should be taught in context or in isolation, by definition and explanation or single equivalents, and whether visuals should be used rather than other words. In addition, the semantic role of grammar in language has not been considered at all by foreign language educators.

Review of the Literature

At first glance, it would seem that more research has been done on vocabulary learning than on any other aspect of foreign language learning. As Carroll (1963) points out, however, most of the psychological research has been done on paired associate learning and this has been conducted to test theories about learning as such. Furthermore, research on paired associate learning, as it is organized by psychologists, has little or no resemblance to the organization of vocabulary learning by teachers.
On the other hand, Cooper (1964) did find a statistically significant correlation of from .35 to .44 between foreign language aptitude and paired associate learning scores. Ryden (1948) examined the extent to which vocabulary-learning ability was an index of general foreign language proficiency and found a positive correlation also.

As part of the research on second language vocabulary acquisition, one particularly widely investigated matter has been whether or not acquisition is aided by the use of pictures as stimuli. Kale and Grosslight (1955) asked subjects to transcribe a Russian word in response to either a pictorial or English word stimulus. More efficient learning occurred when the stimuli were pictures. Similar results were reported by Lumsdaine (1949), Kale (1953), Kopstein and Roshal (1954). Carroll objects to some of the findings on the grounds that the studies are limited in design.

Another question is whether translations are better learned when embedded in syntactic context or when presented as isolated word pairs. Morgan and Foltz (1944), Morgan and Bailey (1943), and Briones (1937) found that foreign words were best learned when presented in context, provided the context was familiar. However, if the context is to be an added burden to be learned, it may inhibit rather than aid performance, according to Seibert
(1930). Lane (1964) notes various methods of manipulating contextual information in programmed vocabulary instruction.

Associate learning theory developments have indicated that prompting is more effective than confirmation as is noted in Cook and Kendler (1956). Subjects who are continually prompted with the corrected response before they make their own correct response do better on a posttest than subjects who are asked to make a response before being presented with the correct response. Forlano and Hoffman (1937) found the same results when they applied this principle to foreign language vocabulary learning.

Other variables which have been investigated include the relative efficiency of foreign-English S-R pairs as opposed to English-foreign pairs. Stoddard (1929) reports more learning when the foreign word was the stimulus member than when it was the response member. Lado (1956) analyzed English-Spanish cognates and proposed a hierarchy of pair-learning difficulty based on similarities in pronunciation and meaning between the English word and its foreign counterpart.

Although it typically includes only English and nonsense material, research on verbal S-R associations suggest factors which might have wider significance. Deese (1962) used measures of word association in defining
an index of meaning. Comprehensive analyses of stimulus and response variables in verbal learning, such as meaningfulness, familiarity and pronounceability, have been conducted by Underwood and Schultz (1960) in which a stimulus has been experienced or a response emitted.

According to an early article by Morgan and Bonham (1944) the part of speech is another relevant factor in word learning. Function words are more difficult to learn than are concrete nouns and verbs, for example. A more recent article by Glanzer (1962) presented data on paired-associate learning as a function of part of speech.

There is also some evidence from research outside the language learning field that learning by "discovery" results in better retention. Haslerud and Meyers (1958) conclusions could be interpreted to indicate that if teaching is organized so that the learner must induce word meanings through the use of context, prompts, etc. before his discoveries are confirmed, retention may be better because of the added effort put into this kind of learning. Allen (1958) applied this to the teaching of vocabulary with the suggestion that the added practice in the language by the student and the added listening was a desirable factor.
In a study done by Carroll and Burke (1965) on maximum rates at which vocabulary materials can be learned, it was suggested that spaced learning of vocabulary was to be encouraged since there is a limit to what can be learned at one sitting.

As Carroll points out in his review of the research (1966), there has been almost no progress in research on vocabulary learning in foreign languages. In addition to this writer's knowledge, no research has been done on ways of teaching structural meaning with the exception of the visual grammar Bull (1963) developed.

Limitations of the Study

Before solving problems they must first be analyzed. The more complex the problem, the more is its solution dependent on a sound analysis.

Language teaching in general includes some of the most complex problems in education, and the teaching of meaning in particular is more involved and less well understood than almost any other aspect of language teaching. This study will attempt to analyze the problem of meaning in second language learning and to offer some possible solutions to these problems based on the writer's theoretical formulations and on existing research findings in the areas of cognitive development and the teaching of meaning.
Although there are many kinds of meaning that a study of this nature could consider, the writer has chosen to limit them to those three that he considers to be the most important for foreign language teaching. These are (1) situational meaning; (2) lexical meaning; and (3) grammatical meaning.

In examining language, many linguistic scientists have preferred to disregard what Fries (1958) has called "social-cultural meaning" and to concentrate on contextual and structural meaning. They have preferred to study the distribution of a linguistic item in a corpus of utterances and have identified meaning as a function of the sets in which the item occurs and of its relationships with other elements in the contrastive patterns of the language. Joos (1958, p. 356) has stated, "Let the sociologists keep the outside or practical meaning; then we can undertake to describe the pure linguistic meaning.

The behavioral psychologist has also found it unprofitable to examine meaning as a concept since the notion of meaning is mentalistic, empirically undemonstrable and unnecessary for an explanation of behavior.

It is these approaches to language which Rivers (1964, p. 132) has identified as leading some researchers in foreign language teaching to propose a period of training in a second language without an explanation of
traditionally defined meaning, concentrating on structural and contextual meaning.

De Saussure, as noted in Rivers (1964, p. 132), presents a dichotomy of language in which provision is made for the "social convention" of language, *langue*, and for the individual, executive side, *parole*. According to him, it is *langue* that we should teach so that the student may be able to use *parole* in communication. In his formulation of *langue*, he includes the need for understanding the social conventions of the people whose language is being studied. Sapir (1921) identifies language as a "perfect symbolism of experience" in which not only the words need to be understood, but also the entire language community through its words and nuances of meaning. The latter can be acquired through participation in the life of the community only, according to him.

Our language is an essential part of every portion of our experience; it gets all its meaning from our experience, and it is in turn our tool to grasp and realize experience. Every language is inextricably bound up with the whole life experience of the native users of that language. The linguistic forms of a language mean the situations in which the speaker uses them. For the speaker to be completely understood, the hearer must in some way grasp the "situations" as they stimulate the speaker's utterances. Hence the need for what Fries (1945, p. 57) has called
"contextual orientation" in order to understand and be understood in a foreign language.

With regard to teaching situational meaning or "contextual orientation," a sound technique is necessary. The knowledge of the life of the people must not be just an adjunct of a language course—something alien and apart from its main purpose, and therefore casual and haphazard. A thorough mastery of a language for practical communication with real understanding demands a systematic observation and recording of many features of the precise situations in which the varied sentences are used. Such a systematic observation and recording must be minute and sympathetic in order to understand and to feel and to experience as fully as possible.

If the student is to master the foreign language so that he may understand with some completeness the native speakers of that language, he must expand or restrict the kind of background experience he has in his own language. He cannot again become a child and grow up in another community in which the foreign language is native, and probably can never enter completely into the meanings of a foreign language as they function for the native speaker of that language. He can, however, set himself the task of attaining as complete a realization as possible of the common situations in which the language operates for the native speaker.
Audiolingual approaches in recent years have attempted to provide for this aspect of meaning through the use of dialogues and creation of situations but with little success since many of the dialogues are contrived and many of the simulated situations lack perspective.

To gain perspective, students need to try to enter into the whole range of experiences that the native speakers of the foreign language have grown up with—the experiences that give content and meaning to their words. Examples of such situations are the modes of recreation, the schools with their curriculum and activities, social relations between the sexes among youth, types of employment for youth, motions and gestures used in various social situations, youth and their relations to parents and teachers, formulas of language, religious practices, practices accompanying eating, conventions regarding taboos, practice of privacy and many other such situations.

To acquire these meanings, situations must be created in which the like and unlike elements of related concepts in two languages are shown. It is this element of language which is referred to as "situational meaning." In the formation of new concepts (concepts that do not exist in the native language), situational meaning becomes even more important if one is to create a new "class of experiences."
Examples are time and space relationships in English and Spanish and event/entity distinctions in Spanish which are represented by a form of "be" in English. A simple illustration of the latter is that the English sentence The symphony is in the auditorium can be interpreted as saying that the event will take place in the auditorium or that the written composition is in the auditorium. Spanish makes the distinction through the use of two different verbs—ser and estar—to make the event-entity distinction.

This study will define situational meaning and propose pedagogical techniques for establishing it in the creation of new concepts and in the restructuring of existing ones.

A second consideration is that dictionary definitions can give words a false air of fixity of meaning and independence. The pedagogical implications of this assumption must therefore be considered. The writer will attempt to propose modes for the presentation of lexical meaning which might be used most advantageously in teaching a foreign language vocabulary at the recognition level in the basic course and beyond the basic course. Lexical meaning will be used in the sense of denotative referential meaning as opposed to connotative meaning. Psychologically it will be treated as the denotative part of "a societally standardized concept"; (Carroll, 1964, p. 187).
It is in accord with modern linguistic principles that the size of vocabulary at the beginning stage should be limited until the phonological system and the basic syntactic system of the language has been mastered. Once past this stage, a rapid expansion of vocabulary becomes important if the student is to gain mastery of a language, since communication requires the necessary lexical items to fill the slots in the grammatical framework.

The level of the student usually determines which method is going to be used to "get the meaning across." In this connection various ways of conveying the meaning of words in foreign language teaching have been proposed. A list of these ways would include the use of realia, pictorial presentation, dramatization, native language explanations, self-defining contexts in the target language or in the native language, illustrative sentences, synonyms and antonyms, or derivational systems. Each modality has its advantages and disadvantages, and as Palmer (1917, p. 100) stated, "No hard rule can be adopted as to the mode of giving the meaning of units--each in its own turn may be superior to the other."

Nevertheless, different preferences of modality for conveying meaning can be observed according to varying linguistic, psychological or pedagogical principles. Mishima (1967, p. 4) summarizes the various ways of
conveying meaning under three headings: (1) use of native language versus exclusion of native language, (2) definitions or explanations versus equivalents and (3) words in isolation versus words in context.

A third consideration is meaning that is conveyed by the grammatical formulation itself. Grammar can be regarded as formal pattern, the description of language in terms of functional opposition of structure—He is here, as opposed to Is he here?, or He is taking the money, as opposed to He took the money,—just as phonemic description deals with the functional opposition of sounds—for example, the contrast of /p/ and /b/ in pit and bit. Grammatical distinctions, then, can have an immediate function in identifying structures and in signalling the structural role of their lexical constituents. There can be little doubt, however, that patterns of structure have semantic significance also. Otherwise it would be difficult to explain, for instance, why sentences of exactly similar lexical form but different word order have very different referential functions: The girl hit the boy and The boy hit the girl. The structural categories of subject and direct object have here the significance of "performer" and "sufferer" of the action.Semantically the sentence is more than the sum of its lexical parts.

There would thus appear to be a place in linguistic description for grammatical semantics, setting out the
uses of structural patterns which have been identified by purely formal criteria.

This study will contend that grammatical meanings are to be found in (1) function words, (2) inflectional forms and (3) types of word order. These three kinds of grammatical meaning will be analyzed with suggestions for applying the theoretical formulations in a language learning/teaching environment.

Description of Remaining Chapters

This study is made up of five chapters which progress from (1) an overview of the role of meaning in language teaching in past years, to (2) a view of the nature of meaning in its several aspects, to (3) the acquisition of concepts in first and second languages, to (4) pedagogical implications for conveying meaning in a second language.

Chapter Two contends that meaning is one of the most important aspects of language and that attempts to teach language in terms of structure and sound only are inadequate. The author will show that meaning must be made an integral part of language teaching at all times by showing that (1) language cannot be separated from the situation in which an utterance occurs or to which the utterance refers; (2) the structure or grammar of a language carries semantic information and (3) lexical
meaning operates as a system within the other systems of a language.

Chapter Three describes how "meanings" are acquired in the native language and how they influence the acquisition of second language concepts. Special emphasis will be given to concept formation based on concrete experiences and the importance of the concrete for development of abstractions. A second aspect of this chapter will be to draw implications for acquiring concepts in the second language from first language learning. The author will contend that strategies for the acquisition of concepts in a second language are parallel to first language learning in many respects.

Chapter Four proposes techniques and media that will best convey meaning as formulated in the previous chapters. The author will identify (1) differential procedures based on differences in meaning between the first and second languages such as explanation and translation; (2) ostensive procedures which attempt to apply the principle of learning meaning through the senses such as the use of objects, actions and situations; (3) pictorial procedures through which more real and lasting impressions can be made with thematic, mnemonic and semantic types of language-teaching pictures which are included in texts, class pictures, films and filmstrips; and (4) contextual
procedures such as definition, enumeration, substitution, metaphor, opposition and multiple contexts which put new words in verbal contexts which give them meaning.

