LINGUISTIC RELATIVITY

AND

ITS IMPACT

ON

LANGUAGE TEACHING

A Thesis Presented

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to

The Institute of Social

Sciences

Master of Arts

English Language Teaching

Gazi University

Ankara, 1990

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ACKNOWLEDGEMENTS

ABSTRACT

Languages are relatively constructed in terms of their intrinsic grammars. The grammatical structure of a language determines the way people perceive external phenomena. In language teaching programs the principle of relativity is either ignored or overlooked and as a result of this the reasons of underlearning are not evaluated in terms of revision or reorganization.

This thesis aims to fill up the vacuum in language teaching pedagogy by bringing a new dimension to the teaching of foreign languages at schools. In this dimension, the concept of mother tongue interference has been revised and related to the Sapir-Whorf hypothesis with a special reference to the limitation it puts to the learning of target language. Such an approach, it is believed, will renovate the function of contrastive analysis in the milieu of language-mind and language-philosophy correlates by bringing sound evidence from the mother tongue and the other tongue.

To achieve this aim, the principle of linguistic relativity has been reanimated and extensively studied in language-culture context with a posterior application in language teaching process. The last, but not the least, assumption of the thesis is to shed light on the speculative relation between the philosophy of language and the teaching of it.

0.1. INTRODUCTION

Language teaching has for long been a matter of discussion and discovery in methodological circles. First, it is a matter of discussion among theoreticians and language teachers due to its purpose and application in especially University English departments of third World countries. In most of these countries the choice of a second language for pedagogical purposes depends on its globality and function in communication in the developing world. Communication is the basic function of language but different languages verbalize the reality through their medium of expression. It is a linguistically acknowledged fact that reality has always been and is the same, but it is perceived by the speakers of different languages as a relatively isolative background which controls the cognitive behavior of people using these languages.

The Sapir-Whorf hypothesis, or linguistic relativity principle envisages that the grammatical structure of a language determines the world-view of a society using it and the cognitive mechanism of native language constitutes some barriers to the acquisition of a second language. Considered from the viewpoint of teaching a language, it can be said that a fair language teaching policy should take into account the underlying oppositions between the native language and the second language, if it is to achieve its methodological end, because the main function of language teaching is to set up a pragmatic communication

environment between any two countries.

The significance of Sapir-Whorf hypothesis for teaching of foreign languages is also connected with the fact that language is a culturally encoded phenomenon and knowing a second language is actually knowing how to decode the linguistic symbols in the second language context. It is evident from the language teaching programs in use that where the mother tongue and target language have the same codifiability, that is, they employ the same categories which have the reciprocal cognitive and semantic grids in their systems students will have no difficulty in the learning process. What matters, then, is the areas where the mother tongue and the target language have different culturally as well as semantically encoded symbols. In such areas, the students will tend to handle the second language categories in terms of their mother tongues because the principle of linguistic relativity plays a crucial part and brings in certain constraints which make the learning process troublesome. In this study, the language-specific effects of such constraints will be researched.

The methodology of language teaching which centers around the Sapir-Whorf hypothesis should have two bearings: linguistics and psychology. Linguistics, by its very nature, provides the language teacher with the new elements/grammar, vocabulary, pronunciation, cultural codification, etc), otherwise known as content. Psychology, on the other hand, offers a lively environment and research techniques enforced with its data and opens the way through

which the linguistically determined content is to be injected into the mind of the learner. According to such a method the grammatical structure of a language should be taught by some techniques which aim to find the relation of these structures to non-linguistic behavior encoded in the particular world-view. Thus, it should also consider the sociological side of the process because language and world-view are in constant interaction with each other and this is what distinguishes one society from others.

At the level of teaching vocabulary, the hypothesis assumes that language employ intrinsic lexical structures which determine the way different peoples perceive non-linguistic data. It is obvious that the lack of corresponding lexical category in the target language will result either in the lack of experience or interference from the mother tongue with an appropriate category.

However, the open-ended nature of human language should be accounted to compensate for the linguistic fallacy that people who don't have a certain category do not actually experience or practice actions dictated by that category. What should an ideal method do is, then, to pin down the areas and offer solutions for the categories which do not occur in either of the languages contrasted. In order to gain better results from a language teaching program, the impediment of linguistic determinism should be taken into account and findings brought by relativity principle inserted.

0.1.1.Aim of the Study

In this thesis, Sapir-Whorf hypothesis and its contribution to language teaching will be analyzed in the light of intrinsic findings to be obtained from the language. That mother tongue has limitations to the acquisition of a second language will be highlighted and solutions in turns of a pragmatic language teaching theory will be made.

Taking this aim for granted, the principle of linguistic relativity and its philosophical underpinnings will be elaborated. On the basis of such a philosophical approach, the grammatical data of English and Turkish will be derived and supplemented with relevant data from other languages on the assumption that languages limit their speakers in certain ways. The cultural codification of different languages will be given on the grounds that language is the best index to the formation of peculiar languages. Attention will also be drawn to language teaching process as a complementary approach to ELT methodology in university English departments of Turkey. To achieve this, the Sapir-Whorf hypothesis and its relevance to behavioral and cognitive language learning theories will be investigated in the course of study. In this context, the fundamental aim of the study is to draw the attention of teachers and students of applied linguistics to the problem areas of second language education under the influence of linguistic relativity principle which forms

the theoretical background to the project.

0.1.2.Scope of the Study

Linguistic relativity, which has been focus of too much speculation since the beginning of the second half of the century, can be extended to a number of fields ranging from philosophy to anthropology, sociology, theory of culture, and purely linguistic disciplines such as phonology, grammar, syntax and semantics which form the crux of the matter.

In this project, after giving a brief account of its relation to the above disciplines it will be compared with linguistic universalism and mentalistic trend of Cartesianism, which is basic to an application to the teaching process. In the last chapter of the thesis, the hypothesis will be analyzed in purely grammatical terms and findings will be obtained at four levels: phonology, morphology, syntax and semantics. Linguistic determinism is best reflected on mother tongue interference being obvious at these four levels and the main assumption that motivates such an analysis is the fact that our mother tongue limits us in perceiving reality. This is evident from the fact that similar linguistic categories are grasped easily while different categories either take up too much time or not learned at all.

In order for all the data to be channelized into a pragmatic teaching theory, the emphasis will be on the

derivation of mother tongue interference with a special

reference to the comparison of English and Turkish.

CHAPTER I

1.Historical Background to Sapir-Whorf
Hypothesis

Sapir-Whorf Hypothesis is a different point of view from the traditional grammar which has attracted considerable attention among linguists, psychologists and anthropologists and is associated with the linguist Edward Sapir and his student Benjamin Lee Whorf. It can simply be defined an the view that thought processes are more or less determined by linguistic structure. The idea is also attributed to Wilhelm von Humboldt and is referred to as his Weltanschauung hypothesis.

Various aspects of linguistic relativity which is an alternative term for the so-called hypothesis were put forth by several thinkers before the eighteenth century "but the clear statement that a language influences the thought of those who speak it is not found until Hamann (1730-1788) and Herder (19744-1803)" (Penn, 1972: 41). The first implication that there is some influence of language on thought is to be found in Plato's Cratylus (435 b.) where Socrates is made to say that "agreement and custom do contribute to the expression of that which we are thinking when we speak."

The Sapir-Whorf hypothesis has traditionally been regarded on two levels: A.the extreme version B.the mild version. The extreme hypothesis has been criticized as

invalid, mainly on the grounds that it identifies language with thought which prevents language from being the product of collective human thought. The mild version, on the other hand, assumes that the way we think is influenced by the language we speak. Plato, in the above example, does not assert that extreme position, defending the view that thought processes are, to some extent, independent of language. These two versions of the hypothesis will be discussed in greater detail later.

The next philosopher to deal with the relation of thought to language was Francis Bacon (1561-1626) who foreshadowed Humboldt by stating that the language of a people and their world view are correlated. He may also be considered a forerunner of Herder in expounding the idea that language is an expression of what may be regarded as the characteristic of a people. her established strong correlations between the grammatical structures and cultures of Greeks, Romans and Sews. For example, Greeks were more predisposed toward art and science than did the Romans who were more practical-minded. The reason according to Bacon was that the Greek language compounds words more freely than Latin does.

Another outstanding figure in Western culture to comment on the issue was John Locke who defended that language phenomena actually distract people for the truth of things. According to him it was the power of words which might, as it often does, set people apart from the concrete world. In this respect, he came very much close to

an extension of Whorf-Korzyboski-Hayakawa hypothesis which
is a semantic interpretation of the symbolic cosmos of
words. His methodologically inductive approach to the
acquisition of knowledge and role of language in human
understanding of cosmological entities might be considered
to have paved the way for the establishment of Whorfian
hypothesis.

In due course of historical development the principle
of linguistic relativity in its mild version has taken
place on the opposite side of "innate-ideas" which are
believed to derive from the previously known self-evident
truths by deduction. In this context, it is against
Leibnitz' monadology which presupposed that a monad has no
windows and idea are innate within the soul itself.
Experience through the senses, Leibnitz said, is an
illusion and thought is autonomous but not free from the
law obeying the principles of sufficient reason.

In contrast to linguistic relativity of Sapir and
Whorf, neither Locke nor Leibnitz and Cartesianism of
Descartes identified thought processes and Linguistic
phenomena. This is significant on the grounds that Hamann
and Herder, as well as Humboldt, Sapir and Whorf did
consider thought and language to be identical. According to
Hamann natural language alone was adequate to reality in
all its variations and dynamism. For him reason is language
and language is reason. By speculating about differences
among languages he reached the proposition that language,
as well as other forms of symbolic expression, displays the

aspects of individual cultures, which is very similar to Vico's cultural relativity principle. Herder, being a student of Hamann, accepted the same idea but went even further asserting that thought did not create language. Language was, by its inner structure, the teacher of ideas.

Finally, Benjamin Lee-Whorf (1897-1941), who was a fire-prevention engineer by vocation and a linguist (Penn, 1972) by avocation, collected these ideas and commented on the relation of language to thought, giving priority to language as the shaper of ideas. According to him, the language one speaks determines not only one's world-view, but also the way one-thinks (Whorf, 1956). In the remaining part of this thesis the Sapir-Whorf hypothesis will be investigated from the point of its extreme version and weak version in an attempt to formulate a pragmatic language learning methodology.

1.1. Basic Considerations for Linguistic Relativity

In the course of life human beings lead, it has been accepted that there are two areas of experience referred to micro-cosm and macro-cosm. The micro-cosm can be considered the psychological limitations we are surrounded with and influenced by in every attempt we undertake to understand what has been going on in the macro-cosm which might be regarded as the holistic evidence about things and beings in the external world.

The micro-cosm offers individual the necessary
cognitive tools and mental predispositions by means of
which he can acquire the natural laws and inductive
inference to be formulated in gaining laws and inductive
inferences to be formulated in gaining access to the macro-
cosm. The macro-cosm, then, is a somewhat abstract
structure of a universally acknowledged cosmology which
encompasses the general laws reached by the data filtered
from the micro-cosm as an individually-oriented background.
It is not unnatural that this individually-oriented
background takes on a different outcome in making
generalizations about occurrences in the external world
because every individual refers to what he has cognitively
internalized in his mind in order to elaborate a scientific
process in its classical method.

It follows from this simple speculation that
generalizations about scientific outcomes are bound to be
relative to their generalizers who cannot go beyond their
internally-constructed mental operations, a process to
which science has not yet given a satisfactory answers. For
instance, when two observers perceive what is regarded as
one occurrence, there are certain similarities, and also
certain differences between their perceptions. The
similarities are coincidental and unimportant as a rule,
while the differences in perception are due to difference
in the brains or minds of the observers. Some of the
differences, which are the raw products of micro-cosm to
be modified in the milieu of macro-cosm, can even be said

to relate to the sense organs and physical situations because they play an active role in shaping ideas.

The same hypothesis may be extended to the range of linguistic phenomena where language differences cause overt differences in the perceptions of their speakers. In this context, Bertrand Russell, an outstanding philosopher of the twentieth century, was right when he stated (1969: 16-17) his famous example:

> A remark made in a language we know will be heard, whereas an equally loud remark in an unknown language may pass entirely unnoticed.

B.Russell supported his example by an equally provoking metaphor according to which "of two men in the Alps, one will perceive the beauty of the scenery while the other will notice the waterfalls with a view to obtaining power from them" (1969:17). Such differences are simply attributable to the psychological differences which deeply penetrate into the minds of language users. Japanese speakers, for example, have difficulty articulating Turkish /r/ sound just as the Turkish speakers who have certain difficulty articulating English consonants /θ/, /ð/ and /ə/, the vowel known as schwa in addition to many others. An unarticulated sound means, as it is the usual case, an unarticulated thought because sounds, are the minimal semantic components capable of hindering the communicating process when they function phonemically) in a language.

In the remaining parts of this chapter linguistic relativity will be analyzed in association with related

disciplines and with contributions from empiricism, rationalism and mentalism. To achieve this it would be reasonable to attempt to define the basic concepts like world-view, relativity and determinism.

1.2.Definition of Concepts

In social sciences and humanities definitions-however incomplete and distractive they may be- play an explanatory part in making points more clear. It is, therefore customary to attempt to define and delimit the boundaries of what one is seeking for. For the sake of not falling into the trap of formulating broad generalizations about a particular linguistic entity, which is very much ignored by social scientists, it seems reasonable to propose a definition of linguistic determinism. This definition is filtered from among the many which have been made by the authorities in the field.

In their Dictionary of Language and Linguistics Hartman and Stork (195) define "relativity" as follows:

> The view proposed by the American
> anthropological linguist B. L. Whorf
> (1897 - 1841), and previously by the
> German ethnologist W. von Humboldt
> (1767 - 1835), that a speaker's
> language determines his view of the
> world (or 'Weltanschauungs') through
> the grammatical categories and semantic
> classifications that are possible in the
> linguistic system that the has inherited
> together with his native culture.

The most important part of the above definition is that linguistic determinism (relativity was also used by the same authors as an alternative term) is related to the native culture which is identified with the linguistic system. It is, indeed, Wilhelm V. Humboldt, a German scholar, who first suggested that language introduces a principle of relativity, "and a language either helps or hinders its speakers in making certain observations or in perceiving certain relations" (Dinneen, 1967:218). Humboldt stressed both the universal and the particular elements in language, He saw that structural diversity of languages was the product of a universally operative and specifically human faculty of the mind. He made a distinction between the "inner" and "outer" structures of languages . It was the inner structure (inner sprachform) of language which formed the fundamental aspect of his theory and characterized him as "coming closer to linguistic determinism" (Lyons, 1981: 304). According to his dynamic view language was "energia" rather than "ergon", and it continuously influenced language and was influenced by it. In this respect, Humboldt shared same ideas with Weisgerber and held his belief that translation was impossible between languages since there was no semantic correspondence in the contents of words in different languages and even in a langauge.

Leo Weisgerber, a German linguist, concentrated his studies on the semantic contents of words and defined language as" the verbalization of external world" (Aksan,

1978: 29). The "word" said Weisgerber,was neither a name given to a man like "John", nor a combination of sounds inducing certain connotations, but something including a number of expressions similar to each other and coloring an activity. This world is made up of linguistic elements, and semantic fields limiting each other. By semantic field (first introduced into linguistic circles by Trier; see Ulman, 1962) is meant a field demarcated by words sharing the same conceptual field. The following example from Turkish illustrates the field theory:

Turkish form	English form
anlamak	to understad
kavramak	to conceptualize
öğrenmek	to learn
algılamak	to perceive
bilmek	to know

In this example all the words are related to "an act of knowing" or "perceiving" and are accordingly viewed in the same semantic field. What Weisgerber meant by linguistic concepts was a verbalized world shaped by a mental abstraction from the outer world.

After introducing basic concepts of relativity principle it seems reasonable to analyze Whorf and his

contribution to linguistic relativity which is deterministic in terms of his methodology.

1.3.Whorf and Linguistic Relativity

Before coming to grips with Whorf's conceptions about his theory it would be appropriate to state (Lyons, 1981) that the principle of relativity is marked by its indulgence in the positive value of cultural and linguistic diversity and its attachment to the principles of universalism and excessive intellectualism of the Englightenment. The universalist trend, an adverse criticism of relativism, will be discussed and compared later.

It must immediately be noted that Whorf's abstract style requires a background which is more philosophical in nature and his choice of vocabulary makes the understanding a little difficult.

According to Whorf every normal person in the world talks after reaching a certain age. So does every normal person carry some deeply rooted ideas about talking and its relation to thinking. In the later stages of life these notions tend to be rather intolerant of opposition as they have been firmly connected with speech habits. Every person has a sysytematic background from which he is to formulate ideas about external world. The formulation of ideas is an independent process encoded in thought or thinking and is supposed to be largely indifferent to the nature of

particular languages. The use of language in Whorfian terminology is referred to as "talking" and it is guided not by particular grammar but by intelligent or rational thinking.

Thought, then, does not depend on grammar but on laws of logic or reason which form a common substratum within the boundaries of which all the observers of the universe organize their languages. These explanations are basic to the formulation of linguistic determinism and are of background nature for further speculations. According to him the formulation of a rule is possible through the exceptions which govern the establishment of general rules. If a rule has absolutely no exceptions if cannot be recognized as a rule or anything else; it is nothing more than part of the background of experience of which we tend to remain unconscious.

In order to render a proposition as a rule, we should enlarge our experience and expand our background knowledge until we encounter an interruption of its regularity. The situation is well metaphorized by Whorf (1956: 209) as "analogous to not realizing that we need air until we are choking." For example, the law of gravitation in part of the untutored individual's background since he is not aware of it. It is not something he isolates from that background since he has not seen any other planet on which bodies do not fall down but move in orbits or go this and that way. Since some people do not, by their very character or mental structures, have the chance of experiencing those

"exceptional moments" they cannot formulate any rule about universal beings or happenings. That is why various grand generalizations of the Western World, such as time, velocity, and matter, are not basic to the construction of a consistent picture of the universe.

Whorf resembles the realization and abstraction of these "exceptional moments" very much to Bergson's _duration_ concept and that is why some languages used by African tribes make use of a different _time_ _concept_ which may be called "psychological." Hopi, for example, may be called a timeless language or it recognizes psychological time which is quite unlike the mathematical time [T], used by Western physicists. In the discussion on culture this problem will be challenged later in this thesis.

According to the philosophy of linguistic determinism natural logic confuses agreement about subject matter attained through use of language, with knowledge of the linguistic process by which agreement is attained.

To exemplify this, following communication situation can be given: Two fluent speakers of Turkish quickly reach a point of agreement about the subject matter of their speech. One of them, A can give directions that will be carried out by the other, B, to A's complete satisfaction. As natural logicians they must understand each other as they think that it is simply a matter of choosing words to express thoughts. If one asks A to explain how he got B's agreement so readily he will simply repeat with some abbreviation or explanation what he said to B. He has no

idea of the process involved. The amazingly complex system of linguistic patterns and classifications, which A and B must have in common before they can understand each other, is all background to A and B. Here, of course, the scientific approach requires the differentiation of agreement about subject matter from the knowledge of the linguistic process by which agreement is attained, and "this is probably what a linguist attempts to do" (Whorf, 1956: 211-12).

When linguists became able to study a large number of languages critically, their base of reference was expanded; they experienced an interruption of phenomena which were considered universal up to that time and it was from this interruption that came a new order of significances. It was understood that the linguistic system as a background of each language is not merely an instrument of voicing ideas but rather is itself the shaper of ideas. It also forms the program and guide for the individual's mental activity and his analysis of impressions. Formulation of ideas, then, is not an independent process, but is part of a particular grammar differing from slightly to greatly between different grammars. The following observation reinforces the results Whorf obtained from the studies of North American native languages:

> We dissect nature along lines laid down
> by our native languages. The categories
> and types that we isolate from the world
> of phenomena we do not find there because
> they stare every observer in the face;
> on the contrary, the world is presented
> in a kaleidoscopic flux of impressions
> which has to be organized by our minds...
> We are thus introduced to a new principle
> of relativity, which holds that all
> observers are not led by the same physical
> evidence to the same picture of the
> universe, unless their linguistic
> backgrounds are similar, or can in some
> way be calibrated (Whorf, 1956: 213-14).

At first glance, it can be claimed that this startling

conclusion is not practical if we compare only modern

European languages. Among these languages these is an

agreement of major pattern which seems to conform to

natural logic. Since these language are modern dialects of

the two root languages (Lehmann, 1962) like Latin and

Greek, which are cut to the same basic plan, their

categorizations are calibrated verbalizing the external

realities in more or less the same way. But when Semitic,

Tibetan, or African languages are contrasted with, say,

Western languages, the scrupulous variety in analysis of

the world becomes more intelligible.

That is why beginning in the early years of his life,

he maintained an interest in the languages of primitive

peoples and developed his theory which is related to

isolated words. He believed that the words of a language

were codified as an index explicating the fundamental concepts of reality.

1.4.Linguistic Relativity and Grammar

The examples pertaining to grammatical relativity belong to the content of thought which, it is believed, influences the process of thought. "They are also purely semantic, rather than formal in nature." (Palmer, 1981:45).

In the Hopi language, for example, 'lightning, wave, flame, meteor, puff of smoke, pulsation, are verbs, because events of necessarily brief duration can only be verbs. Hopi, then has a classification of events by duration type, which is very strange to English mode of thought. On the other hand, it is peculiar that in Nootka, a language of Vancouver Island, all the words seem to be verbs without any class division. In this language, people have a monistic view of nature in which there is only one class of words for all kinds of events. In this language, "A house occurs' or 'it houses' is the way of saying 'house' exactly like 'a flame occurs' or 'it burns.' T. the speakers of English, these terms seem to be verbs because they are inflected for durational and temporal nuances. This is unavoidably so because in Nootka the suffixes of the word for house event make it mean long-lasting house, temporary house, future house, house that used to be, and so on.

Another reason that English speakers (as well as the

speakers of other "SAE" group including Turkish) perceive these forms as verbs, is the bipolar tense system of English in which "tense is an obligatory category in the finite verb phrase. We distinguish two tenses in English: the _present_ _tense_ and the _past_ _tense_. Tense is always marked on the first verbal from" (Aarts and Aarts, 1982:74). It is not unlikely that English has the following forms pertaining to _tense_:

speaks   spoke

may speak   might speak

has been speaking   had been speaking

House present: There is a house

House past: There was a house, etc.

These examples make it clear that in English we have a linear-time concept as an important indicator of mathematical [T]. But Hopi time tends to be psychology-oriented which is behavioristic.

1.4.1.Structure as the Determinant of Thought

"By structure is meant here facts about a language stated as an abstract calculus without reference to meaning" (Greenberg, 1961: 477). For example, the morphotactic rule that no morpheme contains more than six phonemes in a language best symbolizes a structural fact. The linguistic typologies popular in the nineteenth century (isolating, agglutinative and inflective) involved chiefly

structural critieria, say, the degree of morphemic complexity of the word. In this context, the increasing complexity of word structure can be related to the evolution of thought from lower unorganized (isolating) forms to higher (synthesized-inflective) forms.

When analyzed at a more close scale, it will be seen that many apparently structural criteria turn out to be actually semantic (Saporta, 1961) who gives priority to structural-semantic pattern in the formulation of linguistic thought. Hoijer gives the perceptual category of the verb structure in Navaho language as evidence of world-view through the following examples:

niíntí   "you have lain down"

nišíńtti   "you have put, laid me down"

Both these verbs are in the perfective mode and ⟨ń⟩ marks this inflection. However, the ⟨ni.⟩ of the first means [movement] terminating in a position of rest, that of the second [movement] ending at a given point. The second form has the causative prefix ⟨ł-⟩ and incorporates the first person object, expressed in this form by ⟨ší-⟩. The stem ⟨-tí⟩ common to both forms, is defined one animate being moves.

The theme of the first verbs, composed of ni-......-tí, means one animate being moves to a position of rest, that is, one animate being lies down. In the second verb the meaning of the theme, ni-......-t-tí, is cause movement of one animate being and animate being down or lay an animate being down. It should, however, be noted that the first

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theme includes in its meaning what in English we should call both the actor and the action. In Navaho these are not expressed by separate morphemes.

In the light of this data, a possible fashion of speaking peculiar to Navaho can be inferred. The Navaho speaks of "actors" and "goals" (these terms are not appropriate to Navaho), not as performers of actions or as ones upon whom actions are performed, as in English, but as entities linked to actions already defined in part as pertaining especially to classes of beings.

This attitude has been associated with the religious practices of the Navaho who conceives of a universe that is given, and in the same way, he has a habit of speaking in which the individuals are linked to actions and movements distinguished, not only as actions and movements, but as well in terms of the entities in action or movement. Correspondingly such a division of nature into classes of entity in action or movement is the macro-cosm that is given.

The comparison of English Sentences with those of Hopi better illustrates the limitation of linguistic structure on thought at the syntactic level:

English	Hopi
He is running	Wari (Running, statement of fact)
He ran	Wari (Running, statement of fact)
He ran	Era Wari (Statement of fact from memory)
He will run	Warikni (Running, statement of

expectation)

He runs (E.g. on   Warikngwe (Running statement of

the track team)   law)

In conclusion, these English   sentences   and their
corresponding oligosynthetic equivalents in Hopi   indicate
that an event to the speaker of a langauge is what his
language classes as a verb and a definition of a verb as a
verb, and of a noun as a noun is not something derived from
nature but from the grammatical categories of the definer's
language. It is equally possible to state that a particular
manner of viewing   the   universe   is   implicit   in   the
organization of the   individual   meaning elements of a
language which are codified in its syntax and lexical
structure.

   1.5.Linguistic Relativity and Culture

   Having emphasized the relation of Linguistic studies
to anthropology one must admit the fact that it is only the
language which opens a window to the cultural structure of
a community. Within the boundary of our   study we cannot
neglect the value of cultural phenomena which in turn
facilitates the analysis of linguistic elements. "In a
sense, the network of cultural patterns of a civilization
is indexed in   the   language which expresses   that
civilization" (Sapir, 1986: 10). The value of linguistics
for anthropology and culture has long been recognized.

