DISCOURSE ANALYSIS AND SYLLABUS DESIGN: AN APPROACH TO THE TEACHING OF READING

by

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ABSTRACT

This thesis has two main concerns. One is with the design of an EFL syllabus for Brazilian secondary schools of the public sector and the other with a preliminary evaluation of this syllabus in this context. To design the syllabus, this thesis takes into account two types of conditions: extrinsic and intrinsic conditions. The extrinsic conditions have to do with the actual characteristics of the "learning milieu" and of the general social context where this "milieu" is found. The study of these conditions point out that for a FL syllabus to be feasible and socially justifiable in this environment it must centre on the provision of reading skills. The intrinsic conditions relate to theoretical issues in applied linguistics which bear upon the internal organisation of a syllabus designed to meet this provision. These issues essentially involve research in the areas of discourse analysis, schema theories of reading comprehension, FL learning and FL syllabus design theories. The design of the syllabus then comprises a mediating process between these two types of conditions, which results in an interactive schema theoretic reading syllabus model.

The inquiry into the operation of the syllabus in the classroom involves the use of a quasi-experimental research paradigm which is complemented by non-experimental research procedures. The findings of this empirical work indicate that it is worth putting the syllabus to the test of practice through its actual realisation in the classrooms so that it can be continually evaluated and improved by teachers.

The thesis concludes with the formulation of an action-research methodology for teachers' work which makes this sort of syllabus development possible.

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ABBREVIATIONS

CA = Contrastive Analysis
EAP = English for Academic Purposes
EFL = English as a Foreign Language
EL = English Language
ELT = English Language Teaching
ESP = English for Specific Purposes
EST = English for Science and Technology
FL = Foreign Language
FLT = Foreign Language Teaching
ISTR comprehension model = Interactive Schema Theoretic Reading comprehension model
L_1 = Native Language
L_2 = Second or Foreign Language
LSP = Language for Specific Purposes
LTM = Long Term Memory
TRI = Topic - Restriction - Illustration

Brazilian states:

GO = Goiás
MG = Minas Gerais
PE = Pernambuco
PI = Piauí
RGN = Rio Grande do Norte
RJ = Rio de Janeiro
SP = São Paulo

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CHAPTER 1

SOME BACKGROUND ISSUES: AN INTRODUCTION

This introduction provides a general setting for the thesis. It clarifies the nature of the problem to be investigated, the kind of inquiry to be pursued and how it is to be tackled in the different chapters of this work.

1.1 The nature of the problem and of the inquiry

For the last few years FL teaching in general and ELT in particular in Brazilian secondary schools of the public sector have reached very low standards. Although a FL is virtually taught in every secondary school in the country, FL education is nothing more than a formality. It is included in the curriculum, but pupils' performance in any FL skill at the end of the secondary school course falls short of any adequate level of competence. As a consequence, the FL teacher in that context has very low prestige and a lot of uneasiness and dissatisfaction in the ELT profession has been generated. This thesis represents an attempt to begin to solve this problem through the design of an EFL syllabus to be investigated and developed by teachers in the classroom. This problem has, in the last few years, attracted the attention of several specialists in the country (Tilio, 1980; Vereza, 1982; Ballalai, 1982; Moita Lopes, 1981 and 1982; inter alia) who have in one way or another tried to tackle it. Also, national conferences of EL lecturers have included sessions dealing with the existing difficulties in EFL in the secondary schools of the public sector; and presently a national project for the development of FL education in that context is in elaboration. In other words, there has been a growing concern with this issue in Brazilian academic circles.

It is my contention that this situation has been mainly caused by negligence on the part of the Brazilian EFL specialists to think out alternatives for FL teaching which take into consideration the nature of the Brazilian context (including here both the general social context and the "learning milieu") so that adequate suggestions for objectives, syllabuses, methodology etc. could be made. Normally, imported solutions have been transferred to the Brazilian classroom without any concern for their appropriateness. It seems to me that only a critical analysis of the Brazilian context can begin to point in the direction of an alternative to FL teaching which is operative and productive. What I am arguing for therefore is a position for the applied linguist to FL teaching in which rather than working in abstraction (ie, solely in view of theoretical issues in applied linguistics), he should start his work from an analysis of the "learning milieu" he is working with. This is a major issue in this thesis. FL teaching takes place in time and in a specific socio-political environment, involving particular individuals operating within certain conditions, therefore the consideration of these factors have to be made central if FL education is to have any relevance in the classroom and in general social terms.

The nature of the research to be undertaken here is therefore committed to a particular issue in Brazilian education, namely, FL education in secondary schools of the public sector and it aims at initiating action in schools by putting forward an EFL syllabus for use and continual appraisal in the classroom. Thus, it does not intend to present a final solution to the existing problem of FL education in that context but to introduce a possible alternative that can be investigated by teachers in the actual classroom through action-research so that in fact syllabus development is made possible and progress in the ELT profession can be generated. In Stenhouse's terms (1975:142), the syllabus to be proposed here "is not to be regarded as an unqualified recommendation but rather as a provisional specification claiming no more than to be worth putting to the test of practice" in the classroom. This research then has a clear pedagogic purpose in the sense that it has a concern with the reality of the classroom and with the education of both pupils and teachers.

In view of the pedagogic nature of this inquiry, it seems necessary that the issues to be studied here be seen in relation to how FLT in general and ELT in particular have been conceived in the Brazilian educational context. This is the point to be dealt with in the next section.

1.2 FLT and ELT in Brazil: a critical view

Until 1961 FLs were compulsory in the curriculum of secondary schools. French, English, Spanish, Latin and sometimes Greek were taught in secondary schools. Students were normally required to take one FL during the seven years of secondary school and other FLs for shorter periods of time. However, because of the expansion of secondary school education in the interior of the country, there was a shortage of teachers who could take up FL posts. The imposition of a FL on the curriculum then became meaningless since there were not enough qualified teachers for so many new schools. Therefore, the Law of Directives and Bases of National Education (Law no. 4024, December 1961) transferred FLs from the set of common core disciplines to the set of additional subjects. It was then that FL teaching in the public sector began to deteriorate because less importance was given to the study of FLs in the curriculum.

A more recent law (Law no. 5692/71) confirmed the position of FLs outside the list of main disciplines and actually added that the decision on the teaching of a FL is to be made by each State Council of Education. That is, FL learning may be part of the curriculum in one state but not in another. And according to this law what should determine the inclusion of a FL in the curriculum is the existence of the essential conditions for FL teaching, which surprisingly are not defined in the law itself (cf 2.2.1 below). It should be indicated however that the option of including a FL in the curriculum only applies to first grade schools (first four years of secondary education). The teaching of a FL is obligatory at 2nd grade schools (last three years of secondary education). Nevertheless, as far as I know, except for the state of E. Santo, a FL is normally included in the curriculum of secondary schools of the public sector in first grade schools. Yet, as I have pointed out in 1.1 above, FLs are not adequately taught.

What is peculiar, I think, is that this de-emphasis on FLs in the official schools coincides with the opening of private FL schools all over the country. There are even chains of private FL schools with branches scattered throughout Brazil and not necessarily only in the state capitals. While the official educational system avoided the responsibility of providing appropriate FL education, the private sector took over. As a result, FL education has been virtually reduced to those who can afford to attend private FL schools.

The situation is such that the idea that one must attend a private FL school in order to learn a FL is assumed to be self evident. It has also been argued that FLs should be totally removed from the curriculum of schools of the public sector because the social classes which attend these schools will never need to use a FL or because FL learning is hard for them (cf 6.3.1.1 below). This view, I think, is, to say the least, misconceived. FL education is part of the official educational system - albeit not in the main core of the curriculum - and it is the responsibility of FL specialists to make it feasible in that context so that FL education is made widely accessible in society. After all, as Ballalai (1982:4) remarks, while FLs are considered as superfluous in the official educational system, they are nationally recognised as essential by the middle classes. Removing FLs from the school curriculum will only enlarge the gap between the education of the lower classes and of the middle classes since the latter have their access to FL education ensured by the private sector. A curriculum which excludes FLs from the public sector schools therefore would function as "the staple of an education designed for the underprivileged [and which] reinforces their exclusion from the education and knowledge most valued and most valuable" (Stenhouse, 1975:19-20) in society. What this thesis will essentially seek to do is to develop a means through which FL education becomes truly possible in the public sector.

In general terms the only FL normally included in the curriculum of Brazilian secondary schools nowadays is English. This, I think, represents a great cultural loss not to mention the danger of having all the foreign information filtered into the country through the means of one FL[1] (cf Ballalai, 1982:1).

