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ABSTRACT

This work asserts that contrastive analysis should be regarded as a technique of research and not limited to error prediction and material preparation. Introductory observations are made on the state of the field, the domain of contrastive analysis, contrastive analysis and transfer, and contrastive analysis and foreign language instruction. In considering the psychological reality of contrastive theory, the established theories of error predictability and interference are shown to be unsuitable, because in the learning of a foreign language, the native and foreign grammars interact, forming a "super-grammar," the evidence for which is drawn from psychology, theoretical grammar models, and linguistics facts. To support the validity of the "super-grammar" theory, current contrastive analysis approaches are demonstrated to be deficient because they separate the components of languages in order to contrast them, thereby ignoring the fact that language learning involves the internalization of the structure of a language as a whole. Because this kind of analysis is faulty, a new, more comprehensive approach is necessary, one which answers the question, "How are syntactic structures organized to convey meaning?" rather than "How are syntactic structures organized when viewed in isolation?" This new view considers extralinguistic factors as well as linguistic factors. (LG)

THE GRAMMATICAL THEORY OF CONTRASTIVE ANALYSIS: A NEW APPROACH

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CHAPTER I

INTRODUCTION

0.0 This chapter is an attempt to show that contrastive analysis should be regarded as a technique of research and not limited to error prediction and material preparation. A need for a new theory and technique will also be demonstrated here. Although the findings of a contrastive theory can be applied in foreign language education, we should not start our research by having preconceived aims and hence set unnecessary constraints on our analysis.

1.0 State of the field:

Contrastive analysis is now the subject of controversy between scholars who do not believe in its effectiveness (Selinker, 1971) and those who expect it to predict levels of difficulty that learners will have in learning a foreign language. Some linguists claim that contrastive analysis is the best basis for program design and classroom procedure. Robert Lado (1960), for example, says in his preface to Linguistics Across Cultures:

> The plan of the book rests on the assumption that we can predict and describe the patterns that will cause difficulty in learning, and those that will not cause difficulty, by comparing systematically the language and culture to be learned with the native language and the culture of the student. In our view, the preparation of up-to-date pedagogical and experimental materials must be based on this kind of comparison.

Wilga M. Rivers (1964) says that teaching methods rest on the careful scientific analysis of the contrasts between the learner's language and the target language. On the other hand, Nickel (1971) has noted that contrastive analysis by itself is inadequate as a basis for a total language teaching. Whitman and Jackson (1972) have the following two conclusions:

> 1. Contrastive analysis ... is inadequate, theoretically and practically, to predict the interference problems of a language learner;
> 2. Interference, or native-to-target language transfer, plays such a small role in language learning performance that no contrastive analysis, no matter how well conceived, could correlate highly with performance data, at least on the level of syntax. (P. 40)

The scholars who reject contrastive analysis on the basis of its inability to predict errors have not explained why contrastive analysis cannot predict errors. The only piece of evidence given by them is that their analysis could not correlate with performance. But these scholars were biased in the first place as the tests they designed were made primarily to predict errors. Such an approach has many shortcomings as it expects the performance of the students to be in terms of their previous native language habits and that the students will be unable to unlearn or modify their verbal behavior.

2.0 The Domain of Contrastive Analysis:

2.1.0 Contrastive analysis should first of all be viewed as a research technique investigating the structure of languages.

We still need more research in this area concerning the "grammar" a learner creates when he learns a new language. I think this "grammar", as I will show later, is a "super-grammar" whose elements are extracted from the native language and the target language.

2.2.0 Contrastive Analysis and Transfer:

Current contrastive studies compare the native language and the target language to find out the points of transfer. This approach has two assumptions behind it: one psychological and the other linguistic.

2.2.1 The psychological assumption is that the native language habits are transferred into the target language. Transfer may be positive or negative. Positive transfer occurs if the same form functions similarly in the two languages. Interference (or negative transfer) occurs because the native language forms cannot be used in the target language and as a result cause restructuring in the system of the target language. Pedagogically this assumes that contrastive analysis will predict the areas of difficulty a student will face in learning a foreign language. This is not sound in different ways.

a. There may be other factors that cause difficulty in using the foreign language. In a previous study (Anwar, 1969) about the interference of the Arabic verb system with the English verb system I found the following results:

Type of Interference	Frequency
Two-part verbs	50%
The choice of a wrong verb	47.21%
Tenses	32.58%
The Infinitive	25.25%
The Absence of the Verb	22.99%
Auxiliaries and Modals	22.55%

This frequency is the percentage of errors due to interference from the native language. The types of interference were set up according to the kinds of mistakes found in 4500 compositions written by students at Cairo University, Egypt.

To find out the percentage of interference, a test of 110 items was prepared on the basis of a representative analytical list derived from the errors made by the students in their compositions. Four distracters were given: one was the correct English answer, another was the mistake found in the compositions and the other two distracters were forms or constructions used neither in Arabic nor in English. As the errors were explained to the students who wrote the compositions, it was assumed that this may help them score highly on the test. In view of this, the test was administered to another group of thirty students similar in their background and level of learning English. The table of frequency given above shows that the highest rate of interference from the native language was 50%. This occurred in the use of two-part verbs which do not comprise a highly

frequent category of the grammar. The other 50% may be due to other factors such as carelessness, forgetfulness, fatigue, etc. But there may be another kind of interference, i.e. interference from the target language itself.

In English there are different forms and even sentences that look alike but their remote structure as well as their syntactic characteristics may be different. This superficial similarity may be the source of interference inside the system of the target language itself. The student may arrive at rules that do not work and hence make mistakes. Let us consider the following two sentences:

(1.) They took him for a fool.

(2.) They took him for a walk.

At the surface structure the two sentences have the words took ... for which are followed in each case by a singular noun. The learner may generalize the rule and use any singular noun instead of a fool or a walk. He may say:

(3.) They took him for a party.

A teacher may analyze such a mistake as due to the use of for instead of to and may assume that is a case of interference from the native language while in fact it may be a case of wrong generalization about the syntax of English.

Interference between the different forms of the target language may occur in other areas too. In English, the adverb now which indicates a present progressive action is generally used with a verb that has the suffix -ing:

(4.) He is writing now.

The learner may apply the rule to a verb like understand giving the wrong sentence:

(5.) *He is understanding the lesson now.

The problem of interference here may not be due to syntactic factors only as semantic factors may be involved too. The verb understand belongs to a group of "stative" verbs that do not occur in the progressive form. Such verbs cannot be used in the imperative either. While we can say:

(6.) Write this lesson.

it is ungrammatical to say:

(7.) *Understand this lesson.

The same problem of interference may be clear in morphology too. From the verbs write, play, teach we can derive the nouns writer, player, teacher by using the suffix -er. The learner may apply the same suffix to pilot, boss, etc., giving the wrong forms *piloter, *bosser.

This is also true of phonology. English has a rule of shifting stress to derive nouns from verbs, e.g.

(8.) per'mit, 'permit

con'tact, 'contact

The student may apply the same rule to a form like 'comment to get the wrong form *com'ment.

This type of interference is true not only of using the language but also of understanding it. The semantic component of the language may be misinterpreted because of similar surface grammatical structures. Consider the following two sentences:

(9.) Do you have the time, please?

(10.) Do you have a book?

At the surface structure (9) and (10) are questions, but while (10) can be answered by yes or no, (9) can be answered by a piece of information about the time. In other words, (9) is an indirect way of saying:

(11.) Tell me what time it is.

The learner must understand (9) as a polite request. Moreover, there are cases in which the same type of sentence may have different responses in different situations. The sentence:

(12.) Do you have anything to drink?

said by a man to his wife means that he wants her to give him something to drink. The same question asked by a person of his friend in a party will be answered by yes or no. So, (12) may function as an indirect order in one situation and as a question in another.

The indirect order may also take the form of a statement. Consider the following sentence:

(13.) It is cold in here.

This sentence, said to a friend while there is a draft in the room, does not mean to give a statement about the weather. It is used to get the same effect as:

(14.) Shut the door, please.

So, different commands can be phrased in different ways. The learner is supposed to learn not only the form and the idea behind the form but the rules that can be applied to get such a form. Any contrastive study that does not include these areas and similar ones falls short of fulfilling the function it addresses itself to.

b. According to the present theory of interference, the degree of interference will depend on the degree of difference between the native language and the target language. The greater the difference between languages, the higher the degree of interference. But this may not be true because similarity between the rules of the foreign and the native language does not mean ease of transfer. For example, in literary Arabic and in English the negative particle la "not" occurs before the verb and no form can occur between the particle and the verb. However, English-speaking students learning Literary Arabic sometimes make the mistake of using words between the negative particle and the verb.

The above example shows that the functional similarity between native and target grammatical rules is not enough for two reasons. The first is that if we want speakers to transfer a rule from one language to another they have to be aware of the rule and the environment in which it applies. We know that native speakers are usually unaware of the rules of their grammar. The second reason is that the rules of the grammar are ordered with relation to each other so that if a rule applies another rule may or may not have to apply. In other words, the learner has to be aware of how a rule can establish a relationship with the rules of the target language. In what follows I will give an example from Arabic and English. The Arabic conjunctive ?anna "that" is like the English conjunctive that as both are followed by nouns. Some students learning Arabic may use a verb after ?anna because word order in Arabic can be Verb, Subject, Object or S V O. For an English-speaking student to transfer his native rule

correctly, he has to know that the rule of starting the Arabic sentence with the subject must apply before embedding the sentence as a complement of ʔanna 'that'. Knowing this is not even enough. While in English that does not change the case of the noun following it, in Arabic the subject following ʔanna 'that' is in the accusative case. This is the scope of case marking after ʔanna. Some students, however, may change the whole equational sentence introduced by ʔanna into the accusative case.

Such phenomena are part of the pedagogical situation as they are part of the competence of the l[illegible]. If contrastive analysis is used as a research technique, we get useful information about such aspects of language use that may be helpful in foreign language education.

c. Since the contrastive analysis hypothesis tries to predict the errors a student makes in learning the target language, the point of departure for the discussion of the verification of contrastive analyses must begin with the constancy of these errors.

The first problem in testing the constancy of language errors is that of collecting an adequate sample of the second language usage of learners of the language. If the investigator is able to obtain an adequate sample of the target language usage of informants, the problem of the constancy of that usage raises two questions: first, are the errors made constant for all informants with the same amount of target language learning experience, and secondly, are the errors constant for a certain learner at a certain stage of learning the target language. Experience has shown that in the above two cases, errors are not constant.

We notice that a student learning a foreign language may use a certain rule correctly in one part of his composition and use the same rule incorrectly in another part of the same composition.

2.2.2. The other assumption behind the contrastive theory is the linguistic one which says that the grammatical rules that work for one language can work for another. This assumption is wrong in the following ways:

a. It believes that what is true of one language may be true of another. Though there is a tendency toward establishing a theory of universal grammar, I believe that Ferguson (1971) is right when he says:

> Every language presents a unique structure which must be analyzed on its own terms. This principle makes explicit the linguist's conviction that within the framework of the universal characteristics of human language there is such an enormous amount of variation among languages that an elegant and convincing characterization of any particular language may be inadequate or misleading if applied to another. (p. 141)

Universal linguistics has not been well established. Probably a new language to be discovered may upset the present conclusions of the theory of universal grammar. It is a well-known fact that the vocal tract and the linguistic innate capacity of all people have basically the same form but language does not depend on these alone. Language is also conditioned by the culture of the society in which it is used.

b. The second mistake of the linguistic approach is this. The facts of any language, for learning purposes, cannot be ascertained only through the study of linguistics. Linguistics needs language teaching as much as, if not more than, language teaching needs linguistics. It is well known that Edward Sapir arrived at the

psychological reality of the phoneme in a learning situation. The theory of phonology has a great deal to benefit from the adaptation of foreign forms into the native language. This is, again, a learning situation. So, a theory of contrastive analysis should not be limited only by linguistic facts.

c. Predictions of difficulty based solely on a limited set of utterances divorced from other components of the grammar are wrong. It is highly doubtful that a theory of interference can be built that is based on separate components and that does not properly locate each single element within the totality of language design.

The rules of the different components of the grammar are interrelated. Some phonological rules condition the distribution of certain allomorphs. The past tense morpheme {D} has the allomorphs /d/, /t/, and /əd/ which are phonologically conditioned. There are also phonological rules that operate on syntactic elements such as the placement of stress and intonation. The sentence:

(15) This young man saw Mary.

with emphatic stress on Mary means that he saw Mary and not Nancy.

There may also be interaction between morphology and the other components of the grammar. The use of a certain morpheme may change the meaning of the word. This is clear in using un or dis with interested for example. Morphology affects syntax too. If the verb is in the future form certain adverbs have to be used while others cannot.

Syntactic processes may have their influence on phonology. In the following sentences the auxiliary can be used in its strong or

weak form:

(16) a. I {am / 'm} ready to help you.

b. The concert {is / 's} here tonight.

But if an element is moved or deleted by a syntactic process the phonological rule of auxiliary reduction is blocked:

(17) a. Ready I {am / *'m} to help you.

b. Tell him where the concert {is / *'s} tonight.

c. He's taller than I {am. / *'m.}

2.3.0. Contrastive Analysis and foreign Language Instruction:

2.3.1. As an aid to language instruction, contrastive analysis offers a very sketchy framework within which some aspects of the learner's task may be considered. By itself, contrastive analysis cannot be a basis of determining the linguistic structures to be offered in a language program. Even if we were able to predict interference from the native language, analyze the difference between the target language and the foreign language, there will be no substitute for teaching the foreign language as an entity.

.3.2. Contrastive analysis can be valid for a psycholinguistic theory that addresses itself to the way of getting information about the psycholinguistic bases of foreign language learning. It is not enough to stress the linguistic criteria used for contrastive purposes as a certain linguistic framework may be at odds with the psychological

background in which it is applied. Whitman (1970) says:

> Presumably all contrastive linguists will agree that the two descriptions of the two languages contrasted must be of the same formal type; it is difficult to imagine what results might be obtained, for example, from a contrast of linguistic forms one of which is described transformationally and the other tagmemically. (p. 192)

In Chapter III I will give examples from Arabic and English to show that even the use of one linguistic theory of analysis cannot show the difference between two languages. The reason, as it seems to me, is because a theory of grammar that is built on the basis of native language acquisition may not be sound when it comes to a situation of foreign language learning. I view the differences in foreign language learning ability not in terms of differences in innate ability but in terms of the way learning competence is applied. The cues employed by the learner may be organized in relation to:

a. the nature of the target language

b. its relation to the native language (or other languages known to the learner)

c. the content of the messages or linguistic material under consideration, all of which determine the possibility of making messages

and d. the situation and method by which the foreign language is taught.