Another thing that has long been recognized is the fact that human beings do not live in the objective world alone, nor do they live in the world of social activity in its ordinary sense, "but are very much at the mercy of the particular language which has become the medium of expression for their society" (Sapir, 1986: 10). It follows, without any further speculation that cultures can be likened to prisons without guardians since it is very difficult for an individual to break the cultural barriers encoded in its native language and to identify with another culture. But one probable advantage of relativity theory is that a full consciousness of it is certainly helpful for a more objective evaluation of the world. For that reason it would be appropriate to throw some light on various theories and definitions of culture.

By the end of the first fifty years of cultural anthropology, Kroeber and Kluckhohn (1952) gave one hundred and sixty four different definitions of the concept "culture". Some of the definitions collected by these anthropologists have "functional" characteristics while others may be characterized as epistemological. From among so many definitions, which have been influenced by Tylor, we had better choose that of Margaret Mead which is rather extensive: "Culture means the whole complex of traditional behavior which has been developed by the human race and is successively learned by each generation. A culture is less precise. It can mean the forms of traditional behavior which are characteristic of a given society, or of a group

of societies, or of a certain race, or of a certain area, or of a certain period of time" (Kroeber and Kluckhohn, 1952:90). Mead's definition emphasizes the historical perspective and is twofold: the first one is the universal aspect which stresses the holistic traditional behaviors common to the human race; and the other is the relative aspect which demarcates the forms of traditional behavior peculiar to a given society, and other subgroups. It differs from Malinowski's definition in that Malinowski emphasizes the economic activities in addition to beliefs and customs (1952:83).

In any case, the main elements of a culture are man, his behavior and his surrounding and it is these three elements that greatly help the anthropologist collect and formulate his data. The basic premise of a relativist theory of culture is that man behaves as he does because of the ways in which he cognitions the external world. A distinction should, however, be drawn between perception which is synonym of cognition and sensation. In an act of sensation, the individual merely senses the things or processes in the external world with which he comes into contact. But perception is the fixation of the coordinates of a sensible effect on the cognitive map of the human mind.

In order to better explain the cultural structures of communities this difference is of crucial attention and rather efficient for a systematic differentiation of individual culture from a more universal one. From the

psychological point of view it can be said that every living creature feels or senses something but it is only man who can cognition at a further stage what he has sensed before. This leads us to the principle of relativity in cultural anthropology because different cultures dictate different ways of perceiving the phenomena in the external world. To support this it would be explanatory to cite Ervin Schrodinger, the German physicist, who claimed that only the ten percent of the world-view of an individual really belongs to him. The rest ninety percent of the world-view of a person is, in fact, the world-view of the culture to which the belongs. This is best explained by the proposition that sensation is species-specific while cognition is culture-specific.

One striking example of perspectivist approach can be seen in Ruth Benedict's now classic Patterns of Culture in which she analyzed the cultural paradigms of three primitive societies. Her approach to culture is both holistic in its integrative aspect (the approach maintained by Margaret Mead), and psychological in the modern sense. By applying the psychological concepts (for instance prudish, secretive, personal conflict, and schizophrenic fear of nature) of these tribes she accomplished what was difficult in an anthropological research.

Borrowing her terminology from Spengler, she compared three cultures (1960) from the point of the relationship between each human being with a specific hereditary endowment and particular life history in the milieu of

cultural background.

Now, let's see her relativist approach by direct reference to her own words:

> No man ever looks at the world with
> pristine eyes. He sees it edited by
> a definite set of customs and
> institutions and ways of thinking.
> Even in his philosophical probings
> he cannot go behind these stereotypes;
> his very concepts of the true and the
> false will still have reference to his
> particular traditional customs .... of
> social theorists because it was the
> very stuff of their own thinking: it
> was the lens without which they could
> not see at all (1960:18-23).

The sentences above remind us of the striking claim of Vico that we can only know that which we have ourselves made or created. Like most of the other concepts, custom, tradition, primitive are among the ones we fabricate not for the validity of their references but for the utility of our cognition. Human mind is in the tendency of ordering and systematising something out of the mess and otherwise meaningless. This tendency, which can be considered a key notion in structuralism and in all other systematic approaches in social sciences, works well for a systematic

approach to language-culture system as well. A system is, no doubt, something more than the aggregates which make up it. The chief notion of a system is its functionality. A system can simply be defined as follows: the units which make up it + the harmony of these units and patterns directed toward a certain function. For a more harmonious treatment of relativism in the anthropology of language-culture systems one should know the elements of system and structure (Izbul, 1981:34).

On the other hand, it must be noted that an analysis of more modern culture can be made despite its difficulties provided that one should assign more complex linguistic symbols their actual meanings as they are related to the cultural patterns. Benedict, who maintained a configurationist approach in her Patterns of Culture, applied the same Gestalt to Japanese people in her famous work The Chrysanthemum and the Sword. The difference of this classical work from other anthropological works lies in the fact that the writer goes through the modern Japanese people in their various aspects including the semantic collocations of their language, and contrasts them with modern American society.

Although the book was written in war years, she is rather objective in her judgements of the two peoples in that she treats Japanese people considering their socio-cultural values of different patterns but forming a Gestalt. In modern anthropology, such an approach to a complicated culture is different from most of the other

researches which are carried out in primitive peoples.

In order to highlight the relativity of concepts in Japanese and American cultures she gives some words and pays attention to the difficulty of translation of these concepts between Japanese and the English language. For example, on is one such critical concept in Japanese culture which has a good many connotations about which Benedict observed,

> Both the Chinese and the Japanese have many words meaning 'obligations'. The words are not synonyms and their specific meanings have no literal translation into English because the idea they express are alien to us (1946:99).

To support the problem of untranslatability, Benedict analyzes the concept on. In Japanese on means "obligations" and covers a person's indebtedness from greatest to the least. It is translated into English by a whole series of words. The meaning scale covers the world from "obligations" and "loyalty" to "kindness" and "love", but these words distort its meaning. If it really meant love or even obligation the Japanese would certainly be able to speak of on to their children, but that is an impossible usage of the word. Nor does it mean loyalty, which is expressed by other Japanese words, which are in no way synonymous with on. By means of a semantic field analysis

of the word 'obligations' it can be asserted that on is a polysemy used to express different shades of the field.

Another striking example in the metaphorical amelioration of the phrase "who lives as already dead", which is supremely appreciated in the Japanese culture. The literal translation of this phrase into Western languages would be "the living corpse" which is an expression of horror " (Benedict, 1946:249).

All in all, it can be said that cultural thought patterns are encoded in language which determines the way people segment the world and define categories of existence.

Culture is so large and all-encompassing subject that one should know the possible shortcomings of dealing with it. Considering so many different definitions of culture I have tried to reflect the relationship between language and culture from a relativistic viewpoint since the cultural patters of a community can be crystallized by a careful analysis of its linguistic structure. Moreover, in studying so diverse and ramified a topic like "culture", reference should also be made to the transmission of a body of values to the successive generations. In its anthropological context, culture is something "which men create for themselves and transmit to their successors by other than biological means" (Uçar, 1986:164). This definition is phylogenetic in nature and taken for granted by most of the scholars including Turkish writers. Cultures, then are particular historical realizations of the common human

potential.

T.S.Eliot, who regards culture as the whole body of values forming an organic whole, states that "the term culture has different associations according to whether we have in mind the development of an individual, of a group or class, or of whole society" (1962:21). It follows from this concentric approach that the culture of an individual is dependent upon the culture of a group or class, and that the culture of the group or class is dependent upon the culture of the whole society to which the group or class in question belongs.

1.6.Linguistic Relativity and Anthropology

In the previous part an approach was made to shed light on the connection between relativity and culture and data were drawn from linguistic symbols. The Sapir-Whorf hypothesis is an outcome of condensed study in linguistic anthropology because it collects data from the languages of primitive tribes like most of the field works in anthropology.

Anthropological studies, by their intrinsic nature, can be considered scientific attempts toward the formulation of grammars of living cultures in the same way that purely linguistic studies are directed at devising the grammars of languages.

In this section an attempt will be made to pin down the relation of anthropology to linguistic relativity.

It will be appropriate to begin with an etymological account of this "science of man" as it is commonly referred to in linguistic studies. Following Vico, we can say that the more we trace a concept toward its etymological background the better the understanding is (see Vico in Encylopedia of Philosophy, 7-8, 247). The term "anthropology" is coined from the Greek words "anthropos" meaning man and "logos" which comes from "legein" meaning to say (Shipley, 1955: 217; 310). Nevertheless, it should be remembered that in Greek Logos shifted its meaning from 'word' to 'reason' which also means logic. In the sense of ordered knowledge it has been very common to add the suffix (-ology) or (-logy).

Anthropology has a number of subfields which combine to do a holistic research on man in his every aspect. Of these, physical anthropology which is also known as biological anthropology is directed to study man in his biological line of development (a more scientific term would be evolution" here). Cultural anthropology can be defined as the scientific study of man in terms of his role in establishing cultural values. Whatever the definitions are, the scope of anthropology is diverse and more comprehensive than many of humanities since "an anthropologist attempts to study the human species as a whole, tracing its physical evolution and studying the great variety of human cultures" (Steward and Glynn, 1955: 5-6).

In reference to relativism it is worth acknowledging

that a cultural anthropologist, in actual practice, tends
to emphasize preliterate peoples as different from, say, a
sociologist who is concerned with analyzing modern
industrialist societies.

The reason is that in the case of preliterate peoples,
langage is easily identified with behavior and provides
data for the derivation of a world-view. But, in the case
of modern industrialist societies the flourishing of
vocabulary and specific terminology make it difficult for
the analyst to arrive at clear-cut conclusions about grand
generalizations. Moreover, the analysis of more complex
societies requires collaborative efforts and supplementary
data from related disciplines like psychoanalysis, social
stratification, theory of culture and contemporary
sociological theories. The works of Malinowski can be cited
for the analysis of preliterate people in its behavioral
aspect, while the works of Benedict and Mead are fair
examples of anthropological investigation of more
contemporary communities as well as primitive ones.

1.6.1.Evidence from Linguistic Anthropology

Anthropological linguistics comprises "the methods and
techniques of describing languages in the field for the
purpose of learning them as tools for gathering
ethnographic data" (Eastman, 1975: 3-4). The basic
technique of anthropological linguistics in gathering data
about primitive tribes was phonemic analysis (See

Demirezen, 1986: 6-11). Phonemic analysis, which was extensively used by the Glossematicians of Copenhagen school in linguistics is consistent in itself and practical in identifying the phonemes of unknown languages. Once the phonemes and their allophonic variations have been discovered their function in higher units are easily derived and grammatical structure of the language in question is compared.

That is why the languages of primitive tribes and American Indians were phonemically analyzed by Whorf, Sapir, Bloomfield in their attempt to construct a sound theory of language and hence a world-view. For instance, the languages of Hopi, Nootka and Aztec are oligosynthetic in which morphophonemic combinations are telescoped, which results in the demarcation of syntactic meaning in a single word. Thus, one word in Hopi can only be restructured in, say, a language of Indo-European family by means of "circumlocution", which is "an obvious example of difficulty encountered in cross-cultural translation" (Hickerson, 1980:106).

For example, the translation of English phrases his horse and his horses into Navaho requires one such circumlocution. Navaho, on the other hand, translates "equally English horse and horses as tį́ʔ due to lack of a plural category for nouns. It also lacks the English distinction between his, her, its, and their" (Hoijer, 1976:152). Thus Navaho bílį́ʔ meets all the plural categories in English.

A modern example of circumlocution can be given due to the comparison of Turkish and German subordinate clauses.

Turkish sentence: Dünyanın en büyük filozoflarından biri olan Immanuel Kant'a bugün de hayranız.

German translation: Noch heute bewundern wir Immanuel Kant, der einer der grüssten Philosophen der Welt ist.

English translation: We still admire Immanuel Kant who is one of the greatest philosophers of the world.

In the Turkish sentence, which is devoid of articles and relative clauses, we have ten elements while in the German equivalent we have fourteen elements, mostly due to the presence of articles.

It is obvious that the Turkish learner of German will have certain problems because his native language limits him to learn to think in a different language. To sum up, it can be said that language limits and is a determinant of thought.

1.7.Linguistic Relativity and Proxemics

Before defining "proxemics" and its relevance to linguistic determinism, it would be tenable to elaborate the functions of "time" and "space" which are essential to an understanding of communication in diverse cultures. The cultures in the Western world utilize a linear-time concept in which the separate events are successive to each other. In an interview about the relativity of cultures, E.Hall assigns the "time concept" a basic function and adds "when

we speak about "time" we speak as if we were talking about money" (1976:24). The Western man, indeed, "takes time", "spends time", or "saves time" which, when analyzed in relevance to its impact on "world-view", are completely alien to some American Indian tribes.

For example the "Present Perfect Tense" presents serious problems for Turkish speakers learning English. This is due to the fact that Present Perfect Tense differs from the Past Simple in which English tells <u>when</u> the action took place in the past (last year, yesterday, etc.). The Present Perfect tense "is interested only in how long the state of affairs has lasted since-up to now" (Karvaly, 1983:33). The auxiliary "have" in the Present Perfect is categorically empty in Turkish and has nothing to do with <u>haben</u> (in German), ter (in Portuguese), or <u>birtokolni</u> (in Hungarian), which is also a sound indicator of cross-cultural problems encountered in learning this tense. The problem of Turkish learner, then, is that of paradigm because he substitutes it for what is called "Present Cont. Tense" in Turkish:

<u>English From</u>   <u>Turkish Form</u>

He has lived in Istanbul   O 1985'ten beri Istanbulda
since 1985   oturuyor.

The use of "space" and its effect on linguistic communication has been defined as <u>proxemics</u>. In his book <u>The Silent language</u>, the American anthropologist Hall indicates how people refer to "space" as a conveyor of message. The underlying assumption is that there is a

constant ecological interaction between organism and its environment. Linguistic as well as non-linguistic communication is fostered by this continuous process which is valid from one-cell microorganisms to complex mammals including "man" (Izbul 1980a, 1980b).

Man's territoriality, that is, his physical status in social interaction has improved much more than any other living creature. For example, the man of the house is always apologetic about "his chair". When someone else in the house comes up to the chair and asks "Oh, was I about to sit in your chair?", the reply is, of course, usually polite. The way people sit in a series of lecture tells us something about their social status. In American culture, women have a strong sensitivity to their kitchens, and don't want to get them taken over by other women. The reason is that a kitchen is the place where the answer of the question "who is dominant?" is given.

After it has been realized that "space" is organized differently in each culture, cultural anthropologists talk about the way space communicates. Traditionally American space begins with "a place". Some of the ways in which place is used can be summarized as follows: "He found a place in her heart", "He has a place in the mountains", "I am tired of this place", and so on. (Hall, 1965:151) Contrasted with the Middle East, the American treatment of place is characterized by fine gradations between the categories. In the Arab world there are just cities and villages which are not graded very much. An American

probably begins his description by phrases like "corner, crossroads store, metropolis, small town", etc. The child who is learning the language has no way of distinguishing one place category from another by listening to other talk. The difficulty stems from the fact that the child, at that age, only comprehends where he lives.

To take another example, most Americans have difficulty in school with geography or geometry. The reason is that space as an informal cultural system is different from space as it is technically elaborated by classroom geography and mathematics. To be fair, it must be accepted that other cultures have similar problems. For examples, a road for a child is at first what he happens to be driving on. This doesn't mean that he can't tell you when you take a wrong turn. What is wrong with his conception of the space is that he has not yet broken the road down into its components, not being able to make a distinction between this road and that road.

Spatial distances in communication say something in addition to the spoken word. There seems to be a normal conversational distance between the two speakers, which is often overlooked or despised by the strangers. For example, if a person gets too close in an act of conversation, the other person backs up, neither of the speaker knowing what happens actually. For an Arab these must be a close distance between the speakers, while for an American a certain distance should be maintained within the conversational zone.

As a final remark, it can be said that the use of "space" in human interaction (although it seems non-linguistic at first glimpse), as an efficient and directive linguistic means, is very important. Space language, which does more than the message itself, is a determinant of culture-bound behavior and a more functional interaction can be set up between the members of different cultures provided they know the proxemic references.

The relevance of proxemics to linguistic determinism is evident from its intrinsic nature as a symbolic para-language which is constructed cross-culturally in linguistically diverse societies. The language of proxemics can be ruled out as a cultural grammar the norms of which determine the cultural identity of its referents. Moreover, the maintenance of a certain distance, say, between an employer and his employees may well be evaluated as an implied linguistic message, which is nothing more than a feeling of superior status. It is not unlikely that diverse cultures may share universal proxemic references (the location of the rooms in a formal building as determinants of social status, etc).

1.8.Linguistic Relativity and Kinesiology

In addition to the fact that vocal sounds and their organizations into meaningful morphemes convey meanings relative to the communities in which they are used, human beings make use of bodily actions and movements which

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contribute to the semantic content of their message. These paralinguistic features are as much effective as purely linguistic elements in an act of speech and in most, if not all, of the linguistic situations they point to the identity of the speaking person.

The signs and gestures which are also viewed under the heading of _kinesics_ or _kinesiology_ enable anthropologists as well as linguistic scholars to make more illuminating commentaries on the nature of human language. F.C. Hayes is one of these anthropologists who investigated the semantic network of these gestures at a cross-cultural perspective and asked his interesting question: "Should we have a dictionary of gestures?" In order to give the expected answer to questions such as this one, it would be tenable to have a look at the language of gestures in different cultures.

Weston LaBarre (1976: 221-29) refers to meaning conveying gestures as _kinemes_ and gives an extensive account of their function in cross-cultural communication. Kinemes might be taken as culturally encoded semantic units and they are rather similar to _phonemes_ in linguistics and Levi-Strauss' _mythemes_ in cultural anthropology. (See Hawkes, 1977) According to LaBarre man is a "handed" animal who points with the forefinger and other fingers are curled palmward. Although Indians, Shans and other Mongoloid peoples point with the lips. Some other groups on the New World point with eye-movements or nose-chin-and head movements which are alien to most people of the Western

World. Some other gestures and paralinguistic features which are certainly linguistics-related in terms of their functions in communication can be formulated as follows:

a)Greeting kinemes: In the kinemes which are relevant to the intrinsic structures of cultures it should be noted that many of the motor habits in one culture are open to serious misunderstanding in another. For example, the Copper Eskimo welcome strangers with a buffet on the head or shoulders with the first, while the northwest Amazonians slap one another on the back in greeting. In the same way Polynesian men greet one another by embracing and rubbing each other's back which in somewhat similar to Turkish fashion in the case of sincere friends.

b)Kissing kinemes: Kissing in Germanic, Graeco-Roman and Semitic in origin. Greek and Roman parents used to kiss each other and their children. In Europe, kissing tradition is as early as the Middle Ages. Kissing the feet is an old habit among various Semites. Djuka Nogroes of Susinam show pleasure at an interesting or amusing dance step by embracing the dancer and touching check to check, first on one side and then on the other which is identical show of the "social kiss" on one cheek between the modern American women who do not wish to spoil each other's make-up.

c)Gestures of contempt: This is also a rich area for study. Malayan Negritos express contempt or disgust by a sudden expiration of breath which is very much like the European snort of contempt. Neapolitans click the right thumbnail off the right canine in a downward arc. It should

be noted in passing that Mediterranean peoples are traditionally rich in such gestures.

d) Beckoning gestures: In a restaurant, an American raises a well-bred right forefinger to order a waiter. To express "come here!", a Latin American makes a downward arc with the right hand. The Shans of Burma beckon by holding the palm down, moving the fingers as if playing an arpeggio cord.

These are a great many examples of paralinguistic behavior which accompany the message conveyed through linguistic medium. The use and interpretation of these gestures internationally is called Applied Kinesiology and greatly contributes to a better understanding of culture patterns. "Misunderstanding of culture patterns, Misunderstanding of nonverbal communication of an unconscious kind is one of the most vexing, and unnecessary, sources of international friction" (LaBarre, 1976: 226(. Moreover, anthropologists have been very careful when they refer to the concept "instinction" in reference to human behavior. The area of nonverbal behavior has been associated with culture, rather than "instinction" which is universal. These kinemes are the units of symbolic behavior which are acquired by man ontogenetically.

To sum up, it can be said that kinetic symbols which accompany linguistic communication form a more mechanistic aspect of cultural grammar. To learn to act in a different culture involves the habitual formation of culture-specific kinemes. Inadequate learning of kinetic movements may cause

serious misunderstandings. An obvious example of this is seen on the occasion that the nodding of head upward means "no" in Turkish culture, but "yes" in British culture and for example, may cause the bus driver to stop. This behavior inculcates a different response in Turkish passenger and unexpected indignation on the part of the driver.

1.9.Linguistic Relativity and PHILOSOPHY of LANGUAGE

The concepts "relativism" and "determinism" require a more speculative and symbolic analysis when accounted in philosophical perspective. Before engaging in the reflection of language in thought it would be better to analyze the nature of a philosophical question. Any subject or field of study is determined by the kind of question to which it has been invented to provide the answer.

Su Isaiah Berlin (1977) distinguishes between empirical and speculative questions; the answer to an empirical question can be given by experience which is more clear and direct to the point. These are the questions of formal disciplines such as mathematics, logic, grammar, or chess and contain certain fixed axioms or accepted rules of deduction. However, the questions of formal disciplines such as logic and mathematics tend to depend on pure calculation "untrammelled by factual knowledge" (Berlin, 1977: 142-143). But a question like "what is democracy?

bends itself to data of observation because the answer can be easily provided by referring to an encyclopedia.

These are some other questions which are neither empirical nor purely speculative; for instance, a question like "What is the cube root of 578?" is settled by a piece of calculation, but if someone asks "What is a number?" or "What is the purpose of life on earth?" how can we look for the answer? these questions, which tend to be called "philosophical" (Berlin 143), are different from both the formal and empirical ones in that they do not seem to contain pointers to the ways in which the answers are to be found. They cannot be answered either by inductive or deductive methods and there is no authority or orthodoxy to look for the answer. It is these types of questions that, by their very nature, have troubled the minds of philosophers since the ancient Greeks, and most of them still not answered.

In an attempt to define language and world-view, Wittgenstein thinks that the limits of one's language are also the limits of his world. According to him" any from of thought is a meaningful sentence, and the collection of sentences is what we call language" (Wittgenstein, 1985: 4-4001) Language reflects the inner logical structure of our mind and we construct language without being aware of the way a sign refers to something in the objective reality. This is very much similar to the way "a person speak without knowing the way speech sounds are articulated" [1985: 4002]. Language, which is as complex as the man

himself, covers thought, but one cannot infer anything from this external coverage about the form of thought due to the fact that this coverage is made for some purposes other than the body which is language itself (4002).

This consideration, to follow Wittgenstein's approach, must apply to sentences. We make assertions by means of sentences. With a sentence we say something. We say how things are. By uttering sentences we try to describe the things which are related in a certain way. What we cannot describe is how our sentences manage to represent reality, truly or falsely. This judgement draws Wittgenstein to make the extreme generalization that sentences cannot be said. According to his famous "Picture Theory" (1967: 330) a sentence is a picture. A proposition, then, is a picture of reality. It is also" a model of reality as we think it to be" (1985:401).

All the things in the world could be used to construct different prepositions, that is, different models of what is already taking place. Asserting the view that a picture is not a mirror of outer world, he further explained his idea as follows:

>We cannot state in any sentence
>the pictorial form of all
>sentences. What can be said can
>only be said by means of a
>sentence, and so nothing that
>is necessary for the understanding
>of all sentences can be said.
>(1967: 330)

Thinking,too, is a kind of language, and a pattern of thought is nothing more than a logical picture of a sentence. All thoughts can be stated in sentences; what cannot be stated cannot be thought" (1967: 331). But, it must, however, be noted that Wittgenstein did not reject the metaphysical; what he rejected was the possibility of stating it.

In maintaining a close connection between language and thought, Wittgenstein can be related to Leibniz and Hamann (Aksan, 1978: 22-23). For Leibniz, languages are the mirrors of human mind and a semantic analysis of signs shows best how the mind works. Leibniz, who emphasized the role of "mother-tongue", defended the idea that most of the creative thinking occurs in one's mother-tongue which is the shaper of world-view. He made some suggestions for the development of German (Gökberk, 1947) which should be used not only in poetry but also in other activities related to intelligence and science. The German Language should be used in philosophy due to its contribution to mentalistic world-view. However, it should be noted that he was a strict representative of Cartesian philosophy and enlarged Descartes's views on language which will be discussed later. He defended the same principles as other Cartesian philosophers like Malebranche and Gordemoy.

Humboldt holds the proposition that the characteristics and mannerisms of different nations are best reflected in their mother-tongues. The world-view of languages correspond to their fixed meanings. A word is

only a material sign of its concept and it is not cognitioned identically by different persons. Although the vocabularies of many languages "may refer to the same concepts on the whole, they are not synonymous at all" (Akarsu, 1984: 62). A definition cannot delimit but indicate the semantic fields of these words. The same idea is defended in Empiricist philosophy. According to Empiricism, each new concept is an attempt at creation of a new way of thinking. Hardly any new concept of a language can be transferred to another language. John Locke, an enthusiastic proponent of Empiricism, insists on the idea that in a comparison of various languages it can be easily seen that there is not any word in one language that corresponds to any other counterpart in another language. A word says Locke, can only be comprehended in all its shades of meaning by itself. Empiricist point of view of linguistic determinism can be summarized in the idea that no two words in two different languages can verbalize the reality in exactly the same way.