Chapter Five is a continuation of Chapter Four with the difference being that Chapter Five deals with the teaching of meaning in the reading phase and with the advanced levels of language instruction. This chapter provides a framework which provides systematic training in the skills and techniques necessary for acquiring word and sentence meanings in reading a foreign language.
CHAPTER II

THE NATURE OF MEANING

**Signs and Symbols**

Recent approaches to semantics have been characterized by the same procedures which have led to behaviorism in psychology and to the descriptive methods of modern structural linguistics. They have tried to replace a subjective and introspective analysis with an objective and empirical one. In short, they have tried to be more scientific.

With the establishment of behaviorism as the dominant method in psychology earlier in this century, it was inevitable that attempts should be made to describe meaning in terms of behavior—to describe it from the point of view of an outside observer whose data were simply what he could observe of the language itself, the circumstances giving rise to it, and people's reaction to it. (Skinner, 1957; Bloomfield, 1933). The way in which meaning had come to be described was considered a mentalistic stopgap which would become superfluous with the advent of an inclusive account of human behavior in connection with linguistic signs.
One starting point for an analysis of meaning is the recognition that a language is a system of primarily vocal signs. Since Aristotle, words have been classified as signs and the characterization has formed part of the definition of words, and of language. It would, in fact, be difficult to conceive of a definition of language which did not use the word sign or some partly synonymous term like token, symbol or stimulus. It has been only in the present century, however, that men have fully recognized the importance of the analogy between the signs which constitute a language and other events, which are also called signs, and have regarded all types of signs and sign behavior as a distinct field of investigation.

Much of our ordinary daily experience could be broken down into cases of the perception of signs and reaction to them (Langer, 1963). For example, when I awake in the morning the first thing I see is my watch; this serves as a sign to me that I am earlier or later than usual and thus regulates the speed with which I dress and prepare to leave for work. If I notice that the sky is overcast I may decide to take an umbrella with me. If I get to the parking lot and see that there are many cars there, I may decide to find a parking space elsewhere. These are examples of the more obvious of sign situations of the kind which may attract attention and be dealt with at the level of consciousness.
In addition, we all become so accustomed to reacting in the appropriate manner to the vast number of signs which impinge upon our senses that most of our interpretations and reactions are not conscious in the sense that they involve thought. A simple act like driving an automobile or crossing the street involves the interpretation of many signs, yet we are able to do it while thinking of something else or talking to another person. Our reactions to other people's facial expressions, manners, tones of voice, etc. are often of this more direct kind. Signs, then, can be events to which we are able to react appropriately when we have learned their significance.

If we ask what it is that gives signs their significance for us, the answer is that they are elements in a familiar pattern of events and therefore allow us to infer the presence of other elements in the same sequence and to establish a code.

**Meaning and Psychology**

From the behavioral psychologist's point of view the phenomenon of our use of language and our reaction to language occupies a part of the field of learned behavior which it is his task to describe. In the earliest period of behaviorism this task was conceived as that of relating speech to the basic formula of the conditioned reflex (Brown, 1958). This theory is well known in outline: a
bell or a buzzer is sounded in the presence of a hungry dog just before it is given food. After a number of such occasions it is found that the dog begins to salivate as soon as the bell is sounded even before the presentation of food.

Since Pavlov's first experiments a great many variations on this theme have been performed with many kinds of animals. In some experiments they learn quite complicated tricks, like solving intricate mazes or pulling a series of levers in the right order or choosing a particular door among several marked with distinctive symbols; success is reinforced by a food-reward and wrong choices discouraged by a mildly painful or unpleasant experience to be avoided.

The essential feature of all these experiments is that they exhibit the replacing of one stimulus, such as food, by another, such as a bell, and the transference of the response to this new conditioned stimulus. We may replace the term conditioned stimulus by sign and say that the bell has become a sign of food for the animal. Can we do the same in reverse and say that a meaning is a stimulus-response feature which corresponds to a form? Can we, in other words, wholly account for meaning by linking up elements of a language (linguistic forms) with the behavioral reactions of which they are the stimuli?

Most people would agree that great obstacles exist to any attempts to find connections of this kind. There is no doubt that, even for an animal, a word (such as
Dinner!) can be a substitute for the sound of a bell and can become a conditioned stimulus. If my wife calls "Breakfast!" to me and my mouth begins to water as I start dressing, I can believe that some part of the meaning of the word for me might be expressed in terms of the conditioned reflex.

This example, however, does not illustrate the simple operation of a reflex, however sleepy I may be, and our response to linguistic signals is usually more flexible and variable than this. We could describe the meaning of a form as a reflex touched off by the auditory stimulus only if we always reacted in the same way, and we obviously do not. One aspect of the problem is the immensely complicated grammatical interdependence of linguistic forms, so that the meaning of any one of them depends on its place in the structure in which it occurs. Allied to this is the factor of dependence on the non-linguistic context. Words and phrases change their meanings according to the circumstances of their use: "They're off" will elicit one kind of reaction on the race track and another in the garage. Also, people's responses to language vary considerably from person to person, and the causes of variations of this kind may not be present in the actual speech situation but may be sought only in the previous experience of the person involved.

On the other hand, these complications are familiar also in sign situations which do not involve speech and,
even in the simplest cases, a non-linguistic sign is rarely the stimulus for a single inevitable response. For example, we react to an overcast sky in accordance with a great many variables: whether it's hot or cold, whether we were about to mow the lawn or barbecue a hamburger. What we do as a consequence of seeing the dark clouds will depend on the relationship of many such circumstances. In order to take into account this variable present in situations which otherwise bear some resemblance to the classic type of conditioned reflex, some psychologists use the concepts of habit and disposition.

What results from the elaboration of conditioning is the formation of a complex hierarchy of habits. There are at least two classes of such habits: stimulus-response regularities which are elicited when certain conditions are present, and dispositions which are tendencies towards a certain type of response, in appropriate stimulus-situations, but which vary over a range of performances. (Thompson, 1959)

This brings us very close to the definition of meaning offered by Stevenson (1965).

The meaning of a sign, in the psychological sense required, is not some specific psychological process that attends the sign at one time. It is rather a dispositional property of the sign, where the response, differing with varying attendant circumstances, consists of psychological processes in a hearer, and where the stimulus is his hearing the sign.

Stevenson illustrates disposition by the analogy--on a more elementary level than that of language--of the stimulating power of coffee. If you say that coffee has the
power of stimulating persons who drink it, you are not referring to anything constant in all circumstances. The stimulating power of coffee does not entirely depend on the amount of coffee drunk. Some people may be habitually more affected by coffee than others; coffee may stimulate more under certain conditions than others; it may depend on what one has eaten, how tired one is, the degree of excitement present before, etc. Stimulating power therefore is not something located in the coffee, but a variable relationship between coffee and persons who are stimulated by coffee. Similarly the meaning of a word will be a variable relation between the word as a stimulus and the dispositions or habits of the hearer.

The notion of habit or disposition, then, appears useful because it makes it possible to bring the study of linguistic meaning into line with that of other areas of human behavior, while taking into account both the relative stability of our reaction to words and its relative variability. The variables are partly personal variations in apprehension and response, partly contextual variants--different grammatical structures, different contexts of other words, and different circumstances of utterance.
Situational Meaning

Ultimately, the way in which a language exists is in the linguistic behavior of the individual speakers of the language. What takes place in language learning is training in the use of linguistic signs—a process of the adaptation of the individual, under adult guidance, to the linguistic habits which are common to the society. However, the abstraction language implies an important fact about verbal behavior which lies concealed in phrases which are preferred by behaviorists, such as "the reinforcing practices of a community." This fact is that linguistic habits, both formal and semantic, which are common to the society are prior to those of the individual and exert a controlling influence over them. One cannot make bookcase mean "telephone" by his own unaided efforts because it already has a prior meaning in the language. This meaning in the language is of utmost importance to the language teacher, yet it appears to have no place in the behaviorist mode of description since the idea of language as a body of social conventions may imply the notions of intention or purpose. These notions are rigorously excluded from the behaviorist treatment of language and meaning.

The kind of meaning the writer is concerned with in this section is best related to what Martinet (1964) has called situation. In this case the setting is
non-linguistic, the people, events and things present when the bit of language is uttered. The meaning-giving relationships are those between language and the relevant elements in the situation in which it occurs as an element itself, and not between the linguistic form and other forms. This kind of meaning is called situational meaning.

The views of Bronislaw Malinowski and J. R. Firth, as advocates of new methods of describing meaning within the field of linguistics proper, are of particular interest here, especially since their views show theoretical affinities with behaviorist doctrine yet offer a richer theoretical basis for the study of meaning than do the classical behaviorists. Malinowski, a social anthropologist whose linguistic theory can be found in C. K. Ogden and I. A. Richard's *The Meaning of Meaning*, was impressed by two things in his investigation of the language of the Trobriand Islanders: the extent to which it was necessary to enter into the life and culture of the people themselves to understand their language, and the extent to which their language was a practical instrument (Malinowski, 1935, pp. 8, 9).

The pragmatic and contextual sides of Malinowski's theory of language are of equal importance to him. He sees language as being intimately bound to the activities of the society which possesses it. Therefore, the only way to translate adequately a poem or a story is to relate
it in the context of situation in which it arose and ultimately to the context of the whole culture. All meanings, then, can be said to be related to the culture and activities of a particular community and can be expressed only by relating speech to particular contexts in which speech takes place in a particular setting.

The most painstaking statement of a contextual approach to language, elaborated and refined as a theory of semantics, is found in the writings of Firth, who acknowledged a debt to Malinowski. He regards meaning as "chiefly situational relations in a context of situation and in that kind of language which disturbs the air and other people's ears, as modes of behavior in relation to the other elements in the context of situation" (Firth, 1935, p. 19). The notion of meaning extends beyond language to the non-linguistic situation in which speech occurs as well as within the speech act itself. Meaning in the sense of relation or pattern can be stated by analyzing the act and situation at the phonological, grammatical and social levels. The aspect of meaning revealed on each level of analysis is that part which can be expressed in terms of relationships at that level.

What is distinctive in Firth's approach is that whereas most descriptive linguists would say that their methods exclude meaning in the interest of an unencumbered formal analysis, Firth insists that such analyses are at
the same time partial semantic analyses. To state the phonemic and grammatical form of a text, then, is to reveal aspects of its meaning and is indeed a preliminary to the further statement of the meaning of an utterance or a text at other levels (Firth, 1964, p. 43).

According to Firth (1964) an utterance always occurs in a context of situation and a full statement of its meaning would include a description of relevant features of the action of the participants, relevant objects and non-personal events, and the effect of the verbal behavior under study. The typical situations themselves would also be placed in relation to the social structure of the society concerned and to the broad types of speech functions found within it.

Bloomfield (1935) in writing about meaning stated that the meaning of a piece of language is "the situation in which a speaker utters it and the response which it calls forth in the hearer."

The preceding has established that for language to be meaningful, the speaker must be acting in some kind of recognizable relationship to his environment, and for a listener to understand, it would be safe to assume that he must be aware of this relationship.

It is perhaps appropriate to state the main categories of situational features which are relevant for an understanding of meaning and for the teaching of meaning.
They are, first of all, the participants in the situation—the speaker and hearer or hearers; then, the actions of the participants occurring before or after the piece of language we want to understand. These actions may be verbal or non-verbal. Thus a question is a question because it is habitually followed by a verbal action by the listener which we call the answer, not because of its linguistic form which may or may not be interrogative. Similarly an order is an order because it is followed by obedient action by the listener, not because it has an imperative form.

**Grammatical Meaning**

Before dealing with lexical meaning we must consider grammatical meaning, since (1) the latter is much less understood and therefore more likely to cause confusion in a semantic analysis, and (2) it structurally precedes lexical meaning, which may be said to "begin where linguistic meaning leaves off" (Katz and Fodor, 1964).

In the phrase **hot fire** the total meaning of the phrase is not signalled by the denotative or connotative values of the isolated words **hot** and **fire**. A part of the meaning is derived from the construction itself. If the order of the two elements **hot** and **fire** is reversed, the denotative and connotative values of **fire** and **hot** remain the same as if they were isolated words. However, as soon
as hot and fire are written in that order to produce hot fire, a new dimension of meaning is added. That is to say, the combination of attributive adjective and noun head also possesses a meaning, namely, that the first element qualifies the second.

According to Nida (1965) there are many different types of constructions and correspondingly diverse meaningful relationships between the constituent parts of grammatical constructions. For example, in the phrases Bill sang, Mary laughed, and Tom worked, the first constituent in each sentence identifies the actor and the second the action, a kind of "actor-action" construction; while in the phrases by the river, in the attic, and behind the barn, the relationship is between the prepositions in, behind, and by and the following immediate constituents, a "relation-axis" construction. Other basic grammatical constructions include "delimiter-head," e.g., two children, this boy; "action-goal," e.g., bit him, burned Jack; and "equator-equated," e.g., is sick, became tired.

