CHAPTER I

ERROR ANALYSIS: A THEORETICAL OVERVIEW
1.1 The state of the art

Errors have always remained a problem for language teachers. Earlier they were looked down upon as marks of the learner's poor learning ability or of poor motivation on his part. With newer methods of teaching, the impact of educational psychology, and changing socio-political conditions, a more tolerant attitude towards errors has emerged. The study of errors has become more rigorous today. One major result of this shift of attention has been an increasing concern in the analysis of learner's language. This shift has made us more aware of the value of Error Analysis.

Error Analysis is essentially an approach to overcome difficulties in second or foreign language learning. It is a systematic study of learners' errors with the help of linguistic and psychological techniques. Defining error analysis, Selinker (1973) remarks:
Error analysis aims at systematically describing and explaining errors made by speakers of a foreign language. An analysis of learners' errors gives us evidence of his competence in the foreign language. We also gain valuable information concerning learners' difficulties at different stages. Such information is important for the planning of courses and the construction of teaching materials.

It is not that in the past teachers did not undertake informal research into their students' errors. They identified some of the recurrent errors and on their basis planned remedial exercises. But widespread and ever-growing interest in the systematic study of learners' errors and prediction of their sources is recent. It has rightly been remarked that

''... unlike the scientific disciplines of linguistics and psychology with which it has been linked in the past two decades, language teaching has remained an art and craft whose theoretical and philosophical foundations are only now being elaborated.''

(Strevens, 1977)

It has been observed that in the case of learning a second language, learners regularly produce utterances in speech as well as in writing, which judged by the rules of the second language are erroneous or ill-formed.
Even "under the best of teachers, mishearings and misunderstanding will occur, and from the first lesson onwards a pupil is likely to distort into incorrectness some of the language material that has been presented to him in correct examples of usage" (Morgan, 1956:70).

Traditionally, errors were viewed as serious defects in learning and teaching processes. They were taken to show that the learner had not mastered the rules of the target language completely and needed repeated explanations till the errors disappeared. In the past, it was thought that "all errors other than those made by native speakers are abnormalities, and the result of faulty method" (Palmer, 1917:21). It was assumed that the learner's "mistakes are not 'cute' but dangerous" because "they represent decremental, not incremental learning" (Rivers, 1964:102). It was also believed that if learning was perfect and efficient, errors would not occur. From this view developed the theory of mother tongue interference.

Errors indicated learners' difficulties with the target language, which could be explained by interference of the habits of the mother tongue and could be avoided in an ideal teaching situation. Lado (1962) remarks:
The individual is not aware that so much of what he does in using language is done through a complex system of habits. When he attempts to communicate in a foreign language that he knows partially, he adopts the same linguistic posture as when using his native language. He thinks of the overall meaning and proceeds to encode it in the linguistic forms of the foreign language . . . . The bulk of encoding goes to his habit system and here it is channelled through the system of the habits of the native language. This psychology is known as transfer. He transfers the habit system of his native language to the foreign language.

Ease and difficulty in learning a new language were therefore related to similarities and differences between the learners' native language (L₁) and the target language (L₂). On the basis of a contrastive study of the structures of the two, a hierarchy of difficulties was arrived at. This was the origin of a new branch of linguistics—the Constrastive Linguistics—based on the structural approach in linguistics and the behavioristic theory of learning in psychology.

As early as 1889, Boas noted the apparent fluctuations in learners' perceptions of sounds. He explained that this resulted when the learner perceived the new sounds in terms of the old ones of the language to which he had been exposed earlier. In 1899, Henry Sweet noted 'cross-associations' between native language and target language.
and remarked that "each idea that comes into our minds instantly suggests the native expression of it, whether the words are uttered or not and however strongly we may stamp the foreign expression in our memories, the native one will always be the stronger" (Sweet, 1999:198). The first clear expression of the desirability of contrastive studies, however, came from Fries in 1945 and was carried on by Robert Lado (1957). It was maintained that

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. (Fries, 1945:9)

Lado (1964:21, 91) was of the view that the differences between $L_1$ and $L_2$ are "the chief source of difficulty in learning a second language" and that "the most important factor determining ease and difficulty in learning the patterns of a foreign language is their similarity to or differences from the patterns of the native language."