After having analyzed the relation between language and thought, languages and world-view, and Empiricism and relativism, it is plausible to throw light in Hayakawa's famous conceptions of linguistic symbolism which greatly influences the behavior of people. Following the "General Semantics" of Alfred Korzybski as a model, he asserts that the whole science of semantics can be regarded as a process of man's accommodation to his environment and as a method of coping with symbolically superficial but socially

profound problems arising from this process.

Indeed, the power of words and language we use lies in their relative symbolization of outer experiences and phenomena which influence man to a great extent. It is with words that we express our nastiest motives and our worst behavior, but it is again with words that we formulate our highest ideals and aspirations.

According to the movement of "General Semantics" the symbols men use are not enough for the verbalization of external world (the process is best explained through Hayakawa's metaphor "Niagara of words"), which is an obvious indicator of inadequate polysemy. But, paradoxically enough, once man has created symbols he enters indirectly under the invisible control of these symbols. By assigning such powerful control to symbols Hayakawa comes close to Cassirer and Veblen who emphasized the symbolic process highly effectively. To exemplify this magical tyranny (1978:23) he refers to dramatic representations on Radio and TV where people admire or scold the personalities of the actors rather than the artistic roles they perform. The process is as follows:

> Symbols and things symbolized are
> independent of each other;
> nevertheless, we all have a way
> of feeling as if, there were
> necessary connections (1978:23).

This is best expressed by his famous motto:

> The symbol is NOT the thing symbolized
>
> The map is not the territory
>
> The word is NOT the thing (25)

Hayakawa's symbolic approach to language is modified by Eco (1984: 130), where some of the characteristics are given in an historical context. However, it should be noted that Eco's definitions derive from his semiotic theory regardless of sociological connotations. From much of the literature on the subject a simple definition of symbol can be framed as follows:

A symbol is something or everything which is used instead of or as a representative of something other than itself. Eco emphasizes common qualities of symbols in terms of their vagueness, their openness, their fruitful ineffectiveness to express a 'final' meaning, and concludes that it is "with symbols and by symbols that one indicates what is always beyond one's reach" (1984: 130).

In his classic novel Nineteen Eighty Four, Orwell gives a good example of linguistic conditioning, where the members of a community are under the predominance of words. In this novel it was assumed that dictionary of a language was the best index of symbols and accordingly a practical indicator of world-view. Words carry on meanings and the flourishing of certain lexical categories (as well as their rejection) may well be associated with the desired changes

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of behavior in the mannerisms of speakers.

1.10.Concluding Remarks

Sapir-Whorf hypothesis or linguistic determinism draws on the assumption that a language is the best index to the formation of world-view of its speakers. The best evidence is linguistically derived from the intrinsic structure of a language. Starting from the phonological inventory, the speakers of certain languages have difficulty internalizing the grammatical structure of the second language. Although the tense category is generally two-fold (at least reducible to two as present and past) in natural languages, this category is further divided into sub-categories which are expressed in the finite verb phrase (Aarts and Aarts, 1982). As a result of this some languages recognize far more tenses than others, do which is a cognitive consequence of the mathematical time-concept. Western languages are good examples with their various shades of _tense_ and present serious constraints on the cognitive-mental system of their speakers. Most of the agglutinating languages that belong to the Ural-Altaic language family realize these tense-categories by adding sequential morphemes to the verb phrase which lead to what is known in translation theory as _circumlocution_. This can be exemplified by a simple example from Turkish and English:

Turkish Form	English Form
Çalışmış olacaktınız.	You would HAVE studied
Gelmişlermiş	It was reported that they HAD come.
öğrenmişmiş	He is reported to have learned.
	or; It is said that he HAD learned.

As it is obvious in these examples, Turkish tense
markers (-mış) and (-miş) have a corresponding clause (It
was reported) or (It is said) in English. These forms are
narrative discourse markers in Turkish and are structurally
different but semantically empty in English. On the other
hand, Western languages recognize the "certainty or
uncertainty of past, present, or future action" (Fishman,
1970: 92) while some American Indian Languages (Hopi,
Nootka, Aztec, Tagalog) recognize a psychological time
concept which is an indicator of their spiritual world-
view. This hypothesis has lead psycholinguists and
antropologists to the speculation that the Hopi could not
have developed a science of physics in the sense that
Westerns did because the scientific experiments were
forbidden by their spiritual world-view and taboos.
(Bertalanffy: 1968, Hoijer: 1976, Hall:1976). These
constraints are language-specific examples which condition
their speakers in the formation of their relative world-
views.

As for cultural relativity, it can be said that culture systems of different peoples are specific microcosms of these peoples and make up barriers for an impartial or objective evaluation of the macro-cosm that is universal. Cultural perspectives are transmitted among the members of a society by non-biological means and make the people observe the universe through their own lenses. Language is the unique tool of gaining insight into the socio-cultural patterns of a society and the best evidence of this is the unique tool of gaining insight into the socio-cultural patterns of a society and the best evidence of this is supplied by the lexical structure. Culturally encoded expressions not only present problems for translation but also create a cognitive environment which is culture bound in its social Gestalt (Benedict: 1960). For instance, "giri", in Japanese proverbs, is that which is the most difficult to suffer. It forms a paradigm in which a number of responsibilities are codified. The concept "giri" has no equivalence in English, and it has been one of the most interesting categories drawing the attention of anthropologists in the world.

Anthropology, as an efficient branch of humanities, has been a practical field for deriving data which are relative to the world-views of societies. The main elements of anthropology are man, and his behavior in a social environment. The mannerisms of human communities form a pragmatic index to their insights of the external world. Cultural and linguistic anthropology help the field-

researcher to collect these mannerisms and organize them into what might be called a "cultural grammar." A theory of pragmatics (first developed by Peirce and elaborated by Morris) explains the relation between these symbols and their users.

Proxemics, as a sub-field of cultural anthropology, has been developed by the American anthropologist E.Hall (1965). It is the use and function of "spatial symbols" which has a relative value in diverse communities.

Cultures often attach different meanings to the same or similar interpersonal differences. People from various parts of the world structure space as a function of their culture, and it may serve as a nonverbal means of communication.

The proxemic units of measurement that form a relative theory of culture can be summarized as follows:

a)Space communicates in very much the same ways as tone of voice.

b)The manner in which or culture views space is manifest throughout its society. For instance, in the United States people live in close contact with one another; they share sides, provide social activities, and organize competitions. Other cultures are different. For instance, the Latin American culture builds houses around patios that are hidden from outsiders behind walls. But in an act of linguistic communication Arabs and Latins tend to stand closer while Americans tend to keep a greater distance (especially in face-to-face) interpersonal

communication).

c)In Western cultures physical contact tends to be reserved for intimate events, but Eastern cultures do not make such a reservation.

d)The culture-bound appropriate distances for people engaged in conversation depend on the purpose and nature of the message. Thus, each individual is surrounded by a culturally-influenced zone.

e)The use of space between persons and non-living things also show great differences in diverse cultures. For instance, the Japanese are very careful with stretching visual space by exaggerating kinesthetic involvement (Hall, 1965). Their gardens not only appeal to the eye, but rather to the usual muscular sensations which are built into the experience of the visitor walking through the garden.

Kinesiology can be defined as the use of paralinguistic symbols like jests, mimics, and facial expressions which accompany linguistic communication. Kinetic movements are pragmatic instruments which help to make-out the linguistic identity of the speaker. These gestures are so important that they have impelled the anthropologists (Le Barre: 1976, Bertalanfty: 1968, Hall: 1976) to ask questions like "should we have a dictionary of gestures?

A relativist philosophy of language draws on the idea that languages do not reflect reality but a somewhat modified reflection is possible which is realized through the cognitive system of speakers. The outstanding

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nineteenth and twentieth century philosophers like Humboldt, Herder, Hamann, and Leibniz speculated on the deterministic function of the mother tongue as the shaper of ideas and their formative views came to be accepted as like origin of modern Sapir-Whorf hypothesis, Herder and Humbold elaborated the inner form (inner Sprachfrom) of language in which language was regarded as "energia" rather than "ergen", which is the earlier version of modern cybernetic approach to language. Thinkers such as Leibniz and Hamann concentrated on the dynamic function of the mother tongue as the tool of creative thinking and pointed to the restriction it offers to the language users. Such modernist philosophers including Kerzybski, Hayakawa and Eco drew the attention to the symbolic power of words on man and a relatively-constructed world-view which has deep impressions on behavior.

Thus, it is clear that we cannot totally disregard the theory developed by Sapir and Whorf. This theory is definitely a limiting factor in second language and foreign language learning. The lines of limitation can be seen in the overlapping areas of identical language components, structures, and expressions. This theory apparently comes to the stage where the two languages in question do not behave the same in producing language structures. The languages coming from the same source are easy to be learned and taught, but not the languages that come from different origins!

CHAPTER II

2.LINGUISTIC RELATIVITY VERSUS LINGUISTIC UNIVERSALISM

In the last chapter an approach was made to relativity and it application to several disciplines from grammar to non-linguistic fields such as proxemics to purely anthropological studies like culture theory and the theory of signs in general. It was, however, taken for granted that cultural values of a nation cannot be isolated from linguistic symbols used in that nation. By a careful analysis of the linguistic symbols of a community, the established norms and mannerisms can be formulated and labeled under the title of world-view, which is peculiar to that community.

On the other hand, some linguists hold the view that the patterns of languages are common, and ruled out by the same mental structure shared by all people in general. This idea is known as linguistic universalism with its corresponding extensions in sociology and culture theory. In this chapter, the findings of relativist viewpoint will be compared with the findings of linguistic universalism, and special attention will be paid to the areas of controversy which might be of some help for a pragmatic language teaching pedagogy. The main purpose of this chapter, then, is to open up a scientific, as well as, philosophical discussion in order to highlight the areas of complimentation and contradiction from which some useful

materials can be drawn for application to language teaching.

2.1.Sociolinguistic Basis of Sapir-Whorf Hypothesis

Social scientists are in general agreement about the principle of linguistic relativity in term of the cognitive function it has on the speakers of a community. So are they in agreement that cognitive organization of a society is determined by the linguistic structure. The world-view of a society is accordingly revealed by linguistic forms. For example, in some languages gender is marked in noun, verbs, adjective, or pronoun while in some other languages it is not marked so. In the former case, the sex of the person should be taken into account, but in the latter case, speakers and hearers do not direct their attention to the sex differences.

In some languages, tense may be important; that is, the verb automatically must indicate when an event took place, and whether it happened at the same time as, or before or after some other event (see linear time concept in Western Languages in the last section). In some other languages, tense is ignored, but it is again the verb form which indicates whether the action has really taken place or not (of Nootka and Hopi languages which tend to be action-centered). Still in some other languages like Turkish and Macedonian, the verb form indicates whether the person speaking actually witnessed the even or merely heard

about it. For example, a grammatical analysis of "Past Perfect Tense" in Turkish, which has no actual counterpart in English, may throw light on an unnecessary indirect speech style:

Turkish	English
söylemiş	He said/He had said
gitmişmiş	He said he had gone.
gelecekmiş	He said he would/would have come.

It is obvious from the tense markers in the finite clauses that the subject is merely narrating an action he has not witnessed himself. Depending upon such hermetic usages, which are very common in Turkish, one can say that Turkish people have unnecessarily employed the past perfect tense which lends itself to indirect way of speech. It might accordingly be defended that Turkish people only, narrate what others have done or said without attempting to take the actions themselves. The result is a narrative world view, devoid of empirical proof.

Of equal significance is the anti-thesis concerning the above usage that Turkish people have a necessary sceptical world-view in which only the events which are certainly and directly known or experienced can be expressed in Simple Past Tense. The same is also valid for Future Tense, provided that the modal functions of "will" are isolated from the context.

Turkish	English
Söyle DI	He said
git Ti	He went
gel ECEK	He will come.

In the second example, such a grammatical caution might be evaluated on a more positive level which is necessary for a critical world-view. Here, what mustn't be ignored is the fact that "the vocabulary, or grammatical patterns of a language greatly influence the thought patterns of its users" (Başkan, 1983: 159).

Peñalosa (1981: 53-54) gives four levels of linguistic determinism on the sociological scale. The first level is codifiability according to which the speakers of a language make some lexical distinctions not made by the speakers of another language. The codifiability level is related to significant cultural differences and increases if the language makes use of a single word rather than an oligosynthetic expression for a particular object (of. Hopi lexicon).

The second level suggests that where a language makes certain lexical distinctions not made by others, it enables their speakers more easily to perceive differences in environment. Therefore, they can remember on the cognitive level, or learn certain nonlinguistic tasks more rapidly or completely, such as Eskimos learning the different types of snow.

According to the third level, the speakers of

languages with particular grammatical features are predisposed to certain cultural styles or emphases. For example, speakers of European languages have orientation toward clocks and calenders related to the verbal tense system. This level of analysis, which relates grammatical structure to world-view, "has not been sufficiently investigated in terms of whatever phenomena the grammatical data are supposed to indicate" (Bertalanffy, 1968: 27). It is, however, of importance that Western culture has placed special interest in physical time concept, chronology, and history, which altogether results in a retrospective world-view. This approach might be associated with Spengler's thesis that time-concept plays a central part in Western "Weltanschuung".

The fourth level implies that grammatical features either facilitate or make more difficult certain nonlinguistic behaviors such as in the cognitive and perceptional areas. This is what is favoured by linguistic determinism.

On the other hand, it is extensively argued that if there are significant connections between language and culture, they are difficult to validate due to the fact that it is almost impossible to make gross generalizations about cultures or social classes. Furthermore, it is a known fact that "peoples of similar cultures speak completely unrelated languages and that closely related languages are frequently spoken by peoples with a very different culture" (Peñalosa, 1981: 54). Germans and

Hungarians can be given as an example to the first hypothesis, and Finns and Samoyeds to the second hypothesis.

Another difficulty making linguistic determinism is the fact that _bilingualism and biculturalism are very common in most societies of the world. No matter how different the languages and corresponding categories may be, the speaker of one language is likely to understand the distinctions made by the other, it can thus be concluded that while language may reflect cultural concerns, they do not cause them.

2.2. Linguistic Universalism Versus Humboldtism

Linguistic universalism, which is the antithesis of Whorfian relativity, takes its underpinnings from the generative grammar of Chomsky and defenders of innate ideas in the linguistic repertoire of one's knowledge about native languages. There is not, however, direct reference in the writings of Chomsky to Whorf's conceptions as to the deterministic nature of languages in the formation of "world-views". Generative grammarians have taken on the Cartesianist approach on the basis of philosophers like Descartes, Cordemey, Leibniz, Genlinx, Spinoza and Malebranche.

Descartes, not an enthusiastic supporter of linguistic science, concentrated on a general framework to establish some valid principles of human reason. Reason is

an allegedly internalized entity which governs thinking in mankind and makes it possible to reflect, identify and name things. The general logic is realized and expanded through reason which has almost the same meaning as Greek "Logos".

According to Descartes, human reason is "a universal instrument which can serve for all contingencies" (Chomsky, 1966: 15). Human reason can, then, provide us with an unlimited variety of free thought and action and it is certainly species-specific. One should admit the fact that the basic assumption of Cartesianism is the separation of human species from that of animal environment in that language is only human. At this point, Cartesianism is on the opposite side of modern anthropological perspective even in the details of language acquisition. A modern anthropological approach, however, regards the acquisition of language on a phylogenetic level making overt comparisons between human and non-human biological species (see Carmichael, 1977).

Innatenes, therefore, offers an efficient milieu in which relativism and universalism can be contrasted. Herder, for example, asserts that man has no innate language and does not speak by nature. Language, in his opinion, is a specific product of man's particular intellectual organization. It is this organization which facilitates man's linguistic adaptation to the world of concrete objects.

Innateness theory, on the other hand, does not ignore the creative aspect of language use which is very much

emphasized by Humboldt in his comprehensive theory of general linguistics. The creative aspect of language use finds its most useful expression in Humboldt who characterizes language as _energeia_ rather than _ergon_. It is not surprising, then, that universalism is in good terms with relativism in certain aspects. However, the basic difference lies in the fact that linguistic universalism relies on a mentalistic theory while relativism tends to be more culture-bound lending itself to empirical data.

Bearing in mind a linguistic competence, Chomsky analyzes the inner logic of the concepts as they are used in generative grammar. In this system the idea of innate structures is inherent in the acquisition device of a given language. Without that idea the universal nature of deep structures cannot be explained in terms of a universal grammar. As it is often claimed, generative grammar is constructed as a hypothetical deductive model and its structure resembles the ones in mathematical logic rather than traditional linguistic models. In the system of mathematics, which is deductive, a given calculus is based on the adopted axioms and transformation rules. An Axiom, being an assumption, is one of the starting points of a given calculus. The statement on innate linguistic structures whose origin is that of innate ideas, is an assumption and function is an axiom. This is the logical structure of the system.

Generative grammarians hold the belief that this is not an assumption but a theorem to be proved, and, on the

other hand, there is the actual role of that statement in the logical structure of the system and these are two different things. "It must be emphasized here that the claim that linguistic universals exist is a necessary component of generative grammar in the same way as the claim that linguistic differentials exist is a necessary component of the Sapir-Whorf hypothesis, i.e. the school of linguistic relativism" (Shaff, 1976: 15).

Although Chomsky does not reject the statements on imitation, he holds the belief that observable responses to sign stimuli are genetically determined and mature without learning. A difference must be drawn between Chomskyan determinism and Whorfian determinism in that the first one is an end in itself within its rationalist limitations whereas the latter is a means of formulating an observable world which is outside the individual concerned. The process that a child undergoes in learning a foreign language in a short time is investigated, in Chomskyan model. In terms of the underlying principles of grammatical rules it has not been completely solved and it is one of the shortcomings of universalist theory to turn into an hypothesis for more scientific mechanism of the human brain. However, there is one striking example which is common to human beings: normal children acquire essentially comparable grammars of great complexity with remarkable rapidity and it suggests that they are specially designed to do this (Schaft, 1976).

A general language learning theory like this provides

an account of a hypothetical language-learning device and might be considered a theoretical model of the intellectual abilities that the child brings to language learning. Within the boundary of universalism, there is a paradoxical case that although languages have universal properties underlined by human mentality, each language provides a "thought world" and a point of view of a unique sort. It is at this point that (Chomsky, 1966) Humboldt departs radically from the framework of Cartesian linguistics and suggests a point of view which is more typically romantic (see romantic idealism of Herder and Humboldt in reference to Sapir-Whorf Hypothesis in the first chapter).

In the light of this explanation, what must be emphasized is the fact that the child contributes his intellectual abilities to the process of language learning. This is very vague and might be interpreted in many ways leading to the formulation of innate structures. Had there not been an organism contributing with highly intricate and specific initial structure, no learning would have taken place. It is at this point that Chomsky presents a more radical version of innateness concept and refers extensively to W.von Humboldt's philosophy of language and particulary his well known idea that a language cannot be taught but a person's mind can only be incited to develop his language.

Following the Port-Royal Grammar School of Arnauld and Lancelot in her middle age, Chomsky focuses on Cartesian Linguistics in its defense of general

characteristics of grammatical structures common to all languages. These characteristics are known as linguistic universals which cannot be learned and restrict the variety of natural languages. "By attributing such principles to the mind, as an innate property, it becomes possible to account for the quite obvious fact that the speaker of a language knows a great deal that he has not learned" (Chomsky, 1966: 60). Linguistic universalim can be summarized as follows:

a)An innate structure is a generic characteristic and independent of individual intelligence due to the fact that grammars constructed by the speakers of a language do not differ much from one another.

b)Universal structures are also valid for the dialects of one and the same language as well as the languages of different origin.

c)An innate structure which is rich enough to account for the disparity between experience and knowledge must be postulated.

d)Such a postulated structure should be neither too comprehensive nor too restrictive, in order not to exclude any language. The innate mental structure has thus an upper and lower boundary in the postulation of its complex character.

The Sapir-Whorf Hypothesis, which was highly influenced by W.von Humboldt, has a set of correlates with the ideas of Generative Grammar, although it is substantially different from it in a number of ways. The

effect of the hypothesis has declined with findings still disproven, and in addition, no serious attempt has ever been made to disprove it.

On the other hand, when the advocates of the generative grammar use the term "universal grammar", they in fact refer to a fiction. The reason is that the use of "universal grammar" does not imply that a set of generative grammar rules, valid in all languages in the form of deep structures, does in fact exist. To follow Waihinger's famous _fictionalism_, it can be said that as long as the existence of something is not proven it remains a fiction. Equally important is the fact that the concept "universal grammar" is a useful fiction since it contributes to the advancement of learning with its postulated principles. In addition, linguistic relativism, which is not yet disproven, is supported by a much more comprehensive body of data than is the generative grammar hypothesis.

2.3. The Two Whorf Hypotheses: Extreme Version and Mild Version

Having outlined the cognitive framework of linguistic universalism with corresponding and contrasting cornerstones of linguistic relativity, it would be reasonable to tackle the two aspects of Sapir-Whorf hypothesis which is essential to our discussion.

After the turbulent years of generative grammar, the defenders of which made no direct reference to the Sapir-

Whorf hypothesis, it has been assumed that the so-called Whorfian hypothesis, might be better regarded as two hypotheses: an extreme one which asserts the dependance of thought on language and a mild one which suggests some influence of linguistic categories an cognition. The extreme hypothesis seems to have been supported by Whorf, Sapir, Humboldt, and Herder at different times. The mild hypothesis, which takes its support from psychological and anthropological approaches, lends itself to a more empirical evidence. Robins (1976: 100-1) made the same distinction in a little different terms. According to his classification the strong form, which is called linguistic determinism, argues that our cognition and thought processes are totally determined by the structure of the language we speak. The weak form stipulates that the structures of different languages impose some influence on the thinking and categorization of its speakers. It is not surprising that categories, either grammatically or culturally, are of importance both from the grammarian's and anthropologist's point of view. After clearing the first difficulty in the hypothesis, further argumentation can be held. In Whorf's own writing (See Carrol's introduction in 1956) there is no clear evidence as to which assertion he intends to make, that is, does language determine thought or language merely influences thought? Even there are some scholars who state that the hypothesis looks like an empirical proposition which is rather "an illusion" (Penn, 1972: 14).

In the light of differing opinions, it is not surprising to claim that there are scientific "hearsays" about what the real Whorf hypothesis is. However, the generally acknowledged opinion is that of a weak version although there is an extreme motto by Rapoport who states" our language does our thinking for us" (Ibid). Other striking views belong to Carroll who is in favour of a liberal interpretation, and to Basson and O'Connor who are in favour of a moderate and an extreme view of the influence of Language on philosophical thought. But neither explanation has a commentary on the importance of clearly distinguishing between these two positions in any testing of the hypothesis.

The following consideration of several empirical tests of the hypothesis might demonstrate the importance of distinguishing between two hypotheses. It must be stated before hand that the results are highly different. In a study made by Lenneberg, an approach was made to show how terms for colors influence the actual discrimination (Penn, 1972). English speaking subjects easily re-recognized the shades of colors, which are named in English. This finding clearly supports the limiting influence of linguistic categories on cognition. Brown and Lenneberg made a similar experiment in which English speakers and some monolingual Navaho speakers were used. These and other related experiments demonstrated the influence of normalized categories on cognition. In other two experiments made by Caroll and Cassagrande, the Hopi and Navaho speakers were

used in order to test the influence of linguistic patterning on cognitive functioning. Since the results were in favor of a certain influence of language on the formation of non-linguistic behavior, all these experiments seem to support the Whorf hypothesis in a cautiously stated from.

On the other hand, it is possible to come across the studies which aim at disproving the Whorf hypothesis. Osgood, in his exploration into the Semantic Space, demonstrates that people do share a common meaning system and think along similar symbolic dimensions. Greenberg, too, comes to te conclusion through his researches that "the agreement in fundamentals of human behavior among speakers of radically different languages outweighs the idiosyncratic differences to be expected from a radical theory of linguistic relativity" (Penn, 1972: 17).

It can be concluded, on the basis of the above data, that the result of these experiments are not mutually contradictory. From an historical and philosophical point of view it must be realized that the extreme position is unreasonable not only on empirical grounds, but on philosophical grounds as well. Moreover, one who defends the extreme version should bear in mind that there is no prelinguistic thought in the individual and that human thought was not originally responsible for the creation of language.

Another reason that Humboldt, Sapir and Whorf may have taken the extreme positions at times is historical and in

this context it can be argued that their extremeness was necessary as an antithetical attitude toward the rationalist assertion of the innate ideas.

2.4.Psycholinguistic Basis of Sapir-Whorf Hypothesis

Since languae is what mentally takes place in the mind before it is channelized into physical segmentation which is known as speech, it is not unnatural that the psychological condition of a speaker is worth analyzing in reference to our discussion. It must, however, be noted that the psycholinguistic parameters of the Sapir-Whorf hypothesis are remarkably on a par with the relation of language to thought.

It was mentioned above that many theoreticians such as Whorf, Sapir, Hamann, Herder and Vygotsky held the view that the grammatical rules and vocabulary of a language are essential to the formation of thought. Whorf pointed out for many times that "salient physical correlations between events, particularly with color and shape, will be reflected in that language" (Paivio and Begg, 1981: 258). However, he derived that the presence of a word or concept necessarily corresponds to a physical commonality among instances of the concept.

On the other hand, it must be emphasized that most research findings have been unclear with respect to the strong and weak hypotheses. It is especially the weakest form which is supported by numerous investigations

including Brown and Lenneberg (Paivio and Begg; 1981) in reference to memory and color. The findings have been summarized. Of equal importance is the research done by Lenneberg in which Zuni speakers made more errors in recognizing yellows and oranges than English speakers did. The research was also valid for bilinguals. The obtained result is significant because in Zuni, there is one word for yellows and oranges, but the English language makes use of several words including separate categories.

