CHAPTER II

ESP: THE COMMUNICATIVE APPROACH

2.1 Introductory

2.1.1 An ESP course is directly concerned with the purposes for which learners need English and these purposes have to be defined in functional terms. In the process of evolution ESP has, in the 1970s, embraced notional, functional and communicative ideas. These terms are frequently used in language teaching these days. Prone at times to some sort of uncertainty about their meaning they jointly reflect a new attitude towards language, a concern with the rhetorical and discoursal aspects as directed to meaningful interaction between human beings. This attitude manifests a striking contrast with the earlier attitudes that see language as a collection of formal lists of items and entities, rules and paradigms etc. ESP, like any other development in language teaching, is likely to reflect the current theory and practice in general. Placing it firmly within the general movement towards functional/communicative teaching of the last decade or so many of the ESP practitioners have taken great pains to examine, interpret and redevelop the traditional theoretical framework in order to determine what sorts of interaction and what language activities are going to be needed by their learners, and to direct teaching materials and techniques accordingly.
2.2 Structuralism and Transformational-Generative Linguistics

2.2.1 The study of language has, in Europe, a very ancient history stretching in an unbroken line from the Greeks, through the work of the grammarians and rhetoricians of Alexandria and Rome, to the Scholastic grammarians of the Middle Ages and the normative grammarians of the eighteenth and nineteenth centuries. From the very beginning there was a split between those who saw language as a system of elements to be catalogued in a logically satisfying way and those who saw it as a human artifact which had arisen from social and individual needs, i.e., a dichotomy between those whose interest in language was the study of its form and those whose aim was to describe its function. Equally, there has been a division between those who seek to discover universal characteristics of language as a phenomenon - the 'grammatica speculative' of the Middle Ages and those who wished to produce definitive descriptions of individual languages - 'particular grammar as nineteenth century linguists called them. In scientific method too, linguistics has oscillated over the centuries between empiricism and rationalism and the choice of scientific method has always implied a belief about the nature of language learning, a leaning towards what we would call today behaviourism or cognitivism. The most overt manifestation of this dichotomy in the present century was witnessed in the views and methods of two major schools of linguists.
whose influence on language teaching has been, and still is, very strong indeed - structuralists and transformational-generative linguists.

2.2.2 Structuralist linguistics arose in the 1930s, adopted a strongly empirical approach and considered language as a system of speech sounds arbitrarily assigned to the objects, states and concepts to which they referred, used for human communication. Whereas the structuralists' philosophical standpoint in relation to learning can be termed as 'mechanistic' the psychological basis of the position adopted by them corresponds to 'behaviourism'. The late 1950s saw a strong challenge not only to structural linguistics but also to the psychology associated with it, a challenge which reoriented linguistics towards a mentalistic philosophy, rational scientific method and a cognitive psychology.

2.2.3 Transformational-generative linguistics, normally abbreviated as TG, was the result of a period of mounting dissatisfaction in the 1950s with structuralist linguistics. The first important publication in which the TG approach was outlined was Chomsky's Syntactic Structures (1957), followed by a series of books and papers, the most significant of which were Aspects of the Theory of Syntax (1965), in which Chomsky expanded the model introduced in 1957; and Language and Mind (1968) in which he formulated the philosophical bases of the theory. For the transformationalists, language
is a system of knowledge made manifest in linguistic forms but innate, and in its most abstract form universal. T G, for descriptive linguistics, represented a major advance on the structuralism which preceded it. The underlying philosophy of the discipline shifted from mechanism to mentalism, the scientific method from empiricism to rationalism and the focus of investigation from the physical manifestations of language system to the structure of the knowledge of the system which permits the creation of such physical manifestations.

2.2.4 Rejecting Skinner's 'behaviourist' model as inadequate for the complexity of human language and the creativity of the speaker-listener, Chomsky (1965:3) writes:

linguistic theory is concerned primarily with ideal speaker-listner in a completely homogenous society who knows its language perfectly and is unaffected by such grammatically irrelevant conditions as memory limitations, distractions, shifts of attention and interest and errors (random or characteristic) in applying his knowledge of the language in actual performance.1

The perfect knowledge here is mastery of the abstract system of rules by which a person is able to understand and produce any and all of the well-formed sentences of his language, i.e., his linguistic competence; the

actual use of language is evidently the domain of linguistic performance.