The concept underlying contrastive studies is that second language learning is the juxtaposition of two systems, which gives rise to a new supersystem combining
features of both the systems (Fries and Pike, 1949) or the concept of intersystemic interference (Weinreich, 1953). Nickel (1971:9) observes that Contrastive Analysis aims at "the description of a partial grammar G C which is made up of the sum of the differences between the grammar of the source language G₁ and that of the target language G₂. The differential grammar is the focus of the didactic programming." Lado (1957:2) outlined the basic assumption underlying contrastive studies as follows:

... individuals tend to transfer the forms and meanings, and the distribution of forms and meanings of their native language and 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 culture as practised by natives.

This hypothesis implies that occurrence of errors is directly proportional to the difference between the two languages. It is founded on the following behavioristic assumptions:

(i) Language learning is habit formation.

(ii) An old habit affects the formation of a new habit.
Contrastive studies developed in two distinct directions—the 'strong' hypothesis and the 'weak' hypothesis (Wardaugh, 1970). The 'strong' hypothesis claimed that difficulties in language learning could be predicted by a systematic Contrastive Analysis, and teaching materials could be devised to checkmate those difficulties. The 'weak' hypothesis, on the contrary, claimed no more than an explanatory role for Contrastive Linguistics: where difficulties are evident from the errors made by the learners, comparisons between $L_1$ and $L_2$ may explain them. Wilkins (1969:102) asks: "Yet is it true that by listing the areas of differences between languages we are listing all the linguistic difficulties that will occur?" He conclusively says that "This is surely an oversimplified view." To strengthen his argument, he adds that many errors are "not linguistic in origin" but rather psychological and pedagogical. It would therefore be better, according to him, to concentrate on "known rather than hypothesized errors."

"The function of the Contrastive Analysis would then be to provide the teacher with information that could aid him in establishing the best possible strategy for overcoming the difficulties."
For quite some time Contrastive Analysis had a prominent position in the preparation of instructional materials, especially in the United States. Of late, its contribution to second language learning has been questioned. Nickel and Wagner (1968), for example, suggest that we should not be over-enthusiastic about the contribution of Contrastive Analysis to language teaching. Commenting on the insufficiency and inadequacy of Contrastive Analysis, Svartvik (1973) says that it is "aloof from the classroom situation." Corder (1967) also points out the unsatisfactory function of Contrastive Analysis. He remarks: "Teachers have not always been very impressed by this [i.e. predictive] contribution from the linguist for the reason that their practical experience has usually already shown them where these difficulties lie and they have not felt that the contribution of the linguist has provided them with any significantly new information. They noted, for example, that many of the errors with which they were familiar were not predicted by the linguist anyway" (Corder, 1967:162). Gradually, language learning process came to be regarded as a creative process in which the learner developed his linguistic competence
on the basis of the language data to which he was exposed. With this view came the shift in emphasis from teaching to learning. As Cohen and Robin (1976: 45) observe, "in recent years the focus in second language acquisition has been directed more towards the learner than towards the teacher."

The unpopularity of Contrastive Analysis can be attributed to the following reasons:

(i) Contrastive Analysis concentrates only on errors of performance resulting from L1 interference. It does not explain errors due to other reasons such as overgeneralization of target language rules, faulty training procedures, etc.

(ii) Since factors other than L1 interference also affect L2 learning, other explanations must be sought.

(iii) Contrastive Analysis does not always predict the areas of difficulty. Some of the difficulties predicted by it do not, in fact, pose any problem to the learner.