The preceding implies that constructions made up of similar classes of words often have similar grammatical meanings. This, however, is not always the case. For example, in the following phrases his coat, his success, his dismissal, and his loneliness, the relationship between his and the following nouns in each instance are quite different. In his coat the expression is approximately
equivalent to he has a coat, but in his success the corresponding expression would be he succeeded. For his dismissal the corresponding form would be he was dismissed and his loneliness is roughly equivalent to he is lonely. In other words, these four expressions his coat, his success, his dismissal and his loneliness, actually "go back" to different expressions.

We could describe his coat and other expressions of the same type as meaning "A possesses B," his success as meaning "A is the goal of the action B," and his loneliness as "B is the quality of A." Traditional phrase-structure grammars would consider all four expressions as being the same, since they consist of a possessive pronoun followed by a noun as the head word of the phrase. If these phrases are related to other elements in the grammar of the language, however, it will soon be discovered that too many functionally diverse expressions have been lumped together.

The most effective way to deal with these problems of diverse meaningful relationships between structurally similar types of expressions is to employ a generative type of grammar which makes use of transformations (Chomsky, 1957, 1965). We may consider that a generative grammar is based upon certain fundamental kernel sentences out of which the language builds up its elaborate structure.
by various techniques of permutations, replacement, addition, and deletion.

In terms of a generative grammar, such phrases as his coat, his success, his dismissal, and his loneliness are different because they come from different kernels by way of different transforms. Their similarity consists of their sharing the common form in the surface structure "his plus noun phrase," but their structures are basically different. Therefore, the meaningful relationships between his and the following nouns are different, for they depend on different meanings in the kernels from which they are transformationally derived. The preceding is true of the equivalent French and Spanish expressions, so no time need be devoted to those languages in this theoretical exposition.

One of the distinct advantages of transformational techniques is the greater facility with which ambiguous expressions can be analyzed and described. For example, the expression fat man's wife may mean that the man is fat or that the wife is fat. If the expression comes from the kernels the man is fat and the man has a wife, then it is the former meaning; but if the expression is derived from the major has a wife and the wife is fat, then it is the second meaning. It happens that the transformations for both these expressions are formally identical, therefore an ambiguity arises. Similarly, he hit the man with a
a stick, le pego al hombre con un palo may be derived from
(1) he hit the man and he hit with a stick, le pego al
hombre and le pego con un palo, or (2) he hit the man and
the man had a stick, le pego al hombre and el hombre tenia
un palo. French would differentiate the two with the
prepositions avec and de.

If we examine typical sets of transformational de­
velopments in various kinds of lexical units, we discover
that there are four principal function classes. These
are similar to what Sapir (1924) noted when he described
the universal characteristics of the noun-verb dichotomy
in languages and employed the basic classification of
words into existents, occurrents, and qualities of exis­
tents and occurrents. The writer classifies them in the
following manner: (1) "objects" such as house, bush,
trunk, moon, boy, rock; (2) "events" such as run, swim,
sew, get up, write; (3) "abstracts" such as (a) yellow,
green, tiny, one, two (abstracts of objects); (b) fast,
slow, once, twice, often (abstracts of events); (c) hard
(such as hard rock, worked hard), soft (as in soft coat,
soft job) (abstracts of either objects or events); or
(d) very (such as in very many), too, (as in too small),
so (as in so fast) (abstracts of abstracts); and (4) "re­
lationals," which serve to relate various objects, events
and abstracts, such as (a) object to object: John and
Bill, the girls in the room, the typewriter on the table;
(b) object to event: the astronauts in flight, the barking of the dogs; (c) event to event as in run and jump, hit and run, won in basketball; (d) object to abstract as in a thing of beauty, the color of a rose; (e) abstract to event as in adept at winning, good for eating; and (f) abstract to abstract as in bad and lazy, beauty of holiness.

Obviously, the complex organization of the preceding is probably beyond the theoretical sophistication of most language teachers. However, according to Nida (1964) there are certain practical advantages to be derived from treating transformations in terms of the four basic semantic elements: (1) we can often more readily see the equivalence of different formal structures possessing the same meaningful relationships; (2) we can more easily plot complex structures, without having to employ long series of related transformations from terminals back to kernels; and (3) we can more significantly highlight some of the contrasts between languages which tend to be otherwise obscured.

Linguistic meaning must be distinguished from other types of meaning because the linguistic signification of a form does not refer to anything outside of language itself. Linguistic meaning is similar to denotative and connotative meaning in the sense that all types of meaning are derived essentially from the signaling of a relationship. In the case of denotative meaning, these relationships are the observed co-occurrences between the symbols and items in
the cultural context. In the case of connotative meanings, these are relationships between symbols and the psychological reactions of the communicators. In the case of linguistic meanings, these are the recurring patterns of symbols which are linked to one another in significant ways.

If we look for the relationship between lexical symbols, we find that combinations of three or more words are usually structured into hierarchically arranged sets of binary constructions (Nida, 1964, p. 58). In the sentence *Le jeune homme mange des gateaux*, we do not relate *le* to *jeune*, *jeune* to *homme*, *homme* to *mange*, etc., but set up a structure which reveals the combinations that occur in an appropriate hierarchy:

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  |  |
  |  |
  |  |
  |  |
Le jeune homme mange des gateaux.
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At every node in the tree diagram there is a construction, a meaningful combination of symbols. The meanings of these combinations do not depend on the symbols themselves, but rather upon the manner of association and the class of the symbols.

Relationships between words can be indicated in a wide variety of ways. Mackey (1965, p. 219) identifies three basic ways in which grammatical meanings can be
expressed. They are structure words, inflectional forms, and types of word order.

Not only can grammatical distinctions have an immediate function in identifying structures and in signalling the structural role of their lexical constituents. But patterns of structure can have semantic significance also as is evidenced by the sentences Boys hate girls and Girls hate boys. These two sentences, although lexically equivalent represent very different situations. The structural categories of subject and direct object have the significance of "performer" and "sufferer" of the action. Semantically, then, the sentence is more than the sum of its lexical parts.

The significance of inflectional forms becomes apparent in the opposition of structures illustrated in the following three sets of sentences: He takes the money versus He took the money; Se llevó el dinero versus Se llevaron el dinero; Il est allé au cinéma hier soir versus Ils sont allés au cinema hier soir.

Languages may differ in that they do not use the same device to convey the same linguistic meaning; i.e., Language A may use a function word to convey a linguistic meaning that is conveyed by inflection in Language B, but languages, in general, use the same stock of devices.
Lexical Meaning

"... what a word means depends upon how it is used." (Brooks, 1964, p. 182). We can say, however, that words can be divided into three separate categories for learning purposes. Brooks (1964, p. 182) has classified these words into "little" or "empty" words, "content" words and "clusters" of words.

"Little" or "empty" words have little meaning in themselves but serve to particularize items in an utterance and to relate them to each other in addition to changing and guiding the direction of the thought and providing the transitions from one thought to another. *An, this, but, however* belong to this category (Brooks, 1964, p. 182).

"Content" words bear their own meaning. They can be referred to as "categories" or "classes of experience" (Carroll, 1964). "Clusters of words," such as verbs that convey special concepts when used with certain pronouns or prepositions present special problems for the learner since in them vocabulary and structure are intimately combined. Examples of "clusters" are *call it off* and *go without* (Brooks, 1964).

This section is concerned with "content" words, or the relationship between words and things. As was suggested earlier, the words that constitute the dictionary of a natural language are a sample of labels of categories
natural to the human species and not tags of specific objects (Lenneberg, 1967, p. 332). Thus words may be said to label realms of concepts rather than physical things as is evidenced by the fact that we cannot define a category by enumerating all objects that are given the same name. Any new object that satisfies certain criteria may be assigned the same label.

We cannot, however, enumerate all the criteria which constitute a category since the criteria are not a finite set of objectively measurable variables such as size, texture, color, etc. It cannot be accurately predicted which object might be named barn and which not by looking only at the physical measurement of that building. Categorization and the possibility of word-assignment must usually be founded on something more abstract.

The child who is given a word and asked to find the category labeled by this word does not start with the hypothesis that that word labels a specific object. Rather, daddy refers to an abstract concept, a general and open category such as people or men. Lenneberg (1967, p. 332) states that "stimulus generalization is prior to stimulus discrimination."

The important point to remember for language teaching is that any one category is not definable by only one, consistently applied criterion. For instance, the word house is usually applicable to structures that serve as
shelter for men, animals, or objects. However, the criterion for categorizing is often changed by metaphorical extensions as in the house of David, house of God, house of cards, etc. It is because of the absence of rigidly adhered to classification criteria that not only the physical world can be grouped and the groups named, but the classification criteria may be bent, stretched and altered to include virtually non-existing entities, resulting in words without referents, but which label a concept as in the word ghost. The procedure also makes possible the development of the meaning of the word times in the phrase "four times five."

The abstractness underlying meanings in general are, according to Lenneberg (1967, p. 333), best understood by considering concept-formation the primary cognitive process, and naming the secondary cognitive process. Concepts are superimpositions upon the physically given; they are modes of ordering or dealing with sensory data. Cognition then must be a psychological manifestation of a physiological process. This task of cognitive organization never comes to an end and is never completed "in order to be used later." Words, then, are the labels of a categorization process. Because of the dynamic nature of this process, the referents of words can easily change, meanings can be extended and categories are always open.
The preceding theoretical position elucidates the problem of translation or the equation of meanings across natural languages. If words label modes of cognizing, we could reasonably expect that all semantic systems have certain formal commonalities. For example, if we hear a given word used in connection with a given object or occurrence, we are able to intuit the general usage of that word—it does not have to be paired with two hundred similar objects or occurrences before we can predict whether the name applies to a new object. On the other hand, every individual may have highly idiosyncratic thoughts or conceptualize in a peculiar way or may even choose different modes of cognitive organization at different times faced with identical sensory stimuli. Given this degree of freedom, it becomes reasonable to assume that languages have universally understandable types of semantics, but may easily have different extensions of meanings and that, therefore, specific semantic categories are not identical across languages. The experience of the physical environment finds expression in all languages and it is mostly the aspect or mode of reference and the metaphysical extensions that vary.

The most dramatic semantic differences between languages is probably found in the realm of feelings and attitudes (Nida, 1964, p. 147). Here, translation is very often a total impossibility. Even within our native
language, it is difficult to describe some of the words for feelings and attitudes such as in the words pride, honor, love, etc. In many instances, our emotions appear to be more subtle than can be indicated by the use of these threadbare terms.

Having considered the nature of lexical meaning in the native language it is appropriate to consider briefly the lexical systems of two different languages. Modern structural linguists have found that every language has its own unique lexical system and that each system differs from language to language. This realization has prompted linguists to conduct more and more contrastive studies on language systems. Lado (1957, pp. 75-92) has suggested approaches in terms of "form," "meaning," and "distribution," of each lexical item while Stockwell et al. (1965, pp. 265-281) have developed their contrastive study of Spanish and English in terms of "ranges of meaning" which each item exhibits in its respective language with classifications of "syntactic," "morphological," "lexical co-occurrence," "denotative," "connotative," and "circumstantial" ranges. Although all of the above must be considered in a theory of meaning, this writer's primary concern now is with Lado's "lexical meaning" or Stockwell's "denotative range."

Let us consider the interrelationship of the words in two lexical systems from this point of view. Belyayev
(1964) exemplifies these interrelationships in the following diagram:

In the diagram, A and B are the lexical systems of two different languages. The numerals designate:

1. Words expressing the same concepts (complete coincidence).
2. Words expressing concepts standing in the relationship of genus and species (subordination).
3. Words expressing concepts which stand in a relationship of partial coincidence.
4. Words expressing concepts which cannot be expressed in single words of the other language.

The diagram illustrates that the words of two different languages are not always identical in meaning, do not always coincide, are not always absolute equivalents and so do not always express a single concept.

It can be said that the range of meanings of some foreign words is wider or narrower than the word's range of meanings in the native language. This phenomenon is
partially explained by the fact that different peoples have different systems for the concepts expressed by the words of their language and, as Hall (1959) contends, different peoples have differing views of reality.