2.3 Linguistic vs Communicative Competence

2.3.1 Socio-psycho-linguistic research takes exception to Chomsky's restricted view of competence and stresses the need to study language in its environment. Hymes, Wales, Campbell, Jakobovits, Cooper, Widdowson and others all reject Chomsky's limited view of competence and the hereto all pervasive fruitfulness of transformational-generative grammar. Jakobovits (1970) holds, "there is no guarantee that generative transformational grammar or for that matter any other linguistic theory will be able to account for all the facts about language which the native speakers possess." He argues that social context selection rules are as necessary a part of linguistic competence of a speaker as those in syntax. In Hymes' (1970) words, "there are rules of use without which the rules of grammar would be useless." Thus the notion of

1. Cf. Chomsky's further statement --"a record of speech will show numerous false starts, deviation from rules, changes of plan in mid-course and so on" (p.31).


competence must include contextual appropriacy. The restriction of competence to perfect knowledge in a homogenous speech community independent of socio-cultural features is inadequate to account for language in use, i.e., language as communication. Campbell and Wales (1970) point out that Chomsky's notion of linguistic competence omits by far the most important linguistic ability -- "to produce or understand utterances which are not so much grammatical but, more important, appropriate to the context in which they are made", and they continue, "by context we mean both the situational and verbal context of utterances." 1 Again Hymes (1971) points out that Chomsky's category of competence "provides no place for competency for language use but neither does his category of performance". This, according to Hymes, omits almost everything of socio-cultural significance. 2 Thus the attempt to formalise the relationship between the language and a particular situation in which it is appropriate has led to the concept of 'communicative competence', which can at best be seen as a socio-linguistic resolution of the competence-performance dichotomy.


2.3.2 Halliday rejects the distinction between competence and performance as misleading. He is interested in language in its social perspective and so he is concerned with 'language use to account for language functions'. Widdowson (1972) offers a valuable suggestion when he says that knowing what is involved in putting sentences together correctly is only one part of what we mean by knowing a language, and it has very little value of its own; it has to be supplemented by a knowledge of what sentences count as in their normal use. A speaker's competence includes knowing how to recognise and how to use sentences to perform rhetorical acts, e.g., defining, classifying, promising, warning etc. He adds, "perhaps the only way of characterising different language registers is to discover what rhetorical acts are commonly performed in them, how they combine to form composite communicative units and what linguistic devices are used to indicate them."¹

2.3.3 We must, nevertheless, acknowledge Chomsky's unique contribution in revitalising theoretical linguistics enabling us to apprise the problem as we can. A transformational grammar is a logical specification of the syntactic knowledge which the learner needs in order to produce grammatical sentences. As such, it can bring out an endless series of grammatical but communicatively disjointed sentences. For TG to be a psychological theory which modelled the processes that take place in the human brain it would need components which

ordered social as well as linguistic knowledge. The notion of competence enlarged with a socio-cultural orientation into communicative competence includes the ability to use linguistic forms to perform communicative acts and to understand the communicative functions of sentences. It can be said to consist of two parts -- 'grammatical', i.e., knowledge of the rules of sentence formation and 'communicative', i.e., knowledge of the rules of their 'use'. In order to achieve target communicative competence in ELT field, the most crucial problem, there has been a move from grammatical, and later, situational approach towards one which is variously described as notional, functional or communicative approach.

2.3.4 In ESP a notional, functional/communicative approach seems to be the obvious one to adopt because the most elementary assessment of the needs reveals that learners will have to put the language they learn to actual use outside the language teaching context. The communicative approach is being rapidly adopted "as the new orthodoxy in language teaching" (Widdowson, 1977). Let us examine this development, its principles and limitations and its relevance to ESP.

2.4 The Notional, Functional Approach

2.4.1 In the 'notional/functional' field one view and probably the most influential finds expression in the work emanating from the Council of Europe, in
particular in Wilkins (1973) and Van Ek (1975). This work is based on a recognition that in actual use of language people do not just produce sentences but express concepts and fulfill communicative function in so doing. On this basis it is proposed that the content of language teaching course should be defined in terms not of the formal elements of syntax and lexis, as is customary in the grammatical approach, but of the concepts and functions these elements are used to realise.

