CHAPTER 2

REVIEW OF RELATED LITERATURE

2.1 Historical Background of Contrastive Analysis and Error Analysis

The origins of Contrastive Analysis were pedagogic. The strongest motivation for doing it

is the practical need to teach a second language in the most efficient way possible and this

involves the development of the best teaching materials. Fries and Lado are considered the

forerunners of Contrastive analysis (CA). Di Pietro (1971:9) however finds some CA

examples as early as 1892 in Grandgent's work *German and English Sounds*. According to

James (1980:8), modern CA starts with Lado's *Linguistics Across Cultures* but it was the

studies of immigrant bilingualism by Weinreich (1953) and Haugen (1956) that gave Lado

his impetus to produce his seminal work. Selinker says that Fries gave an insight into

modern CA in 1945 in his book *Teaching and Learning English as a Foreign Language*:

> *The most efficient materials are those that are based upon a scientific description of the language to be learned, carefully compared with a parallel description of the native language of the learner. (1945:9)*

Lado made the link between this quotation and CA explicit. In his *Linguistics Across*

Cultures, Lado pointed out that what was implied in Fries's statement is the fundamental

assumption of CA:

> *…individuals tend to transfer the forms and meanings, and the distribution of forms and meanings of their native language and culture to the foreign language culture – both productively when attempting to speak the language and to act in the culture, and receptively when attempting to grasp and understand the language and the culture as practiced by natives. (Lado, 1975:2)*

Lado laid down the groundwork for the theory and methodology of CA. His book

Linguistics Across Cultures, which is considered by many linguists as the founding text of

CA provides useful tools for a comparison of the source and target languages. Lado (1957: vii) believes that,

> *… We can predict and describe the patterns that will cause difficultly in learning and those that will not cause difficultly, by comparing systematically the language and culture of the student.*

He believes that CA contrasts the system of one language, the grammar; the phonology and the lexicon of the system of the second language in order to predict difficulties which speakers of the second language would have in learning the target language. CA is also useful in constructing teaching materials to help students with specific culture to learn the target language. The selection of items presented to learn a language is dependent upon the outcomes of a contrastive analysis. A systematic comparison between the native language and the second language is helpful so that areas which could prove troublesome would be identified in advance and be given special attention.

2.2   The Behaviourist Learning Theory

Research in L1 acquisition has greatly influenced study in L2 learning both in theory and at the practical level. Before the 1960s the dominant language learning theory was the imitation and habit-formation theory of the behaviourist approach. The tenets of this theory were also adopted by L2 researchers but there is an additional complicating factor to account for in L2 learning, that is, the fact that the second language or foreign language learner already possesses a set of earlier habits, his native language habits.

When the behaviourist view of L1 acquisition was replaced by Noam Chomsky's linguistic theories, which propounded that a child has an innate creative capacity to construct his knowledge of the language, L2 researchers also began to view L2 learning from the same perspective. The new techniques developed for collecting and analyzing children's speech

were also used to collect data about the processes involved in L2 learning. We thus see the tendency for researchers to adopt a single theory of language acquisition that can account for first and second language learning, as both these activities are manifestations of man's capacity to learn and use language. (Lim Sep Neo, 2001:32)

Contrastive Analysis was constructed within the behaviourist framework. The behaviourist learning theory is a theory of learning in general. It stresses the importance of habit formation. A habit is a link between a particular response and a particular stimulus. It is formed when there is a regular association of a particular stimulus with a particular response. John Watson, a psychologist, said that the existence of the stimulus would prompt a response, which would become automatic if the stimulus happened frequently enough but B.F. Skinner argued that a habit developed when a response to a stimulus was regularly followed by behaviour. This consequent behaviour reinforced the habit and helped to strengthen the association between the stimulus and the response. It is observable and automatic. It is automatic when the stimulus behaviour is imitated or copied sufficiently for it to be performed spontaneously. Thus habit formation occurred where there is imitation, reinforcement and repetition of behaviour. (Ellis, 1985:21)

To the behaviourists, language is a behaviour, not a mental phenomenon. Their theories of habit formation were applied to language learning, first in L1, then to L2 acquisition. To learn his mother tongue, a child imitates the utterances made by adults. His attempts at using language would be rewarded or corrected by approval or some other reaction. To get more of these rewards, the child repeats the utterances and these become habits that constituted the language the child is learning. This habit-formation theory of the behaviourist psychology that was used to explain how a child learned his first language was also believed to be applicable to second language learning.

