# 1 The origins of ESP

We will now discuss in a little more detail the struggle for existence.

(Charles Darwin: The Origin of Species)

As with most developments in human activity, ESP was not a planned and coherent movement, but rather a phenomenon that grew out of a number of converging trends. These trends have operated in a variety of ways around the world, but we can identify three main reasons common to the emergence of all ESP.

#### 1 The demands of a Brave New World

The end of the Second World War in 1945 heralded an age of enormous and unprecedented expansion in scientific, technical and economic activity on an international scale. This expansion created a world unified and dominated by two forces – technology and commerce – which in their relentless progress soon generated a demand for an international language. For various reasons, most notably the economic power of the United States in the post-war world, this role fell to English.

The effect was to create a whole new mass of people wanting to learn English, not for the pleasure or prestige of knowing the language, but because English was the key to the international currencies of technology and commerce. Previously the reasons for learning English (or any other language) had not been well defined. A knowledge of a foreign language had been generally regarded as a sign of a well-rounded education, but few had really questioned why it was necessary. Learning a language was, so to speak, its own justification. But as English became the accepted international language of technology and commerce, it created a new generation of learners who knew specifically why they were learning a language - businessmen and -women who wanted to sell their products, mechanics who had to read instruction manuals, doctors who needed to keep up with developments in their field and a whole range of students whose course of study included textbooks and journals only available in English. All these and many others needed English and, most importantly, they knew why they needed it.

This development was accelerated by the Oil Crises of the early 1970s, which resulted in a massive flow of funds and Western expertise into the oil-rich countries. English suddenly became big business and commercial pressures began to exert an influence. Time and money constraints created a need for cost-effective courses with clearly defined goals.

The general effect of all this development was to exert pressure on the language teaching profession to deliver the required goods. Whereas English had previously decided its own destiny, it now became subject to the wishes, needs and demands of people other than language teachers. English had become accountable to the scrutiny of the wider world and the traditional leisurely and purpose-free stroll through the landscape of the English language seemed no longer appropriate in the harsher realities of the market place.

## 2 A revolution in linguistics

At the same time as the demand was growing for English courses tailored to specific needs, influential new ideas began to emerge in the study of language. Traditionally the aim of linguistics had been to describe the rules of English usage, that is, the grammar. However the new studies shifted attention away from defining the formal features of language usage to discovering the ways in which language is actually used in real communication (Widdowson, 1978). One finding of this research was that the language we speak and write varies considerably, and in a number of different ways, from one context to another. In English language teaching this gave rise to the view that there are important differences between, say, the English of commerce and that of engineering. These ideas married up naturally with the development of English courses for specific groups of learners. The idea was simple: if language varies from one situation of use to another, it should be possible to determine the features of specific situations and then make these features the basis of the learners' course.

Swales (1985) presents an article by C. L. Barber on the nature of Scientific English which was published as early as 1962. But it was the late 1960s and early 1970s which saw the greatest expansion of research into the nature of particular varieties of English – for example, descriptions of written scientific and technical English by Ewer and Latorre (1969), Swales (1971), Selinker and Trimble (1976) and others. Most of the work at this time was in the area of English for Science and Technology (EST) and for a time ESP and EST were regarded as almost synonymous. But there were studies in other fields too, such as the

analysis of doctor-patient communication by Candlin, Bruton and Leather (1976).

In short, the view gained ground that the English needed by a particular group of learners could be identified by analysing the linguistic characteristics of their specialist area of work or study. 'Tell me what you need English for and I will tell you the English that you need' became the guiding principle of ESP.

#### 3 Focus on the learner

New developments in educational psychology also contributed to the rise of ESP, by emphasising the central importance of the learners and their attitudes to learning (e.g. Rodgers, 1969). Learners were seen to have different needs and interests, which would have an important influence on their motivation to learn and therefore on the effectiveness of their learning. This lent support to the development of courses in which 'relevance' to the learners' needs and interests was paramount. The standard way of achieving this was to take texts from the learners' specialist area – texts about Biology for Biology students etc. The assumption underlying this approach was that the clear relevance of the English course to their needs would improve the learners' motivation and thereby make learning better and faster.

The growth of ESP, then, was brought about by a combination of three important factors: the expansion of demand for English to suit particular needs and developments in the fields of linguistics and educational psychology. All three factors seemed to point towards the need for increased specialisation in language learning.