In a few states however pupils can still choose between French and English, although they in general tend to prefer English if given the choice. The reasons for such preference are obviously connected with the undeniable importance of English as an international language, which is due to the economic power of England and USA in the first and in the second half of this century, respectively, and to the penetration of English as the language of the new imperialist (ie, USA) in Brazil in this century (cf 2.5.1 below). In this sort of social context, it is not surprising that there is so much interest in EFL learning in the country and that a knowledge of English has also become a symbol of social status since it provides access to the language and culture of the imperialist. In this regard, note the following accurate evaluation of ELT in Brazil: the need for English

> "stems, in part, from social and prestige values and also from a desire to emulate British and American cultural models. The knowledge of a foreign language is seen as almost synonymous with professional and social advancement, an elegant accomplishment and a sign of social status."
> (The ELT Profile on Brazil, The British Council, 1976:2)

What is interesting however is that despite such an enormous emphasis on learning English in the country, the real social justification of ELT in Brazil does not seem to have been the concern of those who have been generally involved with EFL both in the official school system and in the academic circles. The objectives of EFL learning normally pursued in secondary schools of the private and public sectors and in private language schools are very different, I think, from the actual role that EFL plays in the country. Traditionally, ELT has centred on the development of the four language skills with emphasis on oral skills (cf the review of the official guidelines in 2.2.1 below). And EFL specialists (cf Tilio, 1980; Vereza, 1982; Whitfield, 1982, inter alia) have generally claimed the role of English in Brazil as a resource for international oral communication on the grounds that Brazilians will need to use oral English in Brazil or abroad as a lingua franca in their contact with foreigners. It seems to me however that these claims have been much more oriented by the long tradition of four language skill syllabuses with emphasis on oral skills than by an actual analysis of what most people need to learn English for in Brazil.

Only a very small minority of the population will ever have a chance of using English as a means of oral communication both inside and outside the country. Further, there are not enough jobs in the Brazilian market, for which oral skills in EFL are necessary (ie, interpreters, hotel receptionists etc.), which could justify emphasis on oral skills in EFL syllabuses. I would argue that the only people who make use of oral English in Brazil are teachers, lecturers and students at the private language school "milieu" and in the English language and literature classroom at the university. Research has in fact shown that even Brazilian EFL secondary school teachers hardly ever have a chance of using oral English either inside or outside the classroom (cf Tilio, 1980:279 and 431). Therefore, to see the role of English in Brazil as a resource of oral communication seems to deny any social relevance to ELT. Even the middle classes who normally attend private language schools for 5/7 years usually lose whatever oral fluency competence they have in English after they leave those schools. Their great advantage over the pupils of the lower classes is the capacity of reading in English they acquired in the language school and which they can easily keep since reading is the only EFL skill that can be used in the Brazilian context. Besides, the only formal requirements in FLs demanded at undergraduate and postgraduate levels involve nothing but the command of reading skills (cf 2.2.4.1 below). The real necessity that students may have of using English may come up when they are taking university courses in certain academic fields which may require the reading of a book published in English which is not available in Portuguese. Thus, the only possible social justification for EFL learning in Brazil has to do with the use of English as a resource for reading. Reading is the only skill which is responsive to educational needs and which the learner can use in his own environment. It is therefore the only skill which pupils can continue using autonomously once the language course is over. As Bruner (1977:17) points out, "Learning should not only take us somewhere, it should allow us later to go further more easily". This is one of the reasons why this thesis, as shown in the next section, argues for a reading syllabus for Brazilian secondary schools of the public sector.

1.3 An alternative to the existing situation: a reading syllabus

In view of my discussion of the ELT situation in Brazil in the previous section, it is clear that the traditional objectives of FL teaching in Brazil (ie, four language skills with emphasis on oral skills) have to be altered since these objectives have no social justification in the Brazilian context, ie, they are inappropriate. And it seems to me that a school subject which is not socially accountable cannot show teachers, pupils and the community in general, the need of its presence in the curriculum. Therefore, it is not surprising that EFL teachers have a very low status in Brazilian secondary schools today.

Also, a school subject which has no accountability in social terms can only co-operate with a view of education which aims at making pupils conform to the "status quo". This is very different from the view of education which informs this thesis: education which gives learners means for acting upon the world so that they can transform it (cf 1.4 below).

Furthermore, in the context of Brazilian secondary shools, as shown in 2.2.1 and 2.2.3 below, it is unrealistic to claim a four language skill syllabus due to the existing conditions in the "learning milieu". Thus, this thesis proposes a reading syllabus as an alternative. This proposal is then derived from the social justification for ELT in the country and from the fact that a syllabus which centres on four language skills conceived as goals is unfeasible in the Brazilian school environment. Note therefore that there are two quite different considerations involved here. One is a matter of educational ideology and the other is related to feasibility. These are two fundamental points in this thesis which led me to criticise the existing situation and which are taken into account in my syllabus proposal.

It should also be observed that the acquisition of the reading skill has been increasingly argued for in the academic circles as the objective of ELT in Brazilian secondary schools (cf Moita Lopes, 1981 and 1982; Ballalai, 1982: Menezes de Souza, 1983). Furthermore, Silva and Oliveira (1984:3) have indicated that the research they coordinated (cf 2.2.2 below and specially note 13 in that section) involving a population of 1859 secondary school EFL teachers has shown that 67.9% of the teachers interviewed believe that the general goal of ELT in both the first and second grades should be the development of reading skills, coinciding therefore with the position taken in this thesis.

I would also like to make the point that using a reading syllabus to teach a FL may help the learner to develop better reading skills in his own native language. In this regard, note that Kleiman (1983) has presented evidence that the Brazilian secondary school pupil generally has a very limited reading competence level in his NL due to the inadequate approach to the teaching of reading utilised in schools. Further, Cavalcanti (1984) has argued that in the Brazilian school there is no formal instruction on how to interpret texts and read critically, ie, reading instruction goes straight from the acquisition of literacy skills to the evaluation of the acquired skills. I would think that the use of a FL syllabus which focuses on reading may also generate more interest in learning and teaching to read in the NL on the part of pupils and teachers, creating an atmosphere for reading instruction in schools from which both the NL and the FL teachers can profit and which by implication will have positive effects on learning to read. It should also be indicated, as will be shown in 5.2.5.6 below, that the FL reading syllabus to be put forward here, by drawing on pedagogic practices associated with other school subjects, will have a general educational value which goes beyond the task of learning a FL.

Although the idea of designing a one skill FL syllabus, ie, a reading syllabus, first came to my mind through my readings in the area of ESP, the syllabus to be put forward in this thesis is a general English syllabus. It does have similarities with ESP syllabuses in the sense that the notion of specificity is paramount in its design. However, in ESP syllabuses specificity is defined in terms of learners' target behaviour, ie, the sort of linguistic knowledge and skills that learners need in a particular situation, profession, etc. In the reading syllabus here on the other hand specificity is defined in terms of the role of the FL in the general social context in which learners find themselves and of the conditions of learning in the school environment. That is, specificity is related to the state of affairs which represents the starting point for the learners rather than the state of affairs which represents target behaviour.

Further, the reading syllabus does not have the short term remedial objectives of ESP courses normally associated with training in the use of a particular FL skill for specific needs. That is, in the reading syllabus FL learning is seen as part of the whole educational process of the learner.

ELT in this perspective does involve teaching one specific skill, but it has a general educational purpose. It comprises learning a FL skill which is useful to learners, which they can continue to develop in their own environment, and which provides them with the possibilities of enlarging their conceptual boundaries since through reading in a FL they can be exposed to different views of the world, of their own culture, and of themselves as human beings. Two different purposes are then taken into consideration: a utilitarian and an educational purpose.

In accounting for these two aims, the reading syllabus provides children of the public sector with the command of the only FL skill which, as seen in 1.2, makes a difference in the education of learners of private language schools. In so doing, the reading syllabus is making a socio-political point since it is helping to equip children of the public sector with the same opportunities available to children in the private sector so that social mobility is made possible.

Underlying the principles which led to the proposal of a reading syllabus for Brazilian secondary schools, there is therefore a particular conceptualization of the structure of society and of the role of education in it, which, I think, need to be made explicit in this introduction.

1.4 Freire's view of education and the social concern of the thesis

The FL syllabus proposal to be advanced here is informed by Freire's (1974a, 1974b, 1982 and 1983) philosophy of education. Essentially, his position is characterised by the belief that the individual's ontological vocation is to act upon and transform the world in which he lives so that he has access to new opportunities of a better life. "While animals adapt to the world to survive, human beings transform it according to certain objectives ..."[2] (Freire, 1982:68).

