CHAPTER IV

READING AS AN INTERACTIVE PROCESS

The brief survey of some theories, approaches and classroom practices of teaching reading presented in Chapters II and III reveals that reading teaching has remained confined to teaching decoding. This view of reading is based on the belief that language has meaning and that all that is needed is ability to decode the printed words. In this bottom-up reading approach the reader is supposed to be a passive decoder who has no contribution to make to meaning-making process.

This traditional approach to teaching reading has been criticized on grounds of both theory and practice. In Chapter I of this study we have already described the shortcomings of this traditional product-based approach to teaching reading. It totally ignores the contribution of the reader and the processes he engages in to make sense of a written text. Research has shown that language does not have meaning but has potential for meaning and that meaning is imposed on it by the reader. Reading researchers have tried to study what enables an effective reader in this meaning-imposition process and what hampers this process in the case of a poor reader.

The different reading theories and models we have
described in Chapter II raise an important question: is reading a language or a reading problem?

According to Alderson (1984:24), it appears to be both a language problem and a reading problem, but there is a firmer evidence that it is a language problem, for low levels of foreign language competence, than a reading problem. He found that some sort of threshold or language competence ceiling has to be attained (before existing abilities in the first language can begin to transfer) below which the reader cannot engage meaningfully with the text. Clarke (1988) also speaks of a language ceiling which, if it is too low, will restrict a reader's ability to interact with the text. Alderson and Richards (1977), too, have shown vocabulary problems to be the most important contributors to text difficulty. But they also found that there were many foreign language readers who did not have 'language problems', including difficulty with vocabulary, but who still found text difficult to process. They conclude that a linguistic analysis of a text is a necessary but not sufficient guide to foreign language reader's problems. Alderson and Urquhart (1984:xxiii) state that

It would seem not unreasonable to suggest that in the interaction of a particular reader and a given text, predicted syntactic complexity, lexical density or infrequency and rhetorical anomaly or opacity might not prove to cause difficulty or incomprehension. This may be because of other text factors.
Attempts have been made by researchers to study what other factors there are which might facilitate reading comprehension and it has been found that other reader factors such as reader's intent and motivation also play a significant role in comprehensibility of texts. Royer, Bates and Konold (1984:65) believe that the importance of intent is apparent without much thought. They point out that what is learnt and the nature of what is learnt depend on intent. For example, when we have read a novel or short story for pleasure, all that we can recall are general details such as plot and gist but recalling with more details may be difficult. If we attempt to report what we have read in great detail, we quickly resort to fabrication, and our recall may be based more on general knowledge than on remembered fact. Now compare this to what a professional can recall after reading a professional article, they plead. Most researchers could report in great detail the logic, citations, specific procedures, outcomes, and conclusions of articles they have read with little difficulty. They conclude that the level of detail learnt from text will vary depending on what the reader wants to learn from the text.

The role of motivation in learning has also been looked into. A large number of experiments on the relation between motivation and learning performance have been reported. The Yerkes-Dodson law is regarded by many to be the best attempt
to summarize the experimental findings (See Alderson and Urquhart, op. cit.:87). This law states that up to an optimal point an increase in level of motivation is accompanied by a rise in learning performance. But an increase beyond that point seems to have negative effects. The position of the optimal point depends on the difficulty of the learning task. The easier the task the higher the optimal level of motivation.

Biggs (1971) makes distinction between intrinsic and extrinsic motivation. Extrinsic motivation for learning is a state where the reasons for learning effort have nothing to do with the content of the learning material. Intrinsic motivation, on the other hand, is characterized among other things by total involvement of the self and lack of anxiety. He criticizes the Yerkes-Dodson law for describing only the relation between extrinsic motivation and learning. Saltz (1971) also has made important critical remarks on the Yerkes-Dodson law. He presents evidence to prove that the anxiety that often accompanies extrinsic motivation has disruptive effects on thinking, problem-solving and other cognitive activities.

Biggs (op.cit.) and Saltz (op.cit.) have made an important point that the experimental research has confined itself to examining the effect of extrinsic motivation (money, praise, grade) or avoiding some kind of punishment.
The competence acquired has not been an end in itself. The learning tasks have been presented to the subjects irrespective of their relevance to the interests and the life of the subjects.

Anders Fransson (1984) has shown that extrinsic and intrinsic motivation lead to different kinds of learning. He makes distinction between meaning-oriented or 'deep-level' learners and reproduction-oriented learning or 'surface-level' learners. He found that extrinsic motivation leads to surface level learning where the learners try to remember the exact wording of central passages; they direct their attention toward learning the text itself: to remember the exact wording—he calls it cramming. Intrinsically-motivated learners direct their attention toward the meaning of the text and try to understand that meaning. He concludes that the type of motivation for reading a particular text is an important factor influencing the choice of approach to learning, and thus determines likely levels of outcome. A subject motivated by expected test demands to read a text for which he has very limited interest is likely to adopt a surface-level strategy, while deep-level learning seems to be the normal strategy chosen by a student motivated only by the relevance of the content of the text to his personal needs and interests.
Another important factor that has been found to facilitate reading comprehension is reader's background knowledge. That reading is not a passive, but rather an active process has been recognized for some time in first language reading (Goodman, 1967, 1971; Smith 1971; Rumelhart 1977). However, only recently has second/foreign language reading been viewed as an active, rather than a passive process. It was only about a decade ago that the psycholinguistic model of reading, which had earlier influenced views of first language reading, began to have an impact on views of second/foreign language reading.

Goodman (1971:135) has described reading as a "psycholinguistic guessing game" in which the reader reconstructs a message which has been encoded by a writer as a graphic display:—

Reading is a receptive language process. It is a psycholinguistic process in that it starts with a linguistic surface representation encoded by a writer and ends with meaning which the reader constructs. There is thus an essential interaction between language and thought in reading. The writer encodes thought as language and the reader decodes language to thought.