#### Tasks

- I Why was ESP introduced in your country or teaching institution? What kinds of ESP are taught?
- 2 'Tell me what you need English for and I will tell you the English that you need' (p. 8). How justifiable do you think this claim is for ESP?
- 3 'The clear relevance of the English course to their needs would improve the learners' motivation and thereby make learning better and faster' (p. 8).
  - a) Give three ways in which 'relevance' can be achieved.
  - b) In what ways can motivation affect language learning?

# 2 The development of ESP

The best laid schemes o' mice and men Gang aft a-gley.

(Robert Burns)

From its early beginnings in the 1960s ESP has undergone three main phases of development. It is now in a fourth phase with a fifth phase starting to emerge. We shall describe each of the five phases in greater detail in later chapters, but it will provide a useful perspective to give a brief summary here. It should be pointed out first of all that ESP is not a monolithic universal phenomenon. ESP has developed at different speeds in different countries, and examples of all the approaches we shall describe can be found operating somewhere in the world at the present time. Our summary must, therefore, be very general in its focus.

It will be noticeable in the following overview that one area of activity has been particularly important in the development of ESP. This is the area usually known as EST (English for Science and Technology). Swales (1985) in fact uses the development of EST to illustrate the development of ESP in general:

'With one or two exceptions... English for Science and Technology has always set and continues to set the trend in theoretical discussion, in ways of analysing language, and in the variety of actual teaching materials.'

We have not restricted our own illustrations to EST in this book, but we still need to acknowledge, as Swales does, the pre-eminent position of EST in the ESP story.

## 1 The concept of special language: register analysis

This stage took place mainly in the 1960s and early 1970s and was associated in particular with the work of Peter Strevens (Halliday, McIntosh and Strevens, 1964), Jack Ewer (Ewer and Latorre, 1969) and John Swales (1971). Operating on the basic principle that the English of, say, Electrical Engineering constituted a specific register different from that of, say, Biology or of General English, the aim of the analysis

was to identify the grammatical and lexical features of these registers. Teaching materials then took these linguistic features as their syllabus. A good example of such a syllabus is that of *A Course in Basic Scientific English* by Ewer and Latorre (1969) (see below p. 26).

In fact, as Ewer and Latorre's syllabus shows, register analysis revealed that there was very little that was distinctive in the sentence grammar of Scientific English beyond a tendency to favour particular forms such as the present simple tense, the passive voice and nominal compounds. It did not, for example, reveal any forms that were not found in General English. But we must be wary of making unfair criticism. Although there was an academic interest in the nature of registers of English per se, the main motive behind register analyses such as Ewer and Latorre's was the pedagogic one of making the ESP course more relevant to learners' needs. The aim was to produce a syllabus which gave high priority to the language forms students would meet in their Science studies and in turn would give low priority to forms they would not meet. Ewer and Hughes-Davies (1971), for example, compared the language of the texts their Science students had to read with the language of some widely used school textbooks. They found that the school textbooks neglected some of the language forms commonly found in Science texts, for example, compound nouns, passives, conditionals, anomalous finites (i.e. modal verbs). Their conclusion was that the ESP course should, therefore, give precedence to these forms.

# 2 Beyond the sentence: rhetorical or discourse analysis

There were, as we shall see, serious flaws in the register analysis-based syllabus, but, as it happened, register analysis as a research procedure was rapidly overtaken by developments in the world of linguistics. Whereas in the first stage of its development, ESP had focussed on language at the sentence level, the second phase of development shifted attention to the level above the sentence, as ESP became closely involved with the emerging field of discourse or rhetorical analysis. The leading lights in this movement were Henry Widdowson in Britain and the so-called Washington School of Larry Selinker, Louis Trimble, John Lackstrom and Mary Todd-Trimble in the United States.

The basic hypothesis of this stage is succinctly expressed by Allen and Widdowson (1974):

"We take the view that the difficulties which the students encounter arise not so much from a defective knowledge of the system of English, but from an unfamiliarity with English use, and that consequently their needs cannot be met by a course which simply provides further practice in the composition of

sentences, but only by one which develops a knowledge of how sentences are used in the performance of different communicative acts.'