In the field of first language acquisition it is necessary to operate with basic concepts of a functional type; the child learns his native language in a situation of use, and the structure he builds up reflects the functions that he internalizes. We are able to understand the

structures underlying the utterances of the child to the extent that we understand the purposes he is using language for. But in foreign language learning we start at the other end; we give the learner certain linguistic forms and hope that he will use them correctly. The structure of language we expose the student to precedes the functions it is required to serve. Although language derives from a number of innate creative forces that man has and which remain in constant operation throughout his life, these forces are used in a "functional" context. People use language as a purposeful activity and this is what makes language accessible to a child learning his foreign language but the classroom situation is not that "meaningful". So, contrastive analysis cannot be so effective if it deals with two languages whose structures and use are not equally meaningful to the learner. (In Chapter II I will show that these extralinguistic factors have to be incorporated into our contrastive grammar.)

3.0. From what was said above, I think a grammatical theory of contrastive analysis must have the following characteristics:

3.1. Our analysis of any two languages has to be checked against actual fact. This actual fact refers to the cultural and social context in which language is used. This also means that it is not enough to contrast sentence with a sentence; the function of the sentence is also important as part of our contrastive theory. For example, an order can be phrased in the form of a command, statement or question:

(18) a. Shut the door, please.

b. It is cold in here.

c. Could you please shut the door?

All these sentences have the function of making somebody shut the door. Choosing one or the other will depend on the situation and such variables have to be included as part of our contrastive grammar.

3.2. We should not be satisfied with showing the difference between languages. We have to "explain" this difference. This is what a student needs. In other words we have to make explicit to the student what is to be learned: both substance and function. So, we have to change the domain of contrastive analysis from "predicting" errors to the "explanation" of linguistic facts. Predictions of errors demand verification at every point and, moreover, this predictive power is as unnecessary one since we cannot be sure of the validity of our "predictions" until we have observed their factual occurrences.

3.3. The aim of any contrastive study should not be limited to the points of difference between the native language and the target language. These points of difference may cause interference but the target language may cause interference too. Moreover, mastery of the points of difference does not guarantee correct performance on the part of the learner. Any contrastive study should relate interference from the native language and interference from the target language. The two types of interference may be due to difference in rules or to the application of the same rule but with different constraints. Some of these constraints, in terms of structural grammar, may be phonologically or morphologically conditioned.

So, the first step in any contrastive study should be to examine each language in order to relate the grammatical aspects that have certain properties in common as these may be manifestations of the same rule. The second step should be investigating the constraints on the rule and then contrast these constraints in the two languages. This study will try to examine all these facts in detail. An attempt will be made to show where the current contrastive analyses fail psychologically and linguistically. A new model will be suggested in Chapter IV to provide more explanatory adequacy to the differences between languages. This model will be more comprehensive than the current contrastive approaches as it will deal with language in a more natural setting whose "gestalt" set-up is more revealing than any piecemeal formal analysis.

CHAPTER II

THE PSYCHOLOGICAL REALITY OF CONTRASTIVE THEORY

1.0 All contrastive linguists seem to agree that the two descriptions of the two languages contrasted must be of the same formal type. So far, we do not have a particular theory for contrastive analysis. The theories of grammar used for contrastive analysis are those that have been used by linguists for analyzing individual languages. When these theories are used in the situation of foreign language learning, they seem to imply that the native and target languages are two separate entities in the mind of the learner and hence contrastive analysis can predict difficulty in learning the foreign language and also interference from the native language. This chapter will show that such an approach is not suitable for contrasting two languages as in learning a foreign language, the native and foreign grammars interact and probably form a "super-grammar", in which case the "ideal"[1] learner of a foreign language, and even a bilingual or multilingual, will be considered to have one grammar. Such an outlook will have as its reference a linguistic theory that considers language within a more comprehensive totality. This linguistic theory distinguishes in the structure of the speech act a mental component and a situational component that relate language to thought and situation respectively.

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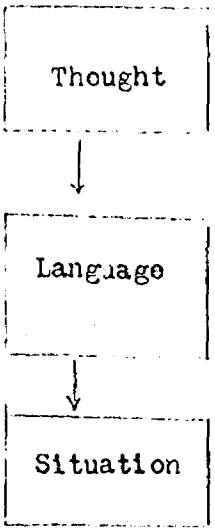
[1] Ideal learner is the learner who has full mastery of the target language and its culture.



The situation is more or less the intention of the speech act. The speech act is related to situation through phenomena such as "our knowledge of the world" or "the order of things", etc. The mental component is the relatedness of the speech act to thought. The intuition of the native speaker is part of the mental component which is systematized in ways corresponding to the particular language structure, i.e. langue. Grammar spreads across both the mental and the situational components.

Evidence for the "one-grammar" the ideal learner of a foreign language has will be drawn from:

a. the psychological theory wherein a new learning situation may draw on former abilities acquired with the native language.

b. the above model of grammar where our knowledge of the world determines the structure of syntax and the lexicon.

c. Linguistic facts showing that the target language need not duplicate, nor be learned independently of, the native language.

Chapter III will give examples of contrastive linguistic phenomena which the current linguistic theories cannot account for.

2.0 Psychological Facts:

2.1 Language derives from a number of innate creative forces that man has and which remain in constant operation throughout his life. These forces are those of "linguistic creativity" and as Jakobsen has shown in Child Language, Aphasia, and Phonological Universals, the child creates the language every time he uses it. This creativity is manifested not only in the production of an infinite number of sentences but also in the continual formation of grammatical systems. Diversity among languages is due to the ways in which man is able to implement his creative forces. These ways of implementing the creative forces are determined by the linguistic forms an individual uses. The linguistic forms, in turn, derive from the culture in which a person lives.

The linguistic creative forces of a person reflect not only individual, isolated facts, but also the general regularities, the common properties that are contained in them. Jakobsen's implicational law is a case in point. For a person knowing more than one language, these general regularities may embrace features from the different languages he knows. These regularities become part of the individual's thought. As Olga Akhmanova (1971) says, "The main unities, the units of thought, in which the generalization of concrete facts is effected, are concepts.... In order that concepts may exist and develop it is necessary that there should be apprehended, side by side with cognoscence of reality, i.e. the reverberation in human consciousness of

its facts and regularities -- the 'expression plane' of language, the system of sound-distinctions as specific and concrete individual facts." (pp. 87-88)

Akhmanova adds:

> ---concepts may be said to be conditioned in three different ways:
> 1. They are based on reverberation of reality in the human conscience. As elements of thought they represent the general regularities, the General, extracted from the endless variety of actual concrete facts.
> 2. In so far as concepts cannot exist without a given concrete linguistic expression, they depend to a certain extent on the peculiarities of the latter. In this way an inverse dependence of thought on language seems to be established: although thinking first comes into being through reverberation of reality, it is modified under the influence of the system of sound (phonetic) and other linguistic distinctions with which the given set of concepts is associated.
> 3. Concepts are modified not only by a given system of outer (linguistic) distinctions, but also because they do not exist one by one, in isolation. They are always part of a conceptual system. ... A deeper penetration into reality implies development and refinement of concepts and is thus connected with, brings in its wake, a transformation and development of the SYSTEM of linguistic means, used for their expression . (pp. 88-89)

This shows that human understanding works globally and not by separate units. This global principle helps in effecting "regularities" in the language. As language affects, and is affected by, concepts, we expect any new grammar learned by the individual to take part in this regularizing process. This is due to the fact that concepts are revealed through language. Language helps us not only to indicate and denote the separate individual phenomena of reality, but also to discover their general features and prop-

erties and thus connect them with our previous generalized experience.

It may happen that foreign language learning introduces the learner into a new concept of reality not already found in his knowledge. In this case this new "meaning" will be incorporated into related "meanings" in the knowledge of the learner; in other words it will be an "allo-concept." This may be why in teaching a foreign language we have to teach the foreign culture so that the form and the right concept can be learned together.

2.2. Perception of the foreign language is performed in terms of the internal model a person has. This is why Lado (1960) says that when a person hears a foreign language, he hears his native language.(p. 11). This overstatement of Lado's may mean that the learner matches the foreign message against his native model. Halle and Stevens have a similar theory (cf. Halle and Stevens, 1964, Stevens and Halle, 1965). They assume that speech is perceived in terms of analysis by synthesis. Perception takes place when the internal pattern matches the stimulus. Halle and Stevens believe that the mechanism employed in speech perception is the same as the mechanism used in speech production. The auditory pattern derived from the acoustic input undergoes a preliminary analysis. This preliminary analysis is a spectrum analysis in which the incoming spectrum is matched to a spectrum produced by an internal synthesizer which has the ability to compute spectra when given phonetic parameters. On the basis of the preliminary analysis and contextual information, a hypothesis is made concerning the abstract representation of the utterance. The proposed abstract representation is changed to an

equivalent auditory pattern and compared with the pattern under analysis. In case of agreement, the hypothesized abstract representation is considered correct. The model includes also abstract generative rules employed in speech production. These rules convert abstract representations to instructions to the vocal tract and thus transforming phonemes to phonetic parameters.

3.0. Communication:

This section is an attempt to show that the learner of a foreign language uses everyday knowledge that he acquired in learning his native language in encoding and decoding the foreign language. This knowledge of the world includes the fact that any linguistic message needs a speaker and a listener (or listeners) and that their status and the relation between them may determine the form and content of the message. This relation may even condition the application of certain transformational rules. For example, in some societies a man talking to a stranger would not mention the name of his wife and instead would use the rule of pronominalization referring to her as she. Among some people, a speaker may intend to conceal the name of the doer of the action so that he may not be committed and hence use the passive voice. All these notions that may be derived from the culture of the individual are important not only in formal linguistic analysis but also in effecting explanatory adequacy in our analysis. These extralinguistic notions have been dealt with by philosophers under different headings such as illocutionary force, presupposition, entailment, inference, felicity conditions, etc.

The learner of a foreign language may draw on such notions when using the foreign language. Such notions as I will show in Chapter IV occur at a high level in the grammar.

3.1. Every communication has a content and a relationship aspect between the encoder and the decoder of the message. This relationship aspect classifies the content and is therefore a metacommunication. As language is part of human behavior, our study should be extended to include the effects of this behavior on others, their reactions to it, and the context in which all this takes place. This means that in addition to the study of syntax and semantics, the pragmatics of speech have to be part of our research. To give an example, the syntactic symbols would remain meaningless unless speaker and hearer have agreed beforehand on their significance. In this sense, all shared information presupposes semantic convention. Moreover, the pragmatics of speech function as variables in certain contexts, and hence are psychologically meaningful only in relation to one another and in relation to the context. Our use and understanding of sentences depend a great deal on the degree of determinateness and indeterminateness among the possible choices. For example, if in answering a question we can use yes or no, then both these words possess equal information. However, if we were to answer always by saying no, then the word no would have no information at all since the answer will be predictable and there will be no room for uncertainty.

The knowledge an individual has about the world is used by the speaker and the hearer at the time of communication. Feedback, which is part of communication, derives from this functional relationship. Presupposition, inference, and entailment -- linguistic phenomena which are not expressed explicitly in the sentence -- follow from this too. These phenomena depend on feedback as feedback is the link that binds the message and the response to the message.

There are many cases in which the speaker does not encode everything in his message. He expects the listener to draw on his knowledge in order to understand the message. For example, if I run out of gas and need to go to a nearby station to buy gas, I just ask any person:

(1) Is there a gas station nearby here?

If he directs me to a gas station that is closed, then he misunderstood me because I did not want to see the site of a gas station, as his answer would imply. In the same manner, in teaching a foreign language, we expect the foreign learner to respond correctly to the above question. In our program we do not teach him that cars use gas and if they run out of gas the driver goes to a gas station to fill the tank up. Although this knowledge is needed to understand the message, we do not teach it in the classroom. We expect the learner to be able to understand such information although it may not be explicitly stated in the sentence.

This argument points to the fact that surface sentences may need prior information so that their meaning can be clear. This

prior information may have the same linguistic effect as elements present explicitly in the sentence. Such prior information may be understood from the situation in which a person may be. For example, the sentence:

(2) Put the butter in the refrigerator and get the milk out.

is understood as:

(3) Put the butter in the refrigerator and get the milk out (of the refrigerator).

The prepositional phrase of the refrigerator at the end of the sentence is deleted under identity with elements that occur earlier in the sentence. The situation in which the sentence is used may have the same linguistic effect of deletion. If a person is standing beside the refrigerator having the door open in his hand, we can say to him:

(4) Put the butter in and get the milk out.

This sentence is understood as:

(5) Put the butter in (the refrigerator) and get the milk out (of the refrigerator).

The phrases in parentheses are deleted as they can be understood from the situation. Here the context has the same linguistic effect as the explicit linguistic elements in sentence (2) above.

3.2. The extralinguistic knowledge of the world may even condition the choice among sentences that are nearly paraphrases. For example, the idea of asking somebody to enter a certain place may be expressed in any of the following sentences:

(6) a. Come in, won't you,

b. Please come in.

c. Come in.

d. Come in, will you,

e. Get the hell in here!

The relationship between the speaker and the hearer determines which sentence is to be used. Obviously a speaker cannot use (e) except in a "jovial" manner with a close friend. If the addressee is at the speaker's door and is a friend, the speaker will use (c). Sentences (a) and (b) can be used by a receptionist at the doctor's office; between friends, these two sentences may give the impression of a forced hospitality.