(iv) Contrastive Analysis provides no means to determine which elements of one language are to be compared with which elements of the other.

(v) Teachers concentrate on known difficulties rather than theoretical predictions. Most contrastive studies deal with theoretical problems like validation of the
notion of linguistic universals and not with actual pedagogical problems. So much so that a distinction has begun to be made between theoretical and applied Contrastive Linguistics in recent literature (cf. Jackson, 1976).

(vi) Recent contrastive studies are too technical to be of any real use to most teachers of a second language.

(vii) Most of the available differential descriptions are "too superficial and incomplete as to be misleading" (Nackey, 1966:201).

1.2 Approximative systems

In the wake of Chomsky's revolution in linguistics and the growth of post-structuralist developments, language acquisition and second language learning became a problem of cognitive learning and the possession of a second language came to be viewed as the possession of a competence rather than a set of dispositions to respond in a certain way to external stimuli. It is now widely believed that a language user possesses a set of cognitive structures acquired by data-processing and hypotheses formation in which the making of errors is an evidence of
the learning process itself and is not only inevitable but necessary (Dulay and Burt, 1974 a). Streuven (1969) regards errors as normal and inevitable features of language learning, and not as problems to be overcome. By examining the errors of various learners a regular pattern can be obtained, through which they progress in learning a second language. Errors become evidence of the learner's success and not of his failure. An analysis of actual errors made by the learners constitutes the most important aspect of such investigations, for it is the most significant data on which the reconstruction of the learners' knowledge of the target language can be made (Corder, 1967).

Before we proceed further, it is essential to consider the distinction between two types of foreign language acquisition: between 'picking up' a foreign language during prolonged contact with people using it, and learning a foreign language within the framework of deliberate and organised instruction. In the first case, there is every reason to expect that the mechanism of language acquisition is broadly similar to that of the infant, subject to variations resulting from greater maturity, motivation for learning and circumstances
of learning. Moreover, as Stevens (1980:9) observes:

Even though some fundamental strategies which operate in mother tongue acquisition undoubtedly also operate in foreign language learning—and work such as that of Corder and Selinker in studying inter-language is therefore highly relevant to our profession—many complexities special to the organized teaching/learning situation that it requires to be analysed and stated in its own terms, which are not identical with those of psycholinguistics.

During the process of learning a second or foreign language, the learner constructs for himself a grammar of the target language on the basis of the linguistic data to which he is exposed and the help he receives from teaching. This process has been called the 'creative construction hypothesis' by Dulay and Burt (1974:11) following Roger Brown (1973). Richards (1975:116) suggests that "language acquisition proceeds through formation of successive hypotheses about linguistic rules involved." This grammar constructed by the learner or "the deviant linguistic system actually employed by the learner attempting to utilize the target language" is called 'approximative system' by Herman (1971:116).

1 The term 'acquisition' will be used to refer to untutored language acquisition and 'learning' for the institutionalized process.
The approximative systems share certain features of
L₂ and, to some extent, of L₁ (Fig.1). They are transient
(Fig.2), and the systematic nature of these systems is
proved by the regularity of patterning of errors in a
given target language by learners sharing the same mother
tongue and often by learners of various language backgrounds.
Corder (1971 a) calls them 'idiosyncratic dialects' of
the target language. It is a dialect because it is a
'shared behaviour of a social group' (Corder, 1971 a)
and is regular, systematic and meaningful, i.e. it has
a grammar and is describable in terms of the rules of
L₂ (Fig.3). Carl James (1971) also refers to language
learning as a process of dialect expansion and calls
the approximate systems as the phenomenon of 'interlingua'.
Selinker (1972) refers to the phenomenon as 'interlanguage'.
Richards and Kennedy (1977) remark: "The interlanguage
is said to constitute a dynamic linguistic application
of rules, strategies and hypotheses." The interlanguage
clearly implies the intermediate nature of approximative
systems (Fig.4).