According to the adherents of behaviourism, previous habits that have been entrenched in the mind of a person as the first language can exercise an influence on the course of L2 learning. A learner transfers the structures, sounds and usage of his first language into the second. There are two kinds of transfer. When the habits of L1 and L2 are similar, there is positive transfer. For example, in declarative sentences, the English pattern of subject-verb-object sequence *(The boy washes the car)* is similar to the French *(Le garçon lave la voiture).* An English speaker learning French would not encounter much difficulty here. However if the object is replaced with a pronoun, transfer is not possible as the order remains the same in English *(The boy washes it)* while in French the object pronoun comes before the verb *(Le garçon la lave).* The English speaker learning French will be predisposed to say *(Le garçon lave la)* and this is how an error occurs. This is called negative transfer. Negative transfer is generally known as interference. Interference is the result of proactive inhibition. Proactive inhibition is the way in which previous learning hinders the learning of new habits. Thus differences between L1 and L2 lead to interferences. Interferences cause learning difficulties and consequently errors. On the other hand, similarities between the two languages facilitate learning and thus no errors will occur.

According to the behaviourist learning theory, errors were evidences of non-learning and were considered undesirable. They should be avoided. To eliminate the chances of errors occurring, attempts were made to predict when they would occur and to this end, the Contrastive Analysis was developed.

2.3   Contrastive Analysis

Contrastive analysis is an inductive investigative approach based on the distinctive elements in a language; it was developed to help teachers of a foreign or second language to teach as efficiently as possible. It is defined by Hammer and Rice (1965) as "a systematic comparison of selected linguistic features of two or more languages, the intent of which is to provide teachers and textbook writers with a body of information which can be of service in the preparation of instructional materials, the planning of courses and the development of classroom techniques." In Lado's words (1957:2) "the teacher who had made a comparison of the foreign language with the native language of the students will know better what the problems are and can better provide for teaching them."

The contrastive analysis hypothesis developed out of the behaviourist-inclined L2 learning theories and the structuralist linguistics of the 1950s. It borrowed the notions of "transfer" and "interference" from psychology and applied them to L2 learning. In CA, the difficulties and errors that occur when we learn and use a foreign language are caused by the interference of our mother tongue. When a structure of the foreign language is similar to the structure of our mother tongue, "positive transfer" takes place and we will not encounter any difficulty. On the other hand where the two languages differ "negative transfer" or interference occurs. This interference might cause difficulty in learning and error in performance. Lado stated "Those elements that are similar to his (the learner's) native language will be simple for him and those elements that are different will be difficult." (Lado, 1957:2) The bigger the differences there are between the two languages, the greater the difficulties would be. When a CA of L1 and L2 is carried out, the difficulties between the two languages can be discovered and then a prediction made of the difficulties that a

learner would encounter. Teaching materials can be constructed based on the results of the analysis.

Wardhaugh (1970) pointed out that the contrastive analysis hypothesis exists in a strong and a weak form. The strong version is *a priori*, and the weak version is *a posteriori* in its treatment of errors. The strong form claims that we can predict L2 errors by identifying the differences between L1 and L2. According to this version CA can provide all the information needed for developing teaching materials. As Banathy et al put it:

> *The change that has to take place in the language behavior of a foreign language student can be equated with the differences between the structures of the student's native language and culture and that of the target language and culture… Differences between the two languages can be established by contrastive linguistic analysis…what the student has to learn equals the sum of the differences established by CA. (1966:37)*

Many linguists whose research showed that many of the grammatical errors made by L2 learners could not be traced to L1 later rejected this strong form. They found that many errors predicted by CA did not materialize. On the other hand, those that were not predicted occurred. They concluded that L1 is not the sole and probably not even the prime cause of errors. Dulay and Burt (1973) attributed only 3% of learners' errors to L1 interference. They suggested that interference might be a major factor only in phonology. However research carried out by Gauberg (1971), George (1972), Tran-Chi-Chau (1975), Mukattesh (1977). Flick (1980) and Lott (1983) showed that the percentage of errors due to L1 interference was much more than the figure given by Dulay and Burt (in Ellis, 1985:29). The mean percentage was 33%. This discrepancy is likely the result of a lack of well-defined criteria for establishing which grammatical utterances constitute language transfer. Wardhaugh (1974:12) thinks that "the strong version seems quite unrealistic and impractical" while "the weak version does have certain possibilities for usefulness" though this "is suspect in some linguistic circles."