Register analysis had focussed on sentence grammar, but now attention shifted to understanding how sentences were combined in discourse to produce meaning. The concern of research, therefore, was to identify the organisational patterns in texts and to specify the linguistic means by which these patterns are signalled. These patterns would then form the syllabus of the ESP course. The Rhetorical Process Chart below (from EST: A Discourse Approach by Louis Trimble (1985)) is representative of this approach:

Level L			Description of level	
Α.	The objectives of the total discourse			
	The state of the s		Detailing an experiment	
			Making a recommendation	
			Presenting new hypotheses or theory	
			Presenting other types of EST information	
B.	The general rhetorical functions that develop the objectives of Level A			
	EXAMPLES:	1.	Stating purpose	
			Reporting past research	
			Stating the problem	
			Presenting information on apparatus used in	
			an experiment -	
			a) Description	
			b) Operation	
		5.	Presenting information on experimental	
			procedures	
C.	The specific rhetorical functions that develop the general rhetorical functions of Level B  EXAMPLES: 1. Description: physical, function, and process 2. Definition			
			Classification	
		-	Instructions	
			Visual-verbal relationships	
D.	The rhetorical techniques that provide relationships within and			
	between the rhetorical units of Level C			
	EXAMPLES:	1.		
			1. Time order	
			2. Space order	
			Causality and result	
		11.	Patterns	
			Causality and result	
			2. Order of importance	
			Comparison and contrast	
			4. Analogy	
			5. Exemplification	
			6. Illustration	

Figure 2: Rhetorical Process Chart

As in stage I there was a more or less tacit assumption in this approach that the rhetorical patterns of text organisation differed significantly between specialist areas of use: the rhetorical structure of science texts was regarded as different from that of commercial texts, for example. However, this point was never very clearly examined (see Swales, 1985, pp. 70–I) and indeed paradoxically, the results of the research into the discourse of subject-specific academic texts were also used to make observations about discourse in general (Widdowson, 1978).

The typical teaching materials based on the discourse approach taught students to recognise textual patterns and discourse markers mainly by means of text-diagramming exercises (see below p. 36). The *English in Focus* series (OUP) is a good example of this approach.

## 3 Target situation analysis

The stage that we come to consider now did not really add anything new to the range of knowledge about ESP. What it aimed to do was to take the existing knowledge and set it on a more scientific basis, by establishing procedures for relating language analysis more closely to learners' reasons for learning. Given that the purpose of an ESP course is to enable learners to function adequately in a target situation, that is, the situation in which the learners will use the language they are learning, then the ESP course design process should proceed by first identifying the target situation and then carrying out a rigorous analysis of the linguistic features of that situation. The identified features will form the syllabus of the ESP course. This process is usually known as needs analysis. However, we prefer to take Chambers' (1980) term of 'target situation analysis', since it is a more accurate description of the process concerned.

The most thorough explanation of target situation analysis is the system set out by John Munby in Communicative Syllabus Design (1978). The Munby model produces a detailed profile of the learners' needs in terms of communication purposes, communicative setting, the means of communication, language skills, functions, structures etc. (see below p. 55).

The target situation analysis stage marked a certain 'coming of age' for ESP. What had previously been done very much in a piecemeal way, was now systematised and learner need was apparently placed at the centre of the course design process. It proved in the event to be a false dawn. As we shall see in the following chapters, the concept of needs that it was based on was far too simple.

## 4 Skills and strategies

We noted that in the first two stages of the development of ESP all the analysis had been of the surface forms of the language (whether at sentence level, as in register analysis, or above, as in discourse analysis). The target situation analysis approach did not really change this, because in its analysis of learner need it still looked mainly at the surface linguistic features of the target situation.

The fourth stage of ESP has seen an attempt to look below the surface and to consider not the language itself but the thinking processes that underlie language use. There is no dominant figure in this movement, although we might mention the work of Françoise Grellet (1981), Christine Nuttall (1982) and Charles Alderson and Sandy Urquhart (1984) as having made significant contributions to work on reading skills. Most of the work in the area of skills and strategies, however, has been done close to the ground in schemes such as the National ESP Project in Brazil (see below p. 172) and the University of Malaya ESP Project (see ELT Documents 107 and Skills for Learning published by Nelson and the University of Malaya Press).

Both these projects were set up to cope with study situations where the medium of instruction is the mother tongue but students need to read a number of specialist texts which are available only in English. The projects have, therefore, concentrated their efforts on reading strategies.\*

The principal idea behind the skills-centred approach is that underlying all language use there are common reasoning and interpreting processes, which, regardless of the surface forms, enable us to extract meaning from discourse. There is, therefore, no need to focus closely on the surface forms of the language. The focus should rather be on the underlying interpretive strategies, which enable the learner to cope with the surface forms, for example guessing the meaning of words from context, using visual layout to determine the type of text, exploiting cognates (i.e. words which are similar in the mother tongue and the target language) etc. A focus on specific subject registers is unnecessary in this approach, because the underlying processes are not specific to any subject register.