1.2.3. These extralinguistic concepts of politeness and the relation between speaker and hearer also condition the choice of certain linguistic forms. This is clear in the verbs of saying used in reported speech such as tell, beg and order. The verb tell assumes a relationship of equality or a situation in which there are no direct orders from a person of a higher authority. The verb order, on the other hand, assumes that the speaker is higher in position than the addressee; beg is a verb which is used by a person lower in rank or who expects to get something from a person who has authority to do so.

Similar notions are true of conversation in general. Gordon and Lakoff (1971) have dealt in detail with what they called "conversational postulates". In a normal conversation, the participants will make the following assumptions, among others, about

the discourse:

Rule I. What is being communicated is true.

Rule II. It is necessary to state what is being said as it is not known to other participants, or utterly obvious. Further, everything necessary for the hearer to understand the communication is present.

Rule III. Therefore, in case of statements, the speaker assumes that the hearer will believe what he says (due to Rule I).

Rule IV. With questions, the speaker assumes that he will get a reply.

Rule V. With orders, he assumes that command will be obeyed.

All these presuppositions and many others about the nature of the world may be criteria against which the well- or ill-formedness of a sentence can be judged. This knowledge of the world must be considered part of a person's linguistic knowledge. As Lakoff (1971) says in "Presupposition and relative well-formedness": "... the general principles by which a speaker pairs a sentence with those presuppositions required for it to be well-formed are part of his linguistic knowledge" (p. 329). Some of these presuppositions may be arbitraray and conditioned by convention in the culture in which a language is used. For example, in Arabic non-human plurals behave syntactically like feminine singular nouns. They take feminine singular subject markers, pronouns, and adjectives. This may be so even in the cases where these nonhuman plurals have the

feminine plural marker -- ā̲t used with human feminine plurals. For example, in the sentence:

(7) ʔalmudarrisā̲tu waṣalna

'the teachers (f.) have arrived.'

the morpheme --ā̲t(u) is used as a plural marker. (-u̲ is the nominative case marker). This morpheme may be used with a nonhuman plural noun as ʔalxiṭābā̲tu 'the letters'. But we cannot say:

(8) *ʔalxiṭābā̲tu waṣalna.

'the letters have arrived'.

because waṣalna 'arrived' ends in -na which is the feminine marker used with human plural subjects. We have to use -a̲t as a subject marker with the verb; this morpheme is also used with feminine singular nouns:

(9) ʔalxiṭābā̲tu waṣalat.

'the letters have arrived'.

The same is true of adjectives and pronouns used in the case of the above nouns:

(10) a. ʔalmudarrisatu kabīrā̲t.

'the teachers (f.) (are) big (f.pl.)

b. ʔalxiṭābā̲tu * { kabīrā̲t / kabīrah }

'the letters (are) * { big (f.pl.) / big (f. s.) }

(11) a. { ʔalmudarrisā̲tu / hunna / * hiya } huna.

{ the teachers (f.) / they (f. pl.) / *she } (are) here.

b. { ʔalxiṭābātu / *hunna / hiya } huna.

{ the letters / *they (f. pl.) / she (= 'they' non-human) } (are) here.

In the above examples, the morpheme -āt is used with both the human and the non-human plurals. However, this morphological similarity is not enough to determine the selectional restrictions in the above sentences. Selectional restrictions, in this case, depend on our knowledge of what is human and what is non-human. This shows that George (1972) is right in saying that "Grammars cannot be the basis of a sound syllabus" (p. 54). In addition to grammar we have to draw on the learner's knowledge of the world. This knowledge may not be part of our course of instruction but is part of the learning situation.

English has a phenomenon similar to the above Arabic one. The use of forms like who vs. which, sink vs. drown depends on whether the noun is animate or inanimate:

(12) a. The ship { * who / which } was in London { * drowned. / sank. }

b. The man who was in London { *which } drowned. { *sank. }

3.4. Some transformational rules, conjunction for example, may be conditioned by our extralinguistic knowledge of the world. Consider:

(13) a. Mary is a dirty nurse and she doesn't take baths either.

b. *Mary is a clean nurse and she doesn't take baths either.

The construction, A and not B either, carries with it the presupposition that one might expect A to entail not B. In (13.a.) such a presupposition is consistent with our cultural values, while in (13.b.) it would not be. Hence the ill-formedness of (13.b.)

The use of a certain tense may be also conditioned by our knowledge of the world. If a speaker wants to show an action that started in the past and still holds true in the present, he uses have + past participle. Consider:

(14) I have bought a new coat.

This sentence implies that the person still owns the coat. But suppose the coat was stolen yesterday, it would be ungrammatical to say:

(15) *I have bought a new coat which was stolen yesterday.

This sentence is ungrammatical as the speaker does not own the coat any more. He has to use a verb form that indicates that the action of buying is not related to the present. However, sentence (15) can be used in a situation where the coat was stolen from somebody yesterday and the speaker bought it from the person who stole it. In such a case, the act of buying is related to the present.

The same tense can be also used in a situation where the coat is not in the immediate use of the speaker but is still believed to be owned by him. Consider:

(16) I have bought a new coat which my brother borrowed to go to the party yesterday.

In the subordinate clause of (16), yesterday, an adverb that shows an action not related to the present, is used while the matrix sentence is in the present perfect tense. However, there is no contradiction and the sentence is grammatical because our knowledge of the world tells us that the coat is still owned by the speaker. Compare sentence (16) with the following sentence:

(17) *I have been to France in 1970.

This sentence is ungrammatical because the present perfect tense cannot occur with a time adverb that refers the same action to a point in the past unrelated to the present. However, this sentence becomes grammatical if the adverb of time is deleted:

(18) I have been to France.

Our knowledge of the world may be also a decisive factor in the interaction between syntactic and semantic rules. Negation is a case in point. For example, the sentence:

(19) I have a car.

entails that the car has a color. So, we can say:

(20) I have a car; the car is blue.

But suppose sentence (19) is negated:

(21) I don't have a car.

In this case, it is ungrammatical to say:

(22) *I don't have a car; the car is blue.

because our knowledge of the world tells us that not having a car does not imply that the car has a color. In other words, negating a sentence does not mean the negation of its entailment. It will be a contradiction in terms of formal logic to have $p \supset -p$. So, negating the subordinate clause of sentence (22) would not make the sentence grammatical:

(23) *I don't have a car; the car is not blue.

This is because the color of a car presupposes the existence of the car and the non-existence of the car implies the non-existence of a color. However, the negative particle not changes a thing into its contrary: blue vs. not blue. In sentence (23) there is not a car or color whose contrary can be stated.

Some rules of delection may also depend on our knowledge of the world. For example, in the sentence:

(24) The Buckeyes will play tomorrow.

we can delete will if we are sure about the schedule of the game:

(25) The Buckeyes play tomorrow.

But if the sentence deals with the manner in which the Buckeyes will play as in:

(26) The Buckeyes will play fast tomorrow.

we cannot delete will.

(27) *The Buckeyes play well tomorrow.

This sentence is ungrammatical because will is deleted; this future particle cannot be deleted in cases about which the

speaker cannot be certain, in this case the manner in which the players will perform in a future game.

This idea of presupposition and nature of things in the world may even determine the order of words at the surface structure of a sentence. Examples of these are: William and Co., Sam and son, John and his wife, etc. Reversing the order of these words will yield unacceptable pharses: *Co, and William, *son and Sam, *his wife and John (in the above sense). It seems that there is a rule in English that what is more dominant has to occur first. For example, in William and Co. we know that William may have more power in the company and so his partners have a subordinate role. These partners have to be mentioned after William.

The same is also true in apposition. While it is grammatical to say:

(28) Elizabeth, the Queen of England, rides a white horse.

it is ungrammatical to say:

(29) *The Queen of England, Elizabeth, rides a white horse.

For Elizabeth to be a queen, she has first to exist as a person. So, the title, which is usually acquired later on in life, has to be mentioned after the name which is acquired after birth.

3.5. The above argument has shown that knowledge of the world is part of the grammar. The person gets that knowledge in the following way. He hears his native language, then internalizes the concept the word refers to. When he is called upon to use the language, he uses those concepts. In foreign language education we do not

teach these concepts. We expect the learner to use those concepts that he learned with his native language when he uses the foreign language. In other words, these concepts form a unity with the foreign grammar. In case those concepts are different we teach the foreign culture in order to help the learner produce and understand the language against the right presupposition. This is because, as Lakoff (1971) says,

> A grammar can be viewed as generating pairs (PR, S), consisting of a sentence, S, which is grammatical only relative to the presupposition of PR. This pairing is relatively constant from speaker to speaker and does not vary directly with his factual knowledge, cultural background, etc. However, if a speaker is called upon to make a judgment as to whether or not S is 'deviant', then his extralinguistic knowledge enters the picture. Suppose the pair (PR, S) is generated by the grammar of his language. Part of his linguistic knowledge will be that S is well-formed only given PR. If the speaker's factual knowledge contradicts PR, then he may judge S to be 'deviant'. (p. 336)

This also shows that presupposition is established by non-linguistic contexts. Moreover, the well-formedness of sentences cannot be determined solely on formal or syntactic grounds.

4.0. Linguistic Phenomena:

There is linguistic evidence that the learner of a foreign language does not duplicate the segments or rules he has in his native grammar and that these elements are used in learning the foreign language. He combines those elements with the target grammar to form a "super-grammar".

At one point, borders between language groups are not borders that can be marked by a line on the map. Each language overlaps into the area of the other. It is indeed hard to establish isoglosses. At the other point, marriage between the grammars of two languages may give birth to a new grammar as it is the case with pidgin and creole. This phenomenon of combining different linguistic forms is operative not only between forms derived from different languages but also inside individual languages. Jakobson's implicational law is a case in point. This law suggests many things pertinent to foreign language learning:

a. The appearance of a certain segment presupposes the existence of another. For example, affricates presuppose the existence of stops and fricatives. So, if a learner has stops and fricatives in his native language and is confronted with a target language which, in addition to stops and fricatives, has affricates, this learner will learn the new sounds by combining features from segments already available to him. The same is also true of homorganic segments. For example /m͡b/ and /n͡d/ are combinations of /m/ and /b/, /n/ and /d/ respectively. So, if a learner is learning a foreign language that has homorganic consonants that are not used in his native language, he may combine segments he already has. He may have to produce these segments homorganically without any juncture.

b. The same may be also true of segments not found in the native system. A native speaker of Arabic whose stops are:

	t	k
b	d	g

has to learn /p/ so as to master the English stop system. We would not like to say that the need to learn /p/ means the need to create a new system since

p t k

b d g

is already a system learned by English-speaking children.

This points to two things. First, psychologically, a system which can be learned by a certain person may be learned by another. Second, the combination of linguistic segments into one unified system is easy to achieve since, in the above example, the appearance of /t/ implies that the learner can produce /p/. The learner may not have /p/ in his adult system, but the inherent features of such a phoneme may be easily manipulated from other segments. He can combine bilabiality from the /b/ sound with the voicelessness used with other stops to produce /p/. There may even be a possibility that he has [p] as an allophone in his native language. Even if the combination of such features is not available already in the native language, the new combination of such features does not imply the creation of a new system. For example, if an English-speaking child wants to learn Sindhi, he has to learn aspirates:

p^h t^h k^h

$b^ɦ$ $d^ɦ$ $g^ɦ$

The sounds [p^h], [t^h], [k^h] occur as allophones in English. This learner will have to learn how to produce voiced aspirates.

Let us deal with another case. Suppose that the foreign learner of English, is a speaker of Sindhi whose stop system includes:

p t k

b d g

ɓ ɗ ɠ

p^h t^h k^h

$b^ɦ$ $d^ɦ$ $g^ɦ$

The English stop system will be part of the system that this learner has. We cannot say that this learner has one /P/ for Sindhi and another /P/ for English since the phonetic description of both /P/'s will be nearly the same whether we define them in terms of point and manner of articulation, distinctive features or by acoustic analysis.

This does not mean that learning the foreign language will be so easy as the sequence of segments and the phonological interaction between the phonological rules may vary from language to language.

Historical evidence supports the above argument that the learner may combine segments or allophones from his native system to form a "super-grammar." It was mentioned above that an allophone in the native language may be used as a phoneme in the target language. Watkin's law says nearly the same thing, i.e. languages move toward allophonic minimization. In Old English for example [ð] was an allophone used intervocalically and in Middle English it became a phoneme after the loss of final /ə/.

Moreover, it seems to be the general tendency of languages to move toward symmetry and a filling-in of the gaps so that language learning can be made easier. In the same manner, the native speaker of Arabic who adds /P/ to his stop system is making his "super-grammar" more symmetrical and economical.

The development of languages into different families is another case in point which shows that the idea of building a "super-grammar" is easy to achieve. Proto-Indo-European which developed into so many languages with different grammars was spoken at a certain point by individual speakers. The grammar of those people included rules and systems that have been split into so many grammars. The idea of a super-grammar is parallel to language development but in the opposite direction, i.e. instead of splitting the grammar into different grammars, the learner is putting different grammars into one "super-grammar". It may mean some complication of the grammar but it is a logical requirement of communication. If a person wants to be understood by more people, he may have to add rules to his grammar. If he wants to limit his language to a certain dialect, this may mean a simplification of his grammar. This may lead to the appearance of new languages. Latin was once an "international language" over the continent of Europe and parts of North Africa and the Middle East. When there was no need for Latin as an international means of communication, people began to use regional dialects which were more economical in effort.

The above argument that the learner may combine some phonological segments or rules from the native language with those of the target language to form a "super-grammar" has a parallel in morphology. The morphological rules of the foreign language or languages learned may make use of the same features of the native language but with some constraint or change in order. For example, let us compare the definite article in Arabic, English, and Rumanian which are three

unrelated languages:

Arabic:

[Definite Article as a prefix] + noun

ʔal 'the' + walad 'boy'

ʔalwalad 'the boy'

Noun + [Indefinite Article + suffix]

walad 'boy' + un 'a'

waladun 'a boy'

English:

Definite Article + Noun

the boy

Indefinite Article + Noun

a boy

Romanian:

Noun + [Definite Article as a suffix]

pom 'tree' + ul 'the' (m.s.)

pomul 'the tree'

stea + UA

'star + 'the' (f.s.)

steaUA 'the star'

[Indefinite Article + Noun
 + Independent]

Un 'a' (m.s.) + pom 'tree'

un pom 'a tree'

'a' (f.s.) + stea 'star'

o stea 'a star'

If a native speaker of Arabic is learning English and Romanian, he will make use of rules which he has already. He will be either expanding the environment in which a certain rule applies or changing that environment. For example, in learning the place of the English article he will be expanding the use of the definite article in Arabic. He will have a rule saying: Use the article before the noun in English. Then he will add another rule to the effect of using the article as a free morpheme. However, the Arabic rule of attaching the article to a following form will be applied in learning English forms such as another where an is added as a prefix to other.