2.4.2 The exponents of functional criteria claim that we need to take into account from the very beginning the communicative purposes for which language is going to be learnt. They emphasise the need for a fairly radical reconsideration of the linguistic basis of our courses. The facts of language are highly complicated. There is actually not a simple one to one relationship between the forms of language and the meaning of language. One form expresses a great variety of meaning and one meaning is often expressed by a great variety of forms. What we have been traditionally doing, they point out, is to take the facts of language first and subsequently demonstrate what kinds of meaning these forms convey. It is possible, on the other hand, to do it the other way round, i.e. take meanings that are involved in language first and the corresponding forms later. This would give, it is claimed, a different orientation to our language teaching.
2.4.3 Much of the language teaching is devoted to reporting, e.g., narrating events, describing situations and people. However, in practice language is used as much to do things as it is simply to inform. We use language to do a lot of things, e.g., to praise, to condemn, to abuse, to allow, to request, to question etc. We make conjectures with language, infer, explain, define, generalise etc. We need skills of language use to do these kinds of things and many more. Wilkins (1977) elaborates upon this idea with the help of an example: the function of 'warning' -- the convention is very simple, that is, 'look out' or 'stop' etc. are used to effectively perform this act; 'to warn' (verb) or 'warning' (noun) not necessarily used in the performance of the act of 'warning'. We can refer to the things we do with language as the functions that language has for us. What is required, then, is a systematic attempt to present this kind of skill in doing things with language. That is to say, "what we do as we use language, is to express this kind of functional meaning, the meaning of these kinds of functions".¹

2.4.4 Some basic precepts of notional/functional criteria appear to be like this ... first predict the situations the learner is likely to use the language in,

then identify the language functions the learner will have to perform, then teach the language necessary to perform these functions. There are obvious practical difficulties involved, viz., listing and description of communicative functions, prediction of situations the learner may have to encounter, the absence of a universal principle in so doing, etc. O'Neil (1977) calls an approach like this "sterile and unpalatable". He holds, "the idea' that everything I write or teach must be seen to be of direct value to the learner in situations we can predict he or she will encounter' is based on delusion; secondly, it cannot be carried out; thirdly, if you try to do so you will debauch the concept of communication itself."¹ He goes on to argue that we cannot teach people to communicate in a foreign language if we become obsessed in everything we do with specific communicative aim, clearly defined purposes or functions.

2.4.5 The notional/functional approach does not deal with language use in context but only with concepts and functions in idealised isolation. Language enables us continually to express novel propositions. In other words, the demands that we put on language

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are virtually limitless. Our faculty of language is a faculty of linguistic creativity. The way in which language is organised to meet these demands is the application of the grammatical system in the actual process of communication depending on the features of the personality, the setting of the interaction and the purpose of the user. These factors consistently influence the user's choice of linguistic forms. Finally, there are rules governing the way in which language is expressed physically either as sound or as visible marks on paper. Linguistic competence must naturally include a knowledge of all these aspects of language.

2.4.5 Whereas the sentence-based structural approach defines language content in formal terms, as lexical items and grammatical patterns manifesting the language system, the notional approach does so by defining it in functional terms, as notions which are realised by formal items. In both the cases, however, the essential design is an inventory of units in isolation and abstraction. With regard to language description the structural approach deals with the distributional properties of surface forms; the notional approach, however, marks an improvement by taking into account the communicative functions of language. In the vital area of learners' needs the two recognise the same goal, i.e., ability to communicate but with a marked difference in emphases and methodology. The structuralist position insists on a knowledge of the system, i.e.,
core linguistic competence. The notional standpoint invariably favours that communicative competence needs to be taught expressly. Both the positions derive from an analyst's and not a participant's view of language, the former lacking in an awareness of the meaning potential of forms and the varied ways in which this is realised in contexts of use, the latter, although offering a set of strategies and creative procedures for realising the value of linguistic elements in contexts of use does not represent language as discourse. It deals with the components of discourse not with discourse itself. (Widdowson, 1978).

2.4.7 The notional/functional approach can at best be seen as a means of developing the structural approach rather than replacing it. The move from sentence to notion is definitely an advance but still it does not face the complexity of real communication, the ways in which notions are realised in discourse. Communication only takes place when we make use of sentences to perform a variety of different acts of a social nature. Thus we do not communicate by merely composing sentences but by using sentences to make statements of different kinds. When one is learning a new language or a new variety of language one is learning to perform appropriate communicative role. Allen and Widdowson (1974), therefore, suggest that what is needed is a new approach which would consider communicative competence essentially linked with role
performance, i.e., a move from an exclusive concern with grammatical forms to at least an equal concern for rhetorical functions. They hold:

Communicative competence consists of both the ability to handle the formal devices of the language which enable the learner to create and combine sentences and the ability to recognise how sentences are used in the performance of acts of communication, the ability to understand the rhetorical functions of language in use.¹

2.5 Beyond the Sentence

2.5.1 A view of language as a vehicle of communication cannot be adequately handled by a sentence based formal approach. In other words, a model of language as a formal system is not sufficient to account for how language users use language to communicate. A single word that epitomises formalist linguistics both for description and pedagogy is 'sentence'. Using the sentence as the maximum unit and proceeding down (or up) in a hierarchically ordered arrangement of items through group-phrase-word-morpheme/phoneme can be a convenient method of analysis but these units of description are not exclusively effective in acquiring communicative skills. Halliday (1969) observes:

special languages may be characterised by different distribution of grammatical patterns, special meaning of generally occurring patterns and by discourse features of connected texts.\(^1\)

It suggests that a characterisation of language for special purposes (e.g., ESP) could profitably be approached by moving away from the sentence based analysis towards an examination of the context. Only percentage counts of how frequently this or that item occurs, or even structural descriptions of patterns which occur more frequently than others will not do. A description in terms of the communicative value of the language used by a scientist or technologist at any particular time is what is essentially needed.

2.5.2 Mackay and Mountford (1978) hold that we need to know, on the one hand, the communicative value of the language pattern as well as, on the other, its structural description and the likelihood of its occurrence in a particular field. Stressing the importance of the communicative adequacy of a language pattern they observe that merely recording that the modal 'will' is more frequent than 'going to' in a mechanical engineering text does not help us much, we must also record what the communicative value of 'will' is, as in the following statement:

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\text{This motor will produce Xhp at 3500 rpm.}
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It is obvious that here 'will' communicates the concept of the potentiality or the capability of the motor rather than predicting a future burst of activity of the motor. This crucial distinction between the "usage of language to exemplify linguistic categories and the use of language in the business of social communication" must be maintained.

2.5.3 There is an increasing recognition of the need to pay as much attention to rules of 'use' as to rules of grammar or 'usage'. "Rules of use", to quote Widdowson (1971) again, "are rhetorical rules and communicative competence is the language users' knowledge of rhetoric." Syntactic description, on the other hand, represents the rules which control the correct usage of language. They do yield a set of sentences but fail to account for how communicative import is carried along over stretches of language consisting of a number of sentence-like units connected together. All these aspects are essentially complementary in accounting for the whole 'language event', to use a Firthian term, and the language event need not be restricted to one sentence in length.


3. Ibid., p.84.
2.5.4 What this amounts to is a realisation of the fact that we must extend the scope of our enquiry beyond the traditional domain of sentence as the basic unit. With the impact of a functional/communicative view of language the sentence barrier has been broken and attempts have been and are being made to push beyond the sentence and discover how larger units of language are structured. Not that linguists were unaware of the larger units within which sentences existed as constituents, they were perhaps unable to discover a suitable structure for language beyond the sentence.

2.6 Text and Discourse

2.6.1 There are two ways of looking at language beyond the limit of sentence, as text and as discourse. Both have their own purpose and have been dealt with variously by linguists as well as literary critics, and also by people who happen to share both the fields. Finer distinctions exist among various interpretations. Text, discourse and their analyses have received much attention in recent years. The application of text-discourse insights, especially discourse analysis techniques to ESP is a natural development but, as with notional/functional criteria, several things are intended by these terms.
2.6.2 Text analysis, or to use Hill's term 'macro-linguistics', is exemplified most obviously in the works of Harris. Harris (1952) represents the analysis of text in terms of combination of sentences, approaches the text as a whole and seeks to discover the ways it 'holds together'. He observes, "language does not occur in stray words, or sentences but in connected discourse."¹ Harris' concern, however, is not to characterise discourse as communication but to use it to exemplify the operation of the language code in stretches of text larger than the sentence. He conceives of discourse in purely formal terms as a series of connected sentences. Although a formalist analysis this is definitely a step forward since it provides some direction for working with larger units of language.