Therefore, the world in his conception is not a static reality but a reality in process. The individual's role is then to take part in this process and,in so doing, he produces social reality and enters the historical process (cf Freire, 1974a:36). It is a view of the individual as subject rather than as object of the historical process.

Education accordingly in this perspective should be responsive to the individual's ontological mission so that the human condition can flourish. To deny people this role is to dehumanise them. In this sense, education should provide the means through which the individual can influence the transformation of society by dealing with reality critically. This process is what Freire (1974b:15) has called "CONSCIENTIZAÇÃO" (the development of critical awareness) through which the individual is led to act upon the world and to take part in the social process. In this way, the individual can consciously choose from the alternatives the world offers. This is what Freire calls education for liberation or education as the practice of freedom,which "consists in acts of cognition, not transferrals of information" (Freire, 1974a:67) in the sense that it stresses reflection rather than reception of information. If people become critical and learn to question the existing social order, the chances that their rights will be threatened by whatever forces will decrease. This view therefore sees education not as a conformist act but as a subversive force and as a source of power.

It implies, I think, a concept of education which, because it acknowledges that social reality is a process, sees the school as an environment which has to foster the individual's participation in this process by making use of means which involve adequate resources for instruction, which reflect the learning of skills socially justifiable and which stimulate critical awareness. The FL reading syllabus to be developed in this work tries to be responsive to these means.
It is also due to this view of education that I have argued in 1.2 above that EFL education, which is so highly valued in the Brazilian context, has to be made accessible in the public sector so that the chances that the lower classes will have of participating in the historical process are augmented.

In this respect, I should like to draw attention to the fact that this thesis has a clear concern with the education of the less privileged classes. It seems essential to me that research in the social sciences must in principle have a bearing on reality.

It must directly or indirectly relate to problems in the social context. However, the nature of this relationship between research and social reality may vary. Research as a social act unavoidably expresses the socio-political leanings of the researcher. That is, research is never neutral. The reasons why and how one does research reveals particular convictions about the structure of society and, as a consequence, the nature of the topics and approaches to be considered relevant. Simplifying the issue, some people do research that has a concern with the dominant classes, and some people do research that has a concern with the less favoured classes. Even when not clearly stated, the socio-political bias is inevitably implied.

In the context of applied linguistics to FL teaching in Brazil, it is not that research has not had a bearing on social reality but that there seems to have been, I think, until quite recently, a preference for topics which have to do with the education of the middle classes. And when the topics have been related to FL education in contexts where they could have a bearing on the education of the less privileged, they have been inadequately approached (cf 1.3 above). There is no reason why those who do research cannot be clearly concerned with the less favoured classes. It is a matter of choice for the researcher: "The fact that science is not found in a neutral form does not imply that all scientists have to be on the side of the dominant classes. They can be, if they so wish, on the side of the exploited classes".[3] (Freitas, 1982:26).

In the last section of this introduction I discuss the contents and the organisation of the thesis with the intention of revealing how they derive from the issues I have raised in this introduction.

1.5 The content and organisation of the thesis: from and back to the classroom

As pointed out in 1.1 above, the inquiry to be pursued here focuses on the reality of Brazilian secondary schools by trying to solve an existing pedagogic problem: the design of an adequate EFL syllabus. With this purpose, this research is divided into two main parts. The first deals with the design of the syllabus itself and the second with a preliminary evaluation of this syllabus. The first part comprises chapters 2, 3, 4 and 5 and the second chapters 6 and 7.

As argued in 1.1 above, the applied linguist to FL teaching should start his work from the examination of the learning environment and of the general social context which characterise the language teaching situation he is concerned with, and only then should he move into theoretical issues in applied linguistics. The first part of his work will then determine the particular areas of research in applied linguistics he needs to focus on. Therefore, that is the sequence of the procedure to be used in the activity of syllabus design here (cf 2.1.1 below), into which in fact this whole thesis is projected.

It should also be noted that due to the pedagogic concern of this thesis, this inquiry starts in the FL classroom, moves into theoretical issues and goes back into the FL classroom in its last phases. The chapters of this thesis then represent the various stages in this route from and back to the classroom, which I now want to discuss.

Chapter 2 involves a critical appraisal of the Brazilian ELT classroom from perspectives which involve policy and pupil/teacher related variables. These will provide for what will be called the extrinsic conditions on the design of the syllabus. This analysis makes use of: a) available existing research, which describes the Brazilian ELT secondary school classroom, undertaken by different researchers in various parts of the country; and b) the official guidelines for ELT published by the state councils of education. This study is then critically assessed in the light of the view of education taken in this thesis and brings about the need of a reading syllabus for Brazilian secondary schools, as advanced in this introduction. These extrinsic conditions in part define the sorts of theoretical issues to be examined in connection with the internal organisation of the syllabus in chapters 3 and 4. The next two chapters then focus on the intrinsic conditions on the design.

Chapter 3 puts together a model of the reading comprehension process which is informed by a particular theory of language use and heavily draws on research in the areas of discourse analysis and schema theories of reading comprehension. This reading comprehension model will provide the backbone structure of the reading syllabus model. This chapter also presents illustrative empirical evidence for some aspects of the reading model and discusses the main issues of research in the areas of L_1 and L_2 reading acquisition related to schema theories, some of which will be influential in the design of the syllabus model.

Chapter 4 discusses theories of syllabus models and of FL learning with the intention of revealing the aspects of these theories from which the reading syllabus model takes its bearings.

Having defined both the extrinsic and intrinsic conditions on the design, the thesis moves into the elaboration of the reading syllabus itself in chapter 5, which is the central goal of the first part of this inquiry. A comprehensive view of syllabus is taken. In this sense, the syllabus contains content specifications and a methodological component, which is responsible for its process-orientation.

The next two chapters constitute the second part of the thesis, which deals with the evaluation of the syllabus. This part then is the empirical research: the focus of this inquiry returns to the classroom where it started. It is essential that the syllabus be seen in operation in the real FL classroom before anything can be said about its validity.

Chapter 6 then discusses the rationale for the empirical research, which involves the use of a (quasi-) experimental research paradigm (quantitative/outcome-oriented data) complemented by non-experimental research procedures,which provide access to qualitative and process-oriented data. Due to the pedagogic concern of this thesis, it is important that the inquiry to be undertaken here into the effectiveness of the syllabus model in the classroom be approached from these two perspectives. While the quantitative/product-oriented data will offer access to the effects of the syllabus proposal in terms of pupils' performance, ie, a very narrow aspect of the evaluation is involved, the qualitative/process-oriented data will provide insights into more broader issues (the participants' affective perception of the innovation, the actual teaching/learning process etc.), which contextualise this research in the classroom. The findings of this inquiry then because of their dual perspectives on the classroom are useful in projecting this thesis into the future realisation of the syllabus in schools. This empirical research essentially comprises the design of a set of teaching materials, which represent a possible realisation of the syllabus developed in this thesis, and their use in secondary schools of the public sector in the city of Rio de Janeiro for a limited period of time.

Chapter 7 contains the results of the evaluation. It describes and discusses the experimental and non-experimental findings of the empirical research and relates both kinds of data to each other. In so doing, this chapter shows how the non-experimental findings, by questioning the experimental findings, bring about issues which can only be clarified in the actual implementation of the syllabus in schools.

Chapter 8 presents the conclusions of the thesis and assesses issues related to the development of the syllabus in the schools through action-research to be undertaken by teachers.

NOTES

1 Christ (1981:42) and Schroder and Zapp (1981:109) discussing FL teaching policy in Europe have also drawn attention to the danger of having English as the only FL in the curriculum of schools: "If English is officially introduced as an international language in Europe, the vast European culture will be lost in the long run ... (Schroder and Zapp, 1981:109) (cf my translation from French: "Si l'anglais etait officiellement introduit comme langue internationale en Europe, ceci produirat à long terme un vaste sabir Europeen, ..."

2 cf My translation from Portuguese: "Enquanto os animais se adaptam ao mundo para sobreviver, os seres humanos o transformam de acordo com finalidades que se propõe,"...

3 cf My translation from Portuguese: "O fato de a ciência não ser encontrável na forma neutra não implica que todos os que trabalham nela estão ao lado das classes dominantes. Eles podem estar, principalmente se quiserem, ao lado das classes exploradas".

CHAPTER 2

DETERMINING THE EXTRINSIC CONDITIONS ON DESIGN

2.1 Introduction

This chapter centres on a description of the Brazilian secondary school ELT classroom from a number of perspectives.[1] The study to be developed in this chapter together with the theoretical and empirical knowledge of the areas of discourse analysis and reading comprehension (cf chapter 3) and the areas of syllabus design and FL learning (cf chapter 4) constitute the bodies of knowledge which provide grounds for the elaboration of the syllabus model put forward in chapter 5.