The approximative system or the 'idiodect' (Corder,
1976) of a learner can be divided into three stages:
(1) The presystematic stage

The learner is not aware of the rules of the target language. His errors are random. He may occasionally produce a correct form.

(2) The systematic stage

The learner has discovered and is operating a rule of some sort, but it may be a wrong one. His errors, however, tend to be regular.

(3) The postsystematic stage

The learner produces correct forms but inconsistently.

Commenting upon the transient nature of the approximative systems, James (1974) remarks: "How can a system remain a system if it is in flux?" He speaks of a fictitious 'homeostasis'. To adopt this point of view is to deny the possibility of all language description with available theoretical models. All languages are in a state of flux. The notion of 'état de langue' is a necessary idealisation upon which all linguistics is founded. However, we do find varieties of approximative systems as in immigrant speech, where the learners have 'reached a plateau' in their learning (Nässer, 1971). Selinker (1972) calls it by the name of 'fossilisation'. The whole process has been illustrated in Figures 1 to 6.
Fig. 1
Approximative system $L_n$

target language $L_2$

$L_n$

mother tongue $L_1$

- correct utterances in $L_2$
- errors due to $L_1$
  influence
- errors due to other factors
fig:2

Transient nature of approximative systems

target language $L_2$

successive stages of approximative systems $L_n$

the gradual progress of approximative system towards $L_2$

mother tongue $L_1$
fig. 3

Approximative system $L_n$ as a dialect

approximative system $L_n$ of a learning group

$l_1, l_2, l_3, \ldots, l_n$: approximatives systems of learners of a particular group
Intermediate nature of approximative systems

target language $L_2$

approximative system

mother tongue $L_1$
fig: 5

Mistakes: breaches in the use of linguistic code

- mistakes
- utterances correct according to $L_2$ rules & appropriate in the context
- utterances correct according to $L_2$ rules but inappropriate in the context

language of the native speaker or second language learner $L_m$

target language $L_2$
Errors: breaches outside the code of $L_2$

target language $L_2$
1.3 Factors influencing approximative systems

There are certain motivational and attitudinal factors which affect L₂ learning. Selinker (1972) mentions five central processes which operate in the latent psychological structure of the learner's brain:

(i) Language transfer

Fossilizable items, rules and subsystems of the learner's native language influence his performance in the target language.

(ii) Transfer of training

Fossilizable items, rules and subsystems are a result of identifiable training procedures.

(iii) Strategies of second language learning

These are a result of identifiable approach by the learner to the material to be learned.

(iv) Strategies of second language communication

These originate from the learner's approach to communicate with the speakers of the target language.

(v) Overgeneralization of the target language linguistic materials

These result from a clear overgeneralization of the target language rules and semantic features.
1.4 The concept of errors

Central to the theory of Error Analysis is the concept of 'error'. We find various terms like 'slips', 'lapses', 'mistakes', 'goofs', and 'errors' in current usage referring to deviant language items. George (1972:2) describes an error with reference to the teaching programme. An error, according to him, is "an unwanted form which a particular course designer or teacher does not want." Defining errors, Corder (1973:259) says: "They result in unacceptable utterances and appear as breaches of the code . . . . They are not physical failures but the sign of an imperfect knowledge of the code. The learners have not yet internalized the formation rules of the second language." Due to lack of mastery over $L_2$ rules, the learner processes the language material in his own way, which gives rise to deviant forms.

Distinguishing between systematic and non-systematic errors, Corder (1967, 1973, 1974) makes a useful distinction between lapses, mistakes and errors:

1. Lapses

Lapses are errors of performance—products of such chance circumstances as memory lapses, fatigue, or
emotional strain, and do not reflect the learner's knowledge of the language. They are slips of the tongue or slips of the pen, false starts or confusion of structures. The speaker or writer is, normally, immediately aware of them and can correct them with more or less complete assurance. These phenomena have been studied by linguists interested in explaining the process of speech perception and production (Boomer and Laver, 1968; Fromkin, 1973; Bierwisch, 1970).