(Goodman, 1971)

Goodman is of the view that the reader need not (and the efficient reader does not) use all the textual cues. Efficient readers maintain constant focus on constructing meaning and for this they minimize dependence on visual
The reader reconstructs meaning from written language by using the graphophonic, syntactic, and semantic systems of the language, but he merely uses cues from these three levels of language to predict meaning, and, most important, confirms those predictions by relating them to his past experiences and knowledge of the language. According to him the five processes involved in reading are: recognition-initiation, prediction, confirmation, correction, and termination. Reader's proficiency is variable depending on the background knowledge brought by the reader to any given reading task. By the early 1970s researchers began to relate Goodman's theory to ESL readers. As Carrell et al. (op. cit.: 23) observe, among the first of the most widely distributed articles that appeared in the reading literature during this period were those of Eskey (1973) and Saville-Troike (1973). Eskey (op.cit.) pointed out that the decoding model was inadequate as a model of the reading process because it underestimated the contribution of the reader. Soon other second language specialists began to view second language reading as an active process in which the reader is an active information processor who predicts while sampling only parts of the actual text. Thus, the most important impact that Goodman's psycholinguistic theory had on both first and foreign language reading was to make the reader an active participant in the reading process. (See Mackay and Mountford 1979 and Widdowson 1978, 1983).
It came to be realized that **getting** meaning from the printed page is too limited a definition of reading and that **bringing** meaning to the printed page indicates more accurately the reciprocal process between the printed symbols and the mind of the reader (Staiger 1973:45).

In this top-down view of second language reading, not only is the reader an active participant in the reading process, making prediction and processing information, but everything in the reader's prior experience or background knowledge—linguistic knowledge, content/topic knowledge and knowledge of the rhetorical structure of the text—are also important.

It has been claimed that an essential part of the reading process of mature reader is the creation of hypotheses about what the text is about, and about which ideas or language are to come—a process which has been termed 'predicting' (See Goodman, 1967 and Smith, 1971). Such hypotheses creation is said to be followed by a selective sampling of the text for confirmation of the hypotheses.

There are many researchers who have pointed out limitations of the top-down model. They view reading comprehension as an interactive process involving constant
interaction between bottom-up and top-down strategies. According to David E. Eskey,

the fluent reader is characterized by both skill at rapid, context-free word and phrase recognition and, at higher cognitive levels, the skillful use of appropriate comprehension strategies. For the proper interpretation of texts the latter skills are crucial, but such lower-level skills as the rapid and accurate identification of lexical and grammatical forms are not merely obstacles to be cleared on the way to higher-level "guessing game" strategies, but skills to be mastered as a necessary means of taking much of the guesswork out of reading comprehension.

(David E. Eskey, 1988:98)

As schema theory research has attempted to make clear, top-down processing perspective is not a substitute for the bottom-up, decoding view of reading; rather it is its complement. It is now generally agreed that efficient and effective reading requires both top-down and bottom-up strategies operating interactively (Rumelhart, 1977, 1980).

This interactive notion of reading is based on a schema theoretic view of basic processes in reading comprehension. As Bartlett (1932) defines it, the term schema refers to "an active organization of past reactions or past experiences" (Quoted in Carrell, et.al.). A schema is an abstract knowledge structure. It is abstract in the sense that it summarizes what is known about a variety of cases that differ in many particulars. While Sir Frederic Bartlett (1932) is usually acknowledged as the first psychologist to
use the term *schema* in the sense that it is used today, yet credit for the notion of schema must surely be given to the Gestalt psychologists.

The term 'Gestalt' literally means shape or form. Gestalt psychology was the study of mental organization and it emphasized holistic properties. The insight of the Gestalt psychologists was that the properties of a whole experience cannot be inferred from its parts. The basic principle of Gestalt psychology is that mental organization will always be as good as prevailing conditions allow. In this definition, 'good' implies such properties as simplicity, regularity, and symmetry. The theory stresses that mental organization is 'dynamic', which means that the tendency toward coherent organization is a spontaneous process that can happen without an external goad. Jean Piaget (1952) most clearly exemplifies the basic tenets of these psychologists who have described stages of cognitive development. Piaget views the acquisition of knowledge as a gradual developmental process in which learners actively experience and organize their environment. He says that people have a biological tendency to organize and adapt their experiences in relation to their current store of information. When learners interact with their environment, they use their accumulated store of prior experiences to organize the new information, and they modify their
behaviour to meet increasing demands from the environment. This accumulated store of prior experiences is known as a person's 'cognitive structure', made up of schemata, and defined as coherent systems of mental operations, which allow the thinking person to arrive at concepts, to solve problems and come to conclusions (either in logic or about the real world surrounding him) without the person himself being necessarily aware of the operations he performs.

(Sinclair, 1975:223-24)

In Piagetian terms, this is the process of adaptation that involves both assimilation and accommodation. Assimilation involves using structures already stored to deal with new information in the environment; accommodation involves modifying these structures so that the new information can be incorporated into the existing cognitive structures. As a result of this process of adaptation, new structures are continually being developed that enable the individual to make further sense of the environment. In other words, learning occurs when there is sufficient, but not excessive, conflict between new and old information. At this point existing mental structures need modification. Assimilation and accommodation are complementary processes that occur in every act. Once these processes have occurred, the individual's store of knowledge and, therefore, behavior have been reorganized to take account of
Among educators something like schema theory has driven our conceptions about reading. According to Anderson and Pearson (1984), comprehension is the interaction of new information with the old knowledge. "To say that one has comprehended a text is to say that she/he has found a mental 'home' for the information in the text, or else that she/he has modified an existing mental home in order to accommodate that new information", they explain.

Research into L2 reading has drawn both on schema theory and on L1 reading research to stress the importance of reader's prior knowledge. Among the features studied which affect reading comprehension are content schemata, formal schemata, knowledge of a specific culture or subculture in terms of its way of life and institutions, and knowledge of a specific subject or discipline.

Bransford and Johnson (1972) studied the effect of background knowledge (pictorial help) on comprehensibility. They found that the same text became quite comprehensible if one was supplied with an appropriate knowledge framework or context. However, they found that the appropriate context improved reading comprehension and recall only if it was made available to readers before reading/hearing the
passage. It is thus clear that lack of background knowledge affects comprehensibility. Hudson (1988) also makes this point when he says that the effect of low language proficiency may be partly offset by reader's ability to activate appropriate background knowledge.