In Brumfit's terms (1980e and 1980g), this chapter provides for the extrinsic constraints on the syllabus, whereas chapters 3 and 4 account for the intrinsic constraints on syllabus construction. In this thesis however instead of using the term constraint, the term commonly found in the literature, I will prefer the term condition. The term constraint is typical of an approach to syllabus design which this thesis will argue against. That is, this term implies an attitude to the syllabus design activity which sees the existing conditions in the classroom as inhibiting factors to a syllabus designed in abstraction (ie, without reference to these conditions), rather than as factors which facilitate and inform certain decisions made by the syllabus designer in the very process of designing the syllabus (as with the approach to be used in this thesis). Further, the term constraint appears to imply that the syllabus designer is restricted by particular features of the classroom when in reality a new syllabus as an innovation may question some of the prevailing norms. In short, I will use the term condition because it better reflects the approach to syllabus design I will argue for here. Thus, in my terms this chapter provides for the extrinsic conditions on the syllabus and the two next chapters for the intrinsic conditions.

The latter type of conditions concerns issues connected with the internal organisation of the syllabus and they are derived from a particular view of the nature of language use, of FL learning and of FL syllabus models (cf Figure 2.1 below).

The extrinsic conditions are however related to aspects which, though external to the design of the syllabus model itself, are crucial in the practice of syllabus construction adopted in this thesis. This represents syllabus elaboration as an activity which should take into consideration the local conditions under which the FL teacher operates, ie, a study of the "learning milieu" where the syllabus to be designed is to be implemented. The underlying claim here is that syllabuses are theoretically unsound if the context where it is going to be used is not taken into account in its design.

Hence, rather than elaborating a syllabus solely by considering its internal organisation (ie, in the light of theoretical aspects which define the intrinsic conditions on the syllabus) and looking into the extrinsic conditions in the phase of implementation in the classroom (as in Munby, 1978:217, for example), syllabus design in this thesis considers both types of factors as determining conditions on design. In this way, the analysis of the extrinsic conditions helps to define the kinds of intrinsic factors which are relevant in the design of the syllabus. That is, the content items to be included in the syllabus, the skills or skill to be accounted for, the appropriateness of methodological devices, etc. are up to a certain extent determined by the study of the extrinsic conditions on the syllabus.[2] Thus, although the extrinsic conditions have to do with aspects which are external to the design of the syllabus itself, they are in fact an intrinsic issue in the syllabus design activity as here conceived.

Within this sort of framework of FL syllabus design, theoretical models of FL syllabus (structural, notional etc.) have no direct and automatic application to the FL classroom since they have been elaborated as theoretical principles which guide FL teaching, irrespective of particular language teaching situations. FL syllabus design theories however inform the elaboration of specific FL syllabus models for particular FL teaching situations (cf 4.3).

To my mind, the irresponsible interests and ethnocentric values of publishers and textbook writers have led to the elaboration of universal FL textbooks and courses and their importation to particular FL teaching contexts, without any concern for appropriateness.[3] Besides, even textbook writers who have been concerned with specific national markets have often transferred theoretical syllabus models directly to the classroom no matter whether these models are adequate to the "learning milieu" where the teacher finds himself. It is, for example, absurd to advocate a syllabus model which implies a particular type of FL learning strategy without considering, among other factors, the characteristics of the language teaching tradition in a country. In this connection, Touba (1978) and Brumfit in a lecture at the University of London in 1983 have argued that students in Egypt and China, respectively, are so much used to rote learning that it seems harmful to require a different type of learning strategy to acquire a FL. Nevertheless, as I have already pointed out, and will further discuss below, a syllabus as an innovation cannot simply conform to local conditions.

Therefore, syllabus construction here is not only an activity at the theoretical level, but also at the operational level since the syllabus designer is elaborating a syllabus for a particular ELT context: the syllabus operation is an integral part of the design. In Tongue and Gibbons' terms (1982:63 and 64), the syllabus model to be constructed in this thesis in chapter 5 is an "applied syllabus" in opposition to a "theoretical syllabus".

One should bear in mind however that even the syllabus model to be advanced in this thesis, which takes particular local features into consideration, will require adaptations to handle the idiosyncrasies of specific language teaching classrooms. Or, as Breen (1984:50) puts it, "every teacher inevitably interprets and reconstructs that syllabus so that it becomes possible to implement it in his or her classroom". However, to my mind, this fact does not invalidate the design of a syllabus model in the form of general guidelines which give teachers and materials designers bearings for their activities and allow for modifications teachers will unavoidably have to make in the implementation of the syllabus.

In this regard, it should be noted that the analysis of the extrinsic conditions on the syllabus to be carried out here, albeit based on data derived from empirical research undertaken in different parts of the country and official publications, does not imply that all sorts of local features operating in the ELT classroom in the context of the Brazilian secondary school have been considered. That is, accounting for the varieties of the Brazilian ELT secondary school classroom is beyond the scope of this thesis, and, for that matter, of any description. The existing differences across the geographical regions in a country of the size of Brazil are certainly reflected in the classroom and are never too well emphasised. Actually, in my study of the extrinsic conditions on the syllabus in 2.2 below, some of these differences will become apparent. However, the description here involves idealisation to a considerable extent so that this research can be operationalised. Nevertheless, while acknowledging the existing regional differences in Brazil, I would think that the fact that the study reported in this chapter addresses a very particular learning context (ie, ELT in

Brazilian secondary schools of the public sector) makes this analysis fairly generalisable across the country. In fact, Tilio (1980:509) points out that the results of her research about pupils' and teachers' attitudes to ELT in a specific region of a southern Brazilian state can, with a few restrictions, be generalisable to the country as a whole.

It should also be made clear from the start that while I argue in this thesis for a type of syllabus design practice which is informed by local features of the "learning milieu" in the very design procedure, it will be seen in the development of this chapter that sometimes certain decisions taken in the design will actually require changes in the existing conditions. As already pointed out above, a syllabus as an innovation will inevitably imply modifications in the prevailing norms.[4] Here these alterations will be made necessary whenever the view of the educational process which orients this thesis is contradicted by the existing norms. This fact will be particularly noted when socio-political and socio-psychological conditions (cf 2.2.1. and 2.2.5 below) are discussed. While on the one hand I argue that the existing local conditions are determining features on the design, on the other I acknowledge that changes in some of these conditions will be needed because of the particular socio-political stand reflected in the view of education followed in this thesis (cf 1.4 above). Therefore, my approach to syllabus design also involves a dialectical process which implies accommodation of the existing local conditions to certain innovative aspects.

2.1.1 Types of extrinsic conditions

The kinds of extrinsic conditions operating in the FL classroom as listed by different applied linguists (cf Howatt, 1974; Munby, 1978; and Brumfit, 1980e) are nearly the same. Following Brumfit (1980e: 130-132), I want to divide these conditions into two groups: policy-related variables and pupil/teacher variables.

The policy-related variables are derived from decisions which are normally beyond the teachers and pupils' immediate control, ie, decisions made at curriculum level.[5] These variables have to do with what Brumfit calls national variables and local situational variables. National variables seem to be related to what Munby (1978:217) refers to as socio-political factors. In other words, conditions determined by a certain view of the educational process, which puts forward a certain kind of language teaching policy. These conditions were introduced in

1.2 above where aspects connected with general FL teaching policy in Brazil were discussed, namely, issues connected with the objective of FL learning in Brazil, the reason why English is the major FL etc. and are further investigated in 2.2.1 below. Local situational variables are related to specific features of the classroom situation which reflect decisions made at the level of national variables. In Munby's terms (1978:217), these are logistical and administrative factors. They address issues which involve the amount of time allotted to EFL in the school curriculum, size of classes, resources available, etc. and are analysed in 2.2.2 below.

The pupil/teacher variables are derived from conditions imposed on the EFL classroom by pupils and teachers. They roughly correspond to what Munby (1978:217) defines as psycho-pedagogical and methodological factors. In this thesis these conditions involve specifically aspects related to the nature of the learners' mother tongue, their language learning experience, the nature of the FL teaching tradition, and socio-psychological factors affecting both pupils and teachers. These conditions are discussed in 2.2.3, 2.2.4 and 2.2.5 below.