2.6.3 Fowler (1977) holds the view that a text has an overall structure analogous to that of a single sentence and that texts are constructed out of sequences of sentences. He observes, "a sentence is an element, or unit, or constituent of a text; a text is made out of sentences in a quite ordinary sense of 'made out of'."² Fowler's basic standpoint is that texts are structurally like sentences and that the categories of structure that we propose for the analysis of sentences


in isolation can be extended to apply to connected sentences, i.e., larger structures in texts. Just one step ahead of Chomsky, Fowler conceives of text but with a sentence perspective, an approach which does not admit of text as an independent unit where sentence can be overstepped and treated as a sub-unit of text. But Fowler has a very significant point to make when he remarks that in certain circumstance a text may consist of a single sentence, e.g., proverbs (A stitch in time saves nine), or notices (Please switch off the light). We can, however, argue that the foregoing examples do not exhaust their value just as sentences or statements manifesting a formal structure alone, i.e., usage as Fowler treats them to be but they count as utterances, as instances of 'use' having a communicative import within their context. Texts, therefore, are not merely sentences put together, they are exceedingly complex. Ability to construct and to decode sentences is not sufficient to explain all the complexities of whole texts.

2.6.4 Text analysis is also exemplified, perhaps less obviously, in the work of Halliday in the notion of register and in Hasan's (1968) work on grammatical cohesion. Register analysis may have its own uses but it seems to have little value in establishing the way in which sentences are connected to constitute a text. The study of grammatical cohesion, on the other hand, does have direct relevance to the analysis and teaching of texts since it attempts to
discover "the characteristics of a text as distinct from a collection of sentences." Analysis, here, is focussed on cohesion between sentences as exemplified by pronominalisation, anaphoric and exophoric reference, by means of which sentences are linked and references are made to parts of the text which have passed and to the other parts which are to come. Hasan is essentially concerned with the cohesive functions of certain linguistic forms and functional notions and provides an inventory of points. Cohesion deals with internal aspects of textuality and cohesive ties do contribute to the unity of a text. They can be grammatical, e.g., pronouns, prop words or substitutes like do, does, one, latter, former etc.; definite article, however, nevertheless etc.; lexical, e.g., repetition of lexical items or its near synonyms, and phonological.

2.6.5 There are certain factors which lead to rhetorical cohesion of a text, namely (a) intra-sentential, in which sentences stand in a particular relationship to one another indicated by subordinating conjunctions such as because, although, whenever etc. and (b) intersentential, whereby the relationships between sentences are marked by connectors such as

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'moreover' (relationship of addition), 'on the other hand' (relationship of contrast), 'therefore' (relationship of consequence) etc. The latter kind has to do more with the communicative value that sentences have in discourse -- a generalisation followed by illustration, contrasting assertions etc.

2.6.6 Text as a level of linguistic analysis demands that we must perceive and interpret not only its lexical meaning but also its grammatical and rhetorical structure. The activity of interpretation requires the simultaneous perception and understanding of not only word meaning but relationship between words, within and between sentences, within and between paragraphs. The study of cohesion, of discourse markers etc. would seem to be another trend in linguistics and language teaching which has developed alongside ESP. Much progress has been made on the basis of insights provided by Halliday and Hasan (1976) and appreciable advances are afoot in the application of cohesive links to the study and teaching of specialised materials.

2.6.7 Another line of enquiry is offered by Labov (1970). He is thinking of the way language forms are used to perform social actions. He observes:

Commands and refusals are actions; declaratives, imperatives, interrogatives are linguistic categories — things that are said rather than things that are done. The rules we need will show how things are done with words...1

If Harris' approach of formal analysis can be called text-analysis Labov clearly points towards discourse. If we aim at developing the ability to do things with language then it is discourse which must be the focus of our attention.

2.6.8 Discourse and discourse analysis have been the subject of study in recent times but the terms have embraced several distinct activities and approaches, viz., the study of the narrative structures of literary texts, the study of the rhetorical coherence of records of interaction in which the locus of attention is the way communicator draws on the resources of the language to participate in the exchange of information. It appears to be worthwhile to refer briefly to the different meanings associated with the 'term' discourse. Discourse may first of all refer primarily to spoken interaction which will be analysed in terms of units of meaning, organised into a hierarchy employing some or all of the terms like act, move, exchange, transact and others. Secondly, discourse may refer to a stretch of language either spoken or written, analysis of which will consider aspects of sentence connection or cohesion. The first meaning of discourse, i.e., analysis in terms of a hierarchy of constituent units is best exemplified by Jones (1974). A related study is made by Lilley (1976) analysing a science lecture. Both Jones and Lilley make suggestions for analysis and the preparation of teaching materials.
based on their analysis. The second meaning of discourse is exemplified in Halliday's (1969) observation -- 'discourse features of connected texts'. And these features obviously include cohesive devices. Candlin and Murphy (1976), however, consider both the meanings as constituting discourse.