(ii) Mistakes

Mistakes are failures to match the language to the situation and result in inappropriate utterances; e.g. the mistake of referring to a naval ship as a 'boat'. Such mistakes are made due to selection of an item from a wrong style, dialect or variety. Both lapses and mistakes are breaches in the use of the linguistic code (Fig. 5) and not in the code itself and can be detected in the language use of native speakers as well as second language learners.

(iii) Errors

Errors are breaches of code (Fig. 6) and refer to systematic breaches of the learner from which we can reconstruct his knowledge of the language to date, i.e. his transitional competence. What the second language
learner actually produces is an idiosyncratic dialect with some rules peculiar to the individual. The learner's idiosyncratic dialect (Fig. 2) is a product of the use of wrong rules or the misuse of right rules. Unlike lapses, where the speaker/hearer is aware of the language rules and can immediately correct, in the case of errors the learner is not aware that the particular form deviates from L2 rules.

For Selinker (1972) errors are a phenomenon of inter-language. For most second language learners successful learning is the reorganisation of linguistic material from an interlanguage to bring it closer to the target language. A complete realization of the target language system is not possible in the second language learner's use of that language. What the second language learner speaks or writes is an interlanguage with fossilized linguistic elements irrespective of the age of the learner or amount of explanation and instruction he has received in the target language. These fossilized structures are considered to be errors or deviations that have become permanent in the learner's language. Other errors can be viewed as a 'transitional' language that keeps on changing with resultant progress in learning. Errors
therefore are natural and "constitute a way of learning
instead of an obstacle to learning" (Olsson, 1974: 175).

1.3 The significance of learners' errors

Learners' errors are significant, for they are helpful in reconstructing the learners' approximative systems at any particular stage in their learning career. They are an evidence of his linguistic competence. They are no longer viewed as problems to be overcome and are seen as an evidence of success rather than failure.

Errors are also of interest to the psycholinguist engaged in understanding the process of language learning. Studies of errors provide insights into the process of transfer. Error Analysis answers the questions what forms and structures of the learner's L₁ are transferred to his interlanguage (or approximative system), if they are at all transferred, and how far this transference facilitates or hinders the learner's attempts to internalize the target language system. While Contrastive Analysis discovers the differences between L₁ and L₂ and predicts learning problems, because of which the learners will make errors, Error Analysis
studies the nature of these errors and confirms or refutes the predictions of Contrastive Analysis.

Besides, Error Analysis serves two more related but distinct functions (Zydatiss, 1974; Strevens, 1969): the one is theoretical and pertains to its leading to a better understanding of second language learning processes and strategies; and the other is pedagogical and 'applied' in aim. From the theoretical point of view, Error Analysis provides a feedback to the linguist, especially to the psycholinguist interested in the process of second language learning. The chief assumption underlying the study of errors is that they are evidence of a system, not the system of the target language but the system of the learner's interlanguage. Its most practical relevance is in second language pedagogy. Errors serve as milestones to the teacher by revealing how far his teaching techniques and materials have been effective and which parts of the syllabus have been inadequately learned or inefficiently taught. It also supplies the teacher pertinent information for designing remedial programmes. The information may be useful to the course designer also for preparing teaching materials.
It would, further, facilitate correction by indicating what to correct and how to correct. Moreover, results of Error Analysis are helpful in writing of pedagogical grammars. It is the learner, however, who gains the most in a teaching-learning situation benefited by the insights provided by Error Analysis.

It is hoped that the present study will clarify some of the crucial issues having a bearing on Error Analysis. It will also shed some significant light on fundamental relationships between \( L_1 \) acquisition and \( L_2 \) learning strategies and processes. Before attempting a classification, analysis and explanation of learners' errors, however, it would be worthwhile to give a brief outline of the methodology followed in our investigation.