The weak version of the hypothesis has the same point of departure as error analysis, that is, from the errors committed by learners. From a corpus of the target language used by students, actual errors are first identified i.e. an error analysis is done of the learners language. Then CA is applied to identify which errors are caused by L1 interference. In other words the role of CA is explanatory rather than predictive and the role of L1 in the occurrence of errors is less important. Krzeszowski also claimed a lesser role for CA as early as 1974 as mentioned by Jackson (1981) in an article entitled "Contrastive Analysis as a Predictor of Errors, with Reference to Punjabi Learners of English":

> *The pedagogical value of CA is becoming less and less obvious and the solution therein more and more removed to a remote area near the horizon. The best that contrastive analysis can do is to predict areas of potential mistakes without making any claims as to whether or not and in what circumstances they are likely to occur in actual performance. (in Fisiak, 1981:197)*

Jackson (in Fisiak, 1981:204) demonstrated that "a contrastive analysis can both predict areas of potential error, even if it does not pinpoint errors and it can provide the explanation of a great number of errors that arise from the interference of the mother tongue."

Duskova (1969) in her research on the sources of errors in foreign language of Czech students enrolled in an English course noted that her students' errors are not only due to negative transfer or rather the nonexistence of certain features in the mother tongue but also to confusion between forms and functions of the target language. Her investigation also revealed that her students made few errors involving items, which were obviously and predictably difficult. This phenomenon can be explained in terms of the learners' operation of the "avoidance strategy." Learners avoid the difficult item by paraphrasing or circumlocution. Consequently Duskova concluded that Contrastive Analysis might be profitably supplemented:

> *By the results of error-based analyses, particularly in the preparation of teaching materials. A further improvement of teaching materials based on CA might be achieved*

by inclusion of the most common errors occurring outside the sphere predicted by CA alone. (1969:29)

In the light of the "avoidance strategy" observed by Duskova and Schachter (1974), among others, James (1980:186) argued that:

If it is true that CAs can predict errors which fail to materialize it is equally true that EA can fail to recognize errors which have materialized.

In his defence of CA, James opined that:

… each approach has its vital role to play in accounting for L2 learning problems. They should be reviewed as complementing each other rather than as competitors from some procedural pride of place. (1980:187)

Wilkins (1972) however suggested that:

Contrastive linguistics should be carried out to provide a linguistic explanation for known errors, rather than as a predictive procedure.

CA was not only attacked on its empirical validity and predictive value, it was also criticized for its theoretical and methodological assumptions. In the 1960s, Chomsky notably challenged the general learning theory based on behaviorism that was used to explain first language acquisition; this criticism was also directed at second language acquisition. The behaviorist notion of imitation and reinforcement could not account for the creativity of language. The concept of stimulus-response could not explain how a language learner could understand and generate an infinite number of sentences that he has never encountered before. The behaviorist view of learning considers learning as an external phenomenon depending on habit-formation formed through practice and reinforcement and the linguistic environment. Chomsky's mentalist view sees language learning more as an internal mental phenomenon, which is creative and universal. The language learner possesses a set of mental processes that could be triggered off by any linguistic input in the form of exposure in natural setting or formal instruction. Chomsky called these active

mental processes, the "Language Acquisition Device". This device is responsible for the creativity of the human mind. It works on the linguistic input, converting it into a form language learner could store and later produce. In other words, language is not merely shaped by external forces. It is created within the mind of the learner as he interacts with his environment. As such, habit-formation through practice and reinforcement cannot alone account for SLA. "If language learning could not be explained in terms of habit-formation, then clearly the central notion of interference was bound to be challenged" (Ellis,1985:30) and the concept of L1 interference in SLA is one of the cornerstones of CA.

The CA Hypothesis was also criticized on its assumption that differences between L1 and L2 would cause difficulties and difficulties produce errors. Critics of CA argued that "difference" is a linguistic concept while "difficulty" is psychological and there is no reason to believe that the degree of linguistic difference between two languages should correlate with the level of learning difficulty and consequently with the occurrence of errors. Empirical studies have shown that there is no significant relationship between difficulty and error. (Ellis, 1985:31)

The linguistic basis of CA, which was mostly built upon translation equivalence as established by a bilingual informant, was also called into question. It was pointed out that there was no theoretical basis for "translation equivalence". In CA, a comparison of languages is carried out based on a description of the categories that constitute the patterns of a language. However languages are realized differently from each other and this precludes a common categorization of their patterns. According to Bloomfield (1933).