In learning Romanian, he will reverse the order in which the article and the noun occur. The indefinite article will occur before the noun and the definite article will occur after the noun. Instead of using these two articles as bound morphemes as it is the case in Arabic, he will use the indefinite article as a free morpheme and the definite article as a suffix.

5.0. This approach which suggests that the learner of a foreign language tries to form a "super-grammar" in order to avoid duplicating his native grammar is quite consistent with the view that grammar is an

apparatus that generates the sentences of the language. Such a generative device makes use of few elements to generate an endless number of sentences. In learning a foreign language, the learner is applying a similar strategy of economy: he is making the input to the rules more general and hence economizing in the number of rules applied. There is psychological evidence that this is true as the mistakes made by foreign learners may be made by native speakers. Examples of such errors are the use of altogether for all together, all ready for already, the slips of the tongue in cases of the absence of agreement between verb and subject as in he go for he goes, the nasalization of vowels in the environment of nasals and the use of the marked form as in: Somebody left their book here, etc. Some of these uses, like the last one, may even be characteristic of certain regional dialects. This shows that the native learner and the foreign learner try to economize and use a "short-cut" in their production. Instead of learning two forms all right and alright, one form can do. In the same manner, when a person is learning a foreign language, he will tend to make use of what he has already. Moreover , the learning of a foreign language is similar to the learning of another dialect of the native language.

The change in conversation from one dialect to another, or from one register to another, is not different from the change from one language to another. Some tribes in Australia (cf. Steinberg & Jakobovits, 1971) use a certain language when speaking among themselves and use "another language that is completely different when speaking to a person who is a taboo." (p. 436) The same is also true

of diglossia which is not different from bilingualism.

Martinet (1960) says:

> The idea that bilingualism implies two languages of equal status is so widespread and so well established that linguists have proposed the term 'diglossia' to designate a situation where a community uses, according to circumstances, both a more colloquial idiom of less prestige and another of more learned and refined status. This implies that 'bilingualism' is found only with individuals, whereas 'diglossia' is a phenomenon of whole communities. (p. 139)

The last sentence implies that in the mind of one person diglossia and bilingualism are similar in having one grammar each. The only difference is only in terms of "social" use; diglossia (cf. Ferguson, 1972) is characteristic of the whole society while bilingualism is a characteristic of one person.

6.0. What is the motivation behind the idea of "super-grammar"?

When a person learns a second language, he may have to learn a new grammatical system. Such a new system may complicate his repertoire. To effect economy in his new grammar, he avoids duplicating the rules he may have acquired before. Similar ideas have been dealt with by many linguists and psychologists. Zipf dealt in many of his articles with the speaker's need to effect communication with minimum differentiation of features. This may conflict with the listener's need to understand with minimum effort, that is, the need for maximum differentiation of features. The speaker wants his message to be formed with minimal redundancy while the listener may need the redundant features so that comprehension can be easy.

Between such conflicting interests a language adjusts to the multiple pressures of shifting compromises. Hence the development of a language may not be solely a matter of adjustments by native speakers. All users of the language, native or foreign speakers, contribute by their use of the language to this development. Moreover, some of the strategies used in learning a foreign language may be similar to those used in acquiring the native language. One of these processes is the combination of elements to generate larger units. This process may be so general that elements borrowed from different languages into the native language may be combined together. This is the case in English where words borrowed from various languages are used with affixes borrowed from Latin or Greek. This leads to another point, i.e. the features available to the person learning a foreign language may be used in such a way so as to produce the required feature or features. For example, an English-speaking person learning Sindhi voiced aspirated plosives will learn these new segments by combining the features voice and aspiration used in English with plosion. Such a strategy will effect economy in effort which is the main motivation behind "super-grammar". In the meantime, there may be opposite forces at work. Simplification on one dimension can lead to complication on another. For example, the use of voiced aspirated plosives by a person who has voiceless aspirated plosives will require him to set a constraint on the environment in which each is used. He has to be aware of the difference between both categories and how to use each.

6.1. Contrastive analysis has to take the idea of "super-grammar" into consideration because it will be economical in analysis. Moreover, it will help in relating the different components of the "grammar" with each other. More important than this is the fact that linguistic description has to explain the facts it deals with. It is not enough to deal with forms or configurations of forms; our analysis has also to effect explanatory adequacy and comprehensiveness of description. Chapter IV will deal with this in detail.

CHAPTER III

LINGUISTIC DEFICIENCIES OF CURRENT CONTRASTIVE APPROACHES

0.0. It was mentioned in the preceding chapter that the current contrastive approaches assume that the learner separates the native and target grammars in his mind. It was shown that this goes against the principle of least resistance and the movement of languages toward complete discreteness in using their forms.

Some contrastivists, Dingwall (1964), for example, call for "the most highly valued grammar" (p. 152) from each language to be used in contrastive analysis. It was mentioned in Chapter I that current contrastive analyses cannot account for attested expression problems. This chapter will give examples of how the current linguistic theories may not be able to account for many linguistic facts in the languages contrasted.

0.1. Current linguistic theories are interested in syntactic, phonological, and semantic components. This separation of components is wrong because in first language acquisition and also in foreign language learning, the structure of language is internalized as a whole along with its function. The formalism of these theories misses a great deal because of the separation of the different components of the grammar that affect each other. The interrelatedness between the different levels of the grammar is clear in the mistakes made by the learners of the foreign language. For example, the student who makes pauses at wrong positions as in the sentence:

(1) The new / teacher from / England / is teaching English in / this school.

has the syntactic problem of not knowing the immediate constituents of the sentence although his mistake is clear at the phonological level. The present linguistic theories think that linguistic interference happens at a single level only; for instance, the vowel system of the native language influences the production of the target vowels. But, in the meantime, different levels of the grammar may also interfere with one another in the process of language learning. The distinctions between the different levels of the grammar may, sometimes, obscure as much as they reveal. We may miss a great deal if we rigidly separate errors into "phonological", syntactic", etc. For example, the student who uses the plural morpheme with student may be faced with the phonological problem of consonant clusters at the end of the word and as a result may add an epenthetic vowel pronouncing the word as [studint+s] . The same may even be true in the interaction between the syntax and the semantics of the sentence where the syntactic error of the student may be due to his semantic intention of deleting the redundant elements in the sentence. For example, the student who writes:

(2) He go to his office by bus every day.

where the verb does not show agreement with the subject, has conveyed a complete message as the adverb of time at the end of the sentence can show the time of action in the sentence and hence adding -s to the verb would be redundant.

Lakoff (1971) has been aware of such shortcomings in the current theory of transformational analysis and this is why he

suggested the idea of global rules in the grammar. Such rules trace the history of derivation between non-adjacent trees. But such a hypothesis rests on the assumption that rules are ordered. However, recent research (Koustoudes, 1972) has shown that it would be more economical if we do away with the notion of rule ordering and consider rules to be applicable in case their structural description is met.

0.2. One of the basic assumptions of transformational generative grammar (Chomsky, 1965) and the generative semantics approach (McCawley, 1971) is that the rules of any descriptive analysis match the natural rules of language. It is also assumed that these rules are universal for the speakers of the languages under investigation. These two assumptions are dubious because they obscure the difference between description through formal generation and human production of messages. The use of these approaches for the purpose of contrastive analysis (cf. Di Pietro, 1972) may imply that the problems of all the learners of a certain target language will be the same. Although there may be some "common" errors among learners who speak different languages, yet each learner may make his own mistakes.

These theories also imply that contrastive analysis can 'apriori predict the errors of a learner and the problems he will confront in learning the target language by contrasting the structure of that language and the structure of his native language. As I have shown in Chapter I, this approach is wrong; it also fails to relate interference from the native language to interference from the target language.

1.0. There are many linguistic phenomena which the above linguistic theories cannot explain. In this section I will give examples from Arabic and English that the structural, transformational, and generative semantics approaches cannot account for.

1.1.0. The celebrated structural approach used in contrastive analysis is that of Lado (1960). This approach depends on form, meaning, and distribution applied to the languages that are to be contrasted. This approach has the following shortcomings:

1.1.1. It is atomistic. At the same time, the three criteria of form, meaning, and distribution are not enough. They do not tell us "how" the form, meaning or distribution is there or "why" it is there. In other words, they do not have any explanatory adequacy. Moreover, the relationship between form, meaning, and distribution is not clear. These three criteria are variables but the rules under which these variables operate whould have priority of investigation. If a student makes a mistake, the result is clear in the wrong form, meaning, or distribution. But this mistake is due, in the first place, to the application of a wrong rule. So, contrastive analysis should begin by investigating the semantic category and the rules that map it into linguistic forms.

1.1.2. Lado deals with form, meaning, and distribution in a linear order. This may result in looking at things from the wrong direction. For an example, let us deal with the following two sentences:

(3) The sheep is hungry.

(4) The sheep are hungry.

To Lado, sheep is singular in (3) because it occurs with is and it is plural in (4) because are occurs after it. But this is not a good explanation because is and are were chosen after the speaker intended to use sheep in the singular or plural form. In other words, it is not is or are that makes sheep singular or plural. It is better to look at the semantic component that makes this difference clearer because there may be cases in which this difficulty cannot be resolved otherwise. For example, in British English there is a group of nouns which can be used as singular or plural in different contexts such as government, club, board, etc. Although the context can show whether the word is singular or plural, Lado's criteria cannot do that. In the following sentence the number of the subject is neutralized between the singular and the plural:

(5) The government discussed the matter yesterday.

This may mean that the government discussed the matter as a unit with somebody else or discussed it among themselves.

3.1.3. Form, meaning, and distribution are not binding criteria. There may be a form that does not have a meaning as do in

(6) Do you need this?

Moreover, the same meaning may be rendered by different forms. Emphatic stress in (7) can be also rendered by the form do which attracts stress as in (8).

(7) I 'know.

(8) I 'do know.

1.1.4. Lado's approach will group together sentences that are semantically different. This is because to him "Grammatical structure as matters of form...correlate with matters of meaning" (p. 52). But this correlation is not true in every case. The following three sentences have nearly the same surface structure but they are semantically different.

(9) He criticized a book.

(10) He wrote a book.

(11) He is playing the radio upstairs.

These sentences have the surface structure S V O, but in (9) the book was there before he criticized it. In (10) the book came into being as a result of his writing. In (11), on the other hand, what is playing is the radio and not the person. (12) will be wrongly put in the same category with (11).

(12) He is playing football outside.

On the other hand, Lado's approach is not economical as it will put under different categories sentences that should be put under one category. For example, he will not group together (13) and (14).

(13) He seated the children.

(14) He made the children sit down.

Although (13) and (14) have different surface structures they should be grouped under one heading: "Causative". Both sentences mean:

(15) He caused the children to sit down.

3.1.5. From what was said in the above section, it is clear that the same meaning may be rendered by different forms (cf. (13) and (14)). However the same form may be used to convey different semantic

conceptions. For example, a statement may be used to give information or to convey an indirect command:

(17) It is nice in here.

(18) It is cold in here.

Both are statements with nearly the same stress pattern, but (18) can be used as an indirect way of asking somebody to shut the door. This problem can be dealt with as part of "usage" and any contrastive study that does not deal with such a problem begs the question. It is the fault of Lado that he purposely leaves "usage" out of his study. Lado (1960) says:

> The usage point of view does not give us criteria to decide which matters of usage are significant in communication and which are not: it does not tell us how to locate those elements that are part of the signaling structure of the language, that signal its structural meanings. The usage point of view results in "problems" that require the student to decide if this or that turn of phrase is the best one, regardless of whether or not the difference is structurally important in communication. (p. 52)

Any successful contrastive study should deal with "usage" because this is one of the areas that learners find to be difficult. A learner who responds to (19) using yes or no misses the main point and does not understand what he is supposed to do.

(19) Could you open the door, please?

Such a question presupposes that the hearer has the ability to open the door. As a result, he is not supposed to use yes or no. He is supposed to perform an action. Lado's problem is that he confuses usage and structural meanings. Usage will not cause any problem if structure is not the only criterion used to decipher meaning. The

semantic component of the grammar is very important and if this is included as an area of contrastive analysis, the study can account for interference from the native language as well as interference from the target language itself.

Neglecting the study of "usage" means putting unneeded constraints on the criteria of analysis. Lado may be interested in the system as a whole. He is aware of different media in different languages, e.g. word order in one language versus inflection in the other; or function word in one language versus inflection in the other. But this superficial difference is not a difference in rules. The difference is only in the way of showing a certain rule. A linguist should be interested in the rules themselves and how these rules interact to form a system. This requires a study of language behavior. Ferguson (1971, p. 139) is right when he says "... that language behavior can be studied systematically to discover its structure, is more than simply the linguist's reverence for language, since it has led to a number of discoveries about universal characteristics of language."

1.1.6. Lado's criteria will create difficulties for contrastive studies. As an illustration, it is very difficult to contrast the "infinitive" in English and Egyptian Colloquial Arabic by applying these criteria. Let us consider the following sentences:

(20) He wants to go.

(21) huwwa ʕāwiz yurūḥ.

he wants he goes.

"He wants to go."