The question then arises as to the ability of people who know different languages being incapable of having the same thoughts and therefore of understanding each other. In order to resolve this quandary, Belyayev (1964) makes it quite clear that differences exist only between the systems of concepts expressed by individual words. Every people is capable of having all the concepts possessed by other peoples. If we say that different peoples possess different systems of concepts, we understand by concepts only those which are expressed in one or another language by a single word.
CHAPTER III

THE ACQUISITION OF CONCEPTS

Development of Meaning in the First Language

The first discernible feature of language to develop in a child's babbling is the intonation contour. The sounds emitted may or may not have a determinable meaning but the intonation is recognizable as being interrogative, exclamatory or affirmative. According to Jakobson (1942) the linguistic development of utterances seems to begin as a whole tonal pattern that is later differentiated into component parts consisting of sounds that seem to contrast with each other.

Between the twelfth and eighteenth months, the child begins to utter unmistakable single words. There is evidence to indicate that these first few words function quite differently from the same words in adult speech in that child speech is a crude phonological replica of the adult's phonological, syntactic and semantic knowledge. The child is satisfied with general pattern similarity and dispenses with segment by segment phonetic identity. Lenneberg (1967) attributes this phenomenon to maturational
factors. He contends that the child must have skills in pattern recognition and equation similar to those of the adult and that what the child acquires and represents with his word are patterns and structure, not constituent elements.

In the realm of semantics, words seem to cover a wider range of objects than later. There is over- generalization. The reference classes of objects in the beginner's language are less differentiated than in adult language, but there is what Lenneberg (1967) refers to as "understandable logic" to the word-object relation from the start.

There is a period at which an infant may have a repertoire of up to fifty words including such items as mommy, here, milk, dolly, etc. He can utter any one of these and they may mean: "Mommy come here," "Mommy went bye-bye;" "I don't want any milk," "More milk;" "I want my dolly," "Where is my dolly;" etc. Even though the child is able to remember all fifty words and even though he hears complete sentences, he does not join together two words either on his own or by request.

It is thus reasonable to assume that the early single word utterances are, in a sense, primitive sentences and that the eventual acquisition and mastery of grammar has its origin right at the beginning of language development.
If this assumption can be made, then it can be concluded that what was alluded to in Chapter II regarding lexical meaning, namely that concepts are ways of dealing with sensory data, is also true from the very beginning of the language acquisition process.

The child whose language consists of nothing but single word utterances has obviously a more primitive syntactic understructure than the mature speaker. The child's syntax is primitive because all of his words have the same syntactic function. The joining of two words in a single utterance is an indication that the initial all-encompassing category is splitting up into functionally distinct categories. Weir (1962) recorded the actual speech that provided evidence of this and Brown and Fraser (1963), Braine (1963), Brown and Bellugi (1964) and Ervin (1964), show that the word utterances are not random concatenations but that a functional distinction was evident in the form of paradigms.

Braine (1963) observed that one of the two words has a higher frequency of occurrence and seems to be a grammatical function or "pivot," and the other word comes from a pool of lexical items with many meanings. By the time the child uses three-word sentences, further differentiation of categories has taken place.

At the age of four a child understands most types of sentences, and most of his utterances are interpretable in
terms of syntactic structures. That is, he can recognize the structure of a given sentence which by itself is totally new to him.

This view contrasts sharply with the traditional psychological approach to the language acquisition process which views the phenomenon of language acquisition within the framework of learning theory. The acquisition of phonology is viewed as a process of shaping the elementary sounds of the infant through reinforcement of successive approximations to the adult pattern. Imitation of adult speech patterns is considered to be a source of reward for the babbling infant and repeated practice of these novel motor habits serves the function of automatizing them. Words of the language then emerge with parental reinforcement. The meaning of words is learned through a conditioning process whereby the referents which the word signals appear in contiguity with the symbol.

Under this theory, the burden of language acquisition is placed on the environment with the parents as the source of input and reinforcement is necessary for establishing the habit. A general characteristic of this approach would be to say that language is acquired from surface to base—that is, that phonological, semantic and syntactic knowledge is based on the relations contained in the overt speech of the parents (Jacobovits, 1968).
Effect of First Language Concepts on Second Language Acquisition

"The learning of one language in childhood is an inevitable process; the learning of a second language is a special accomplishment" (Mackey, 1967, p. 107).

The first and most obvious reason for this is that the learner of a second language has already had experience with a language. The type and amount of experience depends on the individual and varies from person to person. A person who has been using only one language since childhood has thoughts which are closely tied to his language. The language he uses is now a part of his experience with the world of action and things. When he was a child, an increase in this experience was always connected with an increase in language learning. (See Chapter II.)

When attempting to learn a second language, the learner is usually faced with the problem of dealing with these same surroundings and this same experience in a different way, not only with different sounds, words and sentences, but with different groupings of things, persons, actions and different arrangements of time, space and matter (Hall, 1959). Mackey (1965) contends that the native language structure, which is so much a part of the learner's thought, is his first obstacle to learning a new language since he tends to "put the raw material of his
experience into the groups fashioned for him by his first language" (Mackey, 1965, p. 107), and what is needed is a second or alternate grouping of his environment and experience which cannot be made in the same manner and under the same circumstances as the first.

The older the second-language learner is, the more analytical he becomes and the more he tends to try to acquire consciously the skills he acquired automatically in his native language. Furthermore, he attempts to use his first language generalizations in the second language. His intuitive knowledge of his native language is projected to the second language.

The learning of the first language follows the same pattern for everyone; the learning of a second language can take on a variety of patterns as is evidenced by the fact that many different approaches have been implemented by teachers to teach languages. Many factors are involved in the acquisition of second languages and the present state of knowledge of language learning is not adequate enough to make possible a complete analysis of all the factors involved since we are not even sure what precisely the understanding and speaking of a language involves.

Recent research in child language development, however, may be showing the way to considering the learning of a second language as very closely related to and possibly even dependent upon the processes used in acquiring the
first language. The general tendency in psycholinguistics is toward the theoretical position that there are underlying basic similarities of all languages called linguistic universals (Jakobovits, 1968); and as Chomsky (1968) and Lenneberg (1967) suggest, these universals can be thought of as an innate mental endowment rather than as a result of learning. Most of the research has been concerned with structure and organization of language but Fillmore (1969) and others have begun to extend this universality to the semantic aspects of language. If the underlying syntactic and semantic aspects of languages are similar, and if these similarities are indeed innate mental endowments, then the processes of learning a second language may well be similar to those used in acquiring the first language. Furthermore, if these similarities between languages exist, it is reasonable to assume that the learner of a second language already possesses many of the second-language concepts and that learning a second language is largely a matter of taking the existing "deep structure" and having students develop a new "surface structure" for the second language. Implied in the assertion above is the equation of "deep structure" and "linguistic universals" and the implication that the transformations applied to the "deep structure" include not only linguistic transformations but also transformations of an anthropological and cultural nature. Thus the concept for the first meal of
the day is identical in the deep structure but emerges as bacon, eggs, toast and coffee or orange juice, rolls and coffee in English and as café au lait, croissant, and confiture in some versions of French, and as huevos rancheros, café and panecillos in some versions of Spanish.

Gagne (1965) provides some insight into how the "range" of a concept or word is acquired. He emphasizes the importance of conducting discrimination learning within stimulus situations that "represent the actual range of the concept being learned" (Gagne, 1965, p. 130) since the concept that emerges will be incomplete otherwise. Using Gagne's example of the learning of the concept for edge, then, the learner must know what an edge is in a three-dimensional object, in a flat thin object like a piece of paper, and in a drawn two-dimensional picture. To be able to "know" the concept edge, there need to be several occurrences of multiple-discrimination learning between each edge and a variety of stimulus objects that are not edges, such as the side, the top, the corner and the curved surface. Likewise, in learning a second language the learner must begin with concrete situations, to which eventually he may bring a common verbal associate. In a sense, it could be said that even though a student already possesses certain information about a universal concept relating to the first meal of the day, this information is deficient in that it is only one class of concrete
situations. The objective is, then, to provide the learner with an alternate class of concrete situations which will distinguish between what breakfast means to an American and what petit déjeuner means to the Frenchman. These concrete situations then must be anthropologically authentic but still preserve the elements that are common to both languages, namely, that breakfast and le petit déjeuner are the first meal of the day.

The meaning of any word in a foreign language is closely related, then, to behavior in the foreign culture toward the object or process for which it stands and the experiences of a native-born member of the culture in relation to that object, event or concept.

The work of the foreign language teacher is to encourage the student to go beyond certain psycho-motor movements and sound impressions to the experiences which physical phenomena represent to the native speaker. It is not enough to teach only the physical aspects of the language. If we accept Mowrer's view that "in communication . . . we are transferring meanings from sign to sign within a given person" then this person "must already have the meanings with which we shall be dealing" (Mowrer, 1960, p. 139). We are merely arousing these particular meanings and associating them in different ways. The important matter here is that we must be aware of the "meanings" we are arousing when we use a foreign language.
CHAPTER IV

PEDAGOGICAL IMPLICATIONS FOR CONVEYING MEANING:
ELEMENTARY AND INTERMEDIATE STAGES

One of the most controversial questions in language teaching is how the meaning of words and phrases should be conveyed to the learner. This is partly due to the different views on the nature of meaning. Whereas some teachers believe that each word has a central meaning which is an inseparable part of the word, most modern philosophers reject the view that there are entities called meanings which exist separately from people and their utterances. The writer's orientation on the nature of meaning has been described in Chapter II. The aim of this and the following chapter will be to describe how situational, lexical and grammatical meanings are conveyed in the teaching of a foreign language.

The teaching of the formal meaning of language is the development of the learner's organizational skills—the ability to generate and analyze linguistic structures, whether they be sound patterns or grammatical units or word patterns. The procedures we use to teach these are
familiar: drills of all kinds, substitution, correlation and conversion exercises, spelling practice, and sound discrimination training. When a substantial part of the organizational skills have been taught, we still have to show the learner when to use the forms he is able to create and in what circumstances the forms become effective communication. In effect, we have to teach him semantic skill--how to use the language meaningfully.

The teaching of the organizational skills and the semantic skills should proceed simultaneously since to teach one without the other would lead to verbalism.

Once the student has mastered the organizational skills, however, the amount of vocabulary is dramatically increased while organizational skills development is limited to perfecting the existing skills through practice and refining of grammatical aspects.

Since this change of emphasis occurs it is reasonable to assume that the method of teaching the semantic skills should be different in both stages. For example, learning vocabulary in context or by definition would be more appropriate for advanced students than for beginning or intermediate students since the context or definition itself would be difficult for the beginning and the intermediate student.

This chapter will consider the teaching of foreign language meaning in the elementary and intermediate levels
with a description of the various procedures which are used and then a description of what this writer considers to be the ideal organization of teaching materials and procedures for teaching meaning effectively.

According to Bloomfield (1933, p. 140) there are three ways of teaching meaning. He describes them as follows:

One is demonstration. If someone did not know the meaning of the word apple, we could instruct him by handing him an apple or pointing at an apple, and continuing as long as he made mistakes, to handle apples and point at them, until he used the word in the conventional way. This is essentially the process by which children learn the use of speech-forms. If a questioner understood enough of our language, we could define the word apple for him by circumlocution—that is, in the manner of our dictionaries, by roundabout speech which fitted the same situation as does the word apple, saying, for instance: "The well-known, firm-fleshed, smooth-skinned round or oblong pome fruit of the tree of the genus Malus, varying greatly in size, shape, colour and degree of acidity." Or else, if we knew enough of the questioner's language, we could answer him by translation—that is by uttering a roughly equivalent form of his language; if he were a Frenchman, for instance we could give pomme as the meaning of apple. This method of definition appears in our bilingual dictionaries.

Mackey (1965) uses these three ways of giving, or teaching, meaning but adds a fourth procedure which he calls a pictorial procedure. He also uses different names for the other three procedures that represent a refinement of Bloomfield's terms which this writer will also use. These terms are differential procedures,
ostensive procedures, pictorial procedures and contextual procedures.

**Ostensive Procedures**

The principle of learning meaning through the senses first advocated by Aristotle's *Nihil est in intellectu, quod non prius fuerit in sensu* has been responsible for the application of the theory of direct association to the teaching of languages. The stronger the association between visual stimulus and vocal response, the shorter the time needed for learning.

The relevant elements of a context of situation are perceived through the senses--any of the senses. Most obviously, the verbal element of the situation is perceived through the sense of hearing in spoken language, but the other relevant features of the situation, such as the participants and what they do and the physical circumstances of the situation such as the street, room, car, office, etc., and what is happening in them are predominantly noted by the sense of sight. The senses of touch and smell and the sense of taste can also play a part in building up a meaning-giving event but play a minor role since these features can be learned through association with the words they normally occur with.

Since the sense of sight is the dominant one, we cannot expect to build up the contextual relationships
out of which meaning arise without depending very heavily on that sense. This can be exemplified by taking two or three common procedures in language teaching. When we hold up or point to an object and say *Esto es un lápiz, Voici un crayon, This is a pencil*, we are reproducing a classroom variant of a situation which would frequently occur outside. What we are doing by the technique of holding or pointing to an object and saying *Esto es un lápiz, Voici un crayon, This is a pencil* is creating a relationship between a sentence and all the features of situational context, not just the pencil since the expression *this is a . . .* would probably not occur if the object were not in sight.