> *The differences (among languages) are great enough to prevent our setting up any system of classification that would fit all languages.*

If there are no universal categories i.e. categories that are common in all natural languages any comparison across languages cannot be constructed.

CA has also been criticized for failing to incorporate into its framework the variability of language use, that is, in which non-linguistic and linguistic contexts and situations, transfer errors are likely to occur.

It has also been questioned that if CA could not predict a majority of errors made by learners, of what practical worth was it to language teachers. As many of the predictions proved to be superficial, a second language teacher could just depend on his practical experience.

Changing attitudes towards errors were also responsible for the loss in favour for CA among linguists. CA was constructed within the behaviourist framework. According to behaviourist accounts of L2 learning, errors are signs of failure and are undesirable and thus should be avoided. It was believed that errors if allowed to be committed, would, by the very fact that they were committed, be reinforced. But soon, linguists, beginning with Pit Corder (1967) began to view errors from a positive perspective. They see errors as evidence of ongoing hypothesis by the learner on the language that he is learning. Hence the importance of carrying out a CA to predict errors becomes less obvious. As a reaction to the shortcomings of contrastive analysis, error analysis was introduced as an alternative.

2.4   Error Analysis

Contrastive Analysis claimed to predict errors made in L2 learning but when empirical studies were carried out, linguists discovered that many kinds of errors that were not due to L1 interference could neither be predicted nor explained by CA. Consequently scholars began to give serious attention to EA. Prior to the late 1960s; EA was carried out on an ad

hoc basis for pragmatic goals. It consisted of an impressionistic collection of common errors and their taxonomic classification into categories. There was no systematic attempt to account for their occurrence.

The renewed interest in EA emerged with the publication of Corder's article "The Significance of Learners' Errors" in 1967. From then on there was a series of articles by Corder (1971, 1973, 1974), Strevens (1970), Selinker (1969, 1972), Richards (1971, 1973) and others which helped to give it direction (Ellis, 1985:51) and opened up another area of research called Interlanguage (Sridhar, 1981) and EA emerged as a theory and a method for teaching and learning. Corder (1967) provided the reasons why errors are significant for the learner, the researcher and the teacher. He believed that the process of language acquisition is basically similar for both first and second language learning and the strategies used in both processes are also substantially the same. The errors made by a L2 learner are similar to his first approximations of a child learning his first language. They are both systematic and provide evidence of the system to which they belong. Based on his viewpoint he proposed a change in our attitude towards errors.

Corder makes an important distinction between mistakes and errors. Mistakes are deviations due to performance factors such as random slips of the tongue, memory limitations, fatigue, emotional strain, etc. they are not systematic and are of no significance in language learning. Errors however are systematic, inevitable and constitute a necessary part of the language learning process. They allow the learner to form and test hypothesis about the nature of the new language that he is learning. Errors provide the researchers information on the progress of the learner in the learning process and evidence of how a second language is acquired (Corder, 1967). Corder, in his article entitled "The

Significance of Learners' Errors", believes that a learner's first language is facilitative. He proposed that errors should be seen as indications of the learner's learning strategies:

> *… the learner's possession of his native language is facilitative and … errors are not to be regarded as signs of inhibitions, but simply as evidence of his strategies of learning. (In Richards, 1974:27)*

The procedure for EA as spelled out by Corder (1974) is as follows:

a. Selection of a corpus of language. The size, medium, homogeneity with regards to age, L1 background, stage of development of the sample is decided.

b. Identification of errors. Mistakes or lapses (deviant sentences that are due to processing limitations) must be distinguished from errors (deviant sentences that result from lack of competence).

c. Classification of errors.

d. Explanation of the causes of errors.

e. Evaluation of errors.

Errors are systematic and consistent deviations from the norms of the target language and they are typical of the learner's linguistic system at a particular point of learning. In pointing out the similarities between first and second language acquisition, Corder asserted that:

> *… the key concept in both cases is that the learner is using a definite system of the language at every point in his development although it is not the adult system in the one case (first language), nor that of the second language on the other. The learner's errors are evidence of his system and are themselves systematic. (in Richards, 1974:24)*

Corder said that "… the concept of ungrammaticality of deviance is not applicable to the learner. Everything he utters is by definition a grammatical utterance in this dialect." (in Corder, 1981:32). He proposed to call this intermediate system constructed by the learner in

the process of learning a language "transitional competence" or "transitional dialect". He also alternatively called it "idiosyncratic dialect".