2.6.9 The third meaning of discourse relates to the study of rhetorical function or communicative process. This can be exemplified from the work of Trimble and Trimble (1977) who engage in the identification of the rhetorical functions in any given text or group of texts, consider the sequencing of function and analyse the forms of their linguistic realisation most particularly, the verb forms. Mackay and Mountford (1978) have dealt with the theory and practice of ESP in terms of discourse features of specialist texts contributing to the communicative purpose. They have also produced materials, particularly Mountford, most notably in the English in Focus Series which exemplify an interest in connectives and also in the structuring and sequencing of rhetorical functions. The editors of the Focus series, H.G. Widdowson and J.P.B. Allen have also produced detailed accounts of the nature of ESP and seem to have a more dynamic approach. The paper by Allen and Widdowson (1978) 'Teaching the communicative use of English' introduces certain distinctions between use and usage, the grammatical cohesion of text and the rhetorical coherence of discourse which now form part
of the basic metalanguage of ESP. Widdowson (1971) makes a useful distinction between text and discourse. He conceives of text as a stretch of language exemplifying the structure of the language, especially the devices indicating such structuring above the level of sentence, and discourse as a stretch of language being a unique piece of communication. Incorporated in Widdowson's definition of discourse is the third meaning of discourse referred to above which includes the consideration of rhetorical functions or communicative purposes. "An utterance is not just the physical manifestation of an abstract rule of grammar, it is also an act of communication".  

2.6.10 The impact of this change of orientation has been, and in future will also be, very significant. Meaning and role are now in the forefront and learning a language is now seen as learning how to mean in a wide range of social settings. It helps us concentrate on the needs of the learner, and design courses for specific, job related purposes where the learner discovers -- to quote the title of the influential book by the philosopher Austin -- how to do things with words. It demonstrates the nature of language as a social skill which constitutes an open system of elements and relationships and which interacts with context of its use, in contrast with the closed system, context-free view of the formalist approach. Today we seek to provide the learner not only with the linguistic knowledge which enables him to produce and understand grammatical sentences but also the social knowledge and skill which permit him

to produce and comprehend socially appropriate utterances. We deem it as part of the speaker's competence to be able to use sentences to form 'continuous discourse' as Halliday (1969) puts it, to use sentences to perform what Searle (1969) calls 'speech acts', Lyons (1970) calls 'semiotic acts' and Widdowson (1971) calls 'rhetorical acts'.

2.7 Scientific Discourse

2.7.1 In recent years there has been a growing recognition of Prof. Widdowson's major contribution to the study of communicative language teaching. By virtue of having a teaching perspective his ideas on scientific discourse are of special relevance to ESP and need to be examined closely. Widdowson defines scientific discourse as "the verbal and non-verbal realisation of the communicative system of science".1 People who talk about scientific English usually give the impression that it can be characterised in formal terms as having a high frequency of certain linguistic forms like the passive and the universal tense in association with a specialist vocabulary. But to characterise in this way, Widdowson believes, is to treat scientific discourse merely as an exemplification of the language system without indicating what kind of communication it is. This is just to conduct

a kind of register analysis, which treats, for example a chapter in a Chemistry textbook, as a sample of language without indicating its communicative function as a description, a report, a set of instructions, an account of an experiment etc. Apart from the purely verbal features of the sample there are formulae, symbols, line drawing, tables etc. which are an essential and intrinsic part of the sample and contribute to its communicative value as a whole. Since they do not exemplify the language system an analysis of the sample as text will make no reference to them. If we treat the sample as a unique piece of communication, i.e., a sample of scientific discourse we must take into account both verbal and non-verbal features.

2.7.2 Widdowson regards scientific English not as a kind of text but as a kind of discourse, that is to say, as a way of using English to realise universal notions associated with scientific enquiry. He believes that as a scientist one is obliged to perform certain acts like the making of hypothesis, the calculating of results, writing of descriptions, instructions, reports, making of deductions etc. These are some of the basic cognitive and methodological processes of scientific enquiry which constitutes a 'secondary cultural system' and which is independent of the 'primary cultural systems' associated with different
societies. Widdowson elaborates:

What I am suggesting, then, is that fields of enquiry in the physical and applied sciences, as these are generally understood, are defined by the communicative systems, which exist as kind of cognitive deep structure independently of individual realisations in different languages.¹

Thus, according to Widdowson, scientists belonging to different primary cultures and societies, have as scientists a common sub-culture sharing certain discourse conventions which are used to communicate this common culture. And, these conventions, Widdowson asserts, are independent of the particular linguistic means which are used to realise them.