The role of activated background knowledge has also been studied by Stein and Albridge (1978). They found that prior exposure to a title of the text enabled readers to make much more sense of a passage while those without it could make no sense of the text even though they had a general understanding of the subject. They conclude that the mere availability of potential information is therefore not sufficient for comprehension; potential knowledge must be activated in order to facilitate people's abilities to understand and learn.

The significance of activating knowledge of the world in everyday comprehension has also been studied by many researchers. Collins and Quillian (1972), McCarrell, Johnson and Bransford (1973), Rumelhart ad Ortony (1977), and Schank and Abelson (1977) argue that no language is ever complete and show that we make assumptions necessary to connect sentences or fill in gaps in messages to make sense of them. Rumelhart (1977) and Trabasso show that even children's stories require many assumptions to link sentences together to form coherent events. In other words,
if people lack the knowledge necessary to make appropriate assumptions or inferences, they would be unable to make any sense of texts.

Background knowledge also includes cultural knowledge. Fries (1945, 1963) was the first American linguist to incorporate cultural background information into a description of meaning. In his analysis, there are three levels of meaning: lexical, grammatical, and sociocultural. Comprehension of the total meaning of a sentence occurs, according to him, only when the linguistic meaning of the sentence is fitted into 'a social framework of organized information'. In the studies relating to the role of cultural knowledge in reading comprehension, two broad positions have been adopted: one, that there is cultural interference at the affective level, in the connotative values of words and in the attitudes expressed in, and underlying the passage (Rivers, 1968) and, two, that there is interference at the denotative level as well (Paulston and Bruder, 1976 and Robinett, 1979).

Steffensen and Joag-Dev (1984) report a cross cultural study to demonstrate that reading comprehension is a function of background cultural knowledge. They conclude that if readers possess the schemata assumed by the writer, they understand what is stated and make the inferences
intended to 'fill in the gaps' in the message. If they do not, they distort meaning as they try to accommodate even explicitly stated propositions to their own pre-existing knowledge structures.

Background knowledge about non-verbal information has also been found to improve reading comprehension. Non-text information includes non-verbal information (such as maps, diagrams, tables, illustrations, etc.); reference apparatus (for example, content tables, index, titles, and sub-titles); and graphic conventions (such as layout, punctuation, type-face, use of symbols). The ability to use non-text information may not strictly be a reading skill but it does help the reader in making sense of the text. A skilled reader understands the contribution to meaning made by various conventions of the written medium such as words printed in italics and punctuation marks. An inexperienced reader may either not notice this information or, if he does, he may be puzzled by it and thus fail to comprehend the text.

Schema theory research thus suggests that effective reading is an interactive process. Exactly how these processes interact—how such notions as background knowledge, topic of discourse, inferencing, and schemata all affect the overall reading model—is a question which research has not answered as yet. As David Eskey (1988:98)
rightly observes, one practical problem that remains is that "no model can determine what mix of skills and strategies second language readers in general employ, let alone the mix for particular readers."

Carrell (1988:101) identifies five main causes for failure of second language readers to process text interactively. These are mentioned under the headings: (1) schema availability; (2) schema activation; (3) skill deficiencies, including deficiencies in reading skills, as well as linguistic deficiencies; (4) misconceptions about reading, specifically about reading in a second language and especially in a second language classroom where reading evaluation is involved; and (5) individual differences in cognitive styles. These have been found to interfere with second language readers' interactive processing of text and cause them to process texts unidirectionally, in either totally top-down or bottom-up processing direction.

Schema theory research suggests that non-availability of relevant schema impedes the interactive process. It is pointed out that if the learners lack the appropriate content and/or formal schemata, they will resort to other strategies. In the words of Carrell
Either they will overrely on text-based processes and try to construct the meaning totally from the textual input (a virtual impossibility because no text contains all the information necessary for its comprehension) or they will substitute the closest schema they possess and will try to relate the incoming textual information to that schema, resulting in schema interference. In either case, comprehension and recall suffer.

(Carrell, 1988:105)

In this case, again, though we are aware of the dangers of overreliance on either of the processes, we do not know how to help the learner. Moreover, schema availability alone is not a sufficient condition for adequate comprehension. Relevant schemata must be activated. But, as Carrell herself points out, the processes by which schemata are evoked are not well understood.

Carrell (1988:108) also refers to another important cause of interference in the interactive process. She calls it "Misconceptions about reading". Some of the work with native English-speaking children's reading, especially in classroom and evaluative settings, suggests that children seem to think that knowledge-based processing is not an appropriate activity in reading. They seem to suffer from what has been called a "meaning is in the text" fallacy (Spiro, 1979). She points out that for some children this fallacy seems to apply only to their reading for school. They misconceive reading as primarily a bottom-up process.
According to Carrell some possible candidates for these misconceptions could be over-emphasis on decoding skills, and on the code in general, especially in early language and reading instruction; reading passages that are insular and lacking in relevance to existing knowledge and reader interests; and tests of reading that stress literal text content rather than its integration with related prior knowledge. To these possible candidates, we would want to add students' inability to realize that writing is also a form of communication and their failure to make sense of the printed text because of the peculiar nature of its communicative mode.

The interactive approach to reading comprehension described above takes the view that language is not an end in itself but only a tool for communication in which arbitrary speech sounds are exploited for achieving communicative ends. It does not look upon language as an abstract system to be analysed and studied in isolation but language as a medium for communication in society, an understanding of which must take into consideration not only the formal features of language but also all those factors in which it operates.

This approach to the study of language is one that focuses upon the social: upon the social functions that determine what language is like and how it has evolved.
Halliday (1985:3) uses the phrase 'language in a social-semiotic perspective' to characterize his approach. The term 'social-semiotic', he explains, can be thought of as indicating a general ideology or intellectual stance, a conceptual angle on the subject. But the two terms 'social' and 'semiotic' have more specific implications. He defines 'semiotics' as the study of sign systems rather than as the study of signs—in other words, as the study of meaning in its most general sense. According to him, linguistics also is a kind of semiotics; it is an aspect of the study of meaning. By 'social', he means two things: (1) the social system (which for him is synonymous with culture) as a system of meanings, and (2) the relationships between language and social structure, considering the social structure as one aspect of the social system.