'It was argued that reading skills are not language-specific but universal and that there is a core of language (for example, certain structures of argument and forms of presentation) which can be identified as "academic" and which is not subject-specific.' (Chitravelu, 1980)

<sup>\*</sup> It is interesting to note, however, that not all such projects have such a focus. The ESP project at King Mongkut's Institute of Technology in Bangkok, Thailand, for example, has to cope with a very similar study situation, but the focus here is on the full range of skills (reading, writing, listening, speaking).

As has been noted, in terms of materials this approach generally puts the emphasis on reading or listening strategies. The characteristic exercises get the learners to reflect on and analyse how meaning is produced in and retrieved from written or spoken discourse. Taking their cue from cognitive learning theories (see below p. 43), the language learners are treated as thinking beings who can be asked to observe and verbalise the interpretive processes they employ in language use.

## 5 A learning-centred approach

In outlining the origins of ESP (pp. 6-8), we identified three forces, which we might characterise as need, new ideas about language and new ideas about learning. It should have become clear that in its subsequent development, however, scant attention has been paid to the last of these forces - learning. All of the stages outlined so far have been fundamentally flawed, in that they are all based on descriptions of language use. Whether this description is of surface forms, as in the case of register analysis, or of underlying processes, as in the skills and strategies approach, the concern in each case is with describing what people do with language. But our concern in ESP is not with language use - although this will help to define the course objectives. Our concern is with language learning. We cannot simply assume that describing and exemplifying what people do with language will enable someone to learn it. If that were so, we would need to do no more than read a grammar book and a dictionary in order to learn a language. A truly valid approach to ESP must be based on an understanding of the processes of language learning.

This brings us to the fifth stage of ESP development – the learning-centred approach, which will form the subject of this book. The importance and the implications of the distinction that we have made between language *use* and language *learning* will hopefully become clear as we proceed through the following chapters.

#### **Tasks**

- Which of the stages outlined above has your country experienced? Has it developed in a completely different way?
- 2 Why do you think EST has set the trends in the development of ESP?
- 3 How far would you agree with Widdowson and Allen's assertion (pp. 10-11)?

- 4 An information leaflet about the Brazilian ESP Project summarises its aims as follows:
  - 'The "specific purpose" most common within the participant universities is the reading of specialist literature in English. Consequently there is a consensus within the project to focus on the teaching of reading strategies with the use of authentic materials and the use of the native language in spoken classroom discourse. The teaching of grammar is based on the minimum necessary for understanding academic texts. The emphasis is largely on a general course content to cover common problems (such as reading strategies), rather than specific courses according to the student's subject specialism (e.g. "English for Engineers").'
  - a) Why do you think this approach has been adopted?
  - b) Do you think that the approach is a justifiable response to the needs of the students?
  - c) How do you think students and teachers will react to this approach?

## 3 ESP: approach not product

Beware that you do not lose the substance by grasping at the shadow.

(Aesop: 'The Fable of the Dog and the Shadow')

The survey above shows that in its relatively brief history there have been several major shifts in the development of ESP both in theory and practice. However, we have tried to show that, in spite of their differences, the successive stages have all concentrated on the linguistic aspect of ESP: they are all essentially language-centred approaches. In later chapters we shall look in greater detail at how this has shaped the way in which people see ESP. For now let us return to the question posed at the beginning of this section: 'What is ESP?' To answer this question fully, we need first of all to establish a context which will help us to see how ESP at the present time relates to the rest of ELT. What exactly is the status of the citizens of ESP and its satellite settlements in relation to the general world of ELT?

In the time-honoured manner of linguistics, we shall represent the relationship in the form of a tree (see figure 3).

The tree represents some of the common divisions that are made in ELT. The topmost branches of the tree show the level at which individual ESP courses occur. The branches just below this level indicate that these may conveniently be divided into two main types of ESP differentiated according to whether the learner requires English for academic study (EAP: English for Academic Purposes) or for work/training (EOP/EVP/VESL: English for Occupational Purposes/English for Vocational Purposes/Vocational English as a Second Language). This is, of course, not a clear-cut distinction: people can work and study simultaneously; it is also likely that in many cases the language learnt for immediate use in a study environment will be used later when the student takes up, or returns to, a job.