By applying Lado's criteria we may conclude that Arabic does not

have the equivalent of the English infinitive as the verb yurūḥ "go" can show number and gender:

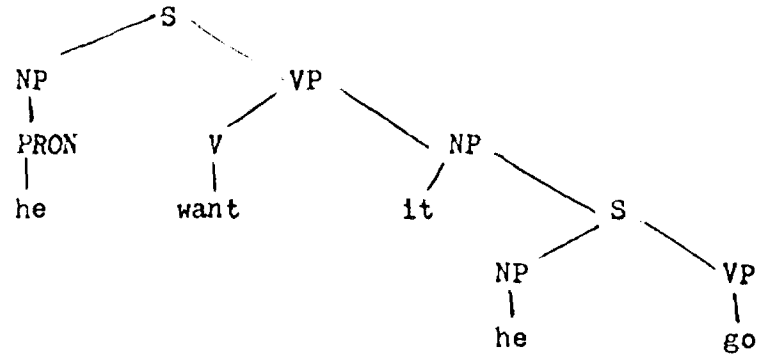
(22) hiyya 9awza turūḥ.
she wants she goes.
"She wants to go."

(23) humma 9awzīn yurūḥu.
they want they go.
"They want to go."

Or we may be satisfied, according to Lado's criteria, by saying that the Arabic infinitive shows number and gender. But this is not true as I will show hereafter.

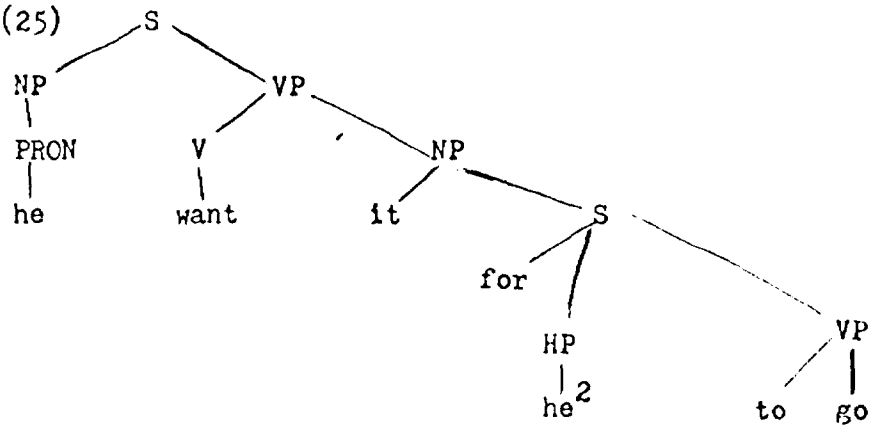
The remote structure of sentence (20) above is (24).

(24)



By applying for ...to complementizer the tree will look like:

(25)



By it-replacement, equi-NP deletion (deleting he[2]) and by deleting for we get the intermediate structure:

(26) He want to go.

By applying the rule of subject-verb agreement, the output will be:

(27) He wants to go.

In this sentence, the agreement is between he and wants only but go does not change its form because it in now in the verb phrase complement and does not have a subject to agree with. The Arabic so-called infinitive shows number and gender because these are the markers of agreement between the subject and the verb. The rule of equi-noun phrase deletion is applied to English but not to Arabic. So, when we say that the Arabic infinitive shows number and gender we are confusing the issue and we are not able to explain the facts correctly. The only difference between Arabic and English in this case is in applying a certain rule, i.e. Equi-Noun Phrase deletion. Lado's criteria do not even mention this rule. His analysis will make it impossible to contrast the Arabic and the English infinitives.

1.1.7. Lado's criteria do not account for related syntactic phenomena in the language contrasted. They deal only with "parts" of what should be contrasted. As an illustration, let us contrast the following two sentences of English and Egyptian Colloquial Arabic:

(28) He is in class.

(29) huwwa filfaṣl

"He is in class."

At the surface structure, the only contrast here is that Arabic does not have the verb be in the present tense. But the case is more complicated than this. (29) has another variety where the participle mawgūd 'present' is used:

(30) huwwa mawgūd filfaṣl.

"he (is) present in class."

Lado may compare sentences (29) and (30) saying that the participle can be deleted in certain positions and may add that the verb be is deleted in the present, as in (29). But this is missing the issue. As I will show later, the present tense in Arabic is the unmarked tense which need not be shown; the particple is derived from an underlying verb to show this unmarked tense. To prove this point, this underlying verb has to be used if sentence (29) is embedded in ʔ ana ʕawzu 'I want him to':

(31) ʔana ʕawzu yitwiǧid filfaṣl.

'I want him to be present in class.

Lado's analysis cannot account either for deriving the participle and using it as in (30) or for deleting it as in (29). In other words, it is not economical because it will require many forms, meanings, and distributions without using few rules to explain the related syntactic phenomena in the languages contrasted.

1.1.8. Form, meaning, and distribution, as variables, cannot make up a grammar. The aim should be to recognize and account for all those places in the two languages contrasted where there can be a possibility of meaningful choice and to state the range of possibilities at each place. In some instances we face a choice among a very small number

of possibilities. This happens for instance when we have to choose between this and that, or between singular and plural, or between past, present, and future, or between positive and negative. The range of choice may be also exhaustive. For example, where "positive" can be chosen, "negative" is the only possible alternative. There are other places, however, where we can choose from a very large number of possibilities and where the forms do not belong to one class. In

(32) He was sitting _____.

we can choose from among there, here, alone, unhappily, near the door, etc. Many other choices are perfectly possible, and probably no two people would agree on the many items that can be used here.

1.1.9. Form, meaning, and distribution are not mutually exclusive criteria. Form is part of meaning, not opposed to it. Moreover, meaning cannot be limited to form because the meaning of the sentence is not equivalent to the total meaning of its words. Meaning may even go beyond the words of the sentence as in cases of presupposition and entailment. This approach does not differentiate between grammatical meaning such as -s in boys vs. boy and the semantic meaning. The natures of grammar and lexis are such that any statement made in grammar can account for a larger number of events than a statement made in lexis.

1.2.0 Transformational Grammar

1.2.1. Transformational-generative grammar is interested in "competence": the ideal speaker-hearer in a homogeneous situation. We know that the speech of a society if far from homogeneous. Although it may be

said that a scientific analysis of language has to separate the theory of language (langue or competence) from the theory of the use of language (parole or performance), this separation may help in theoretical investigation and not in a pedagogical situation. This is because in a pedagogical situation we are interested mainly in performance or the actual use of language.

Transformational grammarians separate competence from performance because of their interest in the formal structure of the spoken language. Any inclusion of variables from performance would, according to them, render impossible the representation of either the systematic character of language or the systematic character of speech behavior. Even when they relate sentences to each other, they do so only in terms of formal structure. The same is true of investigating the structural description of a sentence which is viewed as a string of formal units. This approach neglects a great deal about the semantics of the sentence, its function, and the context in which it can be used. Although scientific investigation is not required to include all facts about speech, what transformational analysis leaves out is of paramount significance to the learner of a foreign language.

1.2.2. The theory of transformational grammar cannot account for the context in which a certain sentence can be used or the way it will be understood by the hearer if extralinguistic factors have to be taken into consideration. For example, if one is christening a ship, we expect the bottle to break. The sentence:

(33) I hereby call this ship Queen Mary.

is void if the bottle fails to break. Transformational grammarians and generative semanticists cannot incorporate such notions into their formal analysis. In teaching a foreign language, we would not like to teach it without making the learner know if the sentence is void or felicitious. This does not mean that the theory of grammar has to include everything from the everyday situation. This will be very simplistic. For example, we need not incorporate into our grammar the notion that fire burns things so that the learner can understand correctly the sentence:

(33) If you put paper on fire it burns.

as such knowledge has no bearing on the content of such a sentence. But the entailment and presupposition of sentences may be conditioned by the culture in which a language is spoken. Chomsky's theory does not account for the acquisition of this everyday knowledge. Such a knowledge should be added as a parameter in the grammar because the intention of the speaker may vary from situation to situation. Osgood (1971) has shown that such extralinguistic factors determine the formation of sentences. He carried out the following experiments with his graduate students. He used a plastic ring (orange), a ball (small and black) and two plastic cups (one red and one green). He told the thirty students that he would ask them to close their eyes when he gave the number of each of five little demonstrations, then to open them when he said "open" and to close them again when he said "close" -- and then they were simply to describe, in a single sentence that a hypothetical six-year-old boy outside the door would understand, what they observed during the eyes-open period. The five

experiments were as follows:

1. He placed the orange ring in the middle of the table.
2. He stood holding the ball. They were instructed to refer to him as the man.
3. He placed the black ball in the middle of the table.
4. He stood holding the red plastic cup in his hand.
5. He placed the green plastic cup in the middle of the table.

Everytime he placed a new item on the table, he removed the other one.

Demonstrations 1,3, and 5 were identical except for the particular object which was in the middle of the otherwise bare table, an orange ring, a black ball, or a green cup. Yet the types of sentences the students produced varied markedly.

The sentences produced by #1 were typically either:

(34) An orange ring is on the table. or

(35) There is an orange ring on the table.

Sentences with the definite article:

(36) The ring on the table is orange.

or sentences making explicit the adjectival transformation

(37) A ring is on the table and it is orange.

almost never occurred. On the other hand, after seeing #2 (usually described as the man is holding a small black ball), #3 did regularly yield sentences with the definite article along with adjectival pronominalization:

(38) The black ball is on the table.

Demonstration #5, following the man is holding a red cup, did typically produce

(39) The cup on the table is green.

Osgood's experiments show that non-linguistic, perceptual antecedents can create, as he says, "cognitive presuppositions" in the same way that previously heard or uttered sentences do. These presuppositions influence the form sentences take. The speaker forms his sentences in a way that can be informative to his listener. So, what the listener is aware of should not be repeated; only the new idea or thing has to be mentioned. For example, if a speaker has already seen a particular black ball, and assumes that his listener is familiar with it also, then it is absurd for him to say the ball on the table is black because the size or color is not informative; it is its new location which is informative now. This shows, to quote Osgood, "Neither the syntactic bone nor the lexical flesh of sentences created by real speakers is independent of the non-linguistic contexts in which they occur. ...the form as well as the content of sentences can be influenced by manipulating the perceptual context in which they are produced." (p. 498) This also shows that the so-called underlying structure is not purely linguistic. As Osgood says:

> The implication of the very recent work on presuppositions, as well as of my little demonstrations, would seem to be that what is "transformed" into a surface sentence is not another 'sentence' ... but rather a momentary cognitive state which is not linguistic at all yet has its own complex semantic structure. (p. 519)

This momentary cognitive state, mentioned by Osgood, is where sentences "come from and go to". This is deeper than the deep

structure posited by Chomsky and the generative semanticists.

1.2.3. Transformational grammar has been used for the purposes of contrastive analysis by Di Pietro in his book Language Structures in Contrast. Di Pietro says in this book:

> To make a contrastive analysis operational, contrasts would have to be expressed as a series of conversions performed on the source language in order to produce the forms of the goal language. (p. 18)

This has the dangerous assumption that the target rules or transformations -- called "conversions" by Di Pietro -- will operate on the native language to produce the target language. This means two things:

a. The deep structure of the native language is not different from that of the target language; hence the rules of the target language will have the input on which they operate provided by the native language. This may be the general assumption of the current theory of transformational grammar which posits the phrase structure rule

$$S \longrightarrow NP + VP$$

as an underlying remote structure. But this remote structure is not enough for rules to apply because certain grammatical rules may be constrained by subcategorization features peculiar to every language. An example of that was given in Chapter II about nonhuman plurals in Arabic which take the feminine singular subject marker, adjectives, and pronouns. Moreover, the equivalent forms in the target language may have different grammatical character-

istics. For example, in English, the verb rumor is always used in the passive voice while the Arabic equivalent ʔaʃāʕa may be used in the active or passive voice:

(40) a. huwwa ʔaʃāʕa ʔanna ʔalwazīra fuṣil.

Lit.: 'he rumored that the minister was fired.'

b. ʔuʃīʕa ʔanna alwazīra fuṣil.

'It was rumored that the minister was fired.'

This characteristic cannot be explained by the semantic connotations of the verb that the person started the rumor may not be known because the same idea can be stated in the active voice:

(41) I know it is John who set that rumor after Mary.

This peculiar grammatical behavior may be due to historical change in usage as the verb rumour was used in the active voice by Shakespeare; this verb also gave the active participle rumourer which was used to mean "one who rumors a thing."

Moreover, conclusions drawn only on the basis of the formal application of rules may be wrong. For example, transformational analysis considers as an NP the node that can be moved by passive to the front of the sentence as in:

(42) Structural Description: NP_1 Aux VP NP_2

Structural Change: NP_2 be V + en by NP_1

But there are many sentences in English that meet this structural description but cannot be passivized:

(43) a. Sam possessed a cow.

b. * A cow was possessed by Sam.

c. I wanted a new book.

d. * A new book was wanted by me.

However, no transformationalist would like to say that the constituent occurring after possess or want in the above English sentences is not an NP as it does not undergo the passive rule.

b. Di Pietro assumes that the learner would not be able to internalize the target grammar as part of his competence. We have, according to Di Pietro's assumption, to teach the student how to apply rules only. However, Di Pietro adds a conflicting note as he says: "Whatever is postulated for the syntactic base, the purposes of contrasting languages are best served by keeping deep syntax as uninvolved as possible" (p. 53). Moreover, if the grammar used in the classroom is interested in rules, this will mean that we will be talking about language while we should be interested in the actual use of language. Students may learn the rules, but they may apply them wrongly. This way of instruction may be also unnatural as in first language acquisition, the child arrives at the rules himself. He abstracts the rule after hearing different forms used around him. Moreover, transformational rules with the different constraints on them are too abstract to be effective in a pedagogical situation.

1.2.4. The application of transformational grammar in contrastive analysis may not "explain" certain linguistic phenomena simply

because of the separation of the different components of the grammar. This is clear in cases where the motivation behind a syntactic rule is semantic. For example, a contrastive study of Arabic and English will be confronted by the fact that in Arabic there are two types of sentences: sentences with verbs and sentences without verbs or equational sentences. A transformationalist may say that there is one underlying sentence in Arabic and that the verb be is deleted in the present and added in the past and future tenses. Another transformationalist may say that equational sentences are derived from verbal sentences. Within the formal framework of transformational grammar no explanation for the motivation behind the rule or its actual use in conversation can be advanced. Such an explanation will have to make use of the actual semantics of the sentence. In Arabic, equational sentences are used to denote an unmarked present situation contemporaneous with the act of speech ungoverned by what comes before or after it. (cf. my M.A. thesis, Ohio State University, 1972).