This intellectual stance to the study of language does not mean that there is no other perspective on the subject. What it means is that there can be—in fact, there have been—many other perspectives on the study of language. For some linguists, Chomsky for example, the preferred mode of interpretation is the psychological one, in which an attempt is made to explain language in terms of the processes of the human mind or the human brain (Chomsky 1957). For others, it might be a psychoanalytic one, or an aesthetic one, or any
one of a number of possible perspectives. Halliday himself adopts the social perspective:

For us, the perspective primarily adopted—not to the exclusion of the others, but because this is where we look first to seek our explanations for linguistic phenomena—is the social one. We attempt to relate language primarily to one particular aspect of human experience, namely that of social structure.

(Halliday, 1985:4)

The social aspect to the study of language has gained prominence during the last decade or two for two particular reasons: one, for the questions we are interested in, especially educational questions, the social dimension seems particularly significant—and it is the one that has been the most neglected in discussions of language in education. Two, learning is, above all, a social process; and the environment in which educational learning takes place is that of a social institution (the classroom and the school) with their clearly defined social structure. To quote Halliday:

Knowledge is transmitted in social contexts, through relationships, like those of parent and child, or teacher and pupil, or classmates, that are defined in the value systems and ideology of the culture. And the words that are exchanged in these contexts get their meaning from activities in which they are embedded, which again are social activities with social agencies and goals.

(Halliday, 1985:5)
This 'social-semiotic' stance towards language considers language not an end in itself but only a means to an end, the end being communication. Hence knowing a language does not mean knowing its vocabulary and structures but an ability to communicate effectively in that language; knowing not the forms of the language but how to perform certain functions in that speech community. However, much language study, and perhaps therefore a good deal of language teaching, has been devoted to teaching only the language usage and not its use. Knowing the grammatical rules and being able to produce correct sentences, where a sentence begins and where it ends, though it is important and worth teaching and learning, is clearly not enough.

It was on the basis of this view of language that the structuralist approach was criticized. Sociologists and sociolinguists also questioned Chomsky's concepts of 'competence' as being abstract, emphasizing only the 'grammaticality' of sentences, and based on idealized linguistic data which not only ignored 'language in use' but also talked of it as being a degenerate variety. As Dell Hymes tells us (1971), this view of language does not tell us anything about language in use and hence is not enough for our purpose as, to quote him, "there are rules of use without which the rules of grammar would be useless."
Many attempts have been made to find the bases for analysing language in use, such as situations, contexts, themes and topics. A situational or contextual study of language in use is made on the principle that language always occurs in a social context and there is a correlation between language and its context. Hence we can describe the language used, say "At the Post Office." The study of language used on different topics or themes is done on similar lines with the difference that it employs the procedure of grouping language around a topic, e.g. travel. Topics may also be treated within a situation as, for example, the situation might be "At the Post Office," but the topics 'weather' or 'travel'.

It is claimed that this model of studying rules of language in use is important since it is based on a prediction of the situation and contexts in which language will occur. However, it has not been free from criticism. Language use, in a given situation, it is argued, is not entirely predictable, depending as it does on the speaker's intentions. For example, one may step into a post office not to buy stamps and envelopes but to complain about non-arrival of a parcel. It is also pointed out that it is difficult, if not impossible, to make a list of situations/contexts. Again, it is clear that this model is not generative: no one can learn a list of language in use
in different situations. Moreover, the making of request, the seeking of information, the expression of agreement and disagreement can take place in almost any situation. This model thus fails to exploit the fact that most of the things people say are common to a wide range of situations and contexts.

There have been many, sometimes conflicting, attempts to classify the main functions of language. One of the most influential was that by Roman Jacobson (1960) which was further developed by Dell Hymes (1962). They proceed by first identifying the elements of communications, as follows:

1. The addresser: the person who originates the message.
2. The addressee: the person to whom the message is addressed.
3. The channel: the medium through which the message travels, e.g. letter, telephone.
4. The message form: the particular grammar and lexical choices of the message.
5. The topic: the content of the message.
6. The code: the language or dialect used for the message e.g. English, Hindi, French.
7. The setting: the social or physical setting.
Macro-functions are then established each focussing attention upon one element:

1. The emotive function: communicating the inner states and emotions of the addresser (Oh no!, Fantastic, Ugh!)

2. The directive function: seeking to affect the behaviour of the addressee (Please help me!, Shut up!)

3. The phatic function: opening the channel or checking that it is working (Hello, Lovely weather; Can you hear me?)

4. The poetic function: in which the particular form chosen is the essence of the message.

5. The referential function: carrying information.

6. The metalinguistic function: focusing attention upon the code itself ('Will' and 'Shall' mean the same thing these days)

7. The contextual function: creating a particular kind of communication ('Right, let's start the meeting).

Attempts are then made to sub-divide each function and specify more precise categories.

Functional analyses enable us to set out the purpose for which students might wish to use language. In this sense it has an advantage over studies which look at only the formal features of language. But this approach, too, has certain weaknesses for the more exact one tries to become
about functions, the more slippery they become. Consider the following:—

Warm air rises.

As Christine Nuttall (1982:14) observes this utterance can be an explanation, an assumption, a conclusion, an objection, an illustration/example, or a reason in different contexts depending on who says it, to whom, when and where.

This approach to language has attracted much of the criticism levelled against situational analyses of language in use (Brumfit, 1978, 1979, 1981).

The merit of functional analyses of language in use does not lie in their alleged superiority to formal analyses of language but in focusing our attention on the shortcomings of the structural analyses and in sharpening our perception of what is required in language study. It establishes the important principle that language does not have meaning but has potential for meaning; that an utterance has more than one meaning depending on the context; that the plain semantic meaning (the fixed context-free meaning) and pragmatic meaning (the meaning which an utterance takes in a particular context) are two different things.

However, even the functional analysis of language in use does not solve our problem: how do we make sense of what
is said? Rather, it poses two more questions about the divergence of forms and functions of language, of the plain literal context-free meaning of words and their meaning in context. These questions are:

1) if the meaning of an utterance does not wholly reside in the language, and if people can mean quite different things with the same words, how do we then interpret what is said from what is meant?; and

2) why do people not just speak directly and say what they intend to say?

Answers to these questions are sought to be given by the theories of conversational principles and speech act.