At the next level down it is possible to distinguish ESP courses by the general nature of the learners' specialism. Three large categories are usually identified here: EST (English for Science and Technology), EBE (English for Business and Economics) and ESS (English for the Social Sciences). This last is not common, probably because it is not thought

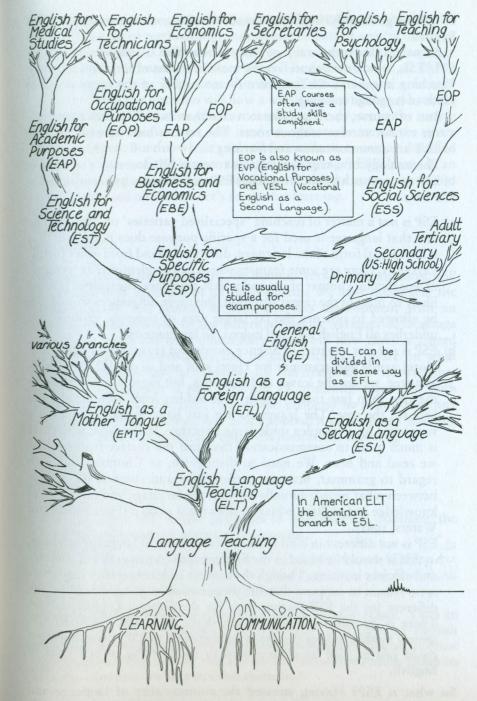


Figure 3: The tree of ELT

to differ significantly from more traditional humanities-based General English.

As we go down the tree, we can see that ESP is just one branch of EFL/ESL, which are themselves the main branches of English Language Teaching in general. ELT, in turn is one variety of the many possible kinds of language teaching.

But, of course, there is more to a tree than is visible above ground: a tree cannot survive without roots. The roots which nourish the tree of ELT are *communication* and *learning*.

The analogy of a tree can help us to get a bit closer to a definition of ESP not so much by showing what ESP is, but rather by showing what ESP isn't.

a) ESP is *not* a matter of teaching 'specialised varieties' of English. The fact that language is used for a specific purpose does *not* imply that it is a special form of the language, different in kind from other forms. Certainly, there are some features which can be identified as 'typical' of a particular context of use and which, therefore, the learner is more likely to meet in the target situation. But these differences should not be allowed to obscure the far larger area of common ground that underlies all English use, and indeed, all language use.

b) ESP is *not* just a matter of Science words and grammar for Scientists, Hotel words and grammar for Hotel staff and so on. When we look at a tree, we see the leaves and branches, but there is much more to the tree than just these – much of it hidden from view inside and beneath the tree. The leaves do not just hang in the air: they are supported by a complex underlying structure. In the same way there is much more to communication than just the surface features that we read and hear. We need to distinguish, as Chomsky did with regard to grammar, between *performance* and *competence*, that is between what people actually do with the language and the range of knowledge and abilities which enables them to do it (Hutchinson and Waters, 1981).

c) ESP is *not* different in kind from any other form of language teaching, in that it should be based in the first instance on principles of effective and efficient learning. Though the content of learning may vary there is no reason to suppose that the processes of learning should be any different for the ESP learner than for the General English learner. There is, in other words, no such thing as an ESP methodology, merely methodologies that have been applied in ESP classrooms, but could just as well have been used in the learning of any kind of English.

So what is ESP? Having stressed the commonality of language and learning, how does ESP differ from other forms of ELT? To answer this,

ESP must be seen as an approach not as a product. ESP is not a particular kind of language or methodology, nor does it consist of a particular type of teaching material. Understood properly, it is an approach to language learning, which is based on learner need. The foundation of all ESP is the simple question: Why does this learner need to learn a foreign language? From this question will flow a whole host of further questions, some of which will relate to the learners themselves, some to the nature of the language the learners will need to operate, some to the given learning context. But this whole analysis derives from an initial identified need on the part of the learner to learn a language. ESP, then, is an approach to language teaching in which all decisions as to content and method are based on the learner's reason for learning.

#### Conclusion

In this section we have identified the main factors in the origins of ESP and given a brief overview of its development. We have noted that the linguistic factor has tended to dominate this development with an emphasis on the analysis of the nature of specific varieties of language use. Probably this has been a necessary stage, but now there is a need for a wider view that focusses less on differences and more on what various specialisms have in common. As 'the tree of ELT' shows, what they have in common is that they are all primarily concerned with communication and learning. ESP should properly be seen not as any particular language product but as an approach to language teaching which is directed by specific and apparent reasons for learning.

### Tasks

- Our tree gives only a few examples of ESP courses. Complete the branches at the top, by adding other courses.
- What differences would you expect to find between an EOP course and an EAP course for doctors? In what ways do you think occupational and academic needs differ?
- 3 All language teaching should be based on learner needs. Thus in theory there is no difference between ESP and General English teaching; in practice, however, there is a great deal of difference. How far would you agree with this statement? What differences, either in theory or in practice do you think there are?