The aim should be to show that linguistic analysis, and in the same manner the process of acquiring language, must involve a much more complex analysis procedure than that offered by mere listing of rules and the relationship among rules. Out of many sentences that the student hears -- elliptical, hesitational, semi-grammatical and grammatical -- he has the ability to abstract the rules for himself and find out the relationship between them.

The idea of combining syntax, semantics, and situational factors into our analysis is very important especially in cases

where the semantic notion is built into the form and where the situational response is not conditioned by the syntactic form of the message. In what follows I will give examples of these two notions. For example, in Literary Arabic, the idea of "causation" is built into the morpheme. This causation has different semantic levels that are rendered by different internal changes of the word:

a. action caused by a higher source is rendered by doubling the second radical: kattab: to cause someone to write something.

b. action happening by chance or initiated by the doer only without the expectation of the experiencer of action: this notion is rendered by using the vowel ā after the first radical as an infix: sāʔada: to cause somebody to be able to do something.

c. action that has to be done by one person only is rendered by using the prefix ʔa --: ʔarsala: to cause something to be sent.

c. Reciprocal action is rendered by using the prefix ta and and infix ā: tarāsala "to correspond with".

d. Spontaneous and inchoative actions are rendered by using the prefix ʔin: ʔinkasara "broke", ʔintahā "ended", etc.

The syntactic form of the message alone may not determine the response; the content may also be a decisive factor. In Egyptian Colloquial Arabic, the answer to a question may depend on its form (whether it is positive or negative), content, or a combination of both. For example, the answer to:

(44) Ṣaḥīḥ huwwa magāʃ?

"Is it true that he didn't come?

may be:

(45) a. ?aywa, huwwa magāʃ.

Lit.: yes, he didn't (come).

b. la?, huwwa ga.

Lit. No, he did (come).

c. ?aywa, huwwa ga.

Lit. Yes, he did (come).

d. la?, huwwa magāʃ.

No, he didn't (come).

We find here that a) and b) are different from English in that the form or the content may be responded to. c) and d) are similar to English.

CHAPTER IV

A NEW APPROACH

0.0. It was shown in Chapters II and III that the current linguistic theories cannot serve the purpose of contrastive analysis as they cannot account for certain psychological, communicational, and linguistic phenomena. This chapter will show that what is needed is a theory based upon and representing the full structural and semantic complexity of natural language, not one which limits itself to the arbitrarily chosen artificial language that has a relatively simple structure. The problem is not that current theories yield wrong answers to the questions they ask; it is that they are asking the wrong questions. What we need is an approach that deals meaningfully with the question, "How is language organized to convey meaning?" rather than "How are syntactic structures organized when viewed in isolation?" This approach will draw on the functions of language: intrinsic functions, i.e. the use of language, and extrinsic functions, i.e. the relation between language and culture. Such functions have the power of constraints that filter the linguistic forms and rules.

This functional approach will be more comprehensive than the current linguistic theories. Language will be considered to be more than a set of sentences or a system of habits. The native speaker may have abilities beyond those posited by formal transformational grammar, for example, abilities to judge the grammaticality,

acceptability, deviancy, synonymy of sentences, etc. Psycholinguistic data, functional use, situational requirements as well as generative ability are theoretically relevant and can lead us to select, in a systematic way, certain grammatical formulations over others, thereby achieving explanatory adequacy. This analysis will be shown to be more valued in terms of rule generality and simplicity metric than the current analyses. The main motivation behind such an approach is that if our grammar is going to deal with a natural language, such a natural language must be a member of the set of all possible languages, and it must also be of such a nature and structure that it can be learnable and usable by human beings.

This approach, as will be shown hereafter, can effect economy in our analysis of languages because:

a. Extralinguistic factors such as the status of speaker and hearer may determine the choice of certain forms.

b. Linguistic components are not watertight compartments; for example, a question may be used as an indirect order or request while a statement can be used for the same purpose.

c. Acceptability of sentences depends on the native speaker's knowledge of the world and the function of language as he sees it.

d. Ambiguity derives from knowledge of the world as well as the application of grammatical rules. For example, the sentence:

(1) John and Mary are married.

is ambiguous between:

(2) John and Mary are husband and wife.

and (3) John is married and Mary is married but they are not

husband and wife.

Sentence (1) may be said to be ambiguous as a result of applying the rule of conjunction reduction to the remote structure which is:

(4) John is married and Mary is married.

The same rule of conjunction reduction can be said to have applied to:

(5) John and William are married.

But while sentence (1) is ambiguous, sentence (5) is not because our knowledge of the world tells us that two men cannot be married to each other. This shows that formal application of rules alone cannot account for ambiguity in all its aspects.

e. Rules can be accounted for semantically as well as situationally. For example, implicative verbs (cf. Karttunen, 1971) presuppose the truth of their complement while non-implicative verbs do not, e.g.

(6) John managed to solve the problem.

implies the truth of:

(7) John solved the problem.

On the other hand, the sentence:

(8) John hoped to solve the problem.

does not imply the truth of (9):

(9) John solved the problem.

This fact shows why (10) is a contradiction, and (11) is not:

(10) *John managed to solve the problem, but he didn't solve it.

(11) John hoped to solve the problem, but he didn't solve it.

These verbs involve certain presuppositions and hence the speaker of (6) is committed to the truth of the complement sentence but the speaker of (8) is not.

f. This approach will be economical in dictionary entries. The morpheme will be entered according to its "core" meaning since any change resulting in polysemy or homonymy is similar to the change that results in restriction or limitation in meaning. These changes are due to situational shifts in the use of forms.

1.0. Functional Approach:

This functional approach differentiates between internal function and external function. Internal function means that the meaning of a sentence is the resultant of the meanings of all its constituent units and constructions. However, a sentence with the "same" constituents may have very different functional effects in different situations. So, it may be safe to say that two occurrences of the "same' sentence may be said to have different "external" meanings. The sentence:

(12) The train is here.

may cause different responses if said by some person to a friend at a railway station or if the friend is standing on the rails. The "internal" meanings of the two occurrences of the sentence are the same, the external meanings are different. In this chapter, the "functions" of language are used as synonymous with the "uses" of language. Such "uses" are not different levels of the grammar but they have to be part of the grammar as they determine the system of

the language. Language serves a variety of different ends in different cultural situations; the potential meaning of language can be understood only as relating to those ends. The classical functional theories of Malinowski, Bühler, and Firth deal with the extrinsic functions of language that are investigated from an ethnographic or a psychological viewpoint. In what follows, the intrinsic study of language deals with how the functional diversity of language is reflected in the language system, and the relationship between grammatical structures and the "use" of language. Following is an illustration. The sentence:

(13) John has arrived.

expresses a certain concept about the speaker's experience of the real world. This is one aspect of the "ideational" function of language. We could also modify the content of (13) in a systematic way, e.g.

(14) John has arrived with Mary.

(15) John has arrived in the new car.

and so on.

Secondly, sentence (13) expresses a role relationship between speaker and hearer. In uttering sentence (13), the speaker is taking upon himself the role of communicating certain facts to the hearer. It is an "invitation" to the hearer to take another role which is that of believing what the speaker says. Here the contrast is with:

(16) Did John arrive?

Finally, the speaker selects the desired form of the message that can effectively represent an experience in a way understandable to the hearer. If instead of (13) we had:

(17) The one who arrived is John.

This would be the "textual" function of language. All these functions, ideational, interpersonal, and textual, are, in fact, normally present in adult utterances. An utterance embodies an idea or content, speaker and hearer, and a message of a certain form or text. Even a simple sentence like (13) expresses all these elements simultaneously.

This functional approach is clear in the areas of language acquisition and recent descriptions of languages. Learning the mother tongue is, in effect, learning the functions of language, which in turn provide the context for and give significance to its structures and systems. Theories of code and register, of speech acts, of context of situation and the like all relate linguistic features to the functions which language serves.

1.1. Language Acquisition:

The child's experience of what language "means" is not restricted to its ideational meaning or "content"; function is a very decisive factor for him. Every person uses the language he acquires at a certain stage to fulfill all the functions that correspond to his needs. Aage Salling (1953) observed that when a child has a twenty-word vocabulary in his mother tongue, this amount of vocabulary should not be considered just as part of an eventual acquisition. These twenty words constitute at that early stage, as Salling puts it, a "little language", that is, a complete operating language fulfilling all the functions which correspond to the child's needs. The twenty-word little language becomes a forty-word little language as the needs themselves expand in range and precision and as ability to express them

develops. The same is true of foreign language learning. For a foreign learner, the language which is presented up to any given stage, the first month, the first term, and so on, should likewise form a complete functioning little language, within the learner's competence.

The type, amount, and use of vocabulary learned are conditioned by the presence of society. People of the world speak different languages because of the societies in which they are born. A person speaks the language he hears in his society. This is because speech is an acquired "cultural" function which is processed through innate mentalistic abilities. Language does not exist apart from the culture of the society in which it is used. As Sapir (1949) says, "Language is a particular how of thought" (p. 218), while culture is what a society does and thinks. In this respect, the flow of language parallels that of the inner content of consciousness. The content of consciousness has to be the first level of contrastive analysis. So, when we contrast the semantic content of vocabulary items or sentences we may be looking at "what" a person is thinking of. Here, again, culture may be a determining factor. Sometimes we may find that one semantic content is covered by one word in one language and by two words in another. For example, while English uses the two words watch and observe to mean different things, Arabic uses lāhaẓa to convey the two semantic contents covered by these two English words. On the other hand, a language may not have a word that can be used to designate a new concept or thing adopted by that language. Old English, for example, which did not have a

word for priest translated it into "the learned one". In the same way, if a society has no knowledge about a thing, it need not have a word for it. On the other hand, languages may expand the meaning of the words they have in order to designate new ideas or things. When the bicycles were first used in the north of the Sudan, they were referred to as an iron donkey. A similar phenomenon is clear in child language. One of the children I observed, a child of three years learning Egyptian Arabic, used to convey all his needs by using the word ga9ān 'hungry', e.g. ʔana ga9ān 9ēʃ "I am hungry bread (= I need bread"), ʔana ga9ān māma, 'I am hungry mother (= I want mummy)', and so on. Remnants of such constructions are still used in adult language among friends. An adult may say ʔana ga9ān nōm "I am hungry sleep (=I need some sleep)". The same is also true of a verb like kal 'to eat' whose use is extended in such sentences as kal il?igār, Lit.: 'he ate the rent (= he did not pay the rent)".

1.2. Linguistic Description:

Many linguistic descriptions incorporated into their analyses the "functions" of language. Malinowski considered that the structure of language mirrors the real categories derived from the attitudes of the child and the "primitive" man to the surrounding world. Later, Malinowski discarded the notions "primitive man" and "primitive language," and generalized his functional approach to all languages.

Some transformational grammarians used the functional approach to effect economy in their analysis. Katz and Postal (1964) relate

questions and imperatives to statements by having the abstract markers Q and Imp in the underlying structures of questions and imperatives respectively. They give semantic and syntactic justifications for their abstract markers. First, for the sake of economy in their theory, they wanted to eliminate all meaning-changing transformations. Up to 1964, the general belief among transformationalists was that transformations preserve meaning. In order to eliminate the meaning-changing rules, it was necessary for Katz and Postal to build some structural difference into the syntactic structures which underlie declarative, imperative, and interrogative sentences. Then rules which matched semantic structures with syntactic structures could make use of the underlying difference between the various sentence types and would not need to take into account the application or lack of application of the sentence-type transformations. Such a treatment was able to point out the relationship among the three sentence types: declarative, interrogative, and imperative. When Katz and Postal did that, it seems they had in mind what a sentence is "used" for: whether to state, ask a question, or order somebody to do something.

These underlying pragmatic markers posited by Katz and Postal can explain why sentences like:

(18) a. You will close the door.

(19) b. You can lift the box.

are ambiguous between assertion and order, and assertion and permission respectively. Sentece (18. a.) may mean:

(19) a. I order you to close the door.

or b. I am asserting the fact that you intend to close the door.

Sentence (18. b.) may mean:

(20) a. You have my permission to lift that box.

or b. You have the ability to lift that box.

The presence of the underlying markers Q and Imp specify the structural description to which the rules can apply. Thus two distinct underlying structures, one containing the imperative marker and one lacking it, would underlie the same surface structure and account for its ambiguity.

Fillmore (1966) also used contextual factors to account for the semantics of come. For example in his footnote #1, he says:

> There are, of course, contexts in which a sentence like I'LL GO HERE is not inappropriate (e.g., when pointing on a map), but there are contexts in which it would be just as appropriate to say I'LL GO THERE, that is, they are contexts in which the demonstrative value of the words HERE and THERE is brought into play, but in which the opposition between HERE and THERE is neutralized. Similarly, when identifying oneself in a group photograph, one may say THERE'S ME, but HERE'S ME would be just as appropriate.(p. 219)

Such situational notions do not only help us understand sentences but also relate sentences to each other through what Fillmore calls "supposition rules." Fillmore says:

> By means of a supposition rule, semantic features associated with certain morphemes in sentences of certain structure are interpreted by constructing new sentences from the original sentences; the claim is made that our understanding of the original sentences includes the semantic interpretation of the newly created sentences among their 'suppositions'. (pp. 222-223.)

Fillmore departs from the current analyses of ambiguity and says that ambiguity is equivalent to the different situations in which a sentence can be used:

> ... a sentence like HE CAME TO THE BANK EARLY supposes ambiguously that I am at the bank now, that you are at the bank now, that I was at the bank when he came, or that you were at the bank when he came. And there are, it would seem to me, the situations in which the sentences would be appropriate (Italics mine, p. 226).

Moreover, the semantic application of rules may be determined by extralinguistic factors. For example, the sense in which sentences can be called analytic, meaningful, synthetic, etc. is different from the sense in which deictics can be. In a sentence like:

(21) Triangles have corners.

the proposition is analytic. But the sentence:

(22) I am here.

is not analytic since it can be used in everyday situation by a person to tell another person that he is present or to tell him about his place.