In a memorial to Lenneberg (Paivio and Begg, 1981: 260-61) Roger Brown reviewed the two decades of research on memory for colors and concluded that the similarities among cultures were significant in their remembering of best colors and much more impressive than the differences. It is paradoxical, as the research goes, that there was considerable variation in the description of these colors in different languages. Languages, in all these experiments, turned out to be an insignificant factor in memory for color. Codability of colors was only a weak predictor of recognition in contrast to communication accuracy, that is, subjects who communicated the colors well, were equally able to remember them used as stimuli in another task.

Steinberg (1988) analyzes linguistic determinism in reference to culture, thought, and behavior, arriving at both contradictory and complementary aspects of the mild version. His complementary conclusions can be summarized as follows:

1) Language may be used to provide new ideas

2) Language may be used to bring about a change in beliefs and values.

3) Language may be used to assist memory. (1988: 116-117).

On the contradictory side, he thinks that the hypothesis is invalid with the acquisition of language, vocabulary multilingualism and bilingualism.

Taking the pitfalls of these approaches into consideration it can be said that the cognitive process of mother tongue acquisition at four levels (phonology, morphology, syntax, and semantics) is under a remarkable influence of linguistic determinism which will be described later.

2.5. Anti and Pro-criticism in Reference to Empirical Evidence

The idea that languae determines thought can best be analyzed with regard to empirical evidence and with supports from the forerunners in the field. It must, however, be noted that not all the findings provide support for such an extreme hypothesis. In this section, attempts will be made to reflect anti and pro-criticism of the so-called Whorfian hypothesis.

2.5.1.Behaviorism and Linguistic Determinism

As an anti-thesis to the findings (which are not very certain) of rationalist and mentalist movements the proponents of this view hold that thought is a kind of behavior, mainly speech. The outstanding behaviorists like Watson, Skinner, Staats and Bloomfield try to reduce the notion of thought on cognition (which is very .much emphasized throughout this thesis) to the observable phenomena. This theory is also another version of the motor theory of speech perception according to which "the understanding of speech requires a prior motor act of some sort, e.g. sub-vocal speech on internal articulation" (Steinberg, 1988: 102).

Thought is accordingly viewed as talking to oneself which is experienced by the individual by his senses. Articulatory movements which are the underlying mechanisms of speech (this may be verbal or nonverbal) and their sensory effects correspond with the acoustic stimulus leading to perception. Behavioristic theory can thus be summarized on the ground that thought cannot be a determinant of language but language incorporates thought in its mechanistic structure.

2.5.1.1.Anti-criticism of Behaviorism

The ideas of Watson, Skinner including Sapir, Whorf and Vygotsky (who insistently, claims that thought comes

into existence only through the structure of language with its rules or vocabulary) have been refuted on the following grounds:

2.5.1.2.Speech Understanding Precedes Speech Production

Speech understanding precedes speech production in normal children. In the normal course of language acquisition an infant can come to understand language prior to producing it by himself. For example, a one-year-old child may be able to understand a sentence like "Put the candy on te table", but he may still be at a one-word or even no-word stage of speech production.

2.5.1.3.Handicapped Children Can Understand Speech Being Unable to Produce It

Persons who are congenitally mute or have congenital paralysis but otherwise normal acquire a normal perception of speech. They may not, however, be able to produce language or produce it laboriously and faultily. For example, a there-year-old _Japanese_ girl who was congenitally mute but able to hear could understand what was spoken to her. Contrastingly enough, the girl could utter only a few sounds but was taught to read complex Japanese writing by matching cards with objects. The case leads one to the conclusion that her ability to understand language was an indication of her ability to think.

At the expense of Skinnerian approach, it follows that behavioral responses other than speech may be the basis of thought. A relevant psychological experiment was held to understand what particular behavioral response were conductive to intelligent thinking. For example, changes in electrical potential in the musculature of the right arm were expected to inculcate thinking about lifting the arm. By this experiment many psychologists believed that they had begun to localize thought and meaning in the body. The problems with this theory is that it incorrectly predicts that a loss of thought or meaning will occur with damage or removal of body parts. Furthermore, it fails to explain the relation of language to thought.

2.5.1.4. Deaf Persons Without Language Think

The typical children who have a congenital hearing loss of over 90 decibels are unable to receive speech. They don't begin to acquire language until after five years they are born. That is the time when they begin to attend private schools. Paradoxical enough, these children seem to behave just as intelligently (the term "intelligence" is taken for its actual meaning. See Fowler's Modern English Usage) and rationally with respect to their environment as do hearing children. If language is regarded as the basis for thought, then one would argue that these children do not think. In the same way, if grammar determines how we dissect nature, then it must be argued that either the non-

language deaf children cannot dissect nature or that they do it differently from children who do have grammars. There is no such difference, nor is there any evidence that deaf children who acquire language late undergo a radical change of perception.

2.5.1.5. Multilinguals as Unitary Persons

The case of persons who are proficient in more than one language is especially significant with regard to linguistic determinism. If the language system forms thought, and if different languages from different perceptual systems, then such person would have formed more than one systems of thought. And if they have done so, they would not have developed coherent intelligence and personalities. Moreover, the degree of proficiency in different languages is a matter of discussion, that is, an individual person cannot be equally proficient in more than one languages since one of the known languages has a propensity for becoming his mother tongue. All other languages are concentric to the focal language. This is the mother tongue in which most intelligent thinking is carried out. It is again this language which has very deeply rooted impressions in the person's mind.

On the other hand, multiculturalism can be elaborated in terms of one primary culture and secondary cultures which have gradually lessening impressions in the mind of the individual person. Casual observation of multilingual-

multicultural persons might sometimes seem to provide some supports. For example, a person might be aggressive in one culture, but passive in another, or polite in one and impolite in another . The crucial point is that such observations cannot be taken superficially as indicating true differences in thought or personality.

There are also some other criticisms which are purely linguistic in origin. One of them is that speakers of the same language may and do have different world views. One contemporary example is the United States where native speakers of the same English language vary in terms of their philosophical, religious, and political ideology. Another anti-criticism stems from the fact that speakers of different languages may share similar world-views. For example, Buddhist, Christian, Communist, Capitalist, authoritarian, democratic, militaristic, royalist, and vegetarian doctrines are shared by speakers of many very different languaes" (Steinberg, 1988: 112).

2.5.2.Pro-Criticism of Behaviorism in Reference to Linguistic Determinism

It is evident from the foregoing discussion that language, speech, or behavior does not seem to be the basis of thought and language system by itself does not provide the specifics of one's view of nature or culture. Nevertheless, there are important cases where the use of language greatly affects the content and direction of

particular thoughts. These three cases of particular
instances are: (1)Language may be used to provide new
ideas; (2)Language may be used to bring about a change in
beliefs and values; and (3)Language may be used to assist
memory. It would be reasonable to throw some light on
these areas respectively.

2.5.2.1.Providing New Ideas Through Language

Consider that the sentence "There will be a great war
between the United States and Iraq" has been uttered by a
speaker. It is very likely that this sentence and the idea
it expresses would be novel to the hearer. The idea which
is formed in the hearer's mind must be the result of
hearing the sentence in question. Although the vocabulary
and structure are already known the sentence is novel.
Novel sentences are created and understood on the basis of
what a speaker already knows about the language in terms of
its syntax and vocabulary. Thus, while, for example,
Einstein's relativity principle is unique in terms of the
ideas it represents, it is not unique from the point of
view of language.

2.5.2.2.Changing Beliefs and Values
Through Language

As a result of reading the Communist Manifesto, one's
values, beliefs, and world view can be radically changed.

Persons who are so changed politically, religiously and in other directions are often said to think differently. The Whorf hypothesis, in this context, can be extended to cover whole cultures. For example, the identification of some of the "worst traits of the German character could be blamed on what Mark Twain called the awful German Langauge because of the extensive use of nominalizations and the capitalization of nouns" (Wardhaugh, 1976: 74). A more recent observation can make up a good example for linguistic determinism in that the postpositioning of French adjectives, as in Les plumes rouges, reflects deductive habits of thought, whereas the prepositioning of English adjectives, as in the red pens, reflects inductive habits. It must further be noted that the deductive tradition of thought stems from the teachings of grand rationalist philosophers like Descartes, Malebranche, Geulinx, Cordemoy and Spinoza who have dominated for long the French tradition of thought. The British tradition is much more inductive in its Baconian methodology and inspired by John Locke's experimentalism. On the other hand, Navaho grammatical structure, which does not clearly separate actors, actions, and objects in the way that English does, reflects the underlying passivity and fate-fullness of the Navaho.

2.5.2.3.Language May Be Used To Assist Memory

Our thinking is grossly stimulated by ideas we hear

and read. It is with the contribution of language that one can write and preserve ideas on which to build new ideas. Without language, no human group could have developed much of a culture of any sort. But something should be taken cognizance of: "In its strong form, the Sapir-Whorf hypothesis suggests that a meeting of minds between alien cultures is impossible. In its weak form it suggests that a meeting of minds is simply hard work. Most linguists today follow some version of the weak form" (Mc Arthur, 1983: 15).

Considering the anti and pro-criticisms of the hypothesis, it can be said that there are two basic functions of the language system that have been constructed by the thought system. The first is to provide physical speech sounds as output with the availability of a particular thought as input. This is the process of speech production and it may be illustrated as follows:
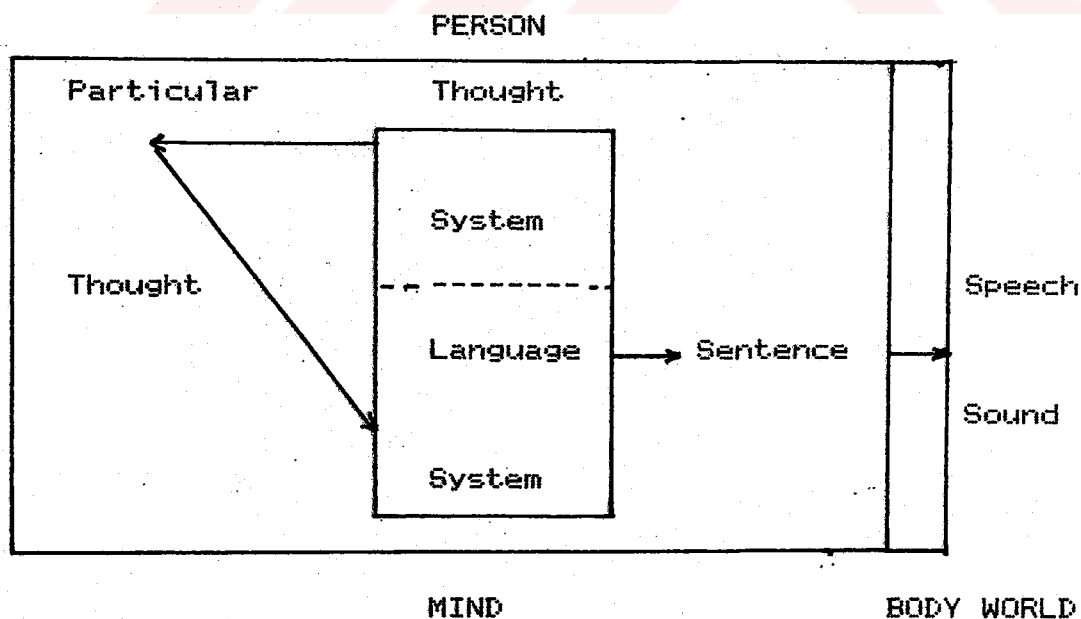
Schema 1.Expression of a thought in speech.

The second basic function provides a particular thought as output assuming speech sounds as input. This is the process of speech understanding and may be illustrated as follows:

PERSON

```
                    ┌──────────────────────────────────────┐
                    │         ┌────────────────┐           │
                    │         │ Thought        │           │
                    │         │                │           │
                    │       ╭─│ System         │  Particular│
                    │       │ │                │           │
                    │       │ │- - - - - - ────────────────▶
                    │       │ │ Language       │  Thought  │
          Speech    │       │ │                │           │
          ──────────────────▶│                │           │
          Sound     │         │ System         │           │
                    │         └────────────────┘           │
                    └──────────────────────────────────────┘
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WORLD   BODY   MIND
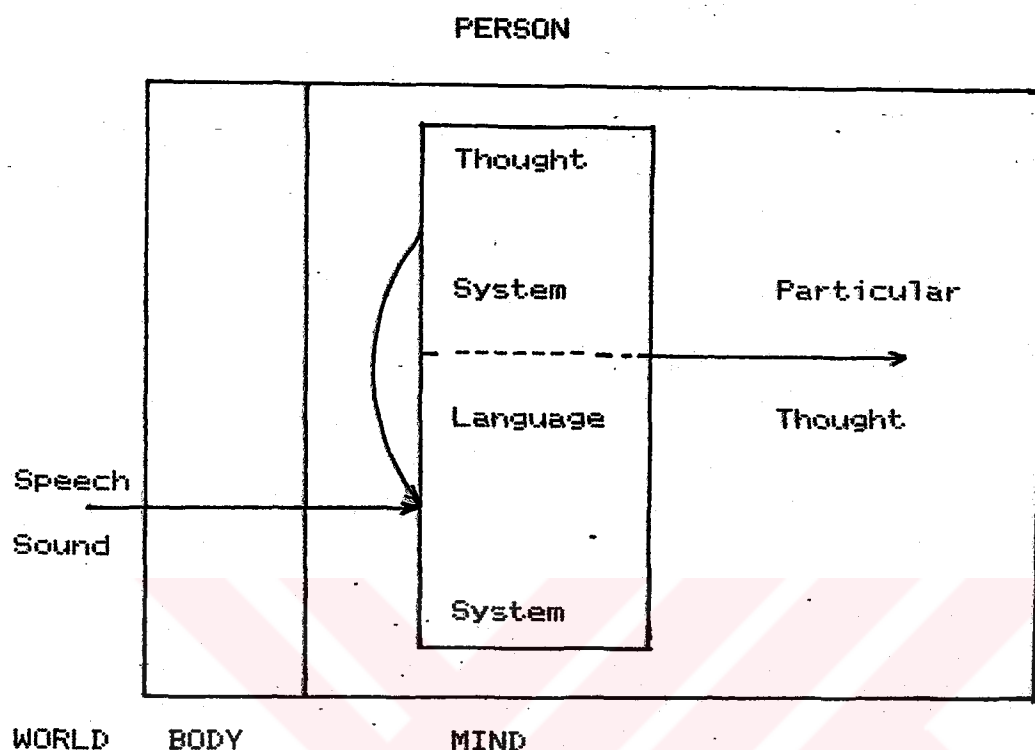
Schema 2.Eliciting a thought from speech.

According to the above shematizations,the mental and physical components are brought into a relationship through the language system. The phonological and phonetic aspects of the language system (the phonic medium) operate through the body aiming to cause speech to be produced through the mouth and to be understood through the ear. When one thinks, the sound forms of words come into his awareness implying the way he does thinking.

To sum up what has been said so far it can be asserted that language has a firm background in the mind of

the speaker and plays a significant part in the formation of his world-view. The empirical research partially seems to have taken on the conclusion that there is not a direct relationship between language and thinking. It does not, however, ignore the fact that language is an extensive determinant of thought ranging from the grammatical structure to the areas where cultural symbols are codified in it.

The radical argumentation takes into account the two fundamental trends which are remarkably functional in their approaches: rationalism on its Cartesian bearing and empiricism on its experimental bearing.

Rationalism, which also absorbs mentalism in its semantic filed, is and has been associated with transformational-generative grammar of Chomisky. Being a philosophical antithesis of relativism, it encapsulates a universally acknowledged background in the minds of the ideal speakers of natural languages and it is this developmental background that is transferred into the acquisition of natural languages. Chomsky's universal theory has been applied to language learning with supports from the human anatomy (Lenneberg, 1967; 1977).

Lenneberg analyzes the language development in reference to the anatomical mechanism (1977) of man and asserts that language development is part of the biological structure which isolates language learning from the infiltration of cultural and linguistic variations. According to the biological perspective "the ability to

learn language is so deeply rooted in man that children learn it even in the face of dramatic handicaps" (Lenneberg 1977: 67). Every language is based on the same universal principles of semantics, syntax, and phonology and the universality becomes more apparent when compared to the speakers who live in the cultures ranging from neolithic types to the highly complex cultural systems such as Western civilization.

It follows from the above explanation that since languages are universal structures of a unique human mind, then the world-views impinged upon the speakers by their languages must not be varied. For example, the predisposition of man toward the acquisition of language is often assumed to be a reflection of man's great non-specific intelligence. For this, anthropological development of brain-neurons is extensively given as evidence and in association with phylogenetic increase in intelligence. Lenneberg opposes this view with evidence on the ontogenetic level that man has a genetically different "mentation from other species, and obviously, a greater capacity to do things human" (1977: 77).

From much of the vague experiments on the uncertain level of intelligence in man in comparison with non-human biological species, there remains a question to be answered: Isn't it possible that language ability is the cause of human intelligence instead of being the consequence of it? This is the causality relationship between language and intelligence which was defended by

such thinkers as Hamann, Herder, W.V.Humboldt, Cassirer and implied by Whorf, Wundt, and Penfield. It is this proposition that is disadvocated by Lenneberg on the grounds that the ability to acquire language is a biological development "which is relatively independent of that elusive property called intelligence" (78)

On the other hand, the empirical research discussed in previous sections and supported by Lenneberg (1967) is remarkably related to the cognitive processes, the area where, linguistic determinism aims to be dominant. The empirical research indicates that "any natural language and, infact, cognition can develop to a certain extent even in the absence of knowledge of any language. The reverse does not hold true, the growth and development of language does appear to require a certain minimum state of maturity and specificity of cognition" (1967: 34).

Finally, a mild version of Sapir-Whorf hypothesis is both promising and pragmatic in the teaching of languages since a fair understanding of linguistic relativity throws much light on language teaching problems. The mild version holds that the port of the language system is actually part of the thought system.

2.6.Concluding Remarks

The Whorfian relativity that attributes a crucial role to language as a determinant of thought, has been criticized by linguistic universalism which is an extension

of Cartesian philosophy of the eighteenth century. The
Cartesian philosophy, which was defended by thinkers such
as Descartes, Cordemoy, Geulinx, Leibniz, Spinoza and
Malebranche, capitalizes on the idea that the creative
aspect of language use provides the best evidence that
another organism who looks like us has a mind like ours.
Man is fundamentally different from everything else in the
physical world and knowledge is attained by way of inner
ideas (Encyclopedia of Philosophy, Vols. 1-2: 37-38). It
is the human mind which has the faculty or power of forming
these ideas in the process of knowledge-acquisition. In
this creative aspect of language use and in assigning the
mind a central role, Cartesianism takes on Rationalism and
these two trends coextensively connote a view or views
about innate mental mechanism that is peculiar to man as
distinct from non-human biological species.

The Generative grammarians have followed the basic
tenets of Cartesianism and elaborated on the idea of a
universal background knowledge that governs the development
of species-specific linguistic mechanism. Chomsky (1988:3)
regards language as a physical configuration located in the
brain and thinks that the mental mechanism of a speaker of
English, German, Spanish or Japan, or any other natural
language is the same. Bearing in mind a linguistic
competence, he analyzes the inner logic of the concepts as
they are used in a generative grammar. The deep structures,
which are the semantic components of a natural language
can, but, be expressed in reference to an idea of universal

grammar. It follows from the above explanation that no matter how diverse and varied the natural languages may be on the surface structure, they share a common deep structure which is the director of a universal world-view.

Linguistic relativity, on the other hand, draws on the idea that different surface structures of different languages pragmatically penetrate into and form different deep structures shaping the world-views of their speakers. According to the defenders of relativism such as Herder, Hamann, Humboldt, Sapir and Whorf, the grammatical components of language systems form Gestalts that are the contents of thought. Language, then, is apparent in what one may call the overt behavior of the individual using it.

For the purpose of a fair analysis of relativism versus universalism, it is significant that one should emphasize the dynamic aspect of language use, which is almost equally, if not completely, accepted by respective trends. The innateness theory, which does not neglect the creative aspect of language use, tends to be a practical area where relativism and universalism can be amalgamated to some extent. Humboldt, the forerunner of relativism, emphasized the so-called creative language use in his _inner Sprachform_, which forms a remarkable part of his general linguistics theory. His theory is nothing more than a modified version of rationalistic hypothesis-testing that is the creator of new linguistic forms. He characterized language as _energia_ (the dynamic and unceasing creator of novel forms, rather than _ergon_ (that which was done and is

no longer active).

Apart from the dynamic structure of human language, it should be especially noted that linguistic universalim radically differs from relativism in that the former is a direct outcome of mentalistic theory while the latter lends itself to a behavioristic theory with much of the support from empirical data. These trends will later be compared with reference to Sapir-Whorf hypothesis in the application part. The important point is that the grammatical and lexical structure of a language is, and should be analyzed (as Lenneberg did to show the influence of color terms on mental discrimination) to provide the intrinsic evidence of linguistic determinism.

Now, lets compare and contrast the basic tenets of universalim and relativism in a diagrammatic form:

LINGUISTIC UNIVERSALIM	LINGUISTIC RELATIVISM
1.Thought determines language	1.Language determines thought.
2.Different languages have an underlying deep structure that is universal.	2.Different languages have different deep structures that are relative to each other.
3.Language is the best index as careful analysis of human mind.	3.Language is the best index to the cultural structure of a society.

4. Learning a language is learning to utter an infinite set of sentences in appropriate contexts.

5. The difference of grammatical structure does not result in cognitive differences in societies.

6. Man has an innate linguistic capacity which is genetically determined.
Mentalism: rationalism+ cognitivism.

7. Mother tongue is not different from the other tongue because language is species-specific.

8. Learning a second language is mastering another grammatical structure that is encoded in

4. Learning a language is learning the linguistic identity of the society in which it is used.

5. The difference of grammatical structure results in cognitive differences in societies.

6. Man has an intellectual linguistic capacity which is culturally determined.
Behaviorism: Humboldtism+Sapir-Whorf.

7. Mother tongue is different from the other tongue because it limits the speaker's view of the world.

8. Learning a second language is learning to act in

more or less the same cognitive   the different grids

system.   -92-   of   another

                                              cognitive map.

        In the light of above comparison, it can be asserted
that an accepted pattern of using language is by and large
prior to certain lines of thinking. In the third chapter.
the lines of thinking that are dictated by the mother
tongue will be investigated, which is   basic to   an
intelligent language teaching process.

        The dichotomy in between this relationship between
universalism and relativism is actualized and partially
materialized by language learning theories.

CHAPTER III

3.Linguistic Relativity and the Teaching
of Foreign Languages

In the last chapter, approaches were made to the Sapir-Whorf hypothesis on the grounds that relation of language to the world-view should be studied interlinguistically and in a psycholinguistically constructed environment subject to verification. It was also pointed out that universalist trend tends to ignore the particular procedures that the learners of languages undergo and different world-view imposed on he speakers of these languages.

The fundamental difference between rationalism and relativism is, in essence, the difference between mentalism and behaviorism. Mentalism tries to put some general characteristics of human mind in a homogenous basket where these characteristics are extended to form the common basis of human perception which is also valid for the learning of a foreign language. According to a posteriori nature of mentalist theory the human beings go through the same stages of language acquisition and the learning of a foreign language results in a transfer of these universally acknowledged cornerstones to a new language which is not essentially different in its underlying structure.

Behaviorism, on the other hand, is associated with a trend of psychology in which learning is treated as the

desired behavior on behalf of the learner. Considering the a priori nature of behaviorism it can be said that human beings go through individually constructed stages since these stages are filtered through particular a priori systems in the learning process. In Skinner's operant conditioning theory, for instance, the stimulus imposed on the organism is excessively reiterated until it becomes the operant, that is, an inseparable part of the organism. In this type of conditioning, the a priori system turns out to be the direction of the conditioning itself which results in the desired operant. The Skinnerian system of behavior can be simply formulated in a lineer sequence as follows:

Stimulus------->Organism---->reiterated conditioning-------->Operant
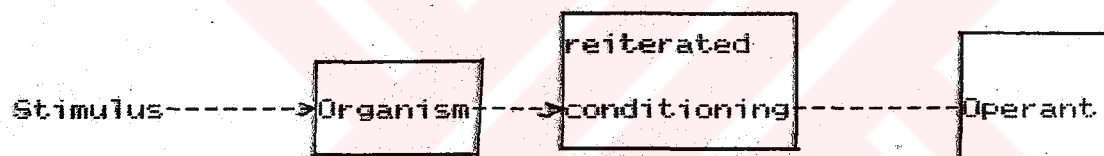
The operant in his simple sequence is the desired objective on the part of the learner who goes through the same system which is open ended. For example, if we want to teach someone a grammatical structure (this process is very common in the Audio-Lingual approach) we can draw the learner in an atmosphere in which too much reiteration of the grammar structure is done until it becomes the operant of the learner. It should be especially noted that after the learner has internalized the new structure he starts to behave in the system, that is, he applies his operant into new linguistic situations which results in the use of similar structures in similar situations. Thus, it is not

incorrect that the Sapir-Whorf hypothesis can be systematized in the milieu of behaviorist language learning theory.

In order to avoid a random correlation of linguistic determinism with unproven data of psyco-motor structure of any theory it would be reasonable to give another sound example. The example is no more than the extension of behaviorism to be process of language learning as a whole. A child, who learns the grammatical structures of his language through a stimulus-response chain (which is still valid in the acquisition of mother-tongue), tends to form the operant of his mother tongue. In the acquisition of a second language the same child tends to transfer this operant to the structures of the second language, which results in what one may call the mother tongue interference.

The concept of "operant" in the above example corresponds with what is called "world-view" in Whorfian hypothesis. After the internalization of mother tongue at phonological morphological, semantic and syntactic levels it is not unnatural that the person has formulated a specific world view which might be shared by the speakers of the same language (or language descending from the same linguistic family) but not the speakers of other languages. The world-view of the speakers of a language is formed habitually according to behaviorist psychology. Whorf mask his experiments on the language of Hopi people who are rather behavior-related even in their handling of language.

His examples of Hopi grammatical structure were, needless to say , a priori toward the formation of the Hopi world-view.

In the light of this empirical evidence about the relation of behaviorism and linguistic relativity a pragmatic foreign language teaching methodology will be suggested with emphasis on the areas of controversy in the acquisition-learning of a second or foreign language. Fishman (1978: 116) views linguistic determinism in terms of four levels which support the desired objectives of language teaching. According to him linguistic codifiability and its corresponding behavioral concomitants should be realized as follows:

> In order to find evidence to support the linguistic relativity hypothesis it in not sufficient merely to point to differences between languages.... it is necessary to show some correspondence between the presence or absence of a certain kind of non linguistic response (1978: 116).

The investigations carried out by Brown and Lenneberg have shown that the colors which can be named with a single word require a shorter response latency than the colors which can be named in a phrase. Needless to say, the colors in the first category are culturally encoded while the

colors in the second category are not. The result is that codability is a determinant of cognitive process which differs in particular regions of experience. Granted this linguistic-cultural approach, the influence of linguistic experience on cognitive behavior can be schematized as follows:

```
Data of                              Data of

language characteristics     Cognitive           Behavior

Phonological,grammatical     Language Data

lexical and semantic                   Cultural      Themes

characteristics


                                     Non-linguistic Data
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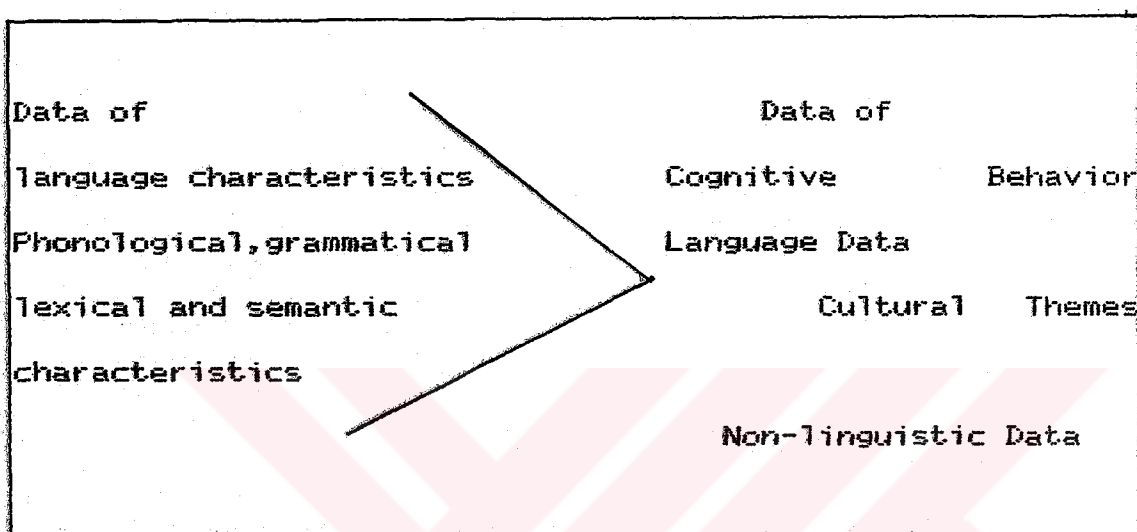
Schema 3.Influence of language data on cognitive behavior.