2.7.3 Again, Widdowson (1977) observes:

Scientific discourse is a universal mode of communicating or universal rhetoric which is realised by scientific text, in different languages by the process of textualisation.²

This view considers three distinct aspects of interpreting the language of science viz. text, textualisation and discourse -- text referring to the physical

manifestation of the language system, i.e., 'surface variants in different languages', textualisation referring to the processes both verbal and non-verbal mediating between text and discourse, and discourse as such referring to the 'universal rhetoric of science'.

Widdowson (1977) explains:

We can compare the discourse approach with the grammarians' search for linguistic universals, textualisation approach with a study of language specific transformations and the text approach with the study of these forms as such in the manner of texonomic grammarians with regard to their outward appearance.

2.7.4 Widdowson's ideas have certainly led to a rethinking of methods and approaches and have paved the way for the production of interesting and useful materials in the ESP field. Some of his suggestions are most valuable but at the same time controversial. They are controversial because they make a number of assumptions not all which can be justified. We must, therefore, examine his basic assertions and scrutinise the limitations of his ideas. His first basic assumption about the universality of science, undoubtedly his most significant contribution, appears to be quite sound theoretically but its pedagogic efficacy in ESP is yet to be tested and proved. His second assumption is about the attainment of the learner.
He assumes that the learners have some knowledge of the subject of their study and a good deal of knowledge of how L1 in general operates. These must be put together. That is to say, our task is to devise teaching procedures which will exploit these different kinds of 'knowledge' in order to extend the learners' experience of language to include communication in English for his specific purposes. Thus it follows that the English teacher will not be teaching English language as such (because the learners are supposed to know it already) but will be providing the learners an opportunity to induce meanings by reference to their 'own knowledge'.

2.7.5 Widdowson is mainly concerned with ESP at the tertiary level; so we must not expect his ideas to be applicable generally in ESP, or at lower academic levels at least. Even at the university level we can surely not assume as do Mackay and Mountford (1978) probably following Widdowson that students will have an advanced conceptual knowledge of objects, substances, processes and operations. As a matter of fact, many students at this level do not have much knowledge of science in their languages; may be it does not exist in those languages. That is perhaps one reason they are learning science in English or in other words, learning English to learn science. Moreover, within the area of skills, many learners may at times be deficient in the required competence in their L1.
This is definitely one reason for the development of ESP and more particularly EAP and study skills. With regard to the time factor in ESP Widdowson's ideas are appropriate to post-experience courses. The majority of ESP learners are probably pre-experience or in-service students. Even the post-experience learners are at times seen to be equipped with limited rather inadequate knowledge of English. Communicative skills can be acquired only after language skills are attained upto a reasonable level of proficiency.

2.7.5 Use can certainly be made of Prof. Widdowson's valuable ideas for more dynamic methodologies and materials. His ideas range from theoretical discussion to actual class-room practice. Intended neither to be prescriptive nor conclusive, as Widdowson himself acknowledges, it is for the profession to make further explorations. A methodology for such a qualitative approach, Widdowson agrees, has not yet been perfected. He urges that studies be made and materials be produced. One such attempt is the concern of the present work which takes up in the following chapters a study of the communicative potential of the lexicon of subject specialism, especially medicine.

2.8 The Communicative Approach — An Appraisal

2.8.1 The communicative approach with all its advantages requires a rigorous scrutiny. Regarding the
communicative orientation with which our classroom has come to be identified Widdowson himself cautions us that it is dangerous to be too ready to follow the dictates of fashion without submitting them to careful scrutiny. So it was with the structural approach, so it is now with the communicative. "If we are really serious about the teaching of communication we cannot just exchange notions for structures, functions for forms and suppose that we have already concluded the business" (Widdowson, 1979:29).

2.8.2 In most general terms we may say that communicative teaching is one which recognises the teaching of communicative competence as its aim. Can we expressly teach 'communicative competence'? What techniques can best be used to teach communicative competence? These questions pose methodological problems of a serious nature. Communication is a highly complex skill involving grammatical appropriacy, the role-relationship between interactants, the setting, topic, linguistic context, constraints upon the speaker and the nature of responses etc. The argument that once the grammatical system of a language is properly acquired a knowledge of how to put it to use will develop of itself is practically not very convincing. When a language is being taught to serve an immediate practical purpose the fallacy of this belief becomes evident. The difficulties which advanced level students face in coping with scientific material
in a foreign language bear witness to it. Similarly, most of advanced level ESP learners with a reasonable amount of proficiency in the grammatical system of English find themselves deficient in handling the skills and tasks of their designated areas of study or vocation and, of necessity, turn to specific purpose training in English.