Other linguists defined this transitional grammar as "an interim grammar" (Cook, 1969), "an interlanguage" (Selinker, 1969) and "an approximative system" (Nemser, 1971). Dulay and Burt (in Richards, 1974:115) in presenting their hypothesis that L2 acquisition = L1 acquisition, categorize the following "goofs" or errors:

a. Interference-like goofs: those reflecting native language structure.

b. L1 Developmental goofs: those not reflecting native language structure but that are found in L1 acquisition of TL e.g. overgeneralization.

c. Ambiguous goofs: these can be classified as interference or developmental goofs.

d. Unique goofs: these do not reflect L1 structure and are not found in the L1 acquisition data of the target language.

Richards and Sampson (in Richards, 1974:5-15) in their discussion of the learners' approximative systems put forward seven factors that influence and characterize these systems namely:

a. Language transfer which produces interlingual errors.

b. Interlingual interference.

c. Sociolinguistic situation.

d. Modality of exposure to the target language and the modality of production.

e. Age.

f. Instability of approximative systems.

g. Universal hierarchy of difficulty.

Intralingual factors concern the faulty knowledge of the target language. Richards (1974:174) attributed intralingual and developmental errors to:

a. Overgeneralization based on the learner's experience of other structures in the target language.

b. Ignorance of rule restrictions. Errors are due to analogy and rote learning of the rules.

c. Incomplete application of rules.

d. False concepts hypothesized.

Richards concluded that interference from the mother tongue is clearly a major source of difficulty in second language learning, and CA has proved valuable in locating areas of interlanguage interference. However, many errors derive from the strategies employed by the learner in language acquisition, and from the mutual interference of items within the TL. These cannot be accounted for by CA. Teaching techniques and procedures should take account of the structural and developmental conflicts that come about in language learning. Selinker attributed errors to:

a. Negative transfer from the mother tongue.

b. Transfer of training.

c. Strategies of learning.

d. Strategies of communication.

e. Overgeneralization of TL linguistic material.

2.5   Interlanguage

Revised thinking about the process of learning claimed that we acquire a second language in a fixed order as result of our innate propensity to process language data in specific ways. This theory about the centrality of learner-internal processes and a fixed order in which language acquisition takes place was first developed to explain L1 acquisition and research of L2 learning later adopted it. The key concept in this mentalist view of language acquisition in L2 learning is interlanguage, a term that is used to refer to the successive linguistic systems that a learner constructs as he tries to achieve mastery of the target language. These systems are distinct from the source language and the target language. Selinker (1969), Cook (1969), Nemser (1971) and others referred to his phenomenon differently.

Interlanguage refers both to the structured system constructed by the learner at any given stage of his development and the whole series of these interlocking systems i.e. the interlanguage continuum. The assumptions underlying the interlanguage theory is stated by Nemser (in Richards, 1974: 56) namely:

- At any given time the learner's language is distinct from the source language and the target language and it is internally structured.

- The learner's approximative systems form an evolving series.

- In a given contact situation the approximative system of learners at the same stage of proficiency roughly coincides. Any major differences can be ascribed to differences in the learning experience.

Selinker (1974) and Richards (1971, 1974) put forth similar views. Selinker noted that any description of interlanguage should take into consideration the phenomenon of fossilization of the acquisition of a L2. For most learners, it is the reorganization of the linguistic material of an interlanguage to identify it with a particular target language. This

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interlanguage could fossilize, that is, it could become a permanent competence of the learner. Selinker (in Richards, 1974:36) defines fossilization as a mechanism whereby the linguistic items, rules and subsystems of a particular native language are retained in the interlanguage of a learner relative to a particular target language no matter what his age is or the amount of instruction he gets. It is a situation where the learner fails to reach target language competence. Selinker explains this phenomenon by postulating the existence of a genetically determined latent psychological structure, which is activated when the learner attempts to express meaning which he may have in the target language. This latent psychological structure is responsible for five principal processes operating in interlanguage and these are:

a. Language transfer, i.e. transfer of L1 elements into L2.

b. Transfer of training i.e. influence of teaching methods.

c. Strategies of L2 learning. Fossilizable items are "a result of an identifiable approach by the learner to the material to be learned."

d. Strategies of L2 communication. Fossilized errors are due to the learner's need to use the TL at a level beyond his competence.

e. Overgeneralization of TL linguistic material.

Selinker (in Richards, 1974:41) also gives some minor processes such as hypercorrection, spelling pronunciation, cognate pronunciation, holophrase learning, etc.