This used to be known as the learning of meaning by direct association, and the method got the name of the Direct Method. In it we were said to be creating a direct, meaningful association between an object and its name. This is only partially true, however, since not everyone who favored the Direct Method was aware that this could only happen in the presence of a demonstration-type situation characterized by the grammatical structure: *this is a . . .* and accompanied by a characteristic movement by the teacher. In the absence of both these necessary conditions no association would take place and no learning of meaning would result.
The technique of teaching meaning described above made use of the situation in which the teacher and the students found themselves in order to give meaning to the language being taught. However, it is immediately evident that if we were to rely exclusively on what is available in a normal classroom as potential elements in a situational context, we could not progress beyond a certain point in our teaching. This is where a consideration of visual materials comes in.

Anything that the learner can see in the classroom, or out of the classroom, is potentially a visual element for the teaching of meaning. This applies to the permanent fixtures in the room such as walls, doors, and windows; to its usual furnishings such as desks, chairs, blackboards, machines and bookshelves; to things which can be brought into the room or are there already, such as books, pencils, plants, animals, tools.

The list so far consists of only physical objects but it has already been pointed out that a context of situation involves people and actions. We must therefore add to the list of potential visual material any person in sight of the learner whether it be student, teacher or visitor and the actions of these people using objects available to them. In cases where the object is not available, models can be used.
Objects or models of them may be used to teach, not only vocabulary, but structure as well. The easier these objects can be seen and felt the easier it is to get the meaning across. The pointing and naming technique has been described above for teaching vocabulary and a limited amount of structure. The success of this technique lies in making clear what is being pointed at.

A second aspect of meaning which can be taught using objects has to do with quality words. They may be effectively presented in contrast with their opposites by means of objects which best bring out their opposing qualities. For example, *gordo* is clearer when it can be contrasted with *flaco* and taught by means of contrasting pairs such as a fat doll and a skinny doll and using pictorial procedures along with it with a representation of a fat boy and a skinny boy, a fat girl and a skinny girl in order to establish the concept *fatness* in the learner.

Certain abstract words like *food*, *metal*, *plant*, and *fruit* may be taught by grouping together a number of objects, models, or samples of material belonging to the same class. This provides an excellent opportunity to show students how in many cases abstract words depend on concrete words for their existence.

Structure words which indicate relationship--words like *on*, *in*, *under*, *over* and *above* in English, *sobre*, *en*, *debajo de* and *arriba de* in Spanish, *sous*, *dehors*, *dans* and
sur in French--may first be presented through objects which illustrate the particular kind of relationship desired. The kinds of objects used are extremely important in establishing the initial meaning since on the table and on the chair are much clearer than on the map and on the road to town.

Objects alone are not sufficient to teach meaning. Actions and gestures must necessarily be used to convey some kinds of meaning. They may be used alone or with objects to convey the meaning of demonstratives such as este/ese, this/that, celui-ci/celui-la, here/there, aqui/alli/alla, ici/la-bas; directional prepositions such as to, from, toward, hacia, de, a, para, à, de, vers; verbs of action and nouns of action such as a smile or a fall.

An objection could be raised at this point concerning gestures. It can be argued that since gestures differ from culture to culture it is not appropriate to use the native culture's gestures in using the language of another culture. The writer agrees with this objection in part. However, in learning a foreign language the learner should be able to talk about his own culture too, and, to this extent, the writer has no objection to the use of native gesture with that of the foreign culture soon after the initial presentation and then insists that the foreign gesture always be used when using the foreign language.
In a recent article, Hayes (1965) wrote that language teachers can use cross-cultural gesture comparisons, systematically arranged, provided that the gesture and its context are equally well described.

An additional technique that can be used to convey meaning ostensively is dramatization or simulation of the situations in which certain events occur.

The teacher can act out an operation, or sweep the floor, or imitate a monkey or a dog. When he does this he re-creates in his imagination and in that of the learner the context of situation in which these things belong. In certain instances by introducing representational visual material specially prepared by the teacher or commercially for the teaching of the foreign language, it is possible to make simulations more clear. This will be further pursued in the following section.

**Pictorial Procedures**

The use of pictures in language teaching is as ancient as the *Orbis pictus* of Comenius (1658). For him it was the picture which could be most easily impressed upon the mind, giving the most real and lasting of impressions. This idea was neglected however until the late nineteenth century and has been used and improved upon during the twentieth century.
Language teaching pictures can be divided into three basic types. The first type simply illustrates a theme or a text and will be referred to as thematic pictures (Mackey, 1965, p. 245). This kind of picture is not intended for conveying meaning and any meaning conveyed by them is incidental to their function as illustrations. Thematic pictures may function as a motivation device to help students imagine what a text says or to focus the attention of the student on what a text says and then to help him comment on a theme. Logically, then, a thematic picture used as described above has serious limitations in the beginning stages of language learning.

Thematic pictures usually are in the form of crowded scenes illustrating a single theme. Examples of this might be a scene of the family around the dinner table, a group of people on a picnic or a group of people at a sporting event. Even though these pictures do not give the meaning of everything, it is possible to use thematic pictures to teach the concrete nouns in the picture and then develop a situation using the thematic picture as a situation-setting device. To use such a technique, however, it is extremely important that the learner be well acquainted with the necessary vocabulary and that new structures be limited to one or possibly two.

A second type of picture is the mnemonic type which is designed to remind the learner of certain words or
sentences (Mackey, 1965, p. 246). Mnemonic pictures usually represent situations broken up into sequences in which each picture can cue a further development of the situation. The mnemonic picture is not designed to convey meaning but rather to help the student remember a sentence. A picture of this type might be a simple stick figure of a boy with a comic-strip balloon over his head with a question mark in the balloon as follows:

![Mnemonic Picture Example]

The information conveyed by such a simple drawing in a dialogue situation might be that a boy is speaking and he's asking a question.

The third type of language teaching picture has been identified by Mackey (1965) as the semantic picture. Its sole function is to get a specific meaning across. Such a picture must be unambiguous and must contain only what the words mean. If a picture is to be truly semantic, all irrelevant detail must be removed since otherwise the picture is merely illustrative (Mackey, 1965, p. 246). It should be noted here that a semantic picture may sometimes function as a mnemonic picture since the sole function of the mnemonic picture is to "jog" the learner's memory.
Any of the three types of pictures can appear in the textbook, in separate pictures for class use or on film. Each medium is presently used in language teaching but with varying results because sometimes the medium used to convey the desired meaning is inappropriate. For example, a thematic picture in a textbook will not help a student memorize a dialogue as well as a series of mnemonic or semantic pictures, but will help the student organize and generalize the language features of a given unit of study by inducing him to verbally create a new situation suggested to him by the picture. A thematic picture in a text, then, can be used either to illustrate what is generally called a recombination narrative where the text recombines learned material into a new situation, or to help the student create his own narrative based on the picture before him, for practice in oral composition, and question-and-answer drill in the classroom.

The ideal text would have a mnemonic picture for every sentence in the basic dialogue. These pictures should be semantic in nature also if possible since McKinnon's research which was reported by Carroll (1966) showed that the aid of semantic information concerning the content and relations involved in grammatical structures enhanced language learning.

Pictures used in the classroom may be the same as those used in the text. The advantage of class pictures,
however, is that the teacher can supplement what is in the text with what he considers to be appropriate for a given lesson. If a teacher has a supply of pictures he can use he is free to provide several pictures of the same concept so that the meaning is clear. This is especially important if a teacher is trying to establish a grammatical concept such as size relationships. For example, one picture of a large object, a smaller object and an even smaller object is not as effective in conveying the concept as three or four pictures with different objects but the same size relationships.

The third medium which may be used with pictorial procedures is the film which takes the form of the filmstrip, slide and the motion picture.

The advantage of filmstrips or slides over text pictures is that they direct the attention of the learner to the screen. They also allow the teacher to be free from the reality of the situation and contrive, if not at least suggest, a new situation. Filmstrips and slides are able to depict not only those situations which the teacher can present in class but also many of those which he cannot; and they can present these situations more rapidly than the teacher can act them. Furthermore, a situation presented on slide or filmstrip can be presented several times without calling on the teacher and without changing the quality of the presentation.
Motion picture films, if specially designed, may be the chief means of presenting the meaning of a language. Since they compel a high degree of attention because of the isolation of context and movement, they should be seriously considered for foreign language teaching.

Whereas filmstrips may convey the meaning of simple actions, they do not convey results and feelings as effectively as motion pictures. The motion picture is superior in this respect because the visual portrayal of movements, synchronized with sound, closely simulate reality to such an extent that even emotional experiences can be conveyed in the motion picture. Because of this simulation of reality it is possible to convey culturally authentic experiences.

As a technique of presentation, the sound film can reduce a situation to its essentials thus preventing anything irrelevant from taking the learner's attention away from the teaching point. The vividness of the experiences presented can increase the meaning of the accompanying language.

**Contextual Procedures**

"The extent to which pictures, objects, actions and situations are used in order to convey meaning depends on the language level at which the method is operating" (Mackey, 1965, p. 249). As was pointed out earlier, the
beginning language learner must depend more on ostensive and pictorial procedures than will a learner on an advanced level. Once the learner has acquired a basic vocabulary, however, known words can be used to teach the meaning of new words and structures.

Nonetheless, the beginning language learner should be able to learn a certain portion of his vocabulary through contextual procedures if the contexts are kept simple and the vocabulary used to present the new vocabulary is within the students' knowledge. For purposes of teaching vocabulary, the teacher would be well-advised to teach certain "key" words to his beginning language learners expressly for teaching vocabulary. Examples might be lo opuesto de, the opposite of, le contraire de; the same as, lo mismo que, la même chose; similar to, similaire à. Thus, if a student knows the meaning of one word, he simply needs to be told that another word is its opposite in order to get an idea of the meaning of a new word.

A second technique which can be used is simply to enumerate what a word includes, perhaps using pictures in conjunction with the verbal aspects. For example, the teacher could show a picture of a cow, a dog, a cat, a horse and a pig to teach the word for animal, saying Esto es un animal, C'est un animal after each picture is shown, or if the words for the individual animals are
known, the teacher could use the name of the animal and say *El perro es un animal*, *La vaca* . . . etc., or *Le chien est un animal*, *Le chat* . . . etc.

William Moulton (1966, p. 114) and R. M. Jones agree that words should be put into semantic groups or fields if learning is to be easier and more interesting for the student. Moulton advocates the learning of synonyms and antonyms as well as words which are semantically related by means of context, such as *hat*, *coat*, *buy*, *store*, *gray*, *wear*, or *vestido*, *comprar*, *zapatos*, *tienda*, *gri$$\$, llevar*, or *robe*, *chapeau*, *magasin*, *gri$$, porter*. This idea seems to be particularly useful if the writer's contention regarding situational meaning is accepted.

Related to the above is Jones' division of vocabulary into "centers of interest." These centers of interest would be based on two kinds of situations: open and closed. The former type can have an infinite number of parts or aspects; the latter is easily defined and clearly limited.

An example of an open situation would be "the house" in which many aspects exist. The words connected with the house would be taught using ostensive and pictorial procedures already described.

In teaching closed situations, however, the position in itself is an aid to learning as in learning the days of the week, months of the year and numbers. The initial presentation of these should be made in their correct
positions using a combination of pictorial and ostensive techniques. However, the teacher's goal should be to free
the vocabulary item from this set frame to enter an open situation.

Another contextual technique that can be used in
the beginning levels in teaching vocabulary is by substituting some words for other words such as pronouns for
nouns as in the following:

The box was in the hall./It was in the hall.

El muchacho lo hizo./El lo hizo.

Le garçon n’est pas encore arrivé./Il n’est pas encore arrivé.

**Differential Procedures**

These are procedures which are based on differences in meaning between the native language and the foreign language. They include the use of the native language to convey meaning.

An understanding of the processes involved in translation from one language to another will help to assess its value in the teaching of languages. It is impossible and perhaps undesirable to go into the problem of translation in detail since to do so would in itself require at least a book. What the writer is concerned with here is whether we can leave all, or any part, of the teaching of situational, lexical or grammatical meaning to translation. It
is desirable to remind ourselves that this was traditionally the only teaching of meaning, and it was specifically against this aspect of language teaching that the Direct Method was directed.