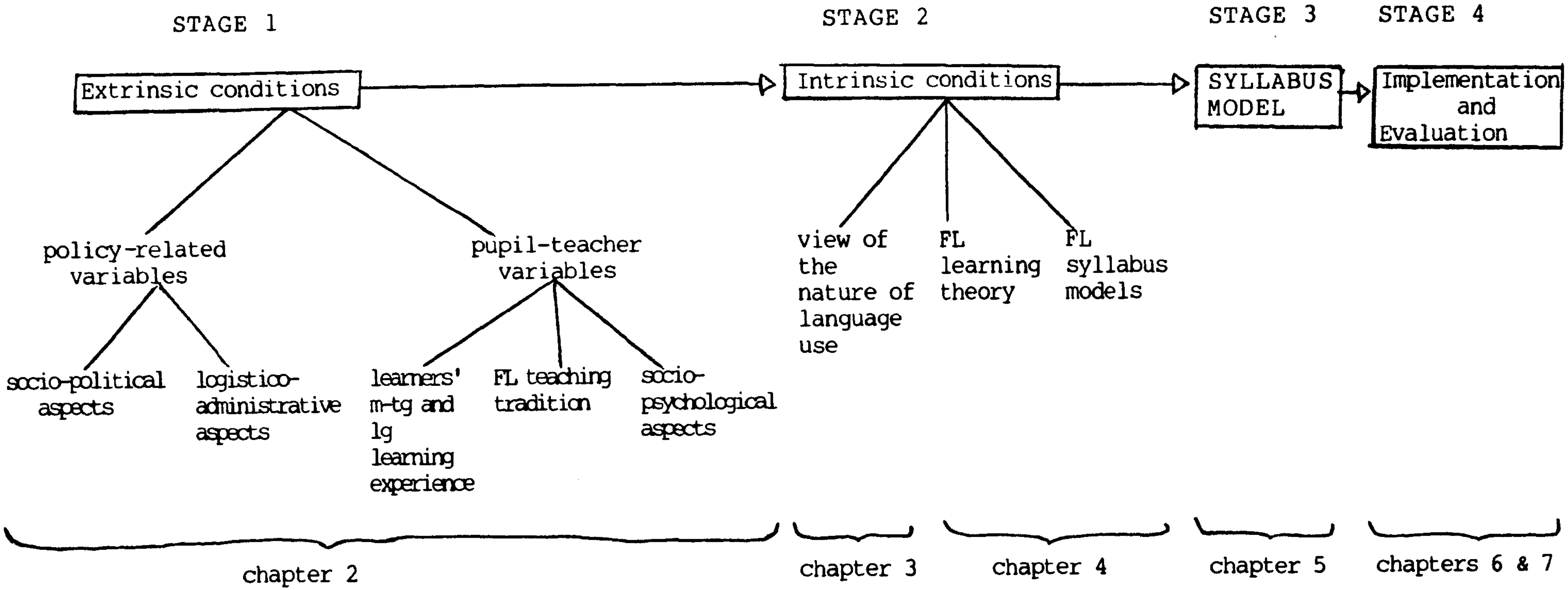
In view of my argument in 2.1 above, it is clear that the practice of syllabus design here follows an order of precedence (cf Figure 2.1 below) in the way these intrinsic and extrinsic conditions are accounted for in the design. This order is very different from the traditional practice, ie, design the syllabus and look into the extrinsic conditions in the implementation phase. Here, the procedure to be employed, into which in fact the whole thesis is projected, determines that at the first stage the extrinsic conditions should be examined (cf chapter 2). These in their turn will inform certain decisions at the 2nd stage or the stage of the intrinsic conditions (chapters 3 and 4) which will then lead into the design of the syllabus in stage 3 (cf chapter 5) and its subsequent implementation and evaluation in stage 4 (cf chapters 6 and 7).

2.2 Description of ELT in Brazilian secondary schools: extrinsic conditions for the syllabus model

This section examines the following extrinsic conditions on the syllabus model to be developed in this thesis: 2.2.1 socio-political; 2.2.2 logistico-administrative[6]; 2.2.3 the learner's mother-tongue and language learning experience; 2.2.4 the EFL teaching tradition; and 2.2.5 socio-psychological aspects.

FIGURE 2.1

Syllabus Design Procedure: a projection of the thesis


STAGE 1
STAGE 2
STAGE 3
STAGE 4
Extrinsic conditions
Intrinsic conditions
SYLLABUS MODEL
Implementation and Evaluation
policy-related variables
pupil-teacher variables
socio-political aspects
logistico-administrative aspects
learners' m-tg and lg learning experience
FL teaching tradition
socio-psychological aspects
view of the nature of language use
FL learning theory
FL syllabus models
chapter 2
chapter 3
chapter 4
chapter 5
chapters 6 & 7

2.2.1 Socio-political conditions

A FL syllabus as a reflection of decisions made at curriculum level is also accountable in socio-political terms. That is, a FL syllabus like any other syllabus in the school curriculum is elaborated within a certain socio-political framework: "There is no such thing as a neutral educational process" (R. Shaull in a foreword to Freire 1974a:14). Accordingly, my analysis of the existing socio-political conditions also reflects a particular socio-political bias towards the educational process, which informs the syllabus to be designed here and, as will be seen, does not coincide with the existing official policy. It is in this way that the view of the educational process which orients this thesis implies changes in the existing socio-political conditions (cf 2.1 above).

As discussed in 1.4 above, the syllabus to be introduced in this thesis is essentially oriented by Freire's concept of libertarian education, ie, education that provides means for learners to act upon reality. ELT in this sort of perspective should cooperate with the learner's entire educational process by emphasising education for critical consciousness.[7] It is in the light of this view of the educational process that I will examine the existing socio-political conditions.

In Brazil, as mentioned in 1.2 above, since Law 5692/71 was passed, there has been no national FL teaching policy. That is, decisions on which FL to teach, through which sort of syllabus and how to implement it are made by each individual state. Each state council of education provides for the guidelines to be followed in that particular state. Therefore, the examination of the relevant socio-political conditions on the ELT classroom requires a study of the guidelines provided in individual states. This is carried out below with a study of these conditions in eight different states (RJ = Rio de Janeiro; SP = São Paulo; MG = Minas Gerais; PE = Pernambuco; PI = Piauí; RGN = Rio Grande do Norte; and GO = Goiás) in four different geographical regions of the country (south, east, centre and northeast).

It should be remarked however that by not providing for a national policy of FL education, the Federal Council of Education are not excluding FL teaching from the school curriculum. In fact, in opinion no. 54/75 of that Council, Professor N. Sucupira, a member of the Council, has made clear that "Nowadays no nation can independently of its cultural autonomy avoid including FL teaching in its school system."[8]

Nevertheless, what has oriented their decision for not establishing a national policy is the fact that the existing regional teaching conditions in their view are so varied that they deemed it more appropriate for the decision of the inclusion of a FL in the curriculum to be made at the state level, depending on whether individual states offer the essential conditions for teaching a FL.

Although these conditions are an important issue in the above mentioned law, they are nowhere defined. It seems however that they are the conditions which make the use of a four language skill syllabus possible, ie, the conditions found in a private language school (an adequate number of classes per week, a limited number of pupils per classroom, audio-visual equipment etc.) since the existing official guidelines can only be realised under these conditions. In other words, if this law were really followed, a FL would not be taught in any school of the public sector, for these conditions are not found in that context. What this law seems to ignore is that the essential teaching conditions for FL learning are dependent on the objectives of the course, ie, they are relative to the goals of the course rather than absolute. If the objectives are changed, the essential teaching conditions are necessarily no longer the same. It is the contention of this thesis that the aims of FL learning in Brazil have to be changed in order to make the EFL course socially justifiable and feasible in secondary schools.

After 1971, with the implementation of the law 5692/71, secondary education would supposedly have not only the function of preparing students for tertiary education, ie, secondary education as a path to a higher educational level, but also a terminal point for those who needed a professional skill to join the job market after secondary school. Unfortunately, this law has proved to be totally inapplicable since the schools did not have the necessary equipment for professional education. In fact, in the attempt to provide students with some kind of professional skill, the more traditional academic orientation of secondary education was put aside, and therefore neither educational aim was realised.

FL education was also influenced by this new trend. In opinion 853/71, the Federal Council of Education state that the study of a FL "will have not only a general aim - the acquisition of a communicative instrument applicable to all situations - but also a specific goal towards the acquisition of professional skills".[9] Under this sort of view of FL education, some state councils created ELT courses which supposedly aimed at the development of interpreting-translating skills. These aims were utterly unrealistic and, indeed, dishonest, since they gave students the false impression that they would be qualified for jobs (translators, for example) which require very specific training and skills and a broad knowledge of both English and Portuguese. It should also be mentioned that there were not enough jobs in the market for which a skill in the use of English would be required. Further, the educational role of learning a FL was totally disregarded whilst maintaining instrumental objectives which were unattainable.

This professionalisation trend in FL education has been virtually abandoned and teachers either resort to more recent guidelines from the state councils, which are impossible to realise because they are unrealistic, or just operate in an aimless fashion by teaching a few lexical and grammatical items in English.