The basic assumption behind such an approach is that the mother tongue does have a delimiting effect, on the learning of a second language, thereby inhibiting the learner's cognition of some categories which are certainly experienced is the second language.

The main purpose of this chapter is to analyze the positive and negative influence of the mother tongue on four linguistic levels: phonology, morphology, syntax and semantics. The remedial teaching with its pedagogical impact will be offered after tacklign each problem area.

3.1. The Evidence of Mother-Tongue Interference

The mother tongue interference in the learning of a foreign language is evident from the fact that in an actual classroom environment the same mistakes of pronunciation, grammar and vocabulary emerge from the language of learners. According to Wilkins (1975: 190), by a careful analysis of the made-mistakes one can even understand and identify the mother tongue of the students although he may not know a word of it.

In the learning of a foreign language, the overall mechanisms of the mother tongue and the language being learned will be assessed in the learner's cognitive map: while these mechanisms will overlap in some respects it is equally probable that they will contradict in some other respects. Although the direction of interference is mutual between the two mechanisms, the mother tongue is more likely to influence the target language. In case the elements or meaning nodes of the languages are similar one can speak of a positive interference and when the structures are not similar there is a negative interference between the languages. The areas where interference takes place are "the bulk of the phonemic system, a large part of the morphology and syntax, and some areas of the vocabulary including kinship, color, weather and so on" (Weinreich, 1961:376). The procedure of interference can be schematized as follows:

```
          ┌─────────────────┐
          │   Interference  │
          └────────┬────────┘
          ┌────────┴─────────────────┐
     ┌────┴─────┐              ┌──────┴──────┐
     │ Positive │              │  Negative   │
     └──────────┘              └──────┬──────┘
                            ┌─────────┴──────────┐
                   ┌────────┴────────┐  ┌─────────┴────────┐
                   │     In the      │  │   In     the     │
                   │ target language │  │ mother   tongue  │
                   └─────────────────┘  └──────────────────┘
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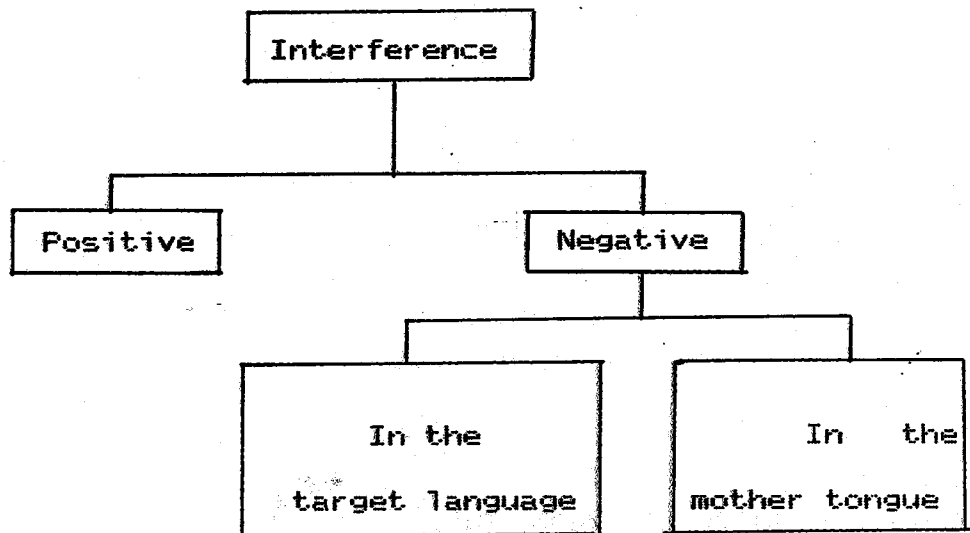
Schema 4.Mother tongue Interference

For the purpose of linguistic relativity it would be
tenable to throw light on the mother tongue interference in
the target language. To exemplify this the efforts of
foreign learners to produce the following English sentence
will be evaluated:

"His wife wants him to pay her grandfather a visit in
the old people's home".

To begin with, a French learner will tend to omit the
/h/ of his and to use the vowel /i/ as in vite since it is
the nearest vowel to /ɪ/ that he has in his own language.
To an Englishman it will sound more like the vowel which
occurs in heat /hiyt/. For the English /r/ in grandfather,
which is produced by a movement of the tongue towards the
teeth-ridge, he is likely to substitute the French /r/,
which is produced by thrilling the uvula against the back
of the tongue. Like many other learners of English he will
have difficulty with the consonant /ð/ in the. This sound,

with its voiceless counterpart /θ/, as in <u>thin</u>, usually appears late even in the speech of native English children, and seems to cause general learning difficulty. The French learner may attempt to use either /d/ or /z/ to replace it, while the speaker of Hindi, for example, will probably substitute an aspirated /tʰ/. A German will pronounce the word <u>old</u> as /owlt/ instead of /owld/ because in German there is no contrast between /d/ and /t/ in final position. In the German language the final plosives are always /p/, /t/ and /k/ but never /b/, /d/ and /g/.

The last phonological example of mother tongue interference makes it clear that the learner of a foreign language is influenced not only by the sounds that exist in his mother tongue, but also by their distribution and phonological status. A Spanish learner will also have some difficulty with this sentence because it requires him to produce a syllable in which three consonants follow the vowel, which is against the phonotactics of Spanish. Failing to articulate the cluster in the word <u>wants</u> he will say /won/.

In both English and Spanish there are sounds that may be transcribed as /d/ and /ð/ although they are not phonetically identical. The phonetic differences are minimal and these sounds may be considered "the same" in the two languages. Their status, however, is not the same. Whereas in Spanish they are allophones of the same phoneme, usually transcribed /d/, in English they are distinct phonemes, /d/ and /ð/. The Turkish kids also have

difficulties in articulating English [θ, r, and w] sounds because they are either non-existent or have different places and manners of articulation in English. For example, /θ/ and /ʒ/ are interdental, voiceless and voiced fricatives that are phonetically empty in Turkish. /r/ and /w/ are also problematic due to their different places of articulation in English. The problem sounds of English for Turkish learners will be discussed at length below.

At the morphological level, although there is less mother tongue interference it is more likely to happen between languages closely related to one another, such as Spanish and Italian or Russian and Serbo-Croation. Thus, the Russian learner of English hardly ever inflects English nouns with Russian case endings. The emergence of a difficulty is not in proportion to the difference between any two languages and in some cases it is the similarity which may cause the error. Overgeneralization itself is another cause of morphological interference which is evident from the following example: since nouns in English are pluralized by the addition of an {s} morpheme, a foreign learner of English may pluralize adjectives by the addition of the same morpheme. In fact the same mistake can be made by students who, in their mother tongue, pluralize as adjective by the affixation of something other than an -s. The must likely morphological error in the sentence we are studying is the occurrence of _want_ instead of _wants_.

Although the actual shapes of morphemes are rarely taken (Wilkins, 1975: 193) from the mother tongue and

inserted into utterances in the target language, it is a very encountered fact that the morphological and syntactic systems are transferred into the language being learned. For example, the rules which govern the choice of possessive adjective in English are different from those in French. In the above sample sentence the forms his and her occur. The choice between them relates to the sex of the person referred to. In French there are also two forms, sa and son, but the choice between them depends solely on the gender of the noun that they are modifying. The sex of the person referred to is irrelevant and indeed cannot be indicated in the possessive adjective.

The French learner of English will commit error when he is constructing such a sentence because the animate noun "wife" refers to a female person, and grandfather refers to a male person. The possible French sentence will be constructed as follows:

"Sa femme lui demande de rendre visite

a son grand-pere."

The exact translation of this sentence into English will sound as follows:

"Her wife wants him to pay his grandfather a visit."

instead of the correct translation:

"His wife wants him to pay her grandfather a visit."

Similar interference occurs when the French speaker says "the sky blue" instead of" the blue sky" following the French pattern "Le ciel bleu" in which modified precedes

the modifier. The modifier, then functions as postposition that is a typical trait of French language.

The definite and indefinite articles also create problems in our sample sentence for speakers of must Slavonic languages. In Russian, for example, there are no articles, that create problems for a Russian learner of English. However more the difference between Russian and English provides more problems of the Russian learning English than it does for the English speaker learning Russian. The reason is that it is far more difficult to remember to put things in than to leave them out.

At the syntactic level different speakers may encounter different problems. To give a simple example from our sentence, it can be said that in French it is not possible for the equivalent of want to be followed by a pronoun like him which is both the object of want and the subject of the following infinitive. An infinitive can follow vouloir only if the main verb and the infinitive have the same subject.

The construction that has to be used involves the French equivalent of that, so that in English we may find the French speaker saying

"His wife wants that he pays her grandfather a visit."

At this point, it can be grammatically asserted that the above mistake could also be made through an overgeneralization of a rule that does apply to some English verbs. Had the verb been demand or request the

sentence would have been perfectly correct. It follows the selection of a verb in its syntactic patterning is another complicated problem, the analysis of which will be made later.

Other types of interference will come from the lexical structure of the mother tongue. Wrong collocation is a very common mother tongue interference in which the words of the mother tongue are semantically mismatched in constructing a sentence in the target language. For example, English people pay visits, but many other language groups make visits, and they are inclined to use this expression when speaking English. Turning to the above example (... old people's home) there is no special reason why the building in which old people live together is called home in English rather than a residence, house, hotel, hall, or hostel, all of which may denote inhabited buildings. The fact is that none of these alternatives would be acceptable in our sample sentence. A French speaker would be more than likely to use house because of equivalent French phrase is maison de retriate and in most contexts house is indeed the translation of maison.

All these substitutions which are made in English for the situations in other languages provide the example of the ways in which a person's mother-tongue is visible his foreign language performance. It follows from these examples that the mother tongue has a limiting effect in the production of the target language forms, which results in the lack of thought patterns in corresponding two

languages. In the pages that follow a larger set of examples of mother-tongue transfer will be given in special reference to the comparison of Turkish and English.

3.1.1.Phonological Mother-Tongue Interference

Phonological mother-tongue interference is the most commonly encountered type of interference in the acquisition of target language. Kenworthy (1988:4) emphasizes the importance of native language in the phonological shaping of a second language and adds that there is to much research comparing the sound system of English with those of other language. The comparisons apply not only to the individual sounds but also to combinations of sounds and features such as rhythm and intonation.

Before attempting to indicate ample evidence of phonological interference it will be well to remember a classic work (Lado, 1957) which is considered to be crux of linguistic comparison not only at the phonological level but also at other levels of language. According to Lado (1957:11) "We have ample evidence that when learning a foreign language we tend to transfer our entire native language system in the process." In his systematic project of comparison which is three-dimensional, first a problem area is detected and then a comparison of a process of articulation is done in both languages to be followed by the solution of problem in the production of target language form. In this last stage a full description of

troublesome contrasts are treated through examples. What is especially striking in his comparative study is the fact that phonology is accounted as an inseparable component of cross-cultural phenomena, which are also valid for morphology, syntax and semantics. Thus it is a set of building blocks of a language which limits the world-view of its speakers.

Kenworthy (1988:11) put, the importance of pronunciation and its relation to linguistic identity as follows:

It is important to remember that the way a person speaks is a sign of their origin. Every language in the world has different varieties and different accents (these may be regional or social class accents). In some languages, there are even different styles of pronunciation for men and women. The way we speak is really a part of our identity. Much the same applies to a foreign accent, to speak English with a foreign accent amounts to a declaration: 'I am not English, I am from somewhere else.

The assumption lying behind the phonological (the same is true for other linguistic levels) interference might be considered a part of another assumption which is more fundamental and extensive: "a language's structuring agency

seems to exert an <u>anaesthetic</u> power which makes it difficult for its speakers to register sounds that do not conform to the <u>contrastive</u> or oppositional patterns of its phonemes" (Hawkes, 1977: 30).

It can accordingly be asserted that it is very difficult for us by the same power to form or utter sounds used phonemically in other languages that do not fit the phonemic structure of our own. It is the silent effectiveness of this <u>anaesthetic</u> power that gives foreign speakers their 'foreignness'.

It is by not any other means that Sapir, and Later the influential B.L.Whorf, made their initial extensions of linguistic structuring into other fields of social behavior and reached the conclusion that the 'shape' of a culture is determined or structured in the some way as that culture's language.

3.1.2.Mother Tongue Interference and Problem Sounds

Starting from the easily stages of his life, the child acquires a phonological system which consists of sounds, intonation and stress as the characteristic features of his mother tongue. The sound /a/ in the phonetic inventory of a Turk is different from /a/ in the phonetic inventory of a Persian. In German the voiced fricative /v/ is pronounced as /f/ which is a voiceless counterpart. However, in English and Turkish /v/ is always voiced with minor production differences, so, a German-

speaking learner ma pronounce to word <u>drive</u> to rhyme with <u>life</u>. The strategy that the learners use could be put something like this: "When I'm not sure what the sound correspondence is in English, I assume it is the same as that in my native language" (Kenworthy, 1988: 98).

The alphabetic system of the language being learned is the cause of another of mother tongue transfer. English, for example, makes use of an alphabetic system. Thus, a learner of English in whose language a non-alphabetic system is employed will have to adjust to alphabetic conventions. Japanese uses a system in which a symbol represents a syllable, not an individual sound. In Arabic orthography, the representation of vowels is variable, that is, they can be represented in the writing system, but may be omitted in certain styles and types of script. Although Turkish and English employ the Roman alphabet, the pronunciation of English does not conform to the written form of sounds. For example, the form/ough/which consists of four letters in English is used to show six distinct sounds:

bough	cough	ought	through	thorough	though
/aw/	/ɔ/	/ɔw/	/uw/	/ow/	/ʌ/

It is obvious that a Turkish Learner of English will substitute for these sounds what he has in his articulatory inventory which is /oğh/, depending upon sound - letter representation. In modern Turkish there is no long vowel, except for borrowed words, as there are in Arabic. The long vowels of Arabic make up a pronunciation problem for

Turkish speakers in the same way that the Turkish speakers in the same way that the Turkish contoids /p/, /tʃ/ and /k/ are alien to the phonetic inventory of Arabic.

There are some sounds which are only found in a few languages; for example, /ɯ/ sound which is very common in Turkish also exists in Russian. As contrasted with this, there are some sounds in Caucasian languages which are hardly ever heard in other languages. These sounds are of considerable phonetic significance and their graphological representation is highly difficult. Of these, "The North Caucasion family includes languages of great phonological interest because of their many consonants and few vowels" (Lehmann, 1962: 44). Nevertheless, the middle-north Caucasion Languages abound in a richly structured vocoid system. In some African Languages Like Bushman, and Hottentot the speech sound are produced ingressively, that is, the air stream goes inward during articulation, which is not very common in most other languages (Demirezen, 1987: 25-26).

Most of the pronunciation problems of Turkish speakers learning English as a second language are due to the fact that the sounds of Turkish have left deep tracks in the minds of Turkish speakers and that they have to learn to act in a different system. The motor mechanisms governing the sound production in these languages present different ways of employing segmentation. The Turkish learner hears the sounds of English in terms of his native language because of the anaesthetic power of his native

system. Since recognition is the first step in learning to produce a foreign sound a faulty recognition will result in a faulty production. It should also be noted in passing that not all the errors result from mother tongue interference and that there are some other factors which are psychological, sociological, emotional and anatomical (for Lenneberg's and Krashen's critical age hypothesis, see Tarone, 1978: 15-34).

3.1.3.Causes of Phonological Mother Tongue Interference

For the purposes of linguistic relativity in foreign language teaching the causes of mother tongue interference as the determinants of phonetic behavior are worth analyzing. Paulston and Bruder (1976: 90-91) give the following causes at the segmental level.

a)Lack of the Sound in the Native System. For most learners of English, the /ð/ in thy and /θ/ in thigh pair is difficult because the sounds are absent from their languages. The learner has to add a new phonemic set. Another difficulty occurs when the native language lacks one of the voiced-voiceless members of a set or one of the vowels of English. The problem then is one of hearing; students simply do not hear the difference between /s/ and /z/ or /i/ and /ɪ/.

b) Allophone in Native is a Phoneme in the Target
Languages.

In Spanish /ð/ is an allophone of /d/ between vowels.
E.g. dedo. When the Spanish student encounters English /ð/
he is surprised and has difficulty producing this sound.
Because allophones do not affect the meaning, they are not
perceived as distinct in the native language.

c) Phonemes with Different Distribution
in the Two Languages

In English /ŋ/ occurs only in syllable final
position. E.G. /sign-singer/. In other languages, it occurs
in syllable initial position as well. Native speakers of
English can hear the sound without difficulty, but
pronouncing /ŋa/ is difficult for them.

d) Phonemes occur in Unfamiliar Combinations

English has a large number of consonant clusters,
both at the beginning and at the ends of syllables
(straight, speak, school, stopped, reached, looked,
glimpsed, etc.), which will cause problems for students in
whose mother tongue these combinations do not occur.

e) Native and Target Languages Have Similar
Phonemes at Different Points of Articulation

French and Spanish /d/ and /t/ are dental, that is,
they are pronounced with the tongue tip against the back of
the teeth. English /t/ and /d/ are alveolar and pronounced

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with the tongue farther back. Although the difference may not be perceived aurally by the learner, it is a factor which contributes to the "foreign accent."

3.1.4. Suprasegmental Phonemes as Determinants of Nativeness

In traditional phonology, suprasegmental phonemes are identified as stress, rhythm, juncture and intonation. They are called suprasegmentals, as Wardhaugh puts it, because they "must always be 'overlaid' on the segmentals since they cannot occur without them" (1977: 69). Stress and pitch differences do result in differences of meaning. For example, in one dialect of Chinese /ma/ with a high, level pitch means "horse". It must, therefore, be admitted that in this dialect of Chinese, pitch is certainly phonemic since there is a minimal pair, just as bit and pit make up a minimal pair in English. Another example can be given from Thai which belongs to Sino-Tibetan linguistic family (Lehmann, 1962: 46-47), and in which there are four phonemic pitch levels: high (Inaa/ uncle or aunt); mid (Inaa/ rice paddy); falling (Inâa/Face); and rising (Inǎa/thick).

In American English the general rhythm differs markedly from that of Spanish and other Romance languages. Certain words receive special weight, others are usually obscured. In general, the heavy stresses of the sentences occur at about equal intervals of time. "If between these

heavy stresses there are many syllables, these syllables are crushed and obscured by the rapid pronunciation necessary to crowd them into the interval of time set by the general tempo of the speech" (Fries, 1945: 23). Conversely when only a few syllables occur between two heavy stressed ones, they receive more time. In Spanish there is approximately the same unit of time between separate syllables, which renders Spanish as a syllable-timed language. In Contrast, English seems to be characterized by larger waves of sound stress, nearly regular in time giving English its stress-timed quality. The following examples help to better illustrate the point.

The doctor's a surgeon.

The doctor's a good surgeon

The doctor's a very good surgeon

The doctor's not a very good surgeon

There is only one primary stress in a sentence that changes according to the new information inserted.

One of the characteristics which makes spoken English very difficult for foreign students to comprehend is this tendency to reduce and run together all unstressed syllables. This fact, which is also a great problem for Turks (because of the syllable-timed phonology of Turkish) should be recognized more clearly by Turkish teachers of English with supplementary teaching aids. For example, "an interval of approximately one second between the strongly

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stressed syllables, marked by a metronome or the regular tapping of a pencil, will provide a satisfactory tempo for demonstrations and exercises." (Fries, 1945: 24).

To sum up what has been said so far, it can be claimed that the segmental and suprasegmental phenomena of a language constitute gross difficulties for learners of non-native origin by limiting their articulatory mechanisms. These segmental and suprasegmental entities are so intrinsically structured in a language that a listener can identify a language on a sensory-motor level and in its musical quality although he cannot distinguish individual words. The articulatory limitations across languages might also be taken as sound evidence for the Whorfian hypothesis that "languages may make some things easier for their speakers to say than other things" (Wardhaugh, 1977: 8).

3.1.5.Problem Sounds For Turkish Learners of English

In order to have a near-native pronunciation of English, Turkish learners should master the phonemic system of English. For this, the learners must learn to adjust to the articulatory mechanism of the sounds they don't have in their mother tongue, Phonemic analysis is a practical technique because it employs contrasting minimal pairs which are very effective for the presentation of new sounds. It is used "both to ensure that the pupil does not simply substitute the nearest mother tongue segment for the one he is acquiring and to enable him to discriminate the

phonemic contrasts of the foreign language when he hears them and to produce them when he speaks" (Wilkins, 1975: 57). For the most part, the Turkish and English phonological systems exhibit a great degree of resemblance. In the areas of controversy, however, additional practice is necessary. The main problem sounds are given below with their probable substitutions:

3.1.5.1.Consonants:

/θ/ and /ð/

These sounds which are not extant in Turkish are produced interdentally in English. /θ/ is voiceless, and /ð/ is voiced. Turkish speakers must probably hear /θ/ as either /t/, /s/ or /f/ and substitute one of these sounds for it in speaking. They are likely to hear /ð/ as /d/, /z/, or /v/ and to substitute one of these sounds for it.

For pedagogical purposes following minimal pairs may be conducted in foreign language class:

/θ/		/ð/	
thin	tin	they	day
three	tree	thy	die
think	tink	those	dose
both	boat	bathe	bade
thank	tank	loathe	load
Think of three trees.		Those are fine doses.	

Give me three tins.   They are thy days.

                           These were the days.

/w/   Being a semi-vowel it "is phonated by both raising the
      dorsum towards   the   volume   with   a   simultaneous
      accompaniment of the   rounding of   lips tightly"
      (Demirezen, 1987: 48). The important point is that
      /w/ exists in Turkish in words like /döv/, /kavun/ and
      /tavuk/. When Turkish speakers substitute /v/ for /w/
      it causes a change in meaning because English /w/ and
      /v/ are distinct phonemes. E.G.; /wine/ /vine/. On the
      other hand, /w/ is an allophone of /v/ in Turkish
      being used in positions after or before rounded
      vowels. English /w/ causes difficulty only in
      positions before or after unrounded vowels where
      Turkish speakers substitute /v/ for it.
Minimal pairs:
      /w/

vine wine   Wine is made from vine.

vein wane   Vest is very common in the West.

vale wale   There are weals in the veal.

stove stow

vest west

veal weal

/ŋ/   The nasal fricative consonant occurs also in Turkish
      as in the words /denk/, /renk/, /engel/, /banka/.
      English /ŋ/ which is never used initially except some

German-oriented words is difficult for the Turkish speakers to recognize and produce. While it is a phoneme in English, it is an allophone of /n/ in Turkish. In Turkish it is distributed before /k/ or /g/ and never occurs in final position. In English-final position it is a great problem for Turkish speakers who add /k/ or /g/ to it. For example, a Turkish speaker has no problem with the English word /sink/ but has difficulty in pronouncing the word /sing/

Minimal pairs:

/ŋ/

think   thing

/ŋk/ sink   sing /ŋ/

kink   king

thank   tang

think there things

The king has kinks

Thanks for the tang

Sing before you sink

/r/ There are three kinds of /r/ sound in English and it is one of the most highly used and problematic sounds. "It becomes a consonant in forms of taps, flaps, and trills, and it becomes a semi-vowel in form of gliding fashion or by forming up a syllable peak in the structure of words" (Demirezen, 1987: 51). According to Sebüktekin (1975: 38) although English /r/ is an

acceptable substitute for Turkish /r/ in all positions, their allophonic ranges do not exhibit much overlapping. Furthermore, Turkish /r/ is a flap in initial position, and a voiceless fricative in final position. In contrast to English /r/, it is always a consonant.

The Turkish student should approximate his articulatory mechanism for the pronunciation of flap /ɾ/ both in word-medial and word-final positions. He should also learn not to add a friction in final position (Some words containing the three types of /r/ in English are given for pronunciation practice below:

latter	write	painter	near
matter	row	planter	where
ladder	center	car	writer
tanner	winner	round	rider

3.1.5.2.Consonant Clusters

Although Turkish has initial and final clusters normally consisting of two consonants their origin in foreign. All initial clusters and most final clusters are found in loan words only. Turkish speakers should learn to pronounce clusters without inserting a vowel between the consonants. Some final Turkish clusters of foreign origin are listed below: (Sebüktekin, 1975: 41).

Cluster	Turkish-form	meaning
/-wk/	zevk	pleasure
/-wç/	zevç	mate
/-sk/	disk	discus
/-ʃk/	meşk	practicing
/-nk/	renk	color
/-rk/	zerk	injection
/-yk/	peyk	satellite
/-lt /	felç	paralysis

Initial clusters in English:

/sp/   as in spend /spend/

/st/   as in step   /step/

/sk/   as in sky   /skay/

/spr/ as in spread /sprĕed/

/str/ as in straight /strĕeyt/

/skr/ as in scrabble /skrĕaebəl/

Final clusters in English

/pt/   as in stepped /stept/

/kt/   as in kicked /kikt/

/čt/   as in fetched /fečt/

/št/   as in fished /fišt/

/bd/   as in robbed /rɔbd/

/gd/   as in begged /begd/

/jd/   as in caged /keyǰd/

/vd/   as in involved /invɔlvd/

/zd/   as in buzzed /bʌzd/

An extreme example of final consonant cluster can be seen in the word g_l_i_m_p_s_e_d_ in which four consonants (-mpst) are clustered without allowing any vocoid to interfere in. Turkish students have limitations in pronouncing these consonants due to the phonotactic constraints of their mother tongue.

3.1.5.3. Vocied-Voiceless Contrast at the End
of a Word

Since vocied stops never occur in word-final position in Turkish, the students should learn to recognize and produce these sounds in English. The following contrasts must be drilled in the classroom:

/p/ as in cap   /k/ as in pick
/b/ as in cab   /g/ as in pig

/t/ as in bet   /č/ as in rich
/d/ as in bed   /ǰ/ as in ridge
some other minimal pairs can be put(in transcription):
/tæp/ /tæb/   /kæč/   /kæ ǰ/
/hæt/ /hæd/   /ma k/ /mag/

3.1.5.4. Vowels

The basic distinction between vowels and consonants

can be expressed in terms of the position of the tongue. Because the production of vowels is assisted by the lips, there is no obstruction in their phonation. Some English vowels causing problems for speakers of Turkish are listed below in comparative fashion:

<u>Diphthong</u>   <u>Monophthong</u>

/iy/   and   /i/

These two vowels are phonemes in English, as in the minimal pair <u>leave</u> /liyv/: <u>live</u> /liv/. The main difference between them is tongue height: /iy/ is higher than /i/; in other words, the mouth is more open in /i/ than in /iy/.

The vowels in the Turkish words <u>iyi</u> and <u>din</u> are similar to /iy/ and /i/ respectively. However, these vowels are allophones in that they do not make a change is meaning when one is used in place of the other. Therefore, Turkish speakers have difficulty in recognizing and producing English /iy/ and /i/. In segmenting the stream of speech they tend to transfer Turkish /i/ in place of these vowels. To overcome this transfer the following minimal pairs should be practiced by the teacher:

/iy/	/i/
beat	bit
seat	sit
heat	hit
leave	live

read   rid

In English /i/ and /iy/ sound are distributed in the words in which the idea of smallness or slightness is somewhat obvious: wee, peep, squeak, seep, bit, jiffy, clink, tipple, giggle, dwindle, whimper, chink. (Stageberg, 1981: 111).

/uw/ and /u/

These two vowels, are in contrast in English as in the minimal pair pool /puwl/: pull /pul/. /uw/ is a retracting diphthong "which is formed by any of the simple vowels plus /w/ for the production of which the tongue moves both upwards and backwards "(Demirezen, 1987: 75). By the addition of /w/ a bilabial articulation is created, which backs the preceding vowel. The main difference between /uw/ and /u/ is height: the mouth is more open in /u/ than in /u w/.,

Similar vowels to these occur in Turkish. For instance, the vowel in the words /tuğ, buğ, kuğu, and çuval) is similar to /uw/, and the one in the words /put, kul, and pul/ is similar to /u/. In Turkish phonology, these vowels are not in contrast. Accordingly, the problem of Turkish student is that he is likely to substitute Turkish /u/ for /uw/ and /u/. Following minimal pairs are advisable to annihilate this negative transfer:

/uw/	/u/
luke	look
pool	pull
fool	full
food	foot

/ow/ and /ɔ/

These vowels are also in contrastive distribution, resulting in two different phonemes in English. The phonemic structure is illustrated in the minimal pair low /low/: law /lɔ/.

The main difference between them is that the mouth is more open in /ɔ/ than in /ow/. The vowels in the Turkish words /boğ/ and /kol/ are similar to /ow/ and /ɔ/ respectively. These vowels do not make a meaning change in Turkish since they are the allophones of one phoneme: /o/. Turkish speakers are likely to transfer Turkish /o/ in places of English /ow/ and /ɔ/. The minimal pairs to be practiced are listed below:

/ow/	/ɔ/
coat	caught
coal	call
row	raw
cold	called
sew	saw
rote	rot

/əɹ/ This sound is a centering diphthong in English in the pronunciation of which the tongue curves backwards. It is mostly retroflexed in American English and is encountered in words worm /wəɹm/, bird /bəɹd/ and heard /həɹd/. The most important characteristic of /əɹ/ is that it is one sound consisting of the syllabic vowel /ə/ and the glide /r/ which is phonemically represented as /ɹ/.

Turkish speakers often substitute the /ör/ in gör for /əɹ/. In Turkish /ör/ is a sequence of /ö/ and /r/, and therefore, is phonetically different from /əɹ/. Moreover, in British English final /r/ is always silent except when it is followed by vowels in junctural combinations constituting additional problem for Turkish learners of English.

Sample words:

hurt   /həɹt/

bird   /bəɹd/

curled   /kəɹld/

hurry   /həɹi/

fur   /fəɹ/

worship   /wəɹsip/

heard   /həɹd/

sir   /səɹ/

3.1.6. English Suprasegmentals Causing Problems for Turkish Learners.

3.1.6.1. Word Level

Suprasegmental phonemes of English are very different from those of Turkish and Turkish students very often transfer their native suprasegmentals into the target language. In a continuous stream of speech some syllables are more stressed than others. Since not all the syllables get equal stress, the employment of it follows some rules which identify the speaker as native or non-native. For example, the capitalized syllables in the following words get the primary stress in Turkish:

Form	meaning
ANkara	a place name
Alçacık	very low
Küçücük	very small
günLERce	for days
giDErek	by going
karıŞIK	mixed
yaklaŞIK	approximately
bileŞIM	amalgam

In English the place of stress is more determined than it is in Turkish. These are four stress patterns on the lexical level in English:

The change of stress in English results in a change of
word class, which is very common:

Noun	Verb
súbjĕct	sŭbjéct
cóndŭct	cŏndúct
ínsŭlt	ĭnsúlt
récŏrd	rĕcórd

Although the same phonological change is employed in
Turkish, it is not as common as English:

BEbek	a place name
beBEK	baby
TAKsim	a place name
takSIM	division
ORdu	a place name
orDU	army

Thus, it can be asserted that Turkish learners don't
change the lexical stress since Turkish is more rigid in
reference to stress. The result is that there occurs a
change in the stress pattern at lexical level.

Since Turkish is a syllable-timed language (so are the
languages of Ural-Altaic family which employ vowel harmony)
the relative degree of stress is not in accordance with the
length of lexical items. It is generally acknowledged that
either the last syllable or the one before the last
unstressed affix is stressed in Turkish. The following

examples contain Turkish and English stress patterns contrasted:

Form	Meaning
anlaSAna	please understand
yürüSEne	please walk
koŞArak	by running
dinleYErek	by listening
alaCAKsınız	you should take it
bitireCEKsiniz	you should finish it
olMUŞcasına	as if it had been fulfilled
DURmamacasına	without ceasing
BENcileyin	like me
SENcileyin	like you

As contrasted with Turkish, a tertiary stress may be present in English words of more than two syllables. This can be numerically illustrated as follows:

engineer/en.gine.er

3 4 1

un.der.sand   work.man.ship

3 4 1   1   4   3

de.sig.na.tion   cen.tra.li.za.tion

2 4 1 3   2 4 3 1 4

Turkish students tend to carry over the stress patterns (there are basically two stress patterns in Turkish: primary and weak) of their mother tongue into

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English, which is a sign of their nativeness. They should also learn to place secondary and tertiary stresses on the words of English.

The following mispronunciations have been collected at the ELT department Gazi University:

Situation 1: the word _written_ was pronounced with the stress on the second syllable instead of the first It sounded like _retain_.

Situation 2: the word "comfortable" was pronounced with the stress on _com_ and on _ta_, leaving the listener with the impression that it was "come for a table."

Situation 3: "productivity" which has the stress pattern with primary stress on _tiv_, was pronounced with a stress on _duc_, and one one _ty_ /prə d ʌ ktiviti/. This was heard as "productive tea" and caused confusion. In Phonetics and Spoken English courses at English department many similar cases of misunderstanding are encountered, which indicates the fact that "the listener is paying as much attention to stress pattern as to the individual sounds" (Kenworthy, 1988: 19).

Some other examples of mistakes made at the English department can be listed as follows:

(Stressed syllables are capitalized)

Correct	wrong
TElevision	teleVIsion
toNIGHT	Tonight
transLATE	TRANSlate