2.0. Application:

The functional model can be used to account for the relation between words. The idiosyncratic components or uses of a certain form can be related to other components or uses. The semantic components may be also complex as they may be required to characterize events or situations that are also complex but semantic description has to deal with events in time, space, kind and identify them in the cultural and physical universe in which human beings live.

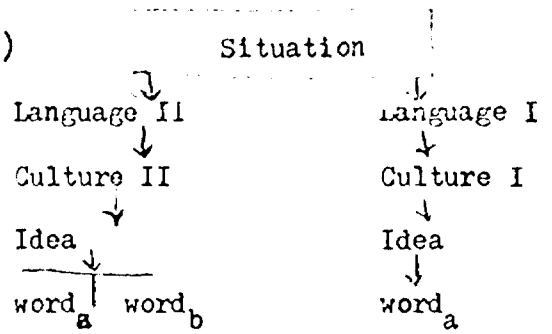
Such an analysis can effect economy in dictionary entry and hence in our contrast of the lexis. For example, the different uses of ga?ān 'hungry' and Kal 'ate' should be registered in the same lexical entry as the different uses reflect a general pattern in the structure of the language. There are also similar situations in which a word that is basically a noun can be also used as a verb. For example, the verb pilot should be related to the noun pilot. If the noun is defined in part as one who flies an airplane, the dictionary must relate this meaning to the related meaning of the associated verb. This aspect of relation between different words may work differently in different languages. Our analysis has to deal with that as a result of semantic differences that are conditioned by differences in culture. Hence, the remotest level of contrast should be:

(23)

Language I	Language II
Idea	Idea
Word / Word	Word

where the idea may be represented by one word in Language II and by two words in Language I. To make our model sharp enough, ideas have to be limited clearly and hence the cultural conditioning factors should be the variables which contrast deals with. This can be demonstrated as follows:

(24)



At this level we may have to include deep structure constraint and the source of constraint which is culture. So, the type of word that surfaces at the end of the above model is conditioned by the situation and the idea that represents it. In other words, every step in the above model filters the next step. To give an example, Arabic modals can be divided into two categories: those that show person, number and gender and those that do not: yumkinuka "you (m. s.) can" vs. yumkin 'can' or 'may', taqdiru 'you (m. s.) can' vs. mina lmumkini 'you can, probably,' etc. The use of one or the other is conditioned by the source of volition. If permission is given by the speaker, the modal does not show number, person or gender but if choice is left to the hearer to carry out the message or not, then the modal shows number, person, and gender. For example, the modal in sentence (25) does not show number, person or gender because permission may be given by the speaker or the speaker may be conveying to the hearer the permission given by another person. (26), on the other hand, leaves the choice to the hearer and so the modal shows person, number and gender.

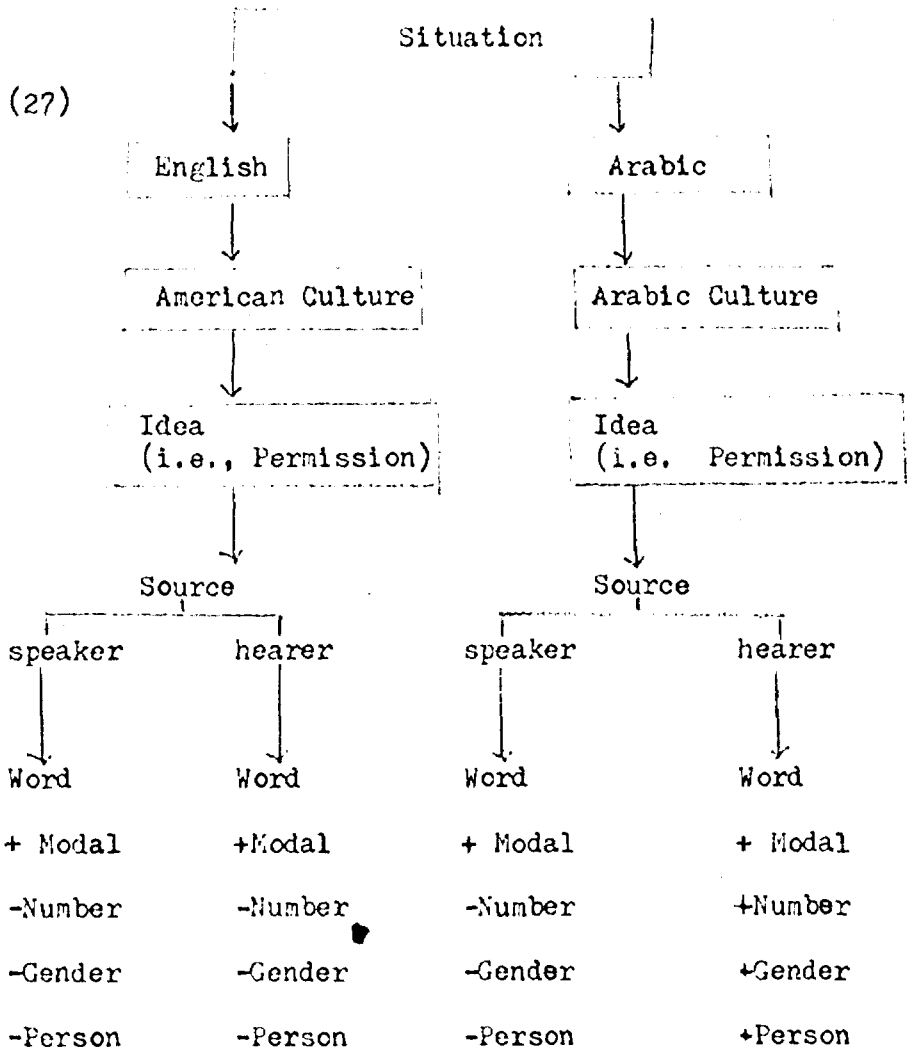
(25) min almumkini ʔan taðhab.
possible that you (m. s.) go.
'you can go'

(26) yumkinuka ʔan taðhab
'you (m. s.) can go.'

Please also notice that the modal in (26) is derived from the same root as the modal in (25) and hence the derivational morphological process is determined by the source of volition. In other words,

the morpheme appearing at the end of the above model tends to reflect the situation which determines the idea that is conveyed. Such notions can be incorporated into the above model to show the difference between English and Arabic modals:

(27)



At this stage, the movement from one level to the other can be viewed as a filtering process that allows the word pertinent to the idea to be used. After this, intrinsic functions came into play. Selectional restrictions appear also at this level. Features like human, non-human, etc. determine which words occur with each

other. For example, the verb sleep can occur with animate or non-animate subjects:

(28) John sleeps in this room.

(29) This room sleeps five men.

Although the verb sleep, in its basic sense, refers to an activity of an animate being in a particular place, when the focus is on the place and at issue is the number of different beings that can sleep in that place, the verb permits the place noun phrase to appear as subject as in (29). This is allowable in English but not in Arabic. The verb nām "sleep" does not have these selectional restrictions. In Arabic we can say:

(30) Yumkinu ʔan yanāma xamsatun fī hāðihi ilḥujrah.

'Five people can sleep in this room.'

But we cannot say:

(31) *hāðihi ilḥujrah tunayyimu xamsah.

'this room can sleep five people.'

But the problem is not a difference in selectional restrictions. (31) is not grammatical in Arabic because the verb tunayyim "sleeps" has causative sense in it. It means "to cause some people to have a room or chance to sleep". Such causation is limited to human beings and this is why a noun phrase referring to a place cannot be used as a subject. In English this is allowable. The only way to express the idea behind (31) is to use a verb like yasaʕ 'hold', yakfī 'suffice, is enough for', etc.:

(32) hāðihi ilḥujrah tasaʕu xamsah.

'This room (can) hold (= sleep) five (persons).'

However, there is more to this rule than the idea of causation. The application of this rule of using a place noun phrase as a subject is conditioned by the explicit presence in the sentence of two noun phrases: one referring to a place and the other referring to human beings. Our contrastive analysis has to make all that explicit.

Such an approach can also account for the use of idioms, personification, polysemy, and, in general, the functional shift of words. Compare the following sentences:

(33) a. ʔalbuytu waqaʕ.
'the house fell.'

b. ʔalwaladu waqaʕ.
'the boy fell (down).'

This functional shift seems to have developed in the following way. Where one kind of activity is related to a similar kind of activity, the word which identifies the former activity may have among its properties certain semantic and syntactic properties of the word that identifies the second activity. This is clear, for example, in the use of the following adjectives:

(34) a. a dead person.

b. a dead plant.

c. a dead match.

d. a dead story. etc.

It is also true in the use of some verbs:

(35) a. John went to sleep.

b. My leg went to sleep.

The verb kill refers to an activity that leads to a certain result,

i.e. putting an end to somebody or something:

(36) a. The man killed the thief.

b. The man killed an animal.

c. You can wait here, if you can kill three hours.

The verb tie also refers to an activity of manipulating string-like objects. It is grammatical to say:

(37) a. She tied her shoestrings.

b. She tied the knot.

The act of tying things can lead to fastening things, and so an extension of the verb tie is:

(38) She tied her shoes.

(38) is acceptable although shoes are not in themselves the objects that one manipulates when tying knots.

These functional shifts may allow other forms to occur in the sentence. So, the adverbs that can be used with (37) can be used with (38)

(39) a. She tied her shoestrings
b. She tied the knot
c. She tied her shoes

{ quickly. fast. firmly. here. etc. }

But if the rule has certain constraints on it (cf. sentences (28) and (29)), this may entail certain constraints on the other forms that can be used in the sentence. The previous examples of sleep is a case in point. While it is grammatical to say:

(40) Ten people can sleep comfortably in this room.

it is acceptable in English to say:

(41) This room can sleep ten people comfortably.

But in Arabic the equivalent of this sentence is unacceptable. Such phenomena may go beyond co-occurrence restrictions to the application of certain grammatical rules. In English the sentence:

(42) I tried to find it.

is derived from:

(43) I tried I find it.

In (43) there is a deep structure constraint that the lower subject must be coreferential to the higher subject. There is also another rule that follows from that, i.e. deleting the lower subject to derive the surface structure. Because of this, it is ungrammatical to say:

(44) *I tried for her to come.

In Arabic, these constraints are not applicable. Hence, the equivalent of (44) is acceptable in Arabic:

(45) ?ana ḥāwaltu ?an ya?ti.

Lit.: "I tried for him to come."

This sentence is acceptable in Arabic because the verb ḥāwal 'try' implies that a person can expend an effort the result of which may enable somebody else to perform an action. While this seems to be general in Arabic, it is limited to few English verbs only such as convince, persuade, talk someone into ... etc.

(46) a. I persuaded him to come.

b. I convinced him to come.

In the same manner, the functional model of analysis can account for redundancy in language. Redundancy may be defined here as the presence of more than one grammatical form conveying the same idea or function. For example, in the English sentence:

(47) He rides a new car.

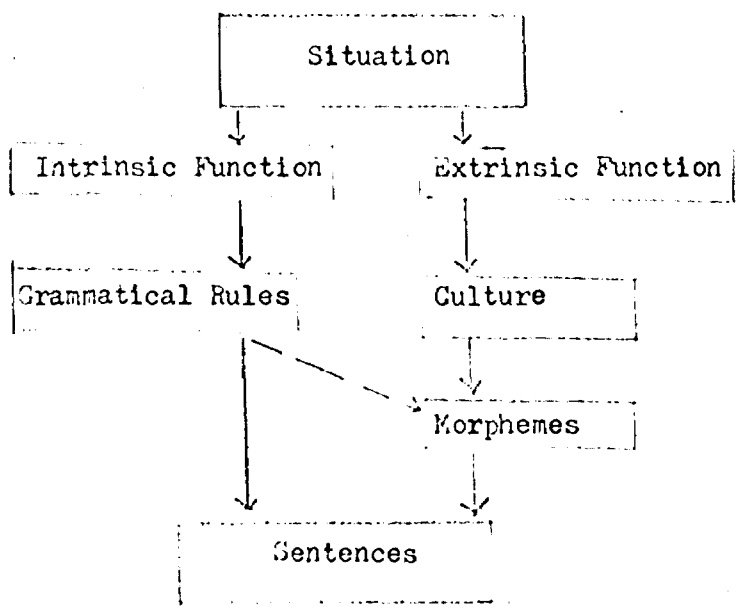
the presence of the suffix -s with the verb is redundant. Languages differ in the amount of redundancy they allow in a sentence. In such a similar construction, Arabic allows the presence of the subject marker and would delete the subject itself:

(48) (huwa) yarkabu sayyāratan jadīda.

'(he) rides a new car.'

The above notion of extrinsic function can be built into our model which would now look as follows:

(49)



There is no directionality implied in this model as linguistic structure has to be viewed as a Gestalt. Moreover, some of the components may be present at different positions in the process of forming any

message. In addition to that, the same rule may have to apply more than once in a manner similar to the transformational cycle.

3.0. The above model has the following advantages:

3.1. It saves us the trouble of setting up more than one linguistic model for the different uses of language. Some people differentiate between levels of usage such as stylistics, register, idioms, etc. This model makes all the different uses of language originate through the same apparatus. Moreover, as it is a cognitive model, it is also the model used in perception. (In Chapter V I will explain how it is cognitive and at the same time draws from situation or environment).

3.2. It answers the following question which generative semanticists cannot answer:

"Where does the semantic deep structure come from?"

Generative semanticists, for example McCawly in "Where Do Noun Phrases Come From?", believe that

> ... indices exist inthe mind of the speaker rather than in the real world ... and ... the noun phrases which speakers use fulfill a function comparable to that of postulates and definitions in mathematics: they state properties which the speaker assumes to be possessed by the conceptual entities involved in what he is saying. (p. 218)

But this does not show how what people say is related to what they know. Generative semanticists are trying to build a self-contained "grammar" that has nothing to do with the external world, but this is linguistically wrong as sentences (1) and (5) above show. Moreover, when a person speaks, he has available to

him a large fund of semantic resources from which he has to choose.

Generative semanticists deal with choice only in terms of "selectional restrictions" but they have not been able so far to get into the level of messages or discourses. Of course they have dealt with the relationship between sentences as far as presupposition, entailment, inference, etc. are concerned but they have not been able to look at language as a "gestalt" and not merely as a group of sentences.