Having discussed the general principles for FLT in Brazil, as expressed in educational laws, I now review the official guidelines recommended in eight states in four different regional areas of the country since, as noted above, there is no national policy. Below in Figue 2.2 I summarise the points of these policies according to the following aspects: general objectives, emphasis on oral skills or reading skills, type of motivation (integrative or instrumental), type of syllabus and teaching approach.[10]

FIGURE 2.2

SUMMARY OF OFFICIAL GUIDELINES FOR EFL TEACHING IN 8 STATES

(see note on the following page)

States / Features	RJ	SP		MG	PE		PI		RGN		GO	
	1st & 2nd G	1st G	2nd G	2nd G	1st G	2nd G	1st G	2nd G	1st G	2nd G	1st G	2nd G
general objectives: 4 skills	+	+	+	+	+	+	+	+	+	NS	+	+
emphasis on oral skills	+	+	–	+	+	+	+	+	+	NS	+	+
emphasis on reading skills	–	–	+	+	–	+	–	+	+	NS	+	+
integrative motivation	+	–	–	–	NS	NS	NS	–	NS	NS	NS	NS
instrumental motivation	–	+	+	+	NS	NS	NS	+	NS	NS	NS	NS
type of syllabus	St & not	St & sit	St	St & not	St	St	St	St	St	St	St	St
teaching approach	cognitive approach	eclecticism	text analysis	NS	NS	NS	NS	NS	NS	NS	audio ling	NS
published by the state council of education in	1980	1980	1978	1980	1975	1975	1980	1984	1980	1984	1981	1975

Note:

+ = feature present

- = feature absent

NS = feature not specified

RJ = Rio de Janeiro

SP = São Paulo

GO = Goiás

MG = Minas Gerais

PE = Pernambuco

PI = Piauí

RGN = Rio Grande do Norte

st = structural

not = notional

sit = situational

1st G = 1st grade (1st 4 years of secondary school)

2nd G = 2nd grade (last 3 years of secondary school)

audio-ling = audio-lingual

It is evident in Figure 2.2 above that the official policies of EFL suggested by the state councils of education of the eight Brazilian states reviewed here are very similar to each other. What is prevalent is the focus on the traditional four language skills with emphasis on oral skills. In other words, what seems to be occurring here is the direct importation of principles of theoretical syllabus models to the Brazilian EFL classroom (cf 2.1 above). Conventionally, general English syllabuses have centred on the four language skills, therefore the recommended official guidelines reflect those traditional syllabuses without paying attention to what the features of the Brazilian EFL classroom are and whether these syllabuses are socially justifiable in the Brazilian context.

It should be noted that in the state of São Paulo's guidelines for the 2nd grade one finds the only attempt to develop a syllabus which can be realised under the characteristics of the Brazilian EFL classroom by emphasising reading skills. However, these guidelines also aim at four language skills. That is, the main focus is on the reading skills, but the general objectives of the course are the four language skills. Further, the methodological approach recommended for the teaching of reading is identified with what Widdowson (1979d) calls text analysis. That is, it centres on the teaching of the systemic level of language (lexical and syntactic features) through a grammatical syllabus and no attention is paid to how these items are realised at discourse level (cf the view of discourse adopted in this thesis in 3.2.3 below).

It should also be remarked that four other states (MG, PE, PI and GO), which also have the four language skills as general objectives, include an emphasis on both reading skills and oral skills, particularly at the 2nd grade. In other words, it seems that at the end of secondary school there is a tendency to make the syllabus centre on the skills which have general usability in the country, ie, reading skills, although oral skills seem to deserve the same emphasis.[11]

The structural syllabus is by far the predominant type of syllabus. Only in three states (RJ, SP, MG) does one find the inclusion of a notional syllabus or situational syllabus associated with a grammatical syllabus. Also, because of the general concern with oral skills, the examination of these guidelines reveals great emphasis on the phonological component of language. In most guidelines, there is explicit indication of the need of handling phonemes and suprasegmental features in the course.

In the three states where a situational or notional syllabus is included, the rationale for such a decision is to present students with language situations (hotels, getting information etc.) they will face when communicating in English. In fact, in the guidelines of the state of Rio, units of a situational syllabus (hotels, shops etc.) are presented side by side with units of a notional syllabus (getting information, advising etc.) as if they were units at the same level. That is, units which relate to the context where language occurs (in a situational syllabus) are mixed with units at the rhetorical level of language (in a notional syllabus) which have to do with unitary discourse values (cf note 18 in 3.3.1 below). Further, in the guidelines of the state of MG the inclusion of a notional syllabus is justified on the grounds that that type of syllabus organisation will ensure the development of communicative competence, ie, they seem to be echoing Wilkins' claim (1976) that a notional syllabus guarantees the development of communicative competence (cf my criticism of this position in 4.3.1.3 below). On the one hand, one could argue that the state councils which include the use of notional syllabuses in their guidelines reflect a positive interest in novelty in applied linguistics circles, but, on the other, these councils do not seem to be fully aware of what these new syllabus proposals actually imply and also do not appear to consider their suitability to the Brazilian context.

The type of motivation emphasised is mostly not specified in the guidelines. However, out of the five cases where one can infer the kind of orientation towards motivation, the trend is towards an instrumental type. The only exception is the guidelines of the state of Rio which suggest an integrative type of motivation. Apparently, since the main objective in that state is the development of oral communication in real language situations of the target language culture, emphasis is put on integrative motivation.

As regards the teaching approaches recommended, there is a variety which goes from the so called audio-lingual approach, cognitive approach and eclecticism (the use of insights from different approaches) to a total lack of concern with methodology. In fact, in most guidelines there is no specification of a teaching approach. The classroom teacher is either facing a situation in which he is advised to use methodological devices which by no means fit the characteristics of his classroom or a situation in which he is given no guidelines whatever as to how to go about the business of teaching.

In conclusion, except for the state of SP guidelines for the 2nd grade, the official recommendations reviewed here centre on a four language skill syllabus with emphasis on oral skills, which are totally unrealistic aims. One could argue however that there is a point in using activities which teach oral skills even if the objective of learning them is not realised, for these activities may reflect the processes of language learning underlying general language competence acquisition. Yet, that is a process-oriented criterion and what is essentially wrong with these guidelines is the inadequacy of their goal orientation, ie, their objectives.

2.2.2 Logistico-administrative conditions

This type of condition is related to specific features of the classroom context which reflect decisions made at the socio-political level. In other words, logistico-administrative conditions are local situational features which are determined by decisions at the national level and are guided by a particular view of the educational process. Therefore, in this section I want to examine the following features of the ELT Brazilian classroom:[12] 2.2.2.1 The classroom setting; 2.2.2.2 Mode of instruction and timetable; and 2.2.3 Administrative support to the teacher. This section draws on the data provided by: a) the research coordinated by Silva and Oliveira (1984) carried out in thirteen Brazilian states (Acre, Piauí, Ceará, R.G. do Norte, Pernambuco, Paraíba, Alagoas, Esp. Santo, Minas Gerais, São Paulo, Paraná, R.G. do Sul, Santa Catarina) and in the capital city (Brasília) with a sample of 1859 secondary school EL teachers;[13] and b) Tilio's Ph.D thesis (1980), which utilised a population of 143 secondary EL teachers, 125 student teachers and 3,064 pupils in the state of Paraná.

2.2.2.1 The classroom setting

The average Brazilian school contains no more than what is absolutely basic for teaching: students' chairs and desks, a teacher's chair and desk, a blackboard, a duster and chalk. Students can normally afford nothing more than a textbook, a notebook, a pencil and a pen. In this connection, it should be noted that Silva and Oliveira (1984:3) have indicated that in one of the states (RGN), where their research was carried out, 53% of the teachers do not adopt any textbook due to the socio-economic level of the students. Only in very few schools, particularly in the richer southern states, is there provision for extra materials such as posters, audio-visual materials etc.

The number of pupils per classroom ranges from 35 to 45 in the majority of states, although Silva and Oliveira (1984:2) have shown that in three states (RGS, ES and MG) classes contain between 25 and 35 pupils.

The pupils' ages will normally vary from 11 to 14 in the first grade (first four years of secondary school) and from 15 to 18 in the second grade (last three years of secondary school).[14]

2.2.2.2 Mode of instruction and timetable

In general terms, instruction is not individualised. Classes, as seen in 2.2.2.1 above, are normally large and there is little chance for the teacher to relate to the pupils individually. Therefore, the usual mode of instruction is teacher-centred. Most of the time the teacher addresses the class as a group and all the attention of the class is focused on him.