Corder (1966) points out that when we attempt to teach meaning by means of translation what we are doing is asking the student to make an assumption about the piece of language he is being taught which may be partly false. He has no alternative to doing this because the teacher provides his only experience of the language or source of information about it. Because of this he must assume that the piece of language he has had translated for him behaves in the language he is learning in the same way it behaves in his native language. In other words, the learner must make a generalization about the language from one particular instance. This can possibly result in mistaken conclusions. Fries (1945) wrote:

Many people naively assume that the "words" of diverse languages are simply different sets of symbols for the same things. Many people assume not only that a language consists solely of words that can be recorded and defined in a dictionary, but also that each word refers to some facts of reality about which every individual has had essentially the same experience. From this point of view all that is necessary for the mastery of a second language is to learn a new name for each particular item. If one could memorize these names he would, they believe, have at once an ability of expression in the second language equivalent to that which he has in his native language.

If the unit of meaning in a situation is the utterance, then it seems reasonable to assume that if we really
wish to use translation as a means of showing meaning, we should never translate any stretch of language shorter than a sentence. The common practice, however, is to use translation as a means of giving the meaning of a single word. Thus we may say conocer or connaître means to know; or of an intonation pattern, Ha vuelto? or Il est revenu? with a rising intonation mean Has he returned?

In the first instance to know is used with facts as well as with the names of people and places but the Spanish and French words usually occur only with the names of people and places and use saber or savoir with facts. Therefore to know sometimes means the same thing and sometimes it does not. In the second instance, while a rising tone in French and Spanish can mean a question, it is also true that a yes-no question may or may not have a rising tone in English.

In addition to explaining the meaning of words and their usage, the native language is sometimes used to explain such things as grammar rules, the production of sounds, differences in the structure of the two languages, and situations about which the language is to be used. Recent texts are adopting this technique for helping the student understand what the teaching point is in a language-learning situation and to this extent the author agrees with the use of the native language in the classroom. However, as an end in itself, language analysis is to be
avoided. A learner has no time to analyze the situation consciously when he is speaking nor can he consider whether he ought to hesitate to make his statement too confidently and employ a given intonation contour.

Desirable Characteristics of Media Used to Convey Meaning

Even if we are able to select materials which are relevant for teaching the meaning of a particular piece of language, we must be sure that those materials can be seen, recognized and understood by the learner.

The above suggests that the relevant features must be visible. It is the teacher's responsibility to see that all the pupils in the class can see all the relevant features of the visual material and they must be visible all the time they are relevant. It is not sufficient for the learner to catch a glimpse of an object taken from the desk or taken out of the pocket. The object must be large enough for everyone to see. This is also true of actions, movements and gestures; all these must be visible and prolonged enough to be noted by the learner. In situations where the relevant features of a situation cannot be enlarged or prolonged, such as in a facial gesture, they can and should be repeated and the students' attention should be directed to them. On the other hand, laboriously opening and shutting doors, boxes and books while practicing
I am shutting (or opening) the . . . can border on the ridiculous and should be avoided. In using representational material, the drawings, pictures and models must be large enough to be visible to the student who is sitting the farthest away. The picture must also be clear enough. Each detail must be separated clearly from the next detail by strong outlines, by distinctive coloring or strong tonal contrast, and in the case of projected materials, by correct focus.

Secondly, the material must be recognized. It is not enough for relevant features simply to be in the line of vision or to be noted. They must also be recognized for what they are. Impediments to this are numerous. What the learner sees of the relevant features may not be presented to him in the form he is accustomed to seeing them. In teacher-made materials the teacher-producer has the power to make the viewers look at things from his own point of view. For example, a building viewed from the top is not necessarily recognizable as such by the learner. The way a teacher performs an action may not be the way a learner is accustomed to seeing it done.

Since a language is an expression of the culture of its speakers, there may be things, people and ways of behavior which are completely unknown to the learner and therefore useless for giving meaning to the language being taught; these things may be known to him through information
in his native language but not through his direct sensory experience. Thus, for example, even though all countries have policemen, the uniform they wear is different in every case. The learner would sometimes have difficulty in differentiating between a policeman, a soldier and a postman in all cases.

We have seen that the relevant features of visual material must be seen and secondly, recognized. However, for the material to be useful for teaching meaning in language it must also be understood.

In her book *Psychology of Perception*, Vernon (1962) writes:

> In the civilised state, man makes so much use of shapes drawn on flat surfaces that his ability to comprehend these has reached a high degree of efficiency . . . . But this capacity must be learnt, and the child only acquires it gradually, and sometimes only after much teaching.

Understanding what we see means perceiving relationships between the relevant features of the scene, and drawing conclusions from them. The ability to do this is clearly related to perceptual maturity and partly to knowledge of the world which is perhaps culturally determined.

It is therefore important to note that the teacher cannot assume that the learner will readily understand what he teaches them simply because he shows them pictures. The picture does not necessarily create meanings in any direct way. It simply provides the student with important
information--affective expressions, lexical referents, behavior of characters, cultural aspects—that he will use in understanding the sentence.

Organization and Application of Teaching Procedures

The initial presentation of a piece of language should serve to establish the situational context of a rudimentary plot by sketching the setting, characterizing the people involved, defining the circumstances of the plot and depicting the actions in the sketch. The purpose of this presentation should be to provide the learner with a general comprehension of the situation—who did what to whom and where.

The medium which is best able to make this initial presentation is the motion picture which has been designed specifically for this purpose. The motion picture has many distinct advantages in establishing the situation that has the alternative, using other pictorial and ostensive procedures, lacks. Since the film can be rewound as many times as necessary, facts and order of events can be clearly established and cultural similarities and contrasts can be noted after the showing that the teacher deems most appropriate. Furthermore, if the motion pictures are part of an integrated set of materials and the films themselves are sequential—a film logically and situationally follows the
previous one—a series of learned film lessons can provide situational continuity for the learner.

After the situational context has been clearly established, the situation should be broken down or segmented into its appropriate components. A dialogue would, for example, be segmented into the utterances of the different participants. Since each segment is a part of the complete situation and is meaningful in itself each segment must be presented also. In this phase, we are interested in the lexical meaning and the grammatical meaning since the situational aspect has already been presented. We are concerned with the environment, relevant objects, verbal and non-verbal behavior of the participants, and the effects of each on the total composition of the situation.

To do this it is obvious that pictorial and ostensive procedures can be used. Key lexical items of a concrete nature should first be presented to the learner for listening and then production using the pointing and naming technique described earlier. The use of pictures, actions, gestures and models to establish lexical meaning are appropriate. It is advisable to have more than one example of each item so that the learner has several experiences of the same concept. Cultural differences in lexical content should be noted at this time.

The next step should be to model orally the segments of the piece of language using appropriate pictorial and
ostensive procedures to illustrate each segment. At this stage each segment should be associated with a mnemonic device so that in subsequent exercises with the segment of language, the learner will be able to recall the appropriate segment. These mnemonic devices could be gestures or pictures, perhaps semantic in nature. Some existing materials use the frames of a filmstrip sometimes based on the previously shown motion picture to fulfill this function. If the teacher does not use this kind of integrated materials it is advisable that he provide these mnemonic aids.

Once the student knows the sounds and meaning of a segment of language, the mnemonic device should be withdrawn and the student encouraged to expand and deviate from the learned segment of language. It should be noted that the language segments at the point prior to expansion and deviation have been a part of the situation which was established as the first step. However, it is uneconomical to teach language utterances which can be used appropriately in only a single foreign language situation. Therefore, a segment of language must be changed to the extent that the grammatical pattern of the segment of language is applicable to different situations.

Therefore the student must be encouraged to create his own language situations using the previously learned segment of language as a model. For example, once a
The student has learned a segment of language corresponding to
*I get up at six-thirty in the morning, Je me lève à six heures et demie le matin, or Me levanto a las seis y media de la mañana*, the next step is for him to create a new segment of language in which he says he gets up at a different hour or that he performs a different action at the same hour or at a different hour.

The substitution slot should be controlled by the teacher so that the same grammatical pattern will occur several times since each time a grammatical pattern is reproduced, grammatical meaning (Chapter II) is being reinforced. The pattern drills currently used in audiolingual or functional skills teaching are well known to foreign language teachers—repetition, simple substitution, progressive substitution, progressive substitution and transformation drills, usually in that order.

The writer agrees that drills of this nature are extremely necessary for establishing and maintaining grammatical meaning. He maintains, however, that the teaching of grammatical meaning can be started while the dialogue is being learned. He also maintains that grammatical exercises must be conducted on two levels—the surface level, which may be a recombination of several other embedded structures and is represented in what a native speaker of a language says, and the deep level which consists of the several individual basic structures which
underlie what a native speaker of a language says. (See Grammatical Meaning in Chapter II.)

When the language teacher, and textbook writer, are dealing with relatively complex expressions, they can employ one of two techniques to elucidate their transformational structures. First, they can draw up a long series of expressions, working up from kernels to terminal utterances or down from terminal utterances to kernels; or secondly, they can plot the relationships between the parts on the basis of identifying the principal functional classes.

The preceding requires the addition of language drills that lead students from deep structures to surface structures. The implication for language teachers and textbook writers in materials development is that utterances would have to be broken down into a series of other less complex transforms or kernels.

The kernel constructions in any language are the minimal number of structures from which the remainder can be most efficiently and relevantly derived. They are quite naturally not identical in all languages but it is significant that insofar as basic structures of different languages have been studied, there appear to be many more parallelisms between kernel sentences than between the more elaborated transformations. For example, all languages appear to have something equivalent to subject-predicate constructions. In a high percentage of languages
these subject-predicate kernel sentences have an equational state type such as he is a man, and he became president, and an action type, such as they fled and the boy killed the snake.

All languages seem to distinguish between verbs and nouns and, in basic structure, objects tend to be expressed primarily by nouns and events by verbs. Also, all languages have ways of indicating the abstractions of events and objects. Relationships between words are indicated in a wide variety of ways such as morphological elements affixed to key words or particles such as conjunctions and prepositions or postpositions.

It may be said, therefore, that in comparison with the theoretical possibilities for differences in structures languages show many similarities, including especially (1) remarkably similar kernel sentences from which all other structures are developed by permutations, replacements, additions, and deletions; and (2) on their simplest structural levels a high degree of parallelisms between formal classes of words (such as nouns, verbs and adjectives) and the basic function classes in transformations: objects, events, abstracts, and relationals.

Because of these two fundamental facts about language it would seem reasonable to develop an approach to materials development, including pattern drills, which takes these facts into consideration. This allows the building
of meaning proceeding from a structurally simple level to the more common recombined utterances common to speakers of a language.

Having further considered the nature of grammatical meaning the question of how one teaches grammatical meaning can be partially answered.

After situational and lexical meanings have been established as described earlier, and the meaning of a segment of language is clear, the teacher normally begins a process of modeling and repetition with the dialogue utterances, building up to full utterance repetition in partials. It is extremely important that each grammatical slot of a complete sentence be built up independently starting with the last slot in order to preserve the syntactic structure. To build up the sentence by more mechanical addition of elements starting with the last one obscures the relationship of one slot to another and does not call attention to the elements contained in each slot. Belasco (1968, p. 34) illustrates this point in the following comparison:

<table>
<thead>
<tr>
<th>Structural build-up</th>
<th>Mechanical build-up</th>
</tr>
</thead>
<tbody>
<tr>
<td>coté</td>
<td>coté</td>
</tr>
<tr>
<td>un seul coté</td>
<td>seule coté</td>
</tr>
<tr>
<td>d'un seul coté</td>
<td>un seul coté</td>
</tr>
<tr>
<td>sont</td>
<td>d'un seul coté</td>
</tr>
<tr>
<td>sont d'un seul coté</td>
<td>sont d'un seul coté</td>
</tr>
<tr>
<td></td>
<td>Link Verb</td>
</tr>
<tr>
<td></td>
<td>Complete</td>
</tr>
<tr>
<td></td>
<td>Predicate</td>
</tr>
</tbody>
</table>
Grammatical relationships can thus be established from the very first stages of dialogue learning rather than waiting until structure drills based on the dialogue have been presented.

The preceding procedure, however, is limited to surface structures in their elaborated forms. Once the dialogue has been presented, exercises which then recombine structure drills to form elaborated surface structures are needed.

Although it is not the writer's purpose to develop a curriculum guide or write materials for a course of study, it would be useful to illustrate a teaching problem in Spanish--using the procedures I have proposed above.

Teaching problem--Direct and indirect object position in Spanish

Model dialogue utterance--Manana se la voy a escribir.

(The teacher should be encouraged at all times to use appropriate pictures, models and actions.)
Exercise 1 Part 1 (Students listen and repeat)

Review of object position

Voy a escribir la carta.
La voy a escribir.

Voy a enviar las maletas.
Las voy a enviar.

Voy a cantar la canción.
La voy a cantar.

Voy a llevar las revistas.
Las voy a llevar.

Voy a escribir el trabajo.
Lo voy a escribir.

Voy a enviar el paquete.
Lo voy a enviar.

Voy a cantar el Ave María.
Lo voy a cantar.