Recent studies of conversation from a variety of perspectives have revealed a number of issues important to the study of conversational inference. It is generally agreed that grammatical and lexical knowledge are only two of several factors in the interpretation process. Other factors such as physical setting, participants' background knowledge, their attitudes toward each other, socio-cultural assumptions concerning role and status relationships as well as social values associated with various message components also play an important role in interpretation. Participants employ various procedures to interpret each other's intent during conversation and as Gumperz (1983:155) rightly says,
It follows that analysis of such ongoing processes requires different and perhaps more indirect methods of study which examine not the lexical meanings of words or the semantic structure of sentences but interpretation as a function of the dynamic pattern of moves and countermoves as they follow one another in ongoing conversation.

Gumperz (1983:153) calls this ability 'Conversational inference'. Conversational inference is the term used to denote "the situated or context-bound process of interpretation by means of which participants in an exchange assess others' intentions, and on which they base their response" (Gumperz, 1983:153).

It is argued that because of the linguists' concern with context-free grammatical rules, existing grammars are built on a highly selective data base and do not provide the information needed for understanding how language is employed. New types of data are needed for studying language in use and these studies concentrate on what Hymes calls the means of speaking. To quote Gumperz,
This includes information on the local linguistic repertoire, the totality of distinct language varieties, dialects and styles employed in a community. Also to be described are the genres or art forms in terms of which verbal performances can be characterized, such as myths, epics, tales, narratives and the like. Descriptions further cover the various acts of speaking prevalent in a particular group ('act' is used here broadly, in Austin's sense, to suggest functions such as question, response, request), and finally the 'frames' that serve as instructions on how to interpret a sequence of acts (Bauman & Sherzer 1975).

(Gumperz, 1983:155)

There have emerged primarily three traditions in this area of language study: (1) Ethnography of communication; (2) Discourse analysis; and (3) conversational analysis.

Ethnographers of communication have collected valuable descriptive information documenting enormous range of signalling resources available in various cultures. They have provided evidence to show that much of language use, like a grammar, is rule governed. Their principal goal, however, is to show how social norms affect the use and distribution of communicative resources, not to deal with interpretation.

In the second tradition, that is, of discourse analysis, the cognitive functioning of contextual and other knowledge becomes the primary concern. This tradition derives from speech act theory of Austin, linguistic
pragmatics, frame semantics (Fillmore 1977) and artificial intelligence. It posits abstract semantic constructs called schemata, by means of which participants apply their knowledge of the world to the interpretation of what goes on in an encounter. Speech Act theory points to the inadequacies of the logician's concept of meaning as the relationship of words or sentences to things or ideas and argues that meaning ultimately resides in human action. The key notion is Grice's (1977) definition of meaning as "the effect that a sender intends to produce on a receiver by means of a message." Speech acts defined in terms of illocutionary force, i.e. utterer's communicative intent, become the main unit of linguistic analysis.

Although the two traditions differ both in theory and in methodological approach, they share similar notions as to what linguistic signalling mechanisms are. Both define the basic theoretical issue as one of showing how extra linguistic knowledge, reflected in cognitive structures or social structures that exist independently apart from communication, are brought into the speech situation.

Conversational analysts are concerned with naturally occurring instances of everyday talk. But they follow another, separate academic tradition of enquiry which concentrates on the actual discourse mechanisms that serve to allocate turns of speaking, to negotiate changes in focus
and to manage and direct the flow of interaction. Deriving from the work of Sacks and his collaborators (Garfinkel and Sacks 1970; Schegloff 1972), it attempts to study the process of conversational management \textit{per se} without making any \textit{a priori} assumptions about social and cultural background of participants. The research has concentrated on isolating strategies of effecting speaker change, opening and closing conversations, establishing semantic relations between utterances, controlling and channelling the course of interaction. Studies have shown that everyday conversation is a dynamic interactive flow marked by constant transitions from one mode of speaking to another; shifts from informal chat to serious discussion, from argument to humour, or narrative to rapid repartee. Conversation analysts have demonstrated that not only formally distinct speech events but all kinds of casual talk are rule governed and that the mechanisms which underlie speaker-listener coordination can be studied empirically by examining recurrent strategies, the responses they elicit, and the ways in which they are modified as a result of those responses.

\textbf{WRITING : A NON-RECIPROCAL ACTIVITY}

When we speak of 'language as a tool' for communication, we mean both spoken and written language. Both these modes of language are used for the same goal--
communication. While they perform the same function, their form and manner of use differ in many respects. For example, one makes use of sounds, other of symbols. The speaker has available to him the full range of 'voice quality' effects, as well as facial expression, postural and gestural systems, but these paralinguistic features are denied to the writer. The writer, on the other hand, has typographical variety at his disposal. The speaker is face-to-face with his hearer while the writer writes for an absent reader. According to Halliday (1989) formal written language is extremely simple grammatically and extremely dense lexically as compared to spontaneous spoken language which tends to be grammatically complex and lexically sparse.

These different features have their own advantages and disadvantages. As Brown and Yule (1983:4) observe, the speaker must monitor what it is he has said and determine whether it matches his intentions, while he is uttering his current phase and monitoring that, and simultaneously planning his next utterance and fitting that into the overall pattern of what he wants to say and monitoring, moreover, not only his own performance but also its reception by his hearer. He is under constant pressure to keep on talking during the period allotted to him; he must decide when to take his turn, how to interrupt his interlocutor and he is also under constant fear of being
interrupted. But then he has certain advantages as well. The speaker can observe his interlocutor and, if necessary, modify what he is saying.

Similarly, the written mode gives the writer certain advantages as well as disadvantages over the speaker. Since the writer is writing for an absent reader, he may look over what he has already written, pause between each word with no fear of being interrupted by his interlocutor, take his time in choosing a particular word, even looking it up in the dictionary if necessary, reorder what he has written, and even change his mind about what he has to say. He is under no pressure to keep on writing, he can even destroy what he has written and throw it into the dustbin without fear of offending his reader. But the writer has one great disadvantage, too: he has no access to immediate feedback and simply has to imagine the reader's reaction. This makes written communication an activity that is non-reciprocal in nature, as Widdowson (1984:81) calls it.