2.8.3 The apparent heterogeneity of communicative needs and an almost immeasurable span of 'communicative tasks' poses another challenge to the communicative approach. Though we may often repeat ourselves much of our communication is to some degree novel. We hear and produce utterances that we have never heard or produced before. Stressing this problem Davis (1977:69) remarks, "Clutching 'Wilkins' in one hand and 'Threshold' in the other we determine the communicative requirements of our language learners". Rationally determined and goal oriented language functions, however, rigorously decided upon, cannot encompass the whole range of communicative requirements that ESP learners will have to cope with. We must not invite the danger of forgetting that ESP learners are not merely language learners they are human beings in contact with other human beings. Widdowson (1979:239) appears to be conscious of this
fact but only in relation to other approaches, not the 'communicative' when he observes:

Skinner is disposed to see language in terms of operant behaviour and tends in consequence to equate human beings with pigeons. Chomsky is disposed to see language in terms of mathematical symbols and so tends to equate human beings with automata.¹

2.8.4 Perhaps the most serious drawback of the communicative approach is the neglect of the personality of the learner. We assess his requirements, measure his purposes, analyse his needs with reference to his specialist study or vocation but we hardly provide for an integration of his 'personality into his communication. Brumfit (1977:71) points to this in his observation -- when effective speakers use language (native or foreign) they use it for purposes other than the production of language. They use it to convey messages, certainly but also -- even in purely academic or occupational contexts -- to define their own attitudes, to protect themselves against criticism, to express sympathy or disapproval or for many other purposes. Thus language should not be viewed merely as a system imposed on the learner or acquired by him, it should rather be viewed as a system integrated with and manipulated by the learner both for himself and others.

2.8.5 What then should be the implications of these interrelating factors and how should we go about forming our strategies for ESP? It seems silly to throw out one approach entirely because another has become more fashionable. We must investigate new vogue words and determine their value. Rather than being swayed by impressive sounding titles and the dictates of fashion we must resist the temptation and examine their efficacy in terms of educational goals. At the same time we can not outright reject the new proposals and fresh insights provided by the current state of our knowledge. We must remain concerned with both the communicative orientation and the system that makes it work. We must organise our teaching in a way that the needs, of both the system and the communicative functions it is used for, are kept in some kind of equilibrium. A view of language as communication is to be treated as an acceptance of further dimensions of language, an enrichment, and it implies teaching materials which interrelate form, function and strategy in a methodology which promotes participation by the learner in the process of interpreting meaning. Of course we have been too much concerned with language system, formation of correct habits, ability to construct correct sentences, emphasis on usage as we are aware that the system is not only essential but it should be strong enough to be put to use in the performance of social actions of different
kinds, an emphasis on the learning of language from the learner's point of view as a communicative instrument. This implies a focus on the learner as a participant in the composition and interpretation of discourse. A communicative method to be really effective is likely to make use of both the analytic and synthetic forms. Finding ways to reconcile these two aspects of language, viz. usage and use, is the biggest challenge for our profession in the 1980s.

2.8.6 Each age is marked by its forms of curiosity, its own modes of enquiry. A socio-linguistic view is typical of the present day outlook. Advances in our understanding of language have also come from the sociology of language and the philosophy of language. Searle (1969) following the lead of Austin (1962) has specified conditions attendant upon acts of promising, advising, warning, greeting, congratulating and so on. We might expect that as this kind of work proceeds we shall be able to describe a type of discourse in terms of the communicative acts it represents and the manner in which they are given linguistic expression. Thus we might be able to characterise varieties of language not as registers or types of texts but as different ways of communicating. In such a context new insights are bound to emerge and have
dramatic implications for applied linguistics in general and for language teaching in particular. New kinds of learners with new kinds of needs and purposes await us and fresh insights into the nature of language, its social function and manner of learning will have to be integrated into our response to these needs. A major challenge for the next decade is that of allowing more open-ended work on language system and communicative orientation, styles and strategies, learners' purpose and personality, all these and more. "There is a great deal of exploration to be done". (Widdowson, 1979).