```
PERfect        perFECT

cigaRETTE      CIgarette

howEver        HOWever

JApaNESE       JApenese
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3.1.6.2.Sentence Level

The interference from the mother tongue had better be handled on the compounding level at which the stress is placed on the rightest element of the compound patterns. In English, this is called the Nuclear Stress Rule which governs the placement of stress on the focal element, that is, the last element from the right.

E.g; a Yellow bird

a terrible headache.

In Turkish, however, the compound elements are stressed in two ways: a) If there is no situational suffix in the modifier, the stress is placed on the modifier:

Turkish form	meaning
güZEL günler	nice days
orTAK yapim	collective production
haVA durumu	weather forecast
geCİŞ ücreti	transition fee
SözCüK anlamı	word meaning

If there is a situational suffix in the modifier, the stress is placed on both modified and the modifer:

Turkish form	meaning
babaMIN İŞİ	My father's work
sözcüGÜN anlaMI	the meaning of the word
BoğaZIN güzelliği	the beauty of the Bosphorus
romaNI OKU	read the novel
resmiNI YAP	paint its picture

In Turkish, compoundings may be quite long when they are used in noun positions, which constitutes another problem for Turkish learners:

Form	meaning
eğiTIM sorunları	The problems of education
ortaöğretim,eğiTIM sorunları	the problems of secondary education.
en önemli ortaöğretim, eğiTIM sorunları	the most important problems of lems of secondary education.

It is obvious from the above examples that where Turkish employs compounding, English prefers possessive structure introduced by "of" and this structure should also be internalized by the Turkish students other examples of compounding stress in English and Turkish are listed below in contrastive fashion:

English	Turkish
a FRENCH TEAcher	Fransız öğretmen
a FRENCH teacher	Fransızca öğretmeni

ăn Irôn Cúrtain	Demirden perde
The Íron cûrtain	Demirperde
ă BLÁCK BÓX	Kara bir kutu
ă BLÁCK-bôx	Kara kutu (in the craft)
ă GRĔEN HÓUSE	Yeşil ev
ă GRĔEN-hŏuse	Limonluk, Sera

In such simple compounds, the Turkish student tends to emphasize the first element, that is, the modifier, due to the transfer from his mother tongue and fails to distinguish the meanings of these pairs.

In the case of complete sentence, it has for long been accepted that there is only one element which takes the primary stress. In case any other element gets the primary stress, it is regarded as contrastive and this is valid for both English and Turkish. "In an English sentence, the normal stress pattern falls on the last element of the sentence" (Demircan, 1980: 82). However, the fact that structure words tend to be unstressed in English should be recognized by the Turkish learner. This is "due to the maintenance of rhythm and superimposition of intonation patterns" (Demirezen, 1986: 111). Another reason of this is the articulatory supression which is done in order to keep pace with the amount of time between stressed syllables.

E.g: The book has been printed for the first TIME. According to the focus of interest, different elements can be stressed:

The book has been PRINted for the first time.

The BOOK has been printed for the first time.

It follows from these examples that the word order does not change as the place of stress changes.

In Turkish whose word-order is not very strict either the verb or the word preceding the verb takes the primary stress:

Babam BORÇ ödedi   "My father paid for debt"

1.......BORÇ...................

2.....bam.....................

3...Ba...........ö...de...di..

In the sentence

Bugün babam borcunu ödedi.   "My father paid for his
                               dept today."

the place of stress changes since the word borcunu is modified here.

Although Turkish employs "contrastive stress", there are problems for Turkish learners in the acquisition of English" contrastive stress" due to the lack of syntactic correspondence:

English	Turkish
The school closed for THREE days.	Okul ÜÇ gün kapandı.
The school CLOSED for three days.	Okul kapanDI üç gün.
The SCHOOL closed for three days.	OKUL kapandı üç gün.

What the Turkish student does is to transfer the stress patterns of his native language to English, which is an obvious indicator of the limitations of mother tongue. To prevent this, care should be taken by the language teacher who had better bring in necessary equipments and

pronunciation materials with   additional   supplementary
practice.

In conclusion, there is a clear-cut contrast between
English and Turkish   phonological   inventories.   The
significance of this, in terms of Sapir-Whorf hypothesis,
is that Turkish   employs syllable-timed   properties   as
different from English   which   employes   stress-time
properties. This distinction brings in serious learning
problems.

3.1.7.Phonesthematic Approach to Linguistic Relativity

In spite of the fact that speech sounds have no
meaning in isolation and became meaningful when they are in
contrastive distribution in a phonemic environment, these
has been a tendency to attribute meaning to distinct speech
sounds since the time of Ancient Greeks.

Indeed, it   was   Heraklietos,   a   pantheist Greek
philosopher, who first associated a speech sound with a
distinct concept. According to him everything in the world,
including God himself, was in a continuous state of flux
which was reflected in the names objects are given. To give
a simple definition it can be said that "phonesthomes are
speech sounds that in themselves express, elicit, or
suggest meaning" (Stageberg, 1981: 111).   If   something
unceasingly flows it is also in a state of change which is
never settled. The idea of continuous change led. Greek
philosophers to look for a connection between the form and

meaning of a word. For example, Plato said that most of the words had been etymologically derived from one root word which was either fliessen "flow" (in Greek "rhein), or gehen "go" (in Greek "ienai). These verbs suggest the meaning of "movement" which is the essence of existing things. Thus, language in its phonetic aspect "can be regarded as a phenomenon which reveals the essence of objects" (Selen, 1967: 117). Some other words in which these is some kind of sound-meaning correspondence can be given as follows: the sound /r/ is associated with the idea of automation in the words rhein "to flow", rhoe "stream" and tromos "trembling".

The reduced vowel /ə/ is seen in words in which there seems to be an idea of "undesirableness." A few examples can be given: muck, gank, dump, slum, glum, etc.

Some consonant clusters at the beginnings of words seem to have phonesthematic value. Here are a few examples:

/gl/:light (glow, glare, glint, gleam, glisten)

/fl/:moving light (flame, flash, flare, flambeau)

/sp/:point (spire, spark, spot, spout, spade)

/sl/:movement (slide, slink, slosh, slither, slouch, slump)

One objection to the sound-meaning correlation comes from the universalists who assert that every spoken language in the world makes use of such speech sounds in certain environments and they are mostly employed at random. However, the idea of sound symbolism goes back to the linguists such as Heinz Werner and Paul Hankamer and to

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philosophers including Herder, Hamann and W.v.Humboldt who were the forerunners of linguistic relativity.

On the other hand, there is a strong connection between phonesthemes and iconic words in that both groups indicate sound meaning correspondence. Iconic words are different from the phonesthemes in that they tend to be direct representations of natural sounds in the external world while phonesthemes are constructed by dint of analogy within the phonemic system of natural languages.

In conclusion, it would be reasonable to ascribe phonesthemes to the fact that although same sounds tend to recur in different languages, their perceptual function is different encoded in language-specific phonotactic rules (Demirezen, 1986: 146). They are perceived in their language-specific phonotactic rules in most, if not all, of the environments and like most of the iconic words they reflect the concrete world as filtered through the cognitive map of the speakers of languages. Moreover, the flourishing of certain sound segments in some languages takes us to the phonologically-constructed world-views of their speakers.

The contrasting units of sounds impede language teaching process because the phonological inventory of the mother tongue limits the learner in articulating the sound segments of the target language. The phonological contrasts between, L_1 and L_2, then, form a pragmatic area where the Sapir-Whorf hypothesis comes to the stage troubling the learning process.

3.1.8.Morphological Mother Tongue Interference

Before attempting to compare English and Turkish at the morphemic level it would be appropriate to point out some general characteristics of these languages. Turkish is a typical example of the languages that are agglutinative in technique and synthetic in structure. "Long strings containing sometimes more than twenty derivational and inflectional suffixes may occur in Turkish" (Sebüktekin, 1974: 87) because suffixation is practically the sole morphological process. The following adverbial illustrates the suffixation in Turkish:

<u>Turkish</u>

öl-üm-süz-leş-tir-e-
me-dik-ler-i-miz-den-
sin-iz.

<u>English</u>

You are from the ones whom we have not been able to get immortalized.

In this example, the Turkish word contains fourteen suffixes which can only be marked syntactically and subordinatively in English. This process is known as "circumlocution" (Hoijer, 1976: 152) and displays serious limitations in mastering the syntactic structure of the target language. Thus, it is grammatically acknowledged that a morphological analysis of Turkish is likely to correspond with some syntactic analysis in English.

Phonologically conditioned allomorphs are extensively employed in both languages, but morpheme alternation which

is determined under morphemic conditions is more frequent
in English, which causes problems for Turkish learners.

E.g.   <u>English</u>   <u>Turkish</u>

        houses   ev<u>ler</u>

        schools   okul<u>lar</u>

        streets   sokak<u>lar</u>

        books   kitap<u>lar</u>

        labels   etiket<u>ler</u>

        oxen   öküz<u>ler</u>

        mice   fare<u>ler</u>

        Morphemic formula:

        | Mother tongue =|==> Noun+/-ler/-/-lar/> | Target language |

        ===>/-s/-/-an/+replacive allomorp [maws]>[mays]

        ===>/-aw/>/-ay/.

        In the last two examples (oxen and mice), the Turkish
student tends to transfer his regular plurality morpheme
(-ler) into English without perceiving inherent restriction
of the morphologically conditioned allomorph in the target
language inventory. In this case, the Turkish learner in
whose language suffixes are attached to the base according
to the assimilative process of vowel harmony, must form
structurally different suffixes.   After   this   general
introduction, some areas of controversy can be handled with
regard to mother tongue interference.

3.1.8.1.Suffixation in English and Turkish

By the very structure of Turkish language, suffixation is a highly productive morphological process. As a parallel component of creative thought, suffixes can be constructed from left to right in the stream of speech. However, it is a general tendency of human language that thought is organized (at least in languages that go from left to right) in an horizontal rather than vertical dimension. In Arabic, the case is reverse and in Chinese sentences and words are written vertically.

Turkish suffixation system covers a wide range of morphological processes which falls into the syntactic domain in English.

E.g.   Turkish   English
        gel   come
        gel-ir   He comes
        gel-ir-di   He used to come
        gel-diy-di   He came /had come.
        gel-mek-te   He has been coming.

In such instances, the problem of Turkish learner is that where he uses a single word (made up of numerous suffixes) in his native system he has to construct a sentence with necessary tense markers and auxiliaries in the foreign system. This case, which has a delimitative function in the learning process, has been taken by some

linguists to be an advantage that leads up to ease of articulation. In most cases, Turkish and English suffixes are regularly structured in linear order:

Turkish form	English form
ölür-ce-si-ne	in a dying fashion
erkek-çe-si-ne	in a manly fashion
iyi-y-miş	He was reportedly well
düş-ün-ce-siz-lik	un-thouht-full-ness

In these examples, only the last word conforms to the Turkish way of derivation except negative prefix /-un/ which is in many cases the correspondent of Turkish negative morpheme /-siz<sız/ "without". Apart from these examples, "Turkish reflexive and derivative suffix and a variant of the passive derivative suffixes are homophonous" (Sebüktekin, 1971: 24) which is the cause of negative transfer from Turkish into English:

Turkish	English
Yıkandı	He washed himself
Yıkandı	he was washed

3.1.8.2. Suppletion in English and Mother Tongue Limitation

In English, suppletion occurs in various adjective and verb paradigms. It can be defined as on internal change

in one of the forms of a paradigm, which is seen in the following examples:

go-goes-going-went-gone

In this example, it is only the past tense form which doesn't seem to fit the general paradigm. The suppletive change can be simply illustrated by the following formula (Stageberg, 1981: 143).

/went/=/go>wen/+/t/.

In the above formula, the separate representation of /t/ is formal rather than semantic because it "may only occur as a morphophonemic variant of the past tense morpheme after voiceless consonants" (Sebüktekin, 1971: 27).

Now, let's look at the following paradigm:

be am/is/are being was/were been

It is obvious that all the forms except be are suppletive because each of them is morphologically different. For Turkish learners of English, suppletive allomorphs have been problematic at the elementary stages of learning due to the fact that Turkish language lacks these categories. Moreover, the past Tense morpheme is always regular in Turkish which is morphologically represented as /-d/ or /-t/+/i<ü<ı<u/ depending on the phonological conditioning.

E.g. <u>Turkish</u>   <u>English</u>

gel+di   He came

gör+dü   He saw

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git+ti              He went

tut+tu              He held
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Thus, the degree of interference is at the allomorphic level of past tense forms in English. However, this type of interference is intralingual rather than interlingual because the learner makes overgeneralizations in the intrinsic system of the target language. Instead of "he came" he says "he comed" and instead of "he saw" he says "he seed."

3.1.8.3.The Comparison of English and Turkish Parts of Speech.

The classification of the parts of speech can be traced back to the time of Ancient Greece and India. The conceptions introduced by Aristotle and Dionysios Thrace are known as the parts of speech in traditional grammar and they have been employed with minor changes in modern linguistics. However, the traditional classification was based on semantic criterion the function of which has emerged differently in different languages.

As contrasted with traditional descriptions, English and Turkish parts of speech display extensive divergences when evaluated on formal criteria. From the point of view of semantic criteria the differences are not very significant due to the fact that Turkish grammatical system was borrowed to a large scale from Greek and Latin

grammatical systems, which causes serious problems in language learning pedagogy. For practical purposes two kinds of classification can be maintained at the formal level:

a) Morphological classes

b) Non-morphological classes

Morphological classes contain inflectional endings of verbs and nouns. For example, a noun is defined as a word which may take either or both of plural and genitive endings fitting in the inflectional series boy, boys, boys', or man, men, man's, men's. A verb is a word that fits the inflectional series play, plays, played, playing.

Non-morphological classes contain such traditional subclasses as numerals, interjections, and the three kinds of question words in Turkish (nominal, adjectival, and adverbial).

Examples:

boy:noun
                 nominal
chaos: nominal

nice.:adjective
                 adjectival
beautiful:adjectival

quickly:adverb
                 adverbial
fast:adverbial
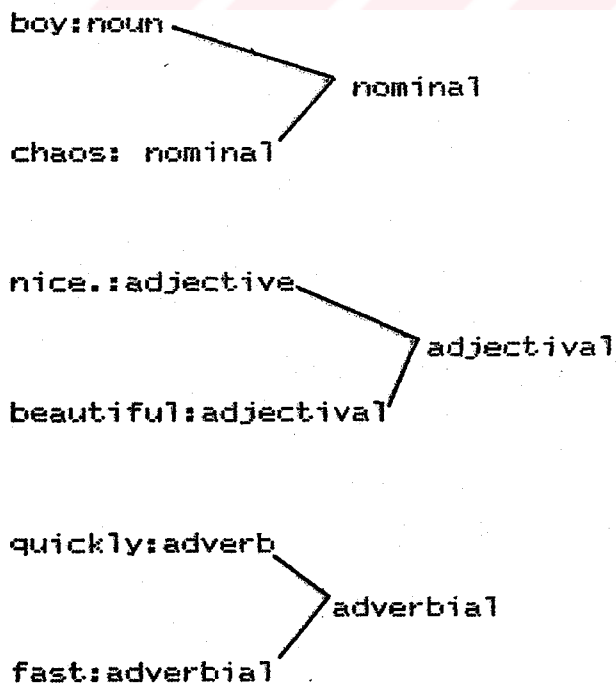
This type of word level overlapping does not occur in Turkish because parts of speech are marked off from one another sharply by alternative use of the same dual criteria. Whereas English inflections, adverbs, and derivational suffixes do not mask all members of syntactic classes, Turkish inflectional suffixes are quite consistent and culminative in marking the parts of speech. For example, all verbs are inflectable with -di. All nominals are followed or can be followed regularly by possessive and personal suffixes.