Let us understand how written communication is a non-reciprocal activity and what problems it poses for ESL readers. We may try to understand these by considering what happens when language is put to communicative use in spoken interaction.
Suppose (A) is the speaker. He has a message in his mind which he wants to share with someone else, say (B), the addressee. To make this possible he must put it into words; he must encode the message. Once it is encoded, it is available outside his mind as a text. This text is available for decoding to the mind of the hearer. Once it is decoded, the message enters the mind of the decoder and communication is achieved.

This sounds very simple though, as already pointed out, communication is a very complex process and involves complicated procedures which the language users employ in making sense of written or spoken language.

In our example above, the addressee (A) will make certain assumptions in order to communicate with his partner (B). His partner, he will assume, has certain kinds of knowledge in common with himself: knowledge, for example, of linguistic rules, of the conditions that have to be met for the performance of illocutionary act, and knowledge, too, of the universe of reality to which he intends to refer. Conversation thus involves the engagement of two kinds of knowledge: knowledge of linguistic rules and knowledge of the world of fact and social convention. To the extent that such knowledge is shared, the interaction will proceed satisfactorily. If there is a lack of shared linguistic knowledge, there will be increasing reliance placed on
shared world knowledge, and vice versa. If (A) and (B) do not share their schemata, they will have to negotiate to establish a common frame of reference and this involves certain procedures.

A common language knowledge by no means guarantees communication. Let us consider the following simple utterance spoken by (A) to (B):

The man is coming on Monday morning.

Evidently, (A) makes this utterance relying on (B) already knowing who 'the man' is and why it is relevant for him to know that he (the man) is coming on Monday morning. So (A)'s utterance does not itself express this information. Now if (B), as (A) believes, shares (A)'s world knowledge he will be able to make sense of it. But we do not know what (A) means by this sentence because we do not know what the context is. We know only what the sentence means (its textual meaning) but we do not know what proposition is being expressed and what the speaker's intention is when he/she speaks this utterance. The application of linguistic rules in dissociation from context of use yields only sentences which are irrelevant to the process of understanding propositional meaning and illocutionary force. We can think of different contexts for the sentence given above. It can be:
an information e.g. to a query

a justification e.g. why a special meal is being planned

an explanation e.g. for tidying the house

a warning to be cautious

and so on.

However, very often the production of a single utterance will not be enough to realize what function is being performed. It may not connect up the worlds of the two interlocutors in which case (A) and (B) will have to negotiate the context.

Let us consider the sentence we wrote above in a concrete situation. (A) and (B) are wife and husband. A domestic scene.

A: The man is coming on Monday morning.
B: Man? Which man?
A: You know, the plumber.
B: The plumber? Which plumber?
A: Yes, the plumber, the one who is to fix our geyser.
B: Oh yes, the plumber, that's right. Good.

(After Widdowson, 1984: 82)
This is a case of propositional repair. So now (B) knows what proposition is being expressed. But that does not mean he has grasped its illocutionary force. So (A) may continue:

A: He is coming on Monday morning.
B: O.K. get the geyser fixed if he comes after I am gone.
A: What about the fittings? He will need them on Monday morning.
B: Sorry, dear; I forgot all about the list.
A: Well, the market is closed tomorrow.
B: Don't worry. I'll buy them right now.

Gradually (A)'s intention becomes clear. Her utterance 'The man is coming on Monday morning' is meant to express the illocutionary force of a request for an action.

Conversation involves more than merely the exchange of information. The participants bring to the conversational process shared assumptions and expectations about what conversation is, how conversation develops and what contribution they are each expected to make. They share common principles of conversation that lead them to interpret each other's utterances as contributing to conversation. The procedures whereby this is brought about have been described by Grice (1975).
COOPERATIVE PRINCIPLE

The idea that conversation proceeds according to a principle shared by all human beings, was first proposed by the philosopher H.P. Grice (1975). He has described four Maxims or Principles of cooperative behaviour which interlocutors observe in conversation. These are:

1. Maxim of Quantity: Make your contribution as informative as required.
2. Maxim of Quality: Make your contribution one that is true.
3. Maxim of Relation: Make your contribution relevant.

By the Maxim of quantity, Grice refers to the assumption that if a speaker has access to information required by the hearer he/she is expected to communicate that information to the hearer. It also accounts for the fact that we normally give sufficient, but not more, information than is required. The Maxim of Quality accounts for the fact that in conversation we normally act on the assumption that our partner is not being untruthful.

However, as Clark and Clark (1977) point out, the rules of conversational implicature are often deliberately flouted
to express sarcasm, irony, criticism and a range of other types of inferential meaning, e.g.

A: How did you find the food?
B: There was plenty to fill hungry bellies.

Knowing that conversation proceeds in accordance with cooperative principles is essential for successful communication. However, cooperative principles are not, on their own, enough to provide the explanation for how inferences are made. To do this we need knowledge of the physical and social world and also need to make assumptions about the knowledge of the people with whom we are interacting.

An approach to formulate how such knowledge is brought into play has been made through considering the question, "For what purpose does conversation take place?" Lane (1978:58) describes some of the concerns of conversation as "exchanging information, maintaining social bonds of friendship, kinship, etc., negotiating statuses and roles and deciding and carrying out joint action." A crucial goal is to interpret the intended speech act appropriately. The theory, popularly known as "Speech Act Theory", was first formulated by the philosopher John Austin (1962) and further developed by John Searle (1969, 1975).

Speech Act Theory begins with the observation that there is a class of highly ritualistic utterances which
carry no information about the world outside language at all, because they refer only to themselves, as, for example, naming a ship. They are utterances in which saying and doing are the same thing. Such ritualistic utterances only succeed in performing their functions if certain 'felicity conditions' are fulfilled.

However, in real life situations such highly ritualistic utterances (called 'declarations') are very rare and are limited to only a few individuals in certain positions. In most people's lives they may hardly ever occur. But declarations do point to another and much commoner group of utterances, 'performatives'. These are also utterances in which saying is doing and they too perform their functions if certain external conditions are fulfilled, but, unlike declarations, their related verbs (such as, 'name', 'declare') are not always actually said. An example can be the act of requesting someone to do something. To do this we can use the performative verb 'request' and say "I request you to close the window" or drop the verb and say "Would you mind closing the window?" But for such utterances to perform their function, it is necessary that certain conditions are in operation and known to be in operation by both the speaker and the hearer. The rule of requests appears as follows:-
If A addresses to B an imperative specifying an action X at a time T and B believes that A believes that

1a: X should be done (for a purpose Y)

(need for the action)

b: B would not do X in the absence of the request (need for the request)

2: B has the ability to do X (with an instrument Z)

3: B has the obligation to do X or is willing to do it

4: A has the right to tell B to do X

then A is heard as making a valid request for action.