As regards the time allotted to ELT in the curriculum, most schools in both 1st and 2nd grades offer two 50 minute classes per week (cf Silva and Oliveira, 1984:2). Some schools may offer more classes depending on staff availability. For example, the schools where the experiment reported in this thesis was undertaken offer three 45 minute classes a week (cf 7.2.1.1).

Whereas in the past (cf 1.2 above), English was taught during the seven years of secondary school education, now it normally extends from a minimum of one to three years[15] in states where a FL is only taught in the 2nd grade to a maximum of seven years in states where a FL is included in the curriculum throughout secondary education.

2.2.2.3 Administrative support to the teacher

Essentially, the support received by EL teachers is restricted to the official guidelines (cf 2.2.1 above) put together by the curriculum plan staff of each state council of education.

Normally, the contact between the curriculum plan staff and the teachers is made through each school's EL coordinator, who is invited to attend meetings in his regional educational centre to discuss matters related to ELT. This coordinator is then supposed to report the discussion back to his colleagues in his school.

These meetings are normally very frustrating because they deal with issues related to the implementation of the official guidelines, which, as pointed out in 2.2.1 above, do not account for the existing local conditions in the ELT classroom. It is also common practice to invite a representative of a publishing company to present new materials. This is an activity that seems to bring no benefit other than possible commercial profits for the publishing companies, since these books are generally totally inadequate to the Brazilian market (cf 2.2.4 below). It is true however that in some areas of the country these meetings are the only chances that teachers may have of getting together to discuss professional matters. Nevertheless, it is a well-known fact that, in general terms, publishing companies have no interest other than selling their own books.

It should be noted that the only support that the EL teacher receives, namely, the official guidelines, are simply suggestions that teachers may follow or not. That is, there is no enforcement as regards the use of these guidelines, which, to my mind, has two contradictory effects. On the one hand, the teachers feel free not to follow the guidelines, which are in fact, as already noted (cf 2.2.1), inadequate, but on the other, he is at a loss since he does not know how to deal with the situation he has to face in the classroom. That is, the decision as to which syllabus to use is essentially in the hands of the individual teacher and he will normally follow the syllabus that textbooks contain. It should also be said, more positively, that this state of affairs nevertheless favours educational innovation since no syllabus is enforced by state councils.

This situation has caused a lot of uneasiness in the ELT profession. Consequently, it is not surprising that 90.3% of the population of teachers Tilio (1980:518) interviewed favour the imposition of a syllabus at a state or regional level. The average FL teacher often lacks the necessary expertise and time to develop a syllabus, and therefore is often prone to accept the syllabuses that textbooks contain.

2.2.3 The learner's language learning experience and mother tongue

In general, the beginning secondary school learner has had 5 years of elementary school education. Normally, his language learning experience is restricted to native language learning although some students who attended a private elementary school may have had some kind of exposure to EFL: a few vocabulary items, songs etc.

However, this is the exception rather than the rule, for most of the pupils at the public secondary schools come from public elementary schools,where English is not part of the curriculum. Therefore, secondary school represents the first time learners are normally exposed to a language other than the NL (either French or English).

As regards the nature of the learners' mother tongue, ie, Portuguese, in contrastive terms with the target language, little can be said which is supported by empirical work. As far as I know, the only two existing examples of contrastive analysis of Brazilian Portuguese and English are restricted to the phonetic and phonological level (cf Mascherpe, 1970), which is of no relevance to the syllabus to be developed here, and to the semantic field of meal terms (cf Moita Lopes, 1976),which shows the existence of similar semantic features in both languages in that field. Nevertheless, although there is almost no formal evidence of how Portuguese and English are related, their similarities are reflected in lexical cognates and in syntactic structures. In fact, the reading syllabus to be introduced in this thesis in chapter 5 exploits these similarities. The main grading principle of that syllabus involves the use of the criterion of contrastive difficulty between the native language and the target language (cf 5.2.2).

At other levels which directly affect motor-perceptive aspects connected with the reading skill, Portuguese and English are quite similar. In both languages the writing system is alphabetic (Roman alphabet); the alphabet is the same except for 3 letters (k, y and w) which are not found in Portuguese orthography; the reading sequence is from left to right; and both languages share a tradition of literacy, ie, language users have a sense of how languages work in writing. The motor-perceptive aspects of reading therefore seem to transfer directly from Portuguese to English (cf note 43 in 3.3.4 below). In this way,the actual physical manifestation of English in writing offers no difficulty to the Brazilian learner-reader. The issue is how English realises the elements of usage and how usage is realised as use (cf the distinction between usage and use in Widdowson, 1978:3), which are aspects the syllabus to be put forward in this thesis tries to account for (cf 3.3.4 and 5.2.3 below).

2.2.4 EFL teaching tradition

2.2.4.1 Type of syllabus, methodology, formal exams and textbooks

The tradition of EFL teaching in Brazil has favoured a structural syllabus. Such preference is perceived not only in the very guidelines provided by the state councils of education (cf 2.2.1 above) but also in the examination of the books adopted in the school system.[16]

Despite the fact that in general terms the official guidelines do not seem to recommend any particular kind of methodology (cf 2.2.1 above), Silva and Oliveira (1984:3) in their research have noted that 44.3% of the teachers interviewed tended to claim eclecticism (ie, the use of insights from different teaching approaches). However, they indicate that 31.5% favoured a traditional (grammar-translation) methodology and 13.4% the use of audio-lingual and audio-visual methods.

As regards the need of English for formal exams (entrance University exams), it should be remarked that, despite the emphasis on oral skills perceived in the official guidelines (cf 2.2.1), the only type of skill in the use of English required from the student by the educational system has to do with his ability in reading comprehension to pass entrance University exams for both graduate and post-graduate work (cf 1.2 above).

Normally, the majority of teachers adopt a textbook (cf 72.2% of the teachers Silva and Oliveira (1984:3) interviewed), and this has a crucial role in ELT in Brazilian schools, for textbooks contain the syllabus the teacher usually follows. Further, it is virtually the only source of materials available for the teacher, for no other additional materials are normally within reach (cf 2.2.2.1 above).

Three main kinds of textbooks are used in schools: (1) books produced in Brazil by Brazilian teachers; (2) books produced abroad aiming at the international market; and (3) books produced abroad but geared towards the Brazilian market. Most of these books follow a structural syllabus and centre on the teaching of the four language skills. It is noteworthy, as Tilio (1980:296) and Silva and Oliveira (1984:11-13) in their research have indicated, that the great majority of the textbooks adopted in Brazilian schools correspond to the first category listed above, ie, books produced by Brazilian writers for the Brazilian market. In fact, out of the 39 different textbooks Silva and Oliveira (1984:11-13) have listed in their report, 34 textbooks are of this kind. Also, Tilio (1980:296) states that all the textbooks used by the teachers she interviewed had been written by Brazilians except one.

There is virtually no difference between the three types of textbooks found in the market, except of course for the fact that Brazilian books are cheaper and that is in fact the reason why they are adopted in schools.[17] All of these books reveal a lack of concern with the "learning milieu" where they are to be used. For example, while centering on four language skills, they take no account of the fact that it is impossible to teach all these skills, to any degree of adequate proficiency, within a curriculum which allows so little time for ELT (cf 2.2.2.2 above), to such large classes (cf 2.2.2.1 above), in a teaching context where there is no provision for extra materials (cf 2.2.2.1 above), where teachers themselves do not have an adequate command of the four language skills (cf 2.2.4.2 below) etc.

As far as I know, there are only two textbooks in the market which may be said to be somewhat concerned with the "learning milieu" (Roças, Freire and Cachapuz (1979) and Celani and Kato (1979)), for they centre on the teaching of one skill: reading. However, both books aim at second grade students and see reading as a supplementary skill to the FL course previously covered. In other words, they do not imply a different way of designing a general English syllabus which, because it is informed by the "learning milieu" and general social context, focuses on the reading skill from the very beginning of the ELT course, as the syllabus to be introduced in this thesis proposes.