Nouns

In English, nouns are inflected only in the plural and genitive case.

E.g. book/books/book's/books'

The corresponding Turkish nouns and pronouns have inflections of a much greater variety and range (including dative, locative, ablative, genitive, and accusative)

E.g. ev   "home"

ev-in   "house's"

ev-de   "in the house"

eve   "to the house"

ev-den   "From the house"

As can be seen, Turkish nominative case has a syntactic function in English.

Adjective

Comparative and superlative forms of adjectives which are formed by "-er" and "-est" suffixes in English do not have corresponding structures in Turkish. Instead, two intensifiers "-daha" and "en" (more-most) are used.

E.g.

Turkish	English
soğuk	cold
daha soğuk	colder
en soğuk	coldest

The problem of the Turkish learner lies in the fact that certain adjectives may appear in nominal positions in English but only after the determiner "the". This is another way of pluralizing in English for which the Turkish student tends to substitute the forms "riches". For instance, instead of the English sentence "The rich can afford it", the Turkish student says "riches can afford it".

Adverbs

English	Turkish
beautifully	güzel-ce
slowly	yavaş-ca
smoothly	düzgün-ce
carefully	dikatlice

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It is evident from the above examples that English adverbial suffix-ly corresponds to the Turkish suffix -ce, -ca, -çe, ... etc., which is phonologically conditioned. In the case of adverbials, the Turkish student has only to learn the English suffix {-ly} which is morphologically regular, and the equivalent of Turkish {-ce}, {-ca}.

The problem with the adverbials stems from the fact that in Turkish there is another way of adverb formation through reduplicative compounding as can be seen in the following examples:

Turkish	English
kapı kapı	door to door
adam adam	man to man
ülke ülke	country to country
güzel güzel	nicely
hızlı hızlı	quickly
kibar kibar	politely

Turkish student tends to transfer the structural habit of his double compounds into the target language without adding the preposition {-to} or suffix {-ly}, which results in the wrong structure "door door", "quick quick" etc.

Pronouns

English pronouns have distinct subject, object and two possessive forms.

Example;

subjective	objective	1st possessive	2nd possessive
I "ben"	me "beni"	my "benim"	mine "benim-ki"

Turkish pronouns have same morphological forms with the addition of suffixes -im -i -ki. This diversification of English pronouns creates several problems for Turkish learners in the choice of appropriate pronouns. For example, instead of "It is my pencil" he says "It is mine pencil".

However, the most striking difference between English and Turkish pronouns is the distinction of gender in the 3rd person singular pronouns of English. The pronouns "He, she, and It" have only one corresponding morpheme in Turkish which is /-o/. This monomorphemic 3rd person singular pronoun of Turkish interferes with the English pronouns in their subjective, objective and possessive cases. This interference is seen even in the advanced speech of adult learners:

The Turkish sentence;

Adam şapkasını masanın üstüne koydu.

is mistakenly transfered into English as

"The man put her hat on the table"

Verb

English verbs are inflected for present and past tenses, e.g., learn-s, learn-ed. Turkish verbs, on the

other hand, have different inflectional endings marking past and conditional tenses, e.g., git-ti" he (she, it) went", git-se "if he (she, it) goes". In English, the (-s) suffix marks the present tense and 3rd person singular "which is the exception in the indicative mood" of the English verb (Aarts and Aarts, 1982: 75). In Turkish there is no difference in the corresponding structure. Thus, the Turkish learner tends to transfer his native structure into English, not pronouncing the (-s) suffix in the indicative mood. E.g., instead of "he goes" he says "he go".

In Subjunctive and Imperative moods there seem to be no great differences between English and Turkish. In fact, the concept of mood is a fairly flexible category in Turkish and it would be more functional to study it in the area of text grammar (Kocaman, 1983).

Example

Turkish	English
Çocuk gel-se	I wish the child came
Çocuk gelsey-di	I wish the child had come
Çocuk gelecek	The child will come
(kendisi gelmeyi kabul etti)	(He himself accepted to come)
Çocuk gelmeli	The child must come
(ben öyle istiyorum)	(I want this)
Çocuk gelmeyebilir	The child may not come
(istemezse gelmez)	(If he doesn't want to come he may not came)

(Kocaman, 1983: 84)

In order to fully understand the nature of model interference the analysis the analysis of structural suffixes like (-se) and (-meli) is not enough because the form (-meli) can be translated into English by means of different modals (should, must, have to) depending on non-linguistic environment.

Determiners

In contrast to Turkish determiner bir "one" English makes use of three determiners which are traditionally called "articles". They are a, an and the. Of these the can sometimes be associated with the Turkish suffix (-ı) in the construction "Adam-ı gördüm" "I saw the man". In Turkish bir is often omitted as a pre-determiner:

E.g.

Dilbilimine Giriş	"An Introduction to Linguistics"
İnsan avcısı	"The man hunter"
İnsanın el emeği	"The handcraft of man"
Bana (bir) sigara ver	"Give me a cigarette"
Kalem gördün mü?	"Did you see a pencil?"
Kalem-i gördün mü?	"Did you see the pencil?"
Bana (bir) kaset ver	"Did me a cassette".

In the light of above examples, the mother tongue interference can be explained as follows: The Turkish learner who has only one category in his native language generalizes it to meet the three different forms: a, an, the. The second assumption is that he totally ignores articles in his target language discourse due to the fact

that the corresponding category is often empty in his mother tongue. Thus, instead of "give me a book" he says "give me book" he says "give me book" and instead of "kitabı gördüm" he either says "I saw book" or "I saw a book."

An additional problem of Turkish learner is the phonologically-conditioned environment of the indefinite article an, a category he lacks in his mother tongue.

E.g. Instead of "an hour later" he says "a hour later". Instead of "give me an orange" he says "give me a orange". In such cases the language teacher must be very careful by giving examples and explaining the grammatical slots of the so-called articles.

Prepositions

Turkish learners' difficulty with English prepositions is more resistent to correction because most of the prepositions in English one post-positioned in Turkish.

E.g. <u>Turkish</u>   <u>English</u>

    ev-de   in the house

    pazar-da   in the market

    çatıda   in the roof

    other post-positions contrasted:

Turkish	English
kitap için	for the book
siz-den sonra	after you
adam-ın hakkında	about the man
duvar boyunca	along the wall

It should be noted that "English prepositions correspond to a large variety of Turkish forms (Sebuktekin, 1971: 46) and they must be learned separately in contextual situations. What is important for linguistic determinism is the fact that Turkish language has a delimiting force on its speakers who are learning English as a second language.

3.1.9.Syntactic Mother Tongue Interference

Before attempting to pin down the mother-tongue factor in Turkish student's acquisition of English as a second language it seems tenable to point out some linguistic facts about typological classification of these languages.

According to the typological classification "languages may be analytic (isolating or roof) languages (Chinese, with no inflection" is the generally used example), or they may be synthetic, inflectional, like Latin and Greek." (Lehmann, 1962: 51). Between these two general classes there is a transitional class called agglutinative or affixing. Turkish and Swahili are two examples for agglutinating languages in which bases and

suffixes are distinctly separable from each other.

Now, let's illustrate the case by means of an example!

	Turkish	Latin
Nom.	su	aqua
Gen.	sunun	aquae
Acc.	suyu	aquam
Abl.	sudan	aquā

(Lehmann, 1962: 52)

These examples tell us that Turkish has a transparant morphology.

Although the Turkish endings can be clearly separated from the stem, in Latin the ending of the genitive and that of the ablative forms can only be determined by historical methods. The importance of a typological classification is that it is based on the grammatical-semantic criteria (which was later to be challenged by B.L. Whorf in his analysis of Hopi Grammar).

To illustrate this let's consider the situation of a man approaching:

An Approaching Man

actor   action
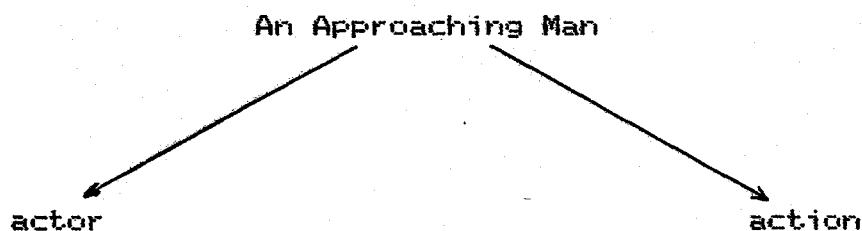
In reporting this situation, a Chinese speaker

matches each component with a word: t'a¹ 'he¹ Lai² 'come'. A Turkish speaker would use only one word: geliyor combining the two situational elements. An English speaker would use three, he is coming, introducing more words than these are components in the situation. It is only Chinese which displays a one to one correspondence between the situation and verbal representation.

Typological classification leads us to the famous assumption of Weisgerber who proposed that languages verbalize an exterior fact as different interior structures. Indeed, it can be asserted that languages gain their ideatities by representing a common deep structure as diverse surface structures, that is, they are relative to each other from the point of view of their intrinsic structures.

Returning to the above example, a few remarks are worth making with respect to Turkish. As a typical example of agglutinating languages it allows a long syntactic structure to be represented in a morphological entity.

E.g.   Turkish   English

        ol-duk   We have been

        gör-dük   We have seen/We saw

        koş-a-ma-mak   The state of not being able to run

        oku-ya-ma-mak   The state of not being able to
                             read.

        gel-e-me-mek   The state of not being able to
                             come.

```
bul-dur-acak        He   will   make   her   find   it.

ac-tır-acak         She will make him open it.
```

Without going into extreme examples, this economic representation in the structure of Turkish can be regarded as a sign of _easier expressability_, which also conforms to the principle of least effort (the French linguist Martinet also defended the principle of economy in language).

For language teaching pedagogy, the case presents several problems in that the cognitive map of the learner which is accustomed to such morphological units will have difficulty in adjusting to the syntactically-oriented system of English.

3.1.9.1.English and Turkish Relative
Clauses Contrasted

The subordination of a relative clause to the main clause has always been a concern for modern linguistics. In contrast to the case that subordinate clauses are attached to the main clause by an appropriate relative pronoun in many languages, the subordinating function is realized "by a gerund or participle in the languages of Ural-Altaic family" (Aksan, 1980: 126; 1978: 84-85).

To illustrate this, let's analyze the structure of a relative clause in some of the Indo-European and Ural-Altaic languages (Aksan, 1978: 84-85):

Turkish:

"Yolda yürüyen adamı gördüm."

Mongol:

"Cam-tur yabu-hçi kümün-i üce-bey."

However, the same sentence can be restructured in some Indo-European languages as follows:

French:

"J'ai vu l'homme qui marche dans la rue."

Italian:

"Io ho visto I'uomo che cammina per le strada."

English:

"I have seen the man who is walking in the street."

German :

"Ich habe den Mann gesehen, der auf der StraBe
   lauft."

It is only in Turkish and Mongol that the subordination is realized by means of participial morphemes (-yen) and -yabu-hçi. In Western languages (including Persian due to its typological affinity) one of the relative pronouns (in the case of English who, whose, whom, which and that)" are used to introduce relative clauses, that is clauses normally functioning as postmodifiers in the structure of the noun phrase" (Aarts and Aarts, 1982: 52). This feature conditions the speakers of Western languages to develop a synthetic thinking in which

syntactically distinct clauses are linked together to form

a holistic world-view. Synthetic structure at lexical level

is a common grammatical trait of German which can only be

expressled by circumlocution in Turkish:

German Form	Turkish Form	English Form
Schreibtish	Yazı masası	Office table
Tischlampe	Masa lambası	Table lamp
Einstellplatz	motorlu araç	parking lot
Vortragen	konuşma yapmak	to deliver speech

This leads us to the idea that German determines a world-view in which sequential and longer syntactic elements are telescoped to imply a more synthetic perception of cosmos.

3.1.9.2.Mother Tongue Interference

Mother tongue interference can be systematically explained in the following formula:

Mother tongue	Surface structure ⇓ Deep structure	Surface structure ⇑ Deep structure	Other tongue
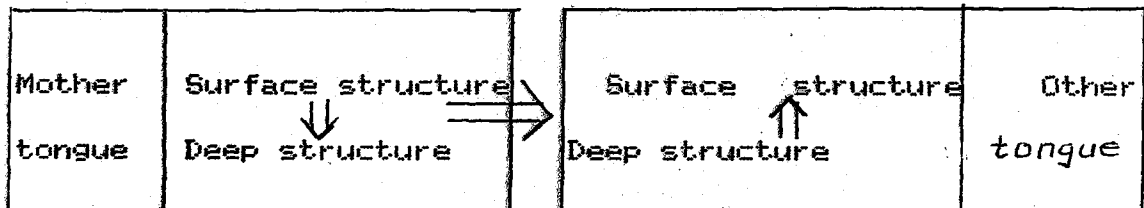
The following examples of mother tongue interference have been elicited from student sheets at the ELT

department of Gazi University of Education:

A.Syntagmatic Mistakes:

English Sentence	Turkish Interference
He reads books(SVO)	(SOV)He book read
He carries milk(SVO)	(SOV)He milk carry
They come here(SVA)	(SAV)They here come
I like my brother(SVDO)	(SDOV)I my brother like
My dear teacher(DN)	(ND)Dear my teacher
I drink tea at breakfast	I tea drink at breakfast

word order

We go to the cinema   We to the cinema go.

B.Tense Category Mistakes:

Both in English and Turkish, generally two tenses are distinguished: the present and the past. All the other compound tenses are either deriveable from the general patterns or conform to them in terms of denotation. Leech (1978: 51) states that "there are a number of ways of expressing future time in English; the most important of them are:

will/shall + infinitive:

The parcel will arrive tomorrow.

Be going to + infinitive:

The parcel is going to arrive tomorrow.

<u>Present Progressive:</u>

The parcel is arriving tomorrow.

<u>Simple Present:</u>

The parcel arrives tomorrow.

<u>will/shall ± Progressive Infinitive:</u>

The parcel will be arriving tomorrow

In these examples it is the "finite verbal forms which are morphologically marked for the category of tense" (Aarts and Arts, 1982: 74) which also account for the Turkish sentence" Paket yarın gele<u>cek</u> (The parcel WILL arrive tomorrow).

It should, however, be noted that each verb form in the above sentences has its particular nuance of meaning and far from being generally interchangeable.

As contrasted with English, the concept of tense in modern Turkish is not so rigid which "proves the futility of superimposing a preconceived scheme of grammar of a certain language upon a different language" (Başkan, 1968: 8).

Now, let's shed light on the meaning-structure opposition in Turkish with respect to the expression of Future Simple:

<u>Future Simple</u>

(As expressed in other four tenses)

Past dubitative

Yarın canına oku+muştum a herifin.

Tomorrow I'll give him a tough time.

Future Simple

<u>oku</u>   + <u>yacak</u> + <u>ım</u>

to read   future   1st person

Past definite

Desene gelecek sene imtihanlarda yan-dı-m.

So I shall have a rough time in te exams next year.

<u>yan</u>   + <u>acak</u>   + <u>ım</u>

to burn   future   1st person

Present Simple

Artık geç oldu: kitabı yarın bitir+ir+im

Too late now; I shall finish the book tomorrow

<u>bitir</u>   + <u>ecek</u>   + <u>im</u>

to finish   future   1st person

Present Continuous

Gelecet hafta bir iş için Ankara'ya gid+iyor+um

Next week, I shall go to Ankara for a business affair

<u>gid</u> + <u>ecek</u> + <u>im</u>

to go   future   1st person

It is also obvious from the above example that aspect plays an important part in the Turkish examples (okumuşum, yandım, etc.), which causes great problems in translation from Turkish into English.

The Present Perfect and Present Perfect Continuous Tenses in English are the two categories in which Turkish student has a lot of difficulty. In translation and composition courses it is possible to see the areas of interference because Turkish lacks these categories in its tense system. Following examples have been collected from the test sheets of students:

Turkish Sentence

1) Yirmi yıldır Ankara'da oturuyoruz.

2) Kız yirmi dakikadır erkek arkadaşını bekliyor.

3) Dört yıl buralardan ayrı kaldım.

4) Tanıştığımıza memnun oldum.

5) O, şuana kadar tanıdığım en nazik insan.

6) Ders çalıştıktan sonra yattım.

7) Onu çok sevmiştim.

8) Keşke sizin yerinizde olsam.

9) öyle acıkmıştım ki...

10) Otobüsü yakalasaydım daha erken gelirdim.

11) Benimle evlenir misiniz?

12) İnsanları seviyorum.

13) Güneş doğudan doğar.

14) Ondan hoşlanmadım.

15) (Onun) İstanbul'a gitmişliği var.

Corresponding English Sentence

1) Instead of "We have been living..."

   We live in Ankara for twenty years.

2) Instead of "The girl has been waiting for...."

The girl is waiting for her boy friend for twenty minutes.

3) Instead of "I have been away for four years."

I have been away since four years.

4) Instead of "I'm glad to meet you"

I become glad to meet you.

5) Instead of "He is the politest person I've ever seen"

I have known/I knew him as the politest person until this time.

(Present Perfect is reduced to the Past Simple which is mistaken)

6) Instead of "After I had studied, I went to bed"

Later I studied I had gone to bed.

(The choice wrong time adverbial to express linear sequence)

7) Instead of "I loved him very much."

I had loved him many.

(Here we have double mistakes; that of tense and quantifier. Turkish narrative category has no correspondence in English.)

8) Instead of "I wish I were you"

I wish I am in your place

(Again, double mistakes). The subjunctive is not clear-cut in Turkish)

9) Instead of "I was so hungry that I ate all the sandwiches."

I was hungry so that I ate all the sandwiches.
(Syntagmatic misplacement of resultative adverbial/intensifier in English)

10) Instead of "If I had caught the bus, I would have come earlier.

If I caught the bus I would be come earlier.
(Conditional category is mismatched) (Pragmatic mistake)

11) Instead of "Will you marry me?"

Do you marry with me?

(Here, we have tense disparity; in English "will" is pragmatic conveyor of proposal in addition to its function in the finite verb phrase).

12) Instead of "I like people"

I am liking people.

(Tense disparity)

13) Instead of "The sun rises in the East."

Sun rises from the East.

(Prepositional mistake due to L_1 interference)

14) Instead of "I didn't like him"

I didn't like from him.

(Tense category is well-chosen but preposition is wrong due to mother tongue interference)

15) Instead of "He has been to Istanbul"

He has gone to Istanbul.

(The mistake made here is that of pragmatics)

In case the student has no corresponding category in

his mother tongue he uses the nearest one in his repertoire and this results in negative mother tongue interference. In some cases what he has in his mother tongue may be an empty category in the target language (example 14) which is another cause of syntactic interference. Interference at the syntactic level results in unacceptable patterns in the target language, which turns out to be striking evidence of the limiting force imposed by native language in the process of second language acquisition. The teaching of English as a second language should be fostered at pragmatic level, that is, the relation between the target language rules and the learner should be supported in language teaching programs.

3.1.10. Mother Tongue Interference in the Field of Semantics

The semantic system of a language can be verified in its phonological, morphological and syntactic inventories because "form" has always been associated with "meaning" in natural languages. However, the semantic system of a language can best be studied with a special reference to vocabulary which is the most efficient and influential area of study. Moreover, the difficulties encountered in learning the lexical inventory of the target language stem from the fact that "the meanings into which we classify our experience are culturally determined or modified, and they vary considerably from culture to culture" (Lado, 1957:

78). Thus, the meaning signalling units we have been brought up with have deep impressions in our cognitive repertoire and they hinder us from reshaping the meaning of a lexical item in another language. The distribution of words in the two languages is another factor which causes interference in the learning process. As the speakers of Turkish, we carry the habits of restrictions of Turkish vocabulary to the restrictions in English vocabulary, which is an obvious indicator of semantic mother tongue interference. These are "the vocabulary items similar in form but different in meaning" (Demirezen, 1981: 18) in the two languages. The words in the following set illustrate this point to a considerable scale:

English form	Turkish form
boy	boy
kin	kin
sin	sin
hint	hint
salt	salt
halt	halt
red	red
ten	ten
toy	toy
tin	tin

These words are extremely hard to teach Turkish students because they are called "false cognates" and have

different distributions encoded in different meanings in English. Although the reality is one and same in different cultures, it is not perceived equally and to the same scale by speakers of different languages. For example, English makes use of a great number of phrasal verbs which are not available to many languages. These two-word verbs express different shades of meaning which are either ignored or catered for different lexical items in another language:

English	Turkish	English
do up	dekore etmek	to decorate
do without	-sız yapmak	not have
do away with	yürürlükten kaldırmak	abolish
do up	bağlamak	Fasten
do for	zarara uğramak	ruin

Thus in a sentence like "After all this frost, I'm afraid our potatoes are done for" the Turkish learner has to learn a phrasal verb "do for" which is not semantically reducible to Turkish "zarara uğramak". This means that in addition to the English lexical category "ruin" he has to adjust to another category in order to sound like a native speaker.

In some cases, one phrasal verb in English may have different shades of meaning in Turkish which causes further learning problems.

English	Turkish	English
	anlamak	"understand"
	yazmak	"write"
make out	rol yapmak	"pretend"
	başarmak	"succeed"

Now, let's consider a text in which the phrasal verb "make out" is used in the following context:

........That chap behaves in such a peculiar way, I can hardly make him out at all. ......

Most of the Turkish learners choose a wrong connotation of the verb "make out", which is different from "understand" only in form. The reason is that in Turkish we have only one lexical category "anlamak" which is also the semantic equivalent of "understand" in English. That is why Lado (1957) emphasized the inclusion of connotative meaning into a systematic comparison of languages and cultures. To put it more clearly, it can be said that some lexical forms which have more or less similar phonetic representations in English have either different meanings or different connotations in English. This is certainly difficult for Turkish learners and must be dealt with cautiously in language teaching programs. Now, let's give an extensive list of these lexical units or the so-called fire traps for Turkish learners

Turkish form	English form
fabrika	fabric "a kind of cloth"

sempati	sympathy
apartman "a total of building	apartment "a flat"
blok	block
keten	coton
moral	moral
kolej "high school"	college "faculty"
sivil	civil
kovboy	cowboy
salon	saloon
jenerik	generic
tost "a type of sandwich"	toast "a treat in drinking"
tişört	T-shirt

The semantic mother tongue interference is obvious in above examples and its direction is negative due to the fact that the Turkish learner identifies his native form with that of English without involving his cognitive map in the connotation of the English equivalent. In such a case the teacher should teach that the superficially similar forms are codified in different connotative environments in the two languages. For instance although Turkish moral and English moral may be codified in similar semantic circles, they have different connotations in the languages in question. Moreover, English moral is pragmatically employed in the adjective category while Turkish moral may, in addition, be distributed in the nominal category. This leads us to the idea that "the lexical structure of the speech one hears guides him in categorizing his

environment" (Saporta, 1961:   491)   owing   to   the

codifiability factor in Lenneberg's terms.

3.1.10.1.Further Examples of Semantic
Mother Tongue Interference

The mistakes of interference from Turkish into English
are mostly problems of same semantic attributions   to   the
words of different structural and pragmatic function. For
instance, Turkish student equates the Turkish form /-tʃek/
with the English form /draw-/ and constructs the following
mistaken sentence:

"He <u>drew</u> our photograph " instead of "He <u>took</u> our
photograph.

The choice of "draw" instead of "take" tends to be a
pragmatic mistake because it fits into semantically and
grammatically acceptable slots in the sentence. However,
its connotation should be pinned down by the teacher. One
method of avoiding the occurrence of such mistakes is to
teach these verbs in longer combinations which might be of
great help in forming the desired "Gestalts" in the minds
of students. For instance, insted of teaching "take" and
"photograph" the teacher had better teach "take a
photograph" which contributes to the semantic formation of
a greater Gestalt "He took my photograph."

Further examples of interference:

English	Turkish	Example of Interference
to cut	kesmek	The burglars cut our way.
to move	hareket etmek	The bus moves at nine o'clock.
to catch	tutmak	I can catch the door.
to open	açmak	Open the electricity!

3.1.10.2. Semantic Mother Tongue Interference at Idiomatic Level

Every language makes use of an extensive list of idioms which may form the artistic index to the establishment of great mental creations. These idioms are codified in the ideosyncratic semantic world-view of a particular language and hardly ever translatable into another language at the level of same artistic achievement. The interference is either due to word for word translation or lack of complete codifiability in the target language.

For instance, the Turkish threatening statement "ben sana gösteririm" is semantically empty in English and is constructed by means of word for word translation which is an obvious example of interference:

Turkish form	English form
Ben sana gösteririm	I will show you
Ben sana öğretirim	I will teach you
(a threatening statement)	

Other examples of Idiomatic Mother Tongue

Interference:

Turkish form

1) Gülmemek elimde değil

2) Elimden geleni yapacağım

3) Dört gözle haber bekliyorum

4) El üstünde tutmak

5) Elden ayaktan düşmek

6) Eli silah tutan

7) Onun eli ağır

8) Eli yüzü düzgün

English form

1) Instead of "I can't help laughing"

   Not to laugh is not in my hand.

2) Instead of "I will do my best"

   I will make what comes from my hand.

3) Instead of "I look forward to hearing......

   I am waiting for news with my four eyes.

4) Instead of "show great respect"

   To hold on the hand.

5) Instead of "be out of order"

   To fall from hand and foot.

6) Instead of "One who is able to defend himself"

   One who holds the revolver.

7) Instead of "A slow worker"

   His hand is heavy.

8) Instead of "rather pretty (woman)

A woman whose hand and face are smooth.