Voy a llevar el traje.
Lo voy a llevar.

Part 2 (Students substitute correct pronoun in correct position), e.g.,

Voy a llevar el traje.
Lo voy a llevar.

Voy a llevar el traje.
Lo voy a llevar.

Voy a enviar las maletas.
Las voy a enviar.

Voy a escribir los trabajos.
Los voy a escribir.
Exercise 2 Part 1 (Students listen and repeat)

La voy a escribir a Maria.
   Se la voy a escribir.

La voy a enviar a Juan.
   Se la voy a enviar.

La voy a llevar a Pepe.
   Se la voy a llevar.

La voy a cantar a Josefina.
   Se la voy a cantar.

La voy a traer a los abuelos.
   Se la voy a traer.

Lo voy a enviar a las chicas.
   Se lo voy a enviar.

Las voy a dar a los hombres.
   Se las voy a dar.

Los voy a llevar a mi amigo.
   Se los voy a llevar.

Part 2 (Students provide correct indirect pronoun in correct position)

La voy a llevar a Pepe.
   Se la voy a llevar.

Lo voy a enviar a la muchacha.
   Se la voy a enviar.

Las voy a dar a los muchachos.
   Se las voy a dar.

Los voy a llevar a mis amigos.
   Se los voy a llevar.

(Additional examples would be needed, but of the same kind.)

It is important to note that the line of the dialogue does not serve as the prototype for the drills that develop the grammatical point but rather serves as the goal. After
the teacher has conducted several exercises of the type described above, he should go back to the dialogue and ask students questions about the content of that dialogue line and other utterances with the same construction to further reinforce the grammatical generalization that the students should have reached by that time.

Many other grammatical relationships can be built up in the same way—by reducing the dialogue utterance to meaningful essentials and then combining them to constitute the elaborated form. Adjective position can thus be illustrated in a series of utterances such as:

She is a girl./The girl is skinny./She is a skinny girl.
Es un chico./El chico es alto./Es un chico alto.
C'est un homme./L'homme est grand.(-physical)/C'est un grand homme.
Es un hombre./El hombre es grande.(+physical)/Es un hombre grande.
Es un hombre./El hombre es grande.(-physical)/Es un gran hombre.
CHAPTER V

PEDAGOGICAL IMPLICATIONS FOR TEACHING MEANING:

READING PHASE

Once the first stage of the reading act--word recognition--has been completed, the reader is required to understand fully what is written provided it is within the learner's second language experience. Eventually, he must understand not only word meanings but what is given directly and what is implied as well, and he must be able to accept or reject ideas on the basis of understanding.

In reading any passage, the reader must be able to grasp the meanings of words in relation to the surrounding vocabulary and other clues in a reading passage. This chapter aims to provide a framework which will give ideas to the teacher for systematic training in the skills and techniques necessary for acquiring word and sentence meanings in reading a foreign language.

Derivation

It can be said that the memorization of each dialogue sentence from the very first lesson was an exercise in vocabulary building since the teacher taught students to
associate words with specific objects whether through pictures, models, simulations, explanation or definition in the foreign language. However, in the pre-reading phase it is almost impossible to use clues within the passage itself for the determination of meaning.

While the writer believes that the primary means of teaching vocabulary in the reading phase is through action context, and pictorial clues, other ways of expanding students' vocabularies can complement the exercises in context.

One of these ways assume that words can have meaning in their own right, and that the teacher is obligated to teach this meaning to the student. This meaning comes not from external clues—that is, from context, but rather from internal clues or from the internal structure of the words themselves.

As pupils advance in their study of the foreign language, the teacher should have exercises which illustrate the great number of Spanish and English forms which differ from one another by suffix and prefix. This process is known as derivation.

Derivation is the name given to the grammatical process of composing new forms with new meanings by the addition of prefixes or suffixes to already existing root forms, such as in atomic from atom and hardness from hard. The teacher can quickly increase the students'
active and passive vocabularies by teaching the pupils to recognize the meanings of the various derivational suffixes and prefixes. The teacher must assume, however, that the root forms are already controlled by the student.

Many audio-lingual texts include exercises on derivation. The exercises below are examples of the kinds of exercises that are possible.

**Derivation of noun from verb.** -ción, -miento, -ncia

- cooperar/cooperación
- organizar/organización
- interrogar/interrogación
- ganar/ganancia
- importar/importancia

**Derivation of adjectives from nouns.** -al

- nación/nacional
- centro/central

The prefixes des-, in-, and im- reverse the meaning of a word.

- orden/desorden
- componer/descomponer
- ventaja/desventaja

- necesario/innecesario
- posible/imposible

The following are selected drills from *Modern Spanish* (Bolinger, *et al.*, 1966) on the derivations presented above, in which the students are instructed to substitute the items listed for the word emphasized:

1. Del verbo **casar** viene el sustantivo **casamiento**.

   (Pensar, llamar, mandar, acompañar, levantar, mejorar)

2. Del verbo **imaginar** viene el sustantivo **imaginación**.

   (Exagerar, terminar, instalar, organizar,
cooperar, participar, formar, invitar, felicitar, importar, presentar, eliminar, celebrar, investigar, significar)

3. Del adjetivo relativo viene el sustantivo relatividad.
   (Sincero, oportuno, tranquilo, nervioso, bárbaro, seguro)

4. Del verbo ganar viene el sustantivo ganancia.
   (Importancia, creencia, sugerencia, existencia, insistencia, preferencia)

5. Lo que es de la profesión se llama profesional.
   (Nación, educación, materia, presidencia, fruta, idea, medicina, secretaria, persona, semana)

   (Acuerdo, honor, nivel, unión, ventaja, apego, empleo)

7. Lo contrario de dependiente es independiente.
   (Directo, exacto, necesario, perfecto, personal, posible, puntual, tranquilo)

8. La zapatería es la tienda del zapatero.
   (Panadería, carnicería, joyería)

Similarly in French:

1. Feuillu veut dire "qui a des feuilles."
   (barbu, pointu, cornu)

2. Branchage veut dire "une collection de branches."
   (cordage, feuillage, plumage, herbage)

3. Ecremer veut dire "enlever la crème."
   (Ecorner, éffruiter, ébrancher, éfeuiller)
4. **Nuageux** veut dire "couvert de **nuages**."
   (Neigeux, huileux, graisseux, terreux)

5. **Enterrer** veut dire "mettre en **terre**."
   (Encaisser, enregistrer, embarquer, empocher)

6. Le **battoir** est une chose qui sert à **battre**.
   (Rasoir, pressoir, fermoir)

7. La **charcuterie** est la boutique du **charcutier**.
   (Boulangerie, laiterie, fruiterie, boucherie, épicerie)

The preceding exercises are a very small sampling of the kinds of activities to use for expanding vocabulary through derivation. Hopefully, the language teacher would introduce an exercise of the nature described only once or twice a week, then find sentences to read which contained that specific teaching point—perhaps for the day after the original presentation—and spend only a few minutes every day on word derivation.

**Inferring**

Derivation, however, does not even begin to encompass the total scope of inferring meaning from contextual situations. Therefore, it is important that the teacher find ways to duplicate as closely as possible in the target language the means by which the native speaker expands his own understanding. Since the pupil does this accurately, even instinctively, in his native language, the teacher can
use this as a departing point. This can be done by selecting a piece of prose in English and adding invented words at frequent intervals. Examples of this are "I used a flam to sweep the room," or "I used a broom to crim the room." The pupils are then asked to guess the meaning of the unknown words indicated. Most pupils will do quite well from the very beginning. In cases where the contextual clues are inconclusive, they will have difficulties of course, but this should not discourage them.

The purpose of the exercises which follow is to introduce the students to some of the more frequent clues to meaning and how to spot them since, despite the high percentage of correct guessing, most pupils do not know by what process they inferred the correct meanings.

We know that, in most cases, word meanings are guessed correctly because the phrase in which they were framed served to define them in some way. In the example "I used a flam to sweep the room," the reader infers that a flam must be something used to sweep the room, thus a broom or broom-like object.

The next step involves phrases which contain forms which could be derived by deduction from relationships implied within the phrases. In these cases, the knowledge of the world the students have serves to help them infer the meanings. In a phrase such as "he blibbed the fire with a bucket of water," the student can correctly infer that
blibbed must mean something like "put out" since he knows from his own experience that water thrown on a fire will put it out.

Frequently, the juxtaposition of synonyms or antonyms in a written phrase gives a clue to the meaning of a form. In a sentence of the type "although there was still snow on the ground, it would soon be blubbed," blubbed is assumed to represent a condition opposed to the existence of snow.

The final step in the initial presentation of inference in English is to give the pupil longer contexts, in which he is required to check and compare his early guesses with repetitions of the same form in a later context. In this way, he learns to follow discussions, make intelligent guesses as he goes along, and then to amend automatically what he has guessed as more context is known.

An adaptation of Allen's (1958) example for teaching "trabaja" will illustrate the point. Upon first contact, the student hears:

1. Dr. Allen bloobs at school.
   
   *Bloobs* could mean many things related to school; however, when the student hears

2. President Nixon bloobs in Washington,
   
   the meaning is narrowed down somewhat. The third sentence,

3. The farmer bloobs on his farm,
   
   will further narrow down the possible meanings
since conceivably, they could study in their respective domains. A fourth and fifth sentence should completely dispel any doubts that students might have if they were something like:

4. Cats don't **bloom**, they sleep a lot.
5. Horses **bloom** since they carry people and merchandise in many countries.

Having gone through this kind of exercise, the student is ready to start doing the same things in the foreign language.

**Definition and Description**

In some sentences, the meaning of words can be guessed from the definition or description that follows it. The context could be such that the information casually given is as good as a description or a definition. For example, in "Le petit garçon est allé porter a manger aux chiens qu'on avait enfermés dans leur chénil" there is information which tells the reader that a **chenil** is some kind of enclosure for dogs. The teacher could ask a question such as "Où sont enfermés les chiens?" and the "Qu'est-ce que c'est qu'un chénil?" "Est-ce que le chenil est seulement pour les chiens ou est-ce qu'un homme peut utiliser un chénil aussi?" Another example is, "La chambre était **exigu** que deux personnes avaient de la peine a s'y remuer." Appropriate questions by the teacher might be "Est-ce que la chambre était grande ou petite?" "Comment
savez-vous que la chambre était petite?" Similarly in Spanish, "El cuarto era tan exigue que ni siquiera cabían dos personas." The teacher could ask, ¿Era grande o pequeno el cuarto?" or "¿Cómo era el cuarto?" and "¿Como sabe Ud. que era pequeno?"

**Synonyms and Antonyms**

Students should be taught to look for other words in a passage that mean the same thing as an unknown word or the opposite of known words.

**Examples:**

1. Ne me celez vous rien? 
   Mais non, pourquoi voulez-vous que je vous cache quelque chose? (celez = cache)

2. Martine était morte de fatigue; Christiane aussi, elle était a bout de forces. (morte de fatigue - a bout de forces)

3. Fernando estaba rendido de cansancio; Raul también estaba agotado. (rendido de cansancio = agotado)

4. Todo el día se había quejado, lamentado, diciendo que era la persona mas desdichada del mundo. (quejado = lamentado)

5. Prendrez-vous le train express ou le train omnibus?

6. En vez de volver pronto a casa se paso el día holgazaneando en las calles.

7. Au lieu de revenir rite à la maison, il aimait flaner dans les rues.
Word Association and Deduction

1. Le chat se défend avec ses *griffes*.
2. De temps en temps elle entendait un cheval qui *hennissait*.
3. Les yeux de l'homme *éclatants* de rage et de fureur.
4. Los ojos del hombre *relumbraban* de rabia y de cólera.
5. De vez en cuando la chica *oía* una vaca que *mugía*.
6. La porte s'est fermée avec un tel *fracas* que le petit bébé s'est réveillé et s'est mis à pleurer.
7. La puerta se cerró con tanto *estrépito* que el niño se despertó y se puso a llorar.
8. Il portait un costume de *coutil* blanc et un large chapeau de paille.

The preceding are only examples of the ways in which meaning can be extracted from the context itself. If students are going to take advantage of the clues within the reading selection, the teacher must choose reading materials that will lead students to make correct inferences and construct vocabulary exercises which will help students develop this facility. These exercises should deal with definition, description, synonyms, antonyms, word association and deduction, individually and separately and then gradually recombined so that students can receive mixed clues similar to what occurs in everyday reading.
Scanning for Clues

Since one of the major roles of the teacher in training students to make inferences is to serve as a guide or manager of the process, he must encourage appropriate scanning for cues. Examples of activities that will develop the ability to scan are:

1. Have students read a paragraph or a part of a selection with instructions to find a specific fact. For example, "Read the page quickly to find out the color of Susan's dress," or "Read the paragraph quickly so you can tell me who the story is about."