Moreover, any semantic description must account for linguistic variability among persons. It has also to account for the variability of an individual's linguistic use at different points in time. This kind of variation through time takes place within the confines of a discourse.

3.3. This approach is more natural than some of the arbitrary analyses that try to take function into consideration. Katz and Postal, as mentioned above, tried to relate questions and imperatives to statements by positing the arbitrary markers IMP and Q in the underlying structure of those sentences. This is very arbitrary and artificial. The only motivation behind it is to make deep structure have a configuration that does not contain the meaning of the sentence directly. What should be done is this. The meaning of the imperative construction in a sentence like:

(49) Write this.

must be given in terms of speaker, addressee and a sentence describing the action to be performed.

Generative semanticists now posit a logical structure as an underlying semantic structure. But this is not convincing because the underlying logical structure is wrong in the following ways:

First, it assumes to be an underlying structure, but, in fact, it works from surface to deep structure, specifying the rules, meaning postulates, and references.

Second, it has the view that language has the only function of stating truths. This view neglects the infinitely large variety of uses to which language can be put.

Third, their aim behind constructing artificial languages is to eliminate ambiguity, vagueness, and imprecision of terms. This view is based on the wrong assumption that language disguises thought.

Fourth, the rules of a logistic system are context-free while in the functional model exposed above rules were shown to be context-sensitive. Generative semanticists may answer this by saying that natural languages are irregular but this is implausible as children learn their native language in a very short time simply because what is learned is highly systematic and regular.

Fifth, formal analysis which limits itself to a formal "system" cannot answer the following questions:

--When is a sentence significant?

--When are two expressions synonymous?

--When is an object referred to by an expression?

Such formalism does not take into account the cognitive fact that individuals differ in their perception and use of language. The

investigator, in accounting for various uses of a form may, for the sake of economy, avoid unnecesssry polysemy, homonymy, functional shift, etc. by concentrating on the core frequent meanings. But such an analysis occurs at an abstract level whose resulting description may or may not be congruent with the set of rules actually arrived at by a native speaker.

CHAPTER V

CONCLUSION

0.0. The preceding chapters have attempted to look at contrastive analysis in a new perspective. Instead of limiting contrastive analysis to prediction of errors as the current approach has been, the attempt was made here to deal with contrastive analysis within the meaningful "gestalt" organism of language as related to thought and use. This is necessary as language learning should have in view the structure of language as well as the purposeful activity it is used for. Moreover, this is nearly what happens in the situation of foreign language learning. Professor Cadora (personal communication) has told me that Arabic-speaking students learning English draw on their native language habits in different ways determined by the skill they are practicing in the foreign language. When those students speak English they draw on their spoken dialectal variety of Arabic. When they write English, they may draw on written literary Arabic which is different from spoken Arabic. This means that it is not enough to contrast segment with segment, morpheme with morpheme or sentence with sentence. It may be even necessary to contrast language skill with language skill. We may even need to go beyond that and relate each language to the culture of the society and the situation in which it is used. As every variety of language may be determined by certain socio-

logical and linguistic factors (cf. Cadora, 1970), we have to extend the scope of contrastive analysis so as to include all these variables. In addition to that we have to explain why one variety of language has to be contrasted with another.

It has also been shown in the preceding chapters that any contrastive approach should be a research technique using a comprehensive grammar capable of relating the different components of the language. This can help a great deal in foreign language education which has to be based on a sound grammatical theory. Such a theory can help in drawing the guidelines for program planning, lesson techniques and teaching methods. In particular, the functional approach delineated here can have contributions to:

a. Theory of linguistic description,

b. Theory of learning,

and c. Methods of Teaching.

1.0. Theory of Linguistic Description:

It would be more revealing if language is dealt with on its own merits. Language, in the first place, is a purposeful activity and our analysis has to deal with such an activity within the framework of what motivates this activity and the purpose for which this activity is used. We have also to deal with language as a code and not merely as a group of sentences. Current transformational theory is interested in grammar as an apparatus that generates sentences. But this is not enough because the relationship among sentences may not be formal. Of course there is a relationship among the following sentences:

(1) a. John is sick.

b. John is not sick.

c. Who is sick? etc.

But there is also relationship between (a) and (b) in (2) although the verb in (2. a.) is not used in (2. b.) and the word voici in (2. b.) is not used in (2. a.)

(2) a. Montrez la fenetre.

b. Voici la fenetre.

Formal transformational grammar would have us believe the answer to (2. a.) is:

(3) *Je montre la fenetre.

2.0. Theory of Learning:

The functional approach has also contributions to the theory of learning. The mentalistic theory which underlies native language acquisition cannot be applied without modification to second language learning. While the mentalistic theory of first language acquisition does not place the burden on the environment but on the mentalistic effort of the child, in second language learning, great stress should be given to the environment as it will provide the learner with the "raw" materials from which he builds up a grammar in the foreign language. This will help us show that Jakobovits (1968) is wrong in arguing that imitation, practice, reinforcement, and generalization are no longer considered theoretically productive concepts in language learning.

2.1. When we talk of foreign language teaching we reduce language to those elements that can be reproduced in classroom techniques. Drills and dialogues can teach very little of language structure and use that cannot be equated with, or lead to, language as behavior. We are in need of natural language activities. Now drills and dialogues are based on linguistic investigation of the language while first language acquisition is based on natural conditions of communication. It is very hard to have "realistic communication" in the classroom where the teacher and the students have nothing of significance to communicate to each other.

Foreign language learning cannot follow the same lines of first language acquisition. In acquiring his native language, a child is exposed to natural situations where the language is used. He hears different people speak to him and to each other. Those people may speak to him in his "baby" talk. He is corrected sometimes and is gratified other times. But foreign language is learned in different circumstances. The learner is no more the child to whom his hearers can respond using his "approximate" use of the language. The learner can be encouraged or discouraged by the responses he gets from his teacher and classmates. All these factors have to be taken into consideration. This shows also that the burden falls on the learner as well as the environment. Jakobovits (1968) is not right in saying:

> "... the burden of acquisition is now placed on the child with relatively minor importance attached to the environment as a reinforcing agency. Furthermore, the cognitive approach

> minimizes the relations contained in the surface of language, attributing the significant information to be acquired to the underlying structure of language which is not contained in the surface input. (p. 91)

In foreign language learning, the surface input should be given much importance as this is the "raw" material from which the learner derives his rules. Great care should be given to the selection of the subject matter, its grading and use because any failure to do so may lead the learner into wrong generalizations about the target language. Moreover, our material in the foreign language should be chosen with reference to the linguistic background of the learner as any new linguistic development of the child is greatly determined by his previous competence. This is also true of native language acquisition. Any new grammatical rule has to establish a relationship with the previous rules of the grammar that the child had acquired. Jakobovits would not agree with that. In discussing cases where a child would move from the correct form came that he acquired first to comed when he hears forms with -ed, Jakobovits says: "This kind of discontinuity shows that the practice model is not applicable here; rules that the child discovers are more important and carry greater weight than practice." (pp. 100-101) But this is not true because:

a. There is no discontinuity here. What is going on here is a reanalysis of the past tense morpheme and the child uses a new allemorph which belongs to the same morpheme. The child's analysis is quite right because he realizes that came is made up of a root plus a past tense morpheme. The child may be wrong only

in choosing a wrong allomorph. I would not call that a discontinuity; probably a better term would be "misrepresentation". However, at a higher level of analysis the child is quite right in his analysis as he does not apply the rule twice saying *camed*. Moreover, in this case it seems that the new rule is not learned perfectly. It seems that the mistake is not in the understanding or analysis of the old form but in the use of the new form or rule. The child learned the *-ed* rule imperfectly. He started to know that *-ed* is used as a past tense marker but he has not learned yet the constraints on this rule. He has not learned that *-ed* is not used with verbs like *come*. So, the deficiency is in the learning of the new rule. Another explanation can be provided by looking at the relationship between the two parts of the rule: forming the past tense of certain verbs by ablaut and attaching *-ed* to other forms. These are two manifestations of the same rule and the child has not learned yet the environment in which each is to be used.

b. This problem has nothing to do with "practice" as we understand it in foreign language education. We use the term "practice" to refer to teaching the students a new rule, the different manifestations of a certain rule, the relation between two rules, etc. When the child uses *comed* instead of *came*, he has to practice *came* vs. a verb that takes *-ed* as a past tense marker. This is what happens if he is corrected.

c. Jakobovits's explanation would mean that the language of the child will be in full fluctuation with only the last rule learnt having the most application. This is not true as the form used first

reemerges. This may be due to the fact that the environment makes the child use came again whether because he is corrected or because he imitates others. This shows two facts:

1. The effect of the environment.

2. Although the child's rules will be general in applying -ed to all verbs, establishing the "exceptions" to this rule will come from external factors. In other words, the child will be provided with data that help him establish the correct use.

2.2. The above argument shows that second language learning is different from native language acquisition and hence grammars built along the lines of first language acquisition may not be suitable for contrastive analysis. When the child learns a second language, he is exposed to new materials which help him form new rules. So, the grammar of the new language may be internalized against the linguistic background the learner has. This means that the grammar of the new language is incorporated into the native "code" with the result that the learner does not separate that "code" from the foreign "code" but creates a new expanded "super-code."

3.0. Methods of Teaching:

3.1. The functional approach as demonstrated in the preceding chapters shows the importance of relating different situations to each other instead of relating surface syntactic forms alone. Analogous surface syntactic structures may miss the point of linguistic creativity which every person has. Moreover, the learning of syntax should be more than generalizations of the ordinal positions in which linguistic units

appear as pattern practice tries to achieve. The process of acquiring language involves a much more complex analysis than that offered by such surface relations of sentences as order of elements and word associations. The child abstracts his rules out of many sentences that are elliptical, hesitational, semi-grammatical and grammatical. Because of this, pattern practice may be deficient in different respects:

First: Pattern practice depends on surface syntactic regularities at the expense of the semantic relationship among different patterns. The person who has learned a language has acquired a system of rules that relates the phonetic shapes of sentences to their meaning enabling him to understand utterances and produce ones that others can understand. Now pattern practice teaches phonetic shapes without the rules that can relate those phonetic shapes to meaning. As the learner teaches himself, he will try to relate these phonetic shapes by applying his "native" rules and this is where interference from the native language occurs; or he may use the previous rules he learned in the foreign language and this is where interference from the target language occurs.

Second, pattern practice depends on a "discovery procedure" used taxonomically at the sentence level. It lacks a semantic background and it does not help the learner get a "referential" component or a "use" component in his grammar of the target language.

Pattern practice uses a stimulus and expects a response from the student. As the stimulus and response are merely structural void of any meaning, mentalism does not play its game. The probability, on the part of the student later, to produce a given new sentence is

nearly nil. We have to remember that it is the freedom from stimulus control that makes natural languages suitable for expressing the products of creative thought. Of course there are many immediate situations that "condition" the utterances of a person like one who has just broken his arm and is asking for help but such cases are extremely rare and highly atypical. In the classroom we have to emphasize the fact that language should serve as a vehicle for communicating whatever might come into the mind of the speaker. We should be aware of the fact that one idea can be mapped into linguistic forms in different ways according to the situation. For example, the "idea" of asking somebody about his address can be expressed in different ways:

(3) a. Where do you live?

b. What is your address?

c. Do you live nearby here?

d. Could you give me your address?

Third, pattern practice fails because it is interested in the code alone while the linguist should view the process of linguistic communication as one in which the mental mechanisms operate to encode and decode verbal messages. We should include in our theory the fact that linguistic communication is the behavioral consequence of those mental mechanisms. In other words, pattern practice fails to answer this question: How is linguistic knowledge put into operation to achieve communication?

Fourth, Pattern practice is an application of the structural notion of immediate constituents. Immediate constituents as well as

phrase structure rules cannot account for the semantic difference between forms that are phonetically similar and can fill the same slot. In the following two sentences, or is used as a conjunctive:

(4) a. You may have coffee or you may have tea.

b. Applicants for the assistance must be orphans or must have a physical ability.

In (4. a.) or has an exclusive meaning but in (4. b.) it is inclusive where it is intended that applications would also be accepted from those who had suffered both misfortunes.

Moreover, pattern practice as well as phrase structure rules fail to account for the semantic interaction among constituents. Consider the following two sentences:

(5) a. He fought with his brother.

b. He fought with his brother against their neighbor.

In (a) above the verb fought means he attacked and was attacked by his brother but in (b) it means that the fighting was directed against the neighbor. The verb used in (b) has a meaning different from that in (a) because the constituent against their neighbor changes the meaning of the verb. This means that syntax is more than putting words together.

Consider also the following two sentences:

(6) a. You must be careful.

b. You must be careless.

The word must in (6. a.) has a meaning different from the same word in (6. b.) simply because of what follows on in the sentence. In (6. a.) it is an order to somebody to be careful while in (6. b.) it

it is used in a deductive sense.

We must take account not only of the positions of the words in strings, but also of the syntactic classes to which the words belong and the distinctive features of those words. This is due to the fact that the types of expressions that can appear in a given position are extremely heterogeneous. The problem with pattern practice is that it does not have an autonomy of its own. The learning of language involves more than surface relations of constituents in sentences. Moreover, the meaning of a sentence is generally not equivalent to the meaning of its words.

3.2. Foreign language methodology can benefit a great deal if the systematic organization of language is viewed in a functional perspective. Function helps to relate the linguistic form to the situation in which it is used. These pragmatic factors can facilitate learning and make it meaningful. Sometimes the sentence may convey ideas that are not explicit in the meaning of its individual words. For example, the sentence

(7) If they had come here first, they would have been able to fix this table.

does not tell the foreign learner if they had come here or not, or if they had fixed the table or not. Such notions are understood by native speakers easily. But this sentence does not give any formal clue about that to the foreign learner. To a native speaker, this sentence presupposes that they did not come here first and entails that they did not fix the table. To make these "implicit" ideas clear

to the foreign learner, we can provide him with a context:

(8) (They were late) If they had come here first, they would have been able to fix this table. (They may have to try again.)

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