(Labov and Fanshel, 1977:78)

Speech Act Theory considers conversation as a sequence of speech acts; conversation, it maintains, is a 'chain of utterances' (speech acts). It is pointed out that speaker-based acts as requests and assertions propel conversation and establish coherence of sequencing in conversation.

However, many researchers have pointed out limitations of the traditional speech act theory (Austin 1962; Searle, 1969) for conversational analysis. It is said that speech acts are usually defined in terms of speaker's intentions and beliefs, whereas the nature of conversation depends crucially on interaction between speaker and hearer. Goffman has claimed that:
... the expression of claims regarding inner states is not what takes up most of the individual's speaking time. Nor is much time actually spent in giving orders, announcing decisions, declining requests, making offers, and the like. And when any of these possibilities do occur, they often do so indirectly, operating through something else; they are an effect that is produced, but an effect that tells us little about the details of the strip of activity that produces it.

(Goffman, 1974:503)

Labov and Fanshel (1977:30) also have asserted that conversation is not a chain of utterances (speech acts), but rather "a matrix of utterances and actions bound together by a web of understandings and reactions." They maintain that it is not such speaker based acts as requests and assertions that keep the conversation going, but rather such interactional acts as challenges, defences, and retreats which have to do with the status of participants in the conversation, their rights and obligations. For example, a direct application of the rule given above yields unambiguous illocutions. There would normally be no problem about the interpretation of the action performed. There may well be problem of acceptability, however: (B) may believe that (A) believes that a certain condition holds, but may nevertheless wish to challenge the belief as being erroneous:
A: Clean the windows.
B: Who do you think you are? (challenging condition 4)

or

B: It's not my job to clean the windows (challenging condition 3).

As Widdowson (1984:111) points out it is in order to avoid the danger of confrontation of this kind that language users customarily resort to indirect methods for conveying their illocutionary intent, particularly when the illocution in question is threatening in some way. In other words, language users draw on certain known procedures for realizing such rules under the normal constraints of social life. That is why (A)—the wife in our example above—does not tell (B) her husband directly in the first instance what her intention is. It is essential that the message be made accessible, but it is also essential that it be made acceptable if the communication is to take place. She knows that her husband has just come back home after day's work at office and would be unwilling to take a trip to the market to buy fittings. So she expresses her intention only indirectly. As a general principle if you intend to impose an obligation on somebody it is prudent to prepare the ground beforehand, to make him or her receptive to your purpose and the message acceptable.
Language users use what Labov (1972) calls, 'modes of mitigation and politeness' to make a message acceptable. These modes of mitigation relate to what Widdowson (1984: 85) has termed 'territorial imperative'. According to Widdowson, human beings, like other living beings, have a strong sense of private territory, their own circumscribed life space of ideas, values and beliefs within which they find their essential security.

POLITENESS PRINCIPLE

The Maxim of Cooperative principle is possible only if the interlocutors cooperate and allow entry into their privacy and this calls for caution. Not surprisingly, therefore, the entry is wary and circumspect to mitigate the effect of intrusion. Robin Lakoff (1973) has formulated the Politeness Principle as follows :-

1. Don't impose.
2. Give options.
3. Make your receiver feel good.

This means that human communication involves the reconciliation of two opposing forces pertaining to what Widdowson calls, cooperative principle and territorial imperative. Effective communication depends upon getting right the balance between these two forces. To quote Widdowson (1983: 48):

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communication depends on interlocutors being receptive, and this means that both propositional information and illocutionary intent has to be expressed in such a way that it is both accessible and acceptable. In other words procedures have to service both the cooperative and the territorial imperatives.

Widdowson calls this process of negotiation discourse. The overt expression of the process takes the form of linguistic signals which can be recorded and studied in detachment after the event. He terms these the text of the interaction.

Thus conversation is a form of interaction involving the overt negotiation of meaning through reciprocal exchange. It consists of exchanges structured in terms of the Maxims of Cooperative Principle and the Politeness Principle and are governed by what Halliday (1985:23) calls ideational and interpersonal knowledge. Conversation progresses through what has been called 'adjacency pairs'. Meanings are communicated and interpreted in conversation through these adjacency pairs which may be defined as utterances produced by two successive speakers such that the second utterance is identified as related to the first as an expected follow up. For example, if (A)'s utterance is interpreted as a question then whatever (B) may say, it will be interpreted as answer to (A)'s question. The two form a pair, the first constituting a first part and the next
constituting a second part. According to Coulthard (1977), adjacency pair is the basic structural unit in conversation.

As a result of conversational procedures, conversation also provides for 'turn-taking'. Schegloff and Sacks (1973) describe that the basic rule of adjacency pair operation is that when a speaker produces a recognizable first part, that speaker should stop talking and the second partner should produce a recognizable second pair part. Adjacency pairs also prescribe the type of talking that the next talker can do.

It is also significant to note that conversations do not simply begin and end; their openings and closings are orderly and organized. All transitions from a state of non-talk to talk, or from talk to non-talk, require engineered solution. We may thus have pre-conversational and post-conversational adjacency pairs. We may also have 'repair', (that is, if the communication fails, the interlocutors may undertake to repair it to re-establish communication); gist or upshot to make meaning as clear as possible.

Let us now consider how these procedures are used in written communication and what their effect is on the nature of the interactive process and the nature of the structure of written discourse.
The writer, like the speaker, has something he wishes to convey but in his case the addressee is not standing before him. Moreover, in his case the addressee may not be (generally is not) an individual but a group of individuals. These addressees, he assumes, will share certain kinds of knowledge in common with himself: knowledge of the linguistic rules, of the conversational procedures, knowledge of the world and of the topic he is going to write about and that he is curious to know what he has to communicate and hence will cooperate in its conveyance.