2. Give students a page of a newspaper with its variety of stories and headings. The pupils are instructed to get as many different ideas as they can by glancing over the whole page in a minute or two. As soon as time is up the paper is folded and the pupils list orally or in writing the number of different ideas they obtained.

3. The students are provided with a copy of a newspaper and a problem to solve, the solution to which is in the newspaper. Example: You want to send a letter to France on the France. By what time must the letter be at the dock? Where is the dock? When will the letter arrive in France?

For maximum value, the directions should be given in the target language and a variety of materials such as periodicals, paid advertisements, newspapers, books, movie marquees, etc. should be used.

Confirming Cues

Next, the teacher must develop in students a sense of the importance of seeking confirming cues and testing for
the validity of correct inferences. Some of the kinds of questions a teacher can ask students who have just begun to use inference as a way of learning vocabulary are:

1. Does it refer to an action, change, condition, relationship? Do people do it?

2. What is it describing in this sentence? A fact? A person?

3. Ask key questions which situate a reading passage such as who, what, when, how, why, and ask students to give key words from the reading text.

An additional procedure might be to have the teacher present a word embodied in some cues. These cues might be a sentence fragment surrounding the word, a complete sentence, or a sentence containing the kinds of context cues presented in the earlier section of this chapter. The student indicates his answer by either giving a definition in the target language or using the word in a sentence and giving the teacher an indication of his certainty. The procedure may be repeated a number of times allowing the cues to accumulate and encouraging the students to make adjustments to the additional contexts.

This provides practice for students in dealing with discordant clues and in locating the kinds of cues described earlier.

An example of this procedure is given by Allen (1958) to teach trabajar. In this procedure he advocates the inclusion of the target word in several contexts, each of
which narrows down the range which the lexical item might have. His procedure is as follows:

In teaching an abstract word like "trabaja" the teacher might say and write the following sentences on the board:

1. El señor Allen trabaja en la escuela.
3. El agricultor trabaja en su rancho.
4. El gato no trabaja; el duerme mucho.
5. El caballo trabaja mucho; él transporta a personas y mercancías.

Having presented these different contexts to the learner, the teacher should ask students to answer questions such as "¿Dónde trabaja el zapatero?" "¿el carnicero?", "¿el vaquero?" etc. to allow the student to apply his hypotheses and have them confirmed or rejected. If such a procedure is used frequently, the student will begin to pay close attention to all the clues early and thus eliminate the discordant ones.

**Noting the Sequence of Events**

An important aspect of the acquisition of meaning is being able to organize events in their correct steps. A procedure that can be used with any task that requires ordering is described below.

The girls in the class can be given a recipe in the language class. On a separate sheet of paper the teacher can list the required steps in random order and the girls
can then be asked to arrange the steps in the correct order.

Another activity is to give students a paragraph to read in which a series of events is listed and the students are asked to arrange them in the proper sequence. The sequence can be established orally first as a result of teacher-initiated questions.

Example: Por fin entraron los animales a sus jaulas. ¡Qué anticipación! Primero entraron todos los elefantes. Entonces siguieron los osos, los camellos y los caballitos. Un oso grande y pardo se cayó y siguió rodando hasta que ya no podían controlarse.

Questions. (1) ¿Cuáles animales entraron primero? (2) ¿Cuáles siguieron? (3) ¿Cuál animal se cayó? (4) Quiénes se rieron?

An additional procedure that can be followed with advanced students is to give them a single task, usually a manual one, such as assembling something that has been manufactured in the foreign country. The foreign language instructions would be provided. Students would be required to execute the task using the instructions as much as possible. (Even in one's own language one must also use some understanding of the task and some ingenuity in following written instructions.) After completing the manipulation, students would prepare a foreign language glossary of the objects dealt with and the actions performed.

(Carton, 1966, p. 100)
Classification by Categories

The teacher prepares a list of words that can be separated into two or more general classifications. The students attempt to arrange these words in the proper groupings.

Example:

Vegetales  La casa  Modos de transporte

col
techo
techo
caballo
ventanas
papas
salon
habichuela

Getting the Main Ideas

1. A short selection is assigned for silent reading. The teacher writes a list of phrases or short sentences on the board and the students must choose those which contain the ideas in the selection.

2. The students are given a short paragraph to read and are instructed to underline the words or word indicating the central thought of the passage.

Reading for Facts

Excellent practice in reading to get facts can be given by the use of material from other school subjects but which are in the target language. This procedure demonstrates the advantages of careful reading. A problem or a question may be written on the board. The students are
given a short time to read it before it is erased. They then answer questions orally or on paper. For example:

La mama de Juan le pidió que fuera a la tienda. Compró una lata de cerezas por 35 centavos y dos latas de sopa por 15 centavos cada una. ¿Cuánto dinero debe darle al cajero?

1. ¿Qué tienen que saber ustedes para contestar?
   A. El número de latas que Juan compró.
   B. El cambio que Juan debe recibir.
   C. Cuanto cuesta todo.
   D. Cuanto dinero Juan tiene.

2. La selección nos dice:
   A. El precio de cada artículo que Juan compró.
   B. Cuanto dinero Juan tiene.
   C. La marca del jabón que Juan compro.
   D. Cuanto dinero le dio Juan al cajero.

Using the Dictionary

Students should be encouraged to use the dictionary intelligently to find word meanings that are appropriate. To do this the teacher can present a short selection on the board, on a mimeographed sheet or on an overhead transparency. The selection should contain some difficult words which the students don't know. The task of the students is to find the appropriate meaning from a dictionary. Under the guidance of the teacher, the class then decides which meaning in the dictionary best "fits" the rest of the sentence or paragraph.
Reading for Implied Details

The teacher can have students read a paragraph carefully. On a mimeograph sheet or on an overhead transparency the teacher should write some statements that tell something that is not directly stated in the paragraph. One of them is a reasonable conclusion that one might make from the reading. The student's task is to find the best answer and write the letter of that statement on his paper. This exercise is valuable for reading for implied details and should be used only with advanced classes. An example in English from Dacanay (1967, p. 293) is:

The merchant finished his business and started for home. He travelled over rough roads on the way. One night a big storm arose. He sought shelter under a big tree and there he fell asleep. When he awoke in broad daylight, he found himself in a beautiful garden full of many different kinds of plants and flowers. He saw a big castle and, thinking that it was occupied by some kind of owner, he went up the stairs. He found the rooms beautifully furnished. He heard sweet music. In one room he found a table full of good things to eat. He sat down to eat, and after eating, he went to the garden to look for his kind host. In a part of the garden he saw all colors of chrysanthemums, and remembering his youngest daughter's wish, he picked a few flowers. Then he heard footsteps behind him. He looked back and what he saw rooted him to the spot.

a. The owner of the castle had been watching him all the time.

b. The owner was a fairy who was unkind to strangers.

c. The owner wanted him to take as many flowers as he could hold.
The ability of students to comprehend the meaning of a sentence or a group of sentences depends on their ability to see the relationship between one part of a sentence and another, and between one sentence and another. Students must understand the meanings of individual words and groups of words and be able to consolidate these into units of thought. Furthermore, sentences are tied together by a unifying idea that may or may not be obscure, thus necessitating special exercises in understanding sentence and paragraph structure.

Although single sentences are likely to be less of a problem than entire paragraphs, students may require some help in analyzing and comprehending them. Each sentence contains a main topic and details subordinate to this central core. The reader's job is to separate the subordinate information and expose the parts of the main topic. Students and teacher may work together on sentences containing these elements.

Example:

Underline the parts that give the main topic of each sentence.

1. En las fotos que incluyo, sacadas en el Club Hípico, todos los caballos llevan montura inglesa, pues esta es la única que se usa en competencias hipicas.
2. Los huasos siempre ensillaban a los caballos muy cuidadosamente; y luego los santiaguinos, creyendo que el montar a caballo no es cosa del otro mundo, se subían al animal y empezaban a galopar.

(The above examples are from Hablar y Leer, Holt, Rinehart and Winston, 1962, pp. 296-297.)

Paragraph reading is more complex than sentence reading since paragraphs contain many more details and subordinate clauses which can confuse the reader. In addition, they usually have a unifying or underlying idea which the reader must grasp. Exercises which are useful to help students sort out the details and see the relationships among the sentences are those of a true-false variety in which the student is asked to agree or disagree with a sentence that summarizes the intent of the paragraph. Paraphrases of the paragraph in which the student is asked to fill in a blank which is crucial to the veracity of the statement is recommended also.

Some paragraphs contain words that alert the reader to what is coming. These signposts indicate that a statement or series of statements are to be made and enable the reader to follow the thought. Although obvious to the reader in his native language, these signposts need to be pointed out to the learner of a foreign language. Examples of such signposts might be:

1. Hay tres posibilidades que podemos considerar.
2. Algunos ejemplos se presentan en lo siguiente.
3. **Finalmente**, casi nunca hay acuerdo cuando es cuestión de los mejores candidatos para un puesto político.

Signposts tell the reader that similar ideas may be expected while others introduce different or new ones. Such words as another, moreover, also, and furthermore indicate that more the same information is to follow. Such words as however, on the other hand, nevertheless, and but prepare the reader for a new or contrary idea. Practice in spotting these different clues in the foreign language will help students develop the habit of reading actively. Selections and paragraphs that contain these signposts can be found in newspapers, magazines and textbooks.

**Expectancy of Words and Concepts**

In approaching any reading situation, the more mature the reader is the more he anticipates the words and concepts that he meets in a particular passage on a specific subject. It is evident that when a person is reading in a well known field, he recognizes the words and concepts much more rapidly than he does in a less known field or with subject matter with which he is not well acquainted. The foreign language student in the initial stages of reading has, for the most part, not been exposed to materials with unknown content for reading. Once past the early stages of reading, however, he
is forced to deal with reading material that is intellectually stimulating to him and which may or may not be familiar to him. When this happens, it is the teacher's task to help him develop a sense of expectancy so that he anticipates the words and concepts that he will meet.

The ability to anticipate words from the general subject-matter fields in which reading is done may be developed by purposeful reading (Bond and Wagner, 1960). In purposeful reading, the field is well defined and is based on some introductory general reading which will clarify the field and give the pupil an idea of what is to be discussed. Thus in discussing the Arts in France it would be a good idea to first talk and read about them individually before talking about them in general. In this way, a minimum of new terms is introduced in the new unit and at the same time the experience the students have about the individual Arts creates a general "feel" for the subject matter.

Another method, which may be used concurrently with the above, is to have the students name the words they might expect to read in a specific passage. In this fashion, the teacher builds backgrounds of word-knowledge, and at the same time he prepares the students to anticipate the presence in the passage of the vocabulary of the general subject-matter area. For example, if the students were going to be reading about tailoring
clothes and tailorships in Spain, it would be appropriate to have students identify which of a list of phrases they would expect to find in a selection having to do with that subject-area.

___ chalecos de abajo ___ trajes hechos
___ forro de seda ___ venta de lechugas
___ molinos de viento ___ mire el modelo de ante
___ guantes ___ tomar las medidas

An additional technique is the one found in elementary schools in which the student is led to expect words by means of picture clues. The pictures could be discussed, the names of characters identified, and the action interpreted. This technique would truly develop expectancy at this level and should be used, especially if the pictures are culturally authentic.

The writer advocates a period of time which is to be devoted to vocabulary and meaning acquisition. The time spent on such activities should be limited but frequent; however, he does not advocate abandoning the formula established by Scherer (1963). It is presumed that by having had formal instruction in the acquisition of meaning in the ways described above, the learner will be successful when reading material based on Scherer’s formula of (1) no more than one new word in every thirty-five running words, (2) that new words or expressions be
spaced as evenly as possible, (3) that each new word be repeated two or three times as soon as possible after the first introduction, and (4) that the vocabulary be as useful as possible. His fifth and sixth principles are concerned with the teaching of inference, which has been the concern of this chapter and is an elaboration of his two principles. However, Scherer's report did not include the formal teaching of ways to derive meaning from a reading context. His report suggested that new vocabulary be taught in terms of the different ways of inferring at the time the vocabulary item appears instead of having a deliberate program of vocabulary development. The writer contends that it is not necessary nor desirable to wait, since as Carton (1966, p. 1) indicates,

It would be hopeless to try to teach every word, every grammatical structure, every construction, or every peculiarity of usage to the student of a foreign language. If students are ever to master a language, there must be some process by which they can learn by themselves. They cannot succeed by merely learning what is taught in the way it is taught.
BIBLIOGRAPHY


Carton, Aaron. The Method of Inference in Foreign Language Study. Research Foundation of the City University of New York, 1966.


____________, and Bonham, D.N. "Difficulty of Vocabulary Learning as Affected by Parts of Speech." Journal of Educational Psychology, XXXV, (September, 1944), 369-77.