Idiomatic examples are innumerable in the two languages and contain so many shades of meaning which are not easily transferrable without perfecting the communicative competence of the target language, that is, learning to think within the genius of it.

Sometimes a verbal category in the native language may correspond to more than one verbal categories which are in complementary distribution in the target language:

Turkish form	English form
askerlik yapmak	make (instead of do) military service
ekmek yapmak	make (instead of bake) bread .
yemek yapmak	make (instead of cook) meal.
görüşme yapmak	make "create .do "do practice" make (instead of have) an interview.
iyilik yapmak	make (instead of do) a favor.
teklif yapmak	do (instead of make) an offer.
savaş yapmak	do (instead of make) war.
iş yapmak	make (instead of do)

		business.
kahvaltı yapmak		make (instead of _have_) breakfast
kötülük yapmak		make(instead of _do_)harm.

As can be observed from the examples, the Turkish form "yapmak" is expressed by more than one verbal categories which are in complementary distribution in English. The interference of the mother tongue results from the difficulty of the Turkish learner to master the corresponding categories in appropriate distributions. Borrowed forms like banyo almak "to have a bath", çay almak "to have tea", etc. are easily teachable. These language-specific examples indicate the areas of controversy where students are likely to transfer from their mother tongue in order to annihilate the linguistic barrier for a functional communication. They experimentally provide the occasions on which languages express the reality through their peculiar linguistic structures.

3.1.11. Communicative Mother Tongue Interference and Culture Factor

Communicative mother tongue interference (Richards, et al, 1985: 49) occurs when a rule of speaking is communicatively transferred into the target language. These rules of speaking include greetings, initiating a conversation or address systems which are codified

differently in languages.

Some common forms of communicative mother tongue interference can be listed as follows:

Turkish form	English form
A:Nasılsınız	A:How are you?
B:Teşekkür ederim	B:Thank you
A:Nasılsınız	A:How do you do?
B:İyiyim, teşekkürler	B:Fine, thanks.
İnşallah afiyettesinizdir	Thank. God! Your appetite is well.
Havalar nasıl gidiyor?	How is the weather?
Görüşmeyeli nasılsınız?	How are you since we didn't see each other?
O şeref bana ait	That honor belongs to me.
Rica ederim	I make a request (instead of "Not at all".)
Lafı mı olur?	Why do you speak it?
Lafınızı balla kestim	I cut your speech sweetly.
Çok çok selam söyle	Say many many greetings.
Allah aşkına!	For God's love.
Değerli Arkadaşlarım!	My dear friends.
Konuşmama başlarken	When I am starting my speech.
Bir tanem	My only one.
Her şeyim	My everything.
Ne desen kabulümüz	I accept what you say.
Ne günlere kaldık	What days we stayed to.

On dakikadır konuşuyor   He is speaking for ten

                                minutes.

As can be seen from the examples, communicative mistakes are made when there is no communicative category for a native form in the target language. For example, in Turkish it is very usual to say "iyiyim teşekkürler" (fine thanks) in return for the question "How do you do?" to which the answer in English is again "How do you do?" Moreover "How do you do?" is not at all the same as How are you? People say How do you do? only when they are introduced to somebody that they don't know" (Swan, 1984: 301). Turkish student tends to transfer what he has in Turkish to the question above because there is no phatic category (the term has been suggested by Malinowski) for How do you do? in Turkish.

The mother tongue interference which occurs in the tense-aspect systems of the languages compared may also be considered communicative because the choice of a wrong category (for example, the choice of Past Simple instead of Present Perfect) causes serious breakdowns in communication, which is the basic function of language in Jakobson's terms.

3.1.12. Concluding Remarks

Languages limit us in categorising reality in a variety of ways. This limitation is evident from the fact that we can't easily get rid of the habits of categorising

reality which are peculiar to our native language and block
the way in learning a foreign language.

Mother tongue interference provides us with
satisfactory data which prove the existence of a certain
determinism dictated by our language. It is again the
mother tongue interference which presents dissimilarities
rather than similarities between any two languages that
cause problems in the learning process. A fair analysis of
mother tongue interference is likely to be functional at
four levels: phonological, morphological, syntactic and
semantic. These levels of analysis are to be associated
with a broader perspective of Contrastive Analysis Theory
which, in addition to its extensive data in language
teaching, "concerns the high degree of task dependency of
speech production and reception" (Sajavaara, 1981: 115). So
mother tongue interference, actually, is the manifestation
of the intrinsic difficulties of native language.

In the light of this perspective the following
examples of interference have been observed in the language
data of Turkish speakers who are learning English as a
second language:

A)Phonological Mother Tongue Interference:

Mother tongue interference in terms of phonology
presents both consonantal and vocal difficulties. In old
English the consonant clusters used to have vowels in
between them. In the historical development of English

vowels have disappeared and consonantal articulation
has come into existence which is an indicator of
technological development of Western societies. The Turkish
learner inserts high vowels /i, ı, ü, u/between clusters
due phonotactic constraints as seen in akıl, Ar.aql."mind"
küfür, Ar.küfr "curse" and sıfır, Ar.sıfr "zero" which can
be associated with a clear and straight forward world-view
(This is a common trait of the speakers of Ural-Altaic
languages). The interference at the consonantal level,
however,is an outcome of the lack of corresponding phonetic
categories in the mother tongue. Event the consonants that
have very similar or same allophonic distribution in the
two languages create articulation problems and cause
interference owing to different places of articulation.

E.g.   Turkish:dental   English:alveolar/dental

       diş[dı]="tooth"   dish   /dıʃ   /

       tik/tık/"spasmodic   tick/tık/

            muscle movement

            of the eye"

     Here, it is clear that Turkish dental /t/ and /d/
will be the source of interference for the Turkish student
in learning the English /t/ and /d/, which are alveolar or
dental-alveolar in reference to the place of articulation.
Mother tongue interference at phonological level, then, is
a sound evidence of linguistic determinism. In Turkish, no
3 consonants can take place word-initially and finally. In

learning English, students commit mistakes owing to the
pressures of this fact.

Standards   mistaken articulation

stress/stres/   /sɪtɪres/

spray/spreɪ/   /sɪpɪreɪ/

sprint/sprɪnt/   /sɪpɪrɪnt/

Such mistakes are especially made by the students who
mostly come from the rural areas.

B)Morphological Mother Tongue Interference

Turkish morphemes and their English correspondents
have different functions and distributions and Turkish
student tends to carry over his morphemic inventory to the
target language as part of his cognitive learning strategy.

Example 1:

Turkish form   English form

Bu işçiler   This workers

O insanlar   Those people

Cause of interference: The use of Turkish determiner (-bu)
with plural nouns, which is not an acceptable matching in
English:

Example 2:

Turkish form	English form
sular	waters
water-s	
ev ödevleri	homeworks
house assignments	
etler	meats
kumlar	sands
sütler	milks :

Cause of interference: In Turkish, the plurality morpheme (-ler) can be used with nouns that are uncountable in English:

Other difficulties stem from the location of preposition in English, since they are usually postpositioned in Turkish:

E.g.

Turkish form	English form(interfered)
oda-da	the room in
room-at	
çarşı-da	the street in
street-in	
kapı-da	the door at
door-at	
hakkın-da	him/his about
him-about	
öncesin-de	the fact before "instead of

the fact-before   before the fact/it."

Here, the Turkish learner may totally ignore the prepositional category in English, producing a form like "He is studying the room" instead of "He is studying in the room".

C)Syntactic Mother Tongue Interference

Before summarizing mother tongue interference at the syntactic level, it would be reasonable to shed light on the syntactic structures of natural languages. According to typological classification, there are six possible orders in languages: SVO, SOV, VSO, VOS, OSV, and OVS. Languages are characterized by having one of these six basic words. Among these word orders, the first two types are relatively common, the third and the fourth are slightly less common, the fifth and the sixth are almost nonexistent. It should, however, be noted that English and Turkish fall on the first two grids of this typological range, that is, SVO and SOV respectively. These word orders put some limitations on the speakers and organize the way they see the external world.

For example, in English the recognized SVO word order makes an extensive use of auxiliaries possible and it is this grammatical trait that separates English from SOV languages like Japanese and VSO languages like Easter Island. In addition, English makes use of a highly rigid

word order which, in the case of alteration, causes serious communication breakdowns pragmatically.

To illustrate this, let's take the simple sentence "Alice folded her hands." In this sentence we cannot omit the subject or the verb. Nor can we omit the object of the transitive verb and change the places of components. Thus, the following variants of this sentence are impermissible:

Folded Alice her hands. [The first two are possible

Folded her hands Alice. in emphatic usage].

Alice her hands folded.

Her hands folded Alice.

Hands her folded Alice.

In contrast to English, the ordering of words and larger syntactic units is fairly flexible in Turkish. The examples below illustrate the relative freedom of word order in a basic sentence consisting of a subject, object, and verb:

A	B	C	
subject	subject	subject	
Ben	onu	gördüm	I saw him.
I	s/he-acc.	see+1st	
		person	
		morpheme	

The remaining possible arrangements of A, B, and C are also acceptable sentences:

ACB Ben gördüm onu   I saw him

BCA Onu gördüm ben   "   "   "

BAC Onu ben gördüm   "   "   "

CBA Gördüm onu ben   "   "   "

CAB Gördüm ben onu   "   "   "

It is this flexibility of Turkish word order (based on the SOV formula) that causes interference in the learning process. The following errors have been committed by Turkish kids at Gazi Faculty of Education: (In a Freshman class of 25 students, eight students coming from the rural area made such mistakes)

Turkish form	English form
Kahvaltıda çay içerim.	I tea drink at breakfast.
O kitap okuyor.	He is book reading.
Masada kalem var.	There is on the table of pencil.
Soru sormak istiyorum.	I want a question to ask.
Televizyon izliyorum.	I television watch.
Yarın okula geleceğim.	I will to school come tomorrow.

In order to remove this difficulty, Turkish students should be made aware of the fact that English and Turkish make use of different sentential categories that are relative to the way they perceive external world. In foreign language classes, they should be given practice by means of example sentences in SVO and SOV patterns. But in

any case, students should be cognitively introduced to the principle of linguistic relativity by teacher and the text books. On the other hand, a course like <u>Contrastive Grammar</u> may be studied in class by means of detailed examples. In this way, the negative interference of the mother tongue can be diminshed in foreign language teaching.

D)Semantic Mother Tongue Interference

The mother tongue and the target language are codified in different semantic grids, which presents numerous problems for Turkish learners. False cognates are obvious examples of mother tongue interference at the semantic level, and extreme care should be taken in order not to be trapped by a false semantic field in the target language.

E.g.

<u>Turkish form</u>	<u>English form</u>
jenerik "introductory music of a film"	generics "the exemplifiary model of an entire activity"
fabrika	fabric
moda	mode
tost "a kind of sandwich"	toast "a treatment of drink"
kolej "a kind of high school"	college "faculty"
fakülte "department of university	faculty a)university department b)a group of teachers (teaching staff)

The reason of semantic interference is twofold:

The Turkish student may not have the same semantic category in his mother tongue and transfer the one that is most similar in form. For example, he translates _fabric_ as _fabrika_ which is wrong. In the second case, he mismatches the two forms that are connotatively different in the two languages. E.g., Turkish "kolej" is not an equivalent of English "college".

In order to remove these semantic interferences in language teaching, the target language vocabulary will be taught along with the target culture. Indeed, the teaching of target culture is missing in language teaching programs. It should be borne in mind that a successful teaching of foreign language is only possible if it is meddled with the socio-culturally approved symbols of the target culture. In Sapir-Whorf hypothesis, language and culture coextensively interact over each other because they are inseparable and determine the relative world-views of different peoples. In such an approach both literal and artistic translation can be realized to the full satisfaction of the learners.

E)Communicative Mother Tongue Interference

A typical example of "communicative mother tongue interference" occurs when a Malay-speaking student opens a conversation in English with "Have you eaten yet?" instead of "How are you?" this shows that the student not only translates his native structure but also native context

into the target language. In Turkish "sıhhatler olsun", "afiyet olsun" and "geçmiş olsun" cannot be translated into English but a contextual translation may be possible.

In language teaching, then, the contexts of L_1 and L_2 will be made clear in order to avoid misunderstandings. The context, like the grammatical structure, is also determined linguistically as well as semantically and limits communicative competence of the speaker.

In language teaching programs, other sociologically encoded symbols will be clarified both by teachers and text books. If possible, foreign language teachers should be subjected to a culture-oriented training of the language they are teaching.

For example, the term <u>Thanksgiving</u> in English is alien to the Turkish learner and it may be mistakenly translated into Turkish as "teşekkür etme". The teacher should be careful to avoid a misunderstanding among students and clarify the socio-cultural meaning by saying that "Thanksgiving" is a special day on which Americans express their gratitude to God for creating them and eat Turkey.

Finally, whatever is and should be made for a creative and functional language learning pedagogy, it should be taken for granted that the mother tongue is a serious handicap and blocks the way at phonological, morphological, syntactic, and semantic as well as pragmatic levels of the target language. The teacher should be trained specially so as to reduce this kind of negative pressure from the target language.

4.CONCLUSION

Linguistic relativity hypothesis dwells on the idea that people dissect nature along with the parameters that their languages permit; accordingly every language can be considered a mirror of the World-view of the community in which it is used. The natural language that is encoded in terms of its intrinsic grammar reflects the micro-cosm or particular Gestalt of its speakers in the way that forms but only one aspect of holistic reality, which is the macro-cosm as a common but inexpress background.

The language-specific codification of the so-called background knowledge is also known as linguistic determinism or the Sapir-Whorf hypothesis because this codification has a dynamic role in the formation of idiosyncratic assessment of non-linguistic experiences. The linguistic symbols employed in the verbalization of non-linguistic experiences not only function as the grammar-oriented evaluation of external world but as the psychological and socio-cultural pointers of a particular world-view as well. This is prominent in a socio-cultural as well as purely linguistic analysis of a particular micro-cosm in reference to a configurationist psychology, that is, a relatively cultural analysis of a community can best be carried out through its linguistic structure.

According to the principle of linguistic relativity, the intrinsic grammatical structure of the native language conditions the speaker and limits him in perceiving the

target language categories. The best logical proof of this limitation is the fact that no matter which method is followed in language teaching programs, a complete learning is not realized on behalf of the learners.

4.1.Intrinsic Evidence from Grammar

Beginning from the phonological level the mother tongue puts some limits to the native speaker in learning the inventory of the target language phonology. The learner whose mind and articulatory mechanism are conditioned according to his native sounds has great difficulty in getting used to articulating the sounds of another language. In learning the target language phonology, the interference of the mother tongue can be related to "psychological habit formation" (Tarone, 1978: 27) in which the sound pattern of native language has an anaesthetic effect on the speaker's mind limiting his kinetic ability to from new habits in a different system. The following examples illustrate the factor of interference:

English form	Interfered pronunciation
back ['bæk]	['bek]
matter ['mætəɾ]	['metəɾ]
example [Igzæmpl]	[eksampəl]
think ['θɪŋk]	['tɪnk]
then ['ðen]	['den]
mother ['mʌðəɾ]	['madəɾ]

author ['oθəɼ]   ['otəɼ]

treat ['tɼ ɹyt]   ['tɪɾ ɹt]

free ['fɼ ɹy]   ['fɪɾ ɹ]

straight ['stɼ eyt]   ['sɪtəreyt]

robbed ['ɼɑbd]   ['ɼɑbə d]

finished ['fɪnɪʃ t]   ['fɪnɪʃə d]

[ɼ] is a retroflew flap as seen in some American English
   words as teacher, rear, horror, and rare. In this
   respect, f, v, θ, ʒ, ŋ tʃ, dʒ, ɼ, æ, ɪ, ɛ, ow, aw, uw,
   w, sounds cause problems for Turks.

   At morphological level, some examples can be given
from the Turkish ablative morpheme (-den) that is
grammatically empty in English:

Turkish form   English form/interfered

Sizden hoşlanıyorum.   I like from you

You-ablative to like+

1st per.progg.

Yüzmekten zevk alırım.   I enjoy from swimming.

To swim-ablative+to

enjoy+1st per.pr.

Çalışmaktan hoşlanmam.   I don't like from studying.

To study+ablative+ not

like/Pr.Tense.

   In some cases, Turkish dative morpheme (-a) may be

grammatically empty in English:

Turkish form	English form/interfered
Eve gidiyorum.	I am going to home
To school+go+1st per.	
Kardeşim okula gidiyor.	My friend is attending to school.
My brother+to school+	
attend, 3rd person sing.	

Some other prepositions may be absent from English and Turkish respectively:

Turkish form	English form/interference
Davranışınızı	I don't approve your behavior.
onaylamıyorum.	
Sizinle istasyonda	I will meet with you at the
buluşacağım.	station.

In this respect. Eng.prepositions, articles, pronouns, are problem causers in the field of morphology. Plural morpheme {-s} and past tense morpheme {-(ı)D}, Simple Present, Present Perfect, reported speech, active-passive and subjunctive are being attested as causes of negative transfer from the mother tongue.

As for the syntactic interference of the mother tongue, the best proof comes from the syntagmatic order of Turkish which is constructed in the SOV formula. This formula is in contrast with the English syntagmatic order

that is SVO, and creates problems causing interference:

Turkish form	English form
Babam kitap okuyor.	My father is book reading.
Adam okula gelecek.	The man to school will come.

Tense-category mistakes are also included in the syntagmatic realm and cause interference as follows:

Turkish form	English form
On yıldır Ankaradayız.	We are in Ankara for ten years.
Üç saattir bekliyoruz.	We are waiting for three hours.
Dört yıldan beri öğrenciyiz.	We have been students since four years.
1986'den beri onu görmedim.	I haven't seen him for 1986.

According to typological classification of languages, these mistakes are mismatched correspondences between languages and limit the speakers of natural languages in acquiring another language. "If languages were relatively homogeneous entities like samples of iron ore, this would not be a problem" (Crystal, 1987: 85). But contrary to the universalist trend, languages are unpredictably irregular and idiosyncratic. The degree of interference is limited by the syntactic overlapping of the mother and target languages.

At semantic level, the native and the target

languages do not share the same denotative and connotative distributions and as a result of this the Turkish students tend to carry the semantic components of their mother tongue to the target language. The following examples of interference have been collected from ELT department of Gazi Faculty of Education: (ten students over twenty from the Freshman classes insist on these mistakes)

English	Turkish	Sample Sentence
cut	kesmek	the burglars cut our way
move	hareket etmek	The bus moves at nine o'clock
catch	tutmak	I can catch the door
open	açmak	Open the television.

In order to tackle this polysemy, pragmatic contexts in which these verbs are used must be clarified by teacher/textbooks.

Some other mistakes stem from the semantic area of idioms that are structurally empty in Turkish.

English	Turkish	Sample Sentence
*do a noise	gürültü yapmak	Don't do noise please!
*make one's best	elinden geleni yapmak	I will make my best
*do a suggestion	öneride bulunmak	My friend did a suggestion to go to the cinema.
*make harm	zarar vermek	You should not make harm to your neighbours.
*do war	savaş yapmak	Turkey and Greece will do war

The difficulty in these idiom-like expressions results from the semantic area of do and make that have only one category in Turkish "yapmak"/"icra etmek".

4.1.1.Methodological Suggestions

All these examples make up evidence from the learning process. In order to remove this intervention, following precautions should be taken in language teaching programs:

1)Students should be made aware of and sensitive to the background phenomena of intrinsic grammar.

2)A sense of determinism (language determines grammatical competence of the native speakers) should be inculcated in the students.

3)Lexical components that are semantically similar but in complementary distribution in the target language (do-make/admit-accept/say-tell/ train-educate /grow up-bring up) and phrasal verbs that are the key meaning elements opening the window to the target world view (set up-set off-set out, etc) should be contextually clarified by the teacher.

4)That language is part of the individual's background out of which experience is dissected should be exemplified by the teacher.

5)To reduce the phonological interference to the minimum (to achieve native-like phonological mastery is impossible due to the relative physiology of human vocal organs as well as relative difficulty of target language

sounds) an extensive use of tape recorders and laboratory equipment should be made.

6)Idioms of the target language and mother tongue should be compared and connotational equivalence should be investigated.

To sum up these pedagogical recommendations, the learners and teachers should be sensitivized to the proposition that "the nature and function of human language imposes limits on the forms it may take" (Robins, 1979: 336).

4.2.The Teaching of Culture and Paralinguistic Inventory

Apart from the purely linguistic structure as the determinant of thought, there is sound evidence that certain non-linguistic entities such as proxemics, kinetics, and cultural symbols determine the way people cognition the universe. Proxemic and paralinguistic symbols can be associated as culture-specific entities of a community. However, "most of the existing language courses, in their concern for formal structural rules, have not given due attention to these aspects of cultural transmission" (Pattanayak, 1978: 620). Following suggestions are advisable for a more succesfull teaching of the target language:

1)It should be acknowledged that space consciousness constantly affects and shapes the human mind.

2) Levels of space consciousness in native and target culture should be documented and their pragmatic grids be inserted in the teaching programs.

3) Paralinguistic symbols like gestures, facial expressions, body movements and their relative socio-cultural significances should be inserted in the syllabus. In this respect, video, film scripts and culture-assisted media must be carefully used in class. Especially video by itself, owing to its flexibility in application to the teaching of foreign language , can be implemented as a FOREIGN LANGUAGE INTERFERENCE REMOVER to lessen the paralinguistic dead-endeds in ELT.

4) Language lessons should center around the target language culture on the assumption that learning a language is learning the culture in which it is symbolically codified.

5) It should also be recognized that one's native culture acts as an unavoidable filter while learning about an alien culture.

6) If possible, language learning activities should be carried out in the territory of target culture.

4.3. The Contribution of Linguistic Relativity to Language Teaching

In language teaching, linguistic relativity principle has had strong connections with structural linguistics and behavioral psychology, which are considered to be the two

cornerstones of the Audio-Lingual Approach. This has been
proved by a gradual analysis of a language-system at four
levels (this is what Whorf actually did when he was
analyzing Hopi language) and it is assumed that the
automatic listen and repeat circle of linguistic units make
up a habitual imposition of these units on the speakers.
The structures that are habitually learned by the learner
condition him along with the parameters of the grammatical
system. It is this system that cybernetically influences
the learner and controls him in his performance of non-
linguistic behavior. In this context, the behavioristic
trend (Richards and Rodgers, 1986: 48-58) is associated with
the principle that language is verbal behavior and
automatic production and comprehension of utterances
results in the operant conditioning of the speakers toward
a different perception of the world (the formation of
mathematical time in Western languages as contrasted with
psychological time of Nootka and Hopi tribes is nothing
more than a linguistic conditioning).

It is a relatively proved fact that the rules of
mother tongue puts some barriers to the learner but once
the rules of the target language are internalized by Oral
or Audio-lingual-approach, they take on the role of a
second language operant which in turn controls the speaker
in a new system. This is why American Indian peoples are
described as action-oriented, which is rendered by their
psychology-related grammatical parameters (for instance,
time concept and temporary nature of actions). To

illustrate this let's give an example form German which has a tendency to nominalize the world. This tendency can be explained as the objectification of world:

German	Turkish
"Das Ansich"	kendi-başına varolan
"das Gute"	iyi-olan
"das Zeitliche"	zamanlı-olan

Such a tendency, which encounters no intrinsic difficulty, provides the speakers of German with the ability of abstract thinking, releasing them from the hegemony of individual things. This facility of the German language must be correlated with great achievements of German philosophy, which is a world-wide reality. It is this quality of German that has made it possible for thinkers such as Humboldt, Hamann, Porzig, and Herder to compose distinguished works of philosophy.

Turkish, that is a nature bound language, lacks this opportunity. What is the word for "das Gute" in Turkish? It may be translated in a circumlocution as "iyiye ilişkin şeyler" (the tings concerning goodness) but what are they? Conversely, Turkish has a tendency to turn abstract concepts into concrete entities. Thus, it is language that controls the creative thinking for a certain end.

On the other hand, the Sapir-Whorf hypothesis is also in agreement with the principles of Carroll's new version of Cognitive Habit-Formation Theory in which a habit is

defined as a learned disposition to perceive, behave, or perform in a certain manner under certain circumstances. "To the extent that an individual's language behavior conforms to the habits of the speech community in which he is a member, we can say that his behavior is rule governed" (Rivers, 1981: 51).

This assumption leads us to the famous proposition of Ervin Schrödinger, the German physicist, that the world-view of an individual is essentially the world-view of the community to which he belongs. The assumption is a meaningful synthesis between habit-formation theory and cognitive-code learning theory where linguistic determinism is at work with its emphasis on the way from intrinsic grammar to thought.

The findings obtained from the research and pedagogical suggestions can be listed as follows:

1)Language reflects that part of reality which is filtered through the cognitive map of the speaker (microcosm).

2)Language determines the world-view of the speakers who use it and does this by virtue of its grammatical Gestalt and cultural background.

3)Linguistic determinism is evident from the limitation of mother tongue in the internalization of other tongue rules.

4)Linguistic determinism is basically behavioral, but marginally cognitive in terms of its linguistic background and relation to psychology.

5) The cultural milieu of the target language can be highlighted with contextual support from the Sapir-Whorf hypothesis.

6) In philosophy, the roots of Sapir-Whorf hypothesis originate from Herder, Hamann, Humboldt and flourish in the structural trend of linguistic and behavioral trend of psychology.

As a final solution, the mother tongue interference is on a par with the phonological-morphological, syntactic, semantic, and cultural overlappings of the mother and target language. Languages of the same origin will not exert too much negative pressure; languages of different origin do this to the degree of the matching of the related language structures through cultural sameness or difference.

So as to remove the mother tongue interference, comparative phonology, morphology, syntax, semantics, and cultural background of mother and target languages must be extensively studied via audio-visual-devices such as video, film scripts, and video-conferences. The following motto explains the principle of linguistic relativity better than anything else:

"The limits of my language are the limits of my world."

-L.S.Wittgenstein.

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