The writer, as Widdowson (1984:48) rightly says, must decide what information he can count on the addressee already having and what information he needs to provide and how he must provide it, in order to get his message across. Here written communication differs from the spoken exchange in that the other interlocutor is not immediately present. We have seen that in spoken exchange the participants alternate in open negotiation of meanings, each taking turns to keep the conversation going. The writer, however, is solitary; the persons to whom he wishes to transfer information are absent and often, to some degree, unknown. So he has of necessity to propel the communication on his own. This does not mean that written discourse is not an interactive process of negotiation. It is interactive but
this interaction is conducted by the writer himself by enacting the roles of both the participants, the writer as well as the reader.

Since there is no immediate reaction, he has to anticipate what it is likely to be and provide for any possible misunderstanding and unclarity arising from a lack of shared knowledge.

To quote Widdowson (1984:59) again, the act of writing is the enactment of an exchange, with the writer taking on the roles of both interlocutors. But whereas in spoken discourse this process of negotiation is typically overt and reciprocal, in written discourse it is covert and non-reciprocal. Because of the absence of his readers, the writer has a basic conveyancing problem: he has certain message to impart and he has to prepare the ground and set up conditions favourable to the reception of such information. He does this by continually shifting his function from writer to reader, enacting the interaction by playing the role of each interlocutor as in the following example:-

Australia is a land of contrasts. It is geologically one of the oldest of land masses, yet it ranks as one of the youngest of nations. it is half a world away from Europe, but its people are largely of European descent and they follow a Western lifestyle.

If we look at the above text we find that the writer
makes an assertion in the first sentence and the subsequent sentences are given to support what he says in the first sentence as if to answer the question, "How can you say that?" We can rewrite this text as follows:

Writer: Australia is a land of contrasts.
Reader: How can you say that?
Writer: It is geologically one of the oldest of land masses, yet it ranks as one of the youngest of nations.
Reader: Can you please give more examples?
Writer: It is half a world away from Europe, but its people are largely of European descent and they follow a Western lifestyle.

Written discourse thus involves non-reciprocal interaction and the result of this is a text: words on the page. The reader must interpret these words to reconstitute the interaction as it does not reveal the second person's reactions which the writer anticipates by enacting the other participant's role. The text is also devoid of the socio-linguistic context in which it was enacted and the reader has to 'place' it in the appropriate context from the various clues provided by the writer.

Written communication because of its peculiar non-reciprocal and decontextualized nature poses problems both
for the writer as well as the reader. The writer has to play a dual role which renders writing difficult. Probably, the main difficulty lies in getting the support acts right by making correct assumptions about the prospective reader. This may not always be easy since the reader is not an individual but a group of individuals. Moreover, his reactions cannot be known because he is unseen and unknown. Many things can go wrong in the process. If the writer provides too much support he becomes tedious and boring and will also offend the reader with proximity. If he provides too little support he is likely to remain obscure and hence beyond the reach of the reader.

Written discourse is equally problematic for the reader, particularly the foreign language reader. Many factors can hinder communication. The reader may not come up to the expectations of the writer; he may not have the linguistic competence or may not recognize the clues to meaning that the writer provides. Or he may allow his own reality, his own attitudes and ideas to override his ability to perceive the clues. It is also possible that his purpose in reading may be such as to lead him to focus on information that is not intended to be focal.

At higher level sound/spelling correspondences are not the real difficulty. What poses difficulty is the nature of the written communication. That is to say, the reading
difficulty is not in the linguistic medium but in the communicative mode.

The result of this non-reciprocal communicative mode is a text, words on the page, which the reader must convert into discourse to realize the writer's message. That is to say, reading competence must include an ability to realize coherence in propositional meanings beneath the surface text and to get what illocutionary force they carry. This ability cannot be attained by just concentrating on the internal grammar of sentences or the features of the text/language.

From the discussion in this chapter it is evident that reading cannot be dissociated from norms of social behaviour and cultural values, a knowledge of which is a must for effective reading, particularly at higher levels. It is also evident that if writing (and hence reading) is interactive, as we have tried to show, then we need to devise a methodology for teaching reading which focuses on the interactive character of writing and develop in the reader an ability to recreate discourse from a given text. The traditional approach has laid emphasis on teaching the formal features of language to get meaning and this, too, at only the sentence level as if language were an end in itself. This approach, therefore, does not equip the reader with knowledge to realize how language is used as a tool for communication.
CONCLUSION

Schema-theory research has shown that the most efficient processing of text is interactive—a combination of data-driven and concept-driven processing modes. In fact, as Spiro (1979) suggests, skilled readers constantly shift their mode of processing, accommodating to the demands of a particular text and a particular reading situation; less skilled readers tend to overrely on processes in one direction, producing deleterious effects on comprehension. Harri-Augstein and Thomas (1984:258) also have found this flexibility in reading as one of the main characteristics of a practised reader. In their studies they found five different types of reading behaviour. A mature reader, they argue, varies his speed and his whole manner of reading according to the text and according to his purpose in reading it. These findings underscore the importance of both language skills and reading strategies for effective reading. The dilemma for ESL teachers, to use Clarke's words, "is one of attempting to provide students of reading the need for guessing, taking chances, etc.—while at the same time helping them to acquire the fundamental language skills to facilitate the process" (Clarke, 1980).

We have also pointed out that in reading comprehension, reader's background knowledge is equally important. One of the important elements of this background knowledge is
linguistic schemata. So far linguistic schemata has been interpreted to mean one's knowledge of only lexis and structures and other formal features of the language employed by a reader in the bottom-up approach. This leaves from its purview the social aspect of the language, that is one's knowledge of how language functions in society. We have therefore presented here a sociolinguistic view of language which tries to study language in society and not as an abstract linguistic discipline. This approach to language attempts to study how people make sense from arbitrary symbols and what accounts for our feeling that a certain stretch of language is coherent. We have also given the various attempts made by researchers to look for this link and arrive at alternative bases for analysing language e.g., situations, contexts, themes, topics, functions and notions, and conversational principles. It has also been argued that when we speak of language as a tool for communication we mean both the spoken and the written form of language as both the media, whatever their differences, have the same goal. It is argued that written language is also interactive though it is non-reciprocal. At higher level what poses difficulty in reading comprehension is not decoding but this peculiar nature of the written communication.