2.6   Studies of Learner Errors

Corder introduced the distinction between errors 'in competence' and mistakes 'in performance'. This distinction directed the attention of researchers of SLA to competence

errors and provided for a more concentrated framework. Thus, in the 1970s researchers started examining learners' competence errors and tried to explain them. We find studies such as Richards' "A Non-contrastive Approach to Error Analysis" (1971), where he identifies sources of competence errors: L1 transfer results in interference errors; incorrect (incomplete or over-generalized) application of language rules results in intralingual errors; construction of faulty hypotheses in L2 results in developmental errors.

Not all researchers have agreed with the above distinction, such as Dulay and Burt (1974) proposed the following three categories of errors: developmental, interference and unique. Stenson (1974) proposed another category, that of induced errors, which result from incorrect instruction of the language.

As most research methods, error analysis has weaknesses (such as in methodology), but these weaknesses do not diminish its importance in SLA research; this is why linguists such as Taylor (1986) reminded researchers of its importance and suggested ways to overcome these weaknesses.

As mentioned previously, Corder noted to whom (or in which areas) the study of errors would be significant: to teachers, to researchers and to learners. In addition to studies concentrating on error categorization and analysis, various studies concentrated on these three different areas. In other words, research was conducted not only in order to understand errors per se, but also in order to use what is learned from error analysis and apply it to improve language competence. Such studies include Kroll and Schafer's "Error-Analysis and the Teaching of Composition", where the authors demonstrate how error analysis can be used to improve writing skills. They analyze possible sources of error in non-native English writers, and attempt to provide a process approach to writing where the error analysis can help achieve better writing skills. These studies, among many others

allow the researchers to recognize the importance of errors in SLA and start to examine them in order to achieve a better understanding of SLA processes, i.e. of how learners acquire an L2.

2.7   Studies of L1 Influence on SLA

Various researchers have concentrated on errors which demonstrate the influence of one's native language on second language acquisition. Before Corder's work, interference errors were regarded as inhibitory; it was Corder who pointed out that they can be facilitative and provide information about one's learning strategies. Claude Hagège (1999) is a supporter of this concept and he mentions it in his book "The child between two languages", dedicated to children's language education. According to Hagège,mother toungue interference is observed in children as well as in adults. In adults it is more obvious and increases continuously, as a monolingual person gets older and the structures of his first language get stronger and impose themselves more and more on any other language the adult wishes to learn. In contrast, as regards children, interference features will not become permanent unless the child does not have sufficient exposure to L2. If there is sufficient exposure, then instead of reaching a point where they can no longer be corrected (as often happens with phonetic features), interference features can be easily eliminated. Hagège stresses that there is no reason to worry if interference persists more than expected. The teacher should know that a child that is in the process of acquiring a second language will subconsciously invent structures influenced by knowledge he already possesses. These hypotheses he forms may constitute errors. These errors, though, are completely natural; we should not expect the child to acquire L2 structures immediately.

In addition to studies of L1 transfer in general, there have been numerous studies for specific language pairs. Thanh Ha Nguyen (1995) conducted a case study to demonstrate first language transfer in Vietnamese learners of English. He examined a particular language form, namely oral competence in the use of the English past tense. He tried to determine the role of L1 transfer in the acquisition of this English linguistic feature and other factors such as age, length of exposure to English, and place and purpose of learning English.

The influence of L1 on L2 was also examined by Lakkis and Malak (2000) who concentrated on the transfer of Arabic prepositional knowledge to English (by Arab students). Both positive and negative transfers were examined in order to help teachers identify problematic areas for Arab students and help them understand where transfer should be encouraged or avoided. In particular, they concluded that "an instructor of English, whose native language is Arabic, can use the students' L1 for structures that use equivalent prepositions in both languages. On the other hand, whenever there are verbs or expressions in the L1 and L2 that have different structures without equivalent in one of the languages, instructors should point out these differences to their students".

Not only was L1 influence examined according to language pair, but according to the type of speech produced (written vs. oral). Hagège (1999:33) discusses the influence of L1 on accent; he notes that the ear acts like a filter, and after a critical age (which Hagège claims is 11 years), it only accepts sounds that belong to one's native language. Hagège discusses L1 transfer in order to convince readers that there is indeed a critical age for language acquisition, and in particular the acquisition of a native-like accent. He uses the example of the French language, which includes complex vowel sounds, to demonstrate that after a critical age, the acquisition of these sounds is not possible; thus, learners of a foreign

language will only use the sounds existing in their native language when producing L2 sounds, which may often obstruct communication.