Typically, most of the books used in Brazilian schools contain a very stereotypical cultural content. Even most of the textbooks written by Brazilians contain an idealised view of the foreign culture and have a colonialist content (cf Ballalai, 1982:20). In this connection, it should be remarked that the ELT textbooks found in Brazil take no account of anglophone cultures other than the American and the British. Therefore, the educational potential in terms of exposure to the varied number of anglophone cultures which EFL learning represents is totally unexploited.[18]

2.2.4.2 Teachers' academic qualifications

In describing the EFL teaching tradition, it also seems necessary to look into the sort of academic qualification that teachers normally have. Brazilian EFL teachers at secondary school level can be classified in three main groups according to their academic background:

1. Teachers who hold a BA in English and a teaching certificate. These constitute a majority (cf Silva and Oliveira, 1984:2) and are the best educated. Their command of oral skills may not be good, but their grasp of reading skills and grammar tend to be fairly acceptable. Their teaching certificate is awarded by a School of Education and they are required to take courses on general education and FL teaching

pedagogy. They are usually trained to deal with the rather privileged circumstances of the private language school classroom and not with the conditions of the FL classroom of the secondary school of the public sector.[19] Their teaching practice is done at special secondary schools which are normally attached to the Department of General Pedagogy of the School of Education and which therefore are very different from the average secondary school.

2. Teachers who hold the Cambridge Certificate of Proficiency in English or the Michigan Certificate of Proficiency in English plus two years of a Teacher's Training Course of a local American bi-national centre. They are allowed to teach only in the First Grade and to qualify as teachers they must get a teaching certificate at a School of Education, going hence through the same type of teacher training process described above. This special type of teachers' qualification was a way of fighting the shortage of qualified teachers, but fewer and fewer teachers are taking this kind of training because of the limited type of teaching certificate it caters for. In fact, Tilio (1980:156) reports that while carrying out her research in a southern Brazilian state (Paraná), she found no teacher who did not have a BA in English. Yet, Silva and Oliveira (1984:2) point out that their research has shown that in the state of Piauí, on the other hand, the majority of teachers are still working towards a first degree.

3. Teachers who simply went to a language school and have some knowledge of English. They usually have a first degree in another field or no degree at all. They were normally offered a teaching position in the school system in the past when there were not enough qualified EL teachers. They are usually found in the less developed areas of the country. Silva and Oliveira (1984:9) report that only 6.8% of their population of teachers would fit this category.

In view of this type of categorisation of the EL teachers of Brazilian schools, it is clear that the average teacher belongs to the first group of teachers described above, in terms of his academic qualifications. His command of receptive skills (reading skills, in particular) is better than of productive skills. In fact, his oral fluency is very limited. Actually, the average teacher's contact with English outside the classroom context is practically restricted to the reading of books, magazines and newspapers. In this connection, Tilio (1980:279 and 431) notes that 62.1% of her population of secondary school teachers rarely speak any English at all in the classroom and that only 44% of her population of teachers and 16.8% of her population of student-teachers have any chance to use oral English at all. These points present therefore further support for the argument, developed in chapter 1, that English in Brazil is virtually restricted to its role as a resource for reading.

Moreover, if FL syllabus design is to take into consideration the features of the existing local conditions, as argued for in this thesis, the fact that Brazilian secondary school teachers in general seem to be better qualified in reading skills should be considered in the design of the syllabus they use. It seems absurd to demand that teachers teach skills of which they themselves do not have an adequate command.

2.2.5 Socio-psychological conditions[20]

This analysis of the socio-psychological conditions operating in the Brazilian ELT classroom concentrates particularly on teachers' and pupils' attitudes to ELT and the sort of motivation normally emphasised. It relies on data mainly derived from research reported in Tilio (1980), Moita Lopes (1981) and Ballalai (1982).

In order to point out more fully the sorts of socio-psychological conditions under which ELT takes place, it is first necessary to look into ELT in a wider social context, taking into consideration sociological, historical and political aspects. These aspects have moulded the socio-psychological framework which defines ELT in Brazil and which is here identified by an anlysis of teachers' and pupils' attitude and motivation towards ELT. Thus, this section starts with an appraisal of the social context where ELT is realised (cf 2.2.5.1), moves on to a discussion of Brazilian teachers' and students' attitudes to EFL (cf 2.2.5.2) and concludes with an analysis of the sort of motivation emphasised (cf 2.2.5.3). Although the issues involved in this section are presented in only a brief discussion, I have considered it sufficient for the purpose of my argument.

2.2.5.1 Social context and ELT

After the Second World War, when the world was divided into two big blocks of power - USA and USSR, Brazil, an economically dependent country, started to operate more clearly under the influence of America. It is then that the so-called American neo-colonialism becomes more apparent in Brazil and is very easily detected in the whole country now. Cultural and economic aspects were affected by the neo-colonising power, determining therefore the dominant ideology in the country. As a reflection of this state of affairs, Brazilian cultural values and economic interests are in a constant struggle with American imperialism.[21]

As with any system of colonisation, the imperialist, because he has the intellectual and technical culture, controls power in society. And in transmitting culture, the imperialist wants to impose his ideology, ie, to conquer minds so that he can guarantee his mercantile interests[22](cf Ianni, 1976:42). To reach this objective, the colonising ideology is interested in fomenting the so-called psychology of dependence by establishing the superiority of the coloniser and, as a consequence, the inferiority and dependence of the colonised. The coloniser is then the model to be emulated. This phenomenon is characterised by patronising, ethnocentric and racist attitudes on the part of the coloniser, which lead the colonised into alienation.

In Brazil, this alienation process is identified through a massive invasion of American values transmitted by the cultural industry (books, magazines, newspapers, TV, radio, cinema, education, propaganda etc.) and through the penetration and status of the English language, which is the language of the imperialist in Brazil in this century.[23] As Asensio (1960:460) has pointed out, "languages have always been companions of empires".[24]

Therefore, the predominance of English as a major international language

> "is mainly the result of two periods of world domination by English speaking countries: British imperialism in the nineteenth century, and the economic influence of the United States in the twentieth century" (Brumfit:1982:1).

This fact seems to explain the existence of a new kind of imperial English, ie, an American variety of imperial English, which is present in Brazil. In fact Moita Lopes (1981:15) reports that 70% of the Brazilian teachers of English he interviewed, out of a population of 102 teachers, identified the variety of English they speak as closer to American English.[25]

English has therefore emerged as an element of transmission of American imperialist cultural values. Obviously, the English language is not of its nature imperialist - only a very strong version of the Whorf hypothesis (cf Whorf, 1956) could account for this claim. However, the way people use (or maybe misuse) this language under particular social, political and historical circumstances may be imperialist.

On the other hand, it is undeniable that a knowledge of English means access to the world since, owing to its international character for economical and political reasons, the amount of information available through this language is not restricted to any culture in particular and provides a means of approaching many branches of knowledge. Further, the use of English in a second language situation has provoked the development of different dialects in English, implying therefore different cultural traditions and that ELT is not confined to any specific culture.[26]

If one is concerned with the design of an ELT syllabus for a country which is affected by American imperialism, one should proceed with care not to cooperate with the alienation of the learner. It is in this sense that the syllabus to be advanced in this thesis in chapter 5 is informed by the social context in which ELT takes place and therefore aims at getting rid of any alienating aspects that ELT may have. With this purpose, the syllabus, as will be shown, makes use of two devices: a) a Parallel Auxiliary Component (cf 5.2.1), which tries to expose the learner-readers to the variety of existing cultures which use English both as a native language and as a second language (Britain, Australia, India, Nigeria etc.) in order to question the widespread necessary equation of English with American values; and b) methodological solutions (cf 5.2.5.6) which make the learner-reader approach text content critically. These two devices reflect the educational principle which underlies this syllabus (cf 1.4 above): the development of critical consciousness through the learning of a skill in a FL—reading.

2.2.5.2 Brazilian teachers' and pupils' attitudes to EFL

In 2.2.5.1 above I discussed the general social context in which ELT takes place in Brazil and in this section I want to address the issue of Brazilian teachers' and pupils' attitudes[27] to EFL in the light of that social context. This section draws on data provided by Tilio (1980) in her research with a population of 143 secondary school teachers, 125 student-teachers and 3064 pupils in the state of Paraná and by Moita Lopes (1981) in his research which utilised a population of 102 EFL teachers in the state of Rio de Janeiro.

In the sort of social context described in 2.2.5.1 above, it is not suprising that the Brazilian EFL teacher and pupil, as the data reported below will show, seem to have been extremely affected by the colonising ideology.

The Brazilian EFL teacher appears to have been convinced of his inferiority and therefore of his dependence on the coloniser. In this process he identifies himself with the coloniser in order to reach his superiority and, by so doing, he alienates himself from his own cultural values. His attitude to EFL will obviously mould his students' and it is therefore extremely harmful to ELT from the educational perspective taken in this thesis. This preoccupation with the role that FL education in Brazil plays in alienating the learner has recently been found in Ballalai (1982) and Moita Lopes (1981) and it has in fact spread beyond academic circles.[28]

This colonised attitude toward the EL is also detected in the social status that a knowledge of English provides one with (cf 1.2 above). The middle classes - in their anxiety to be equal to the coloniser - have invaded EL courses once they realised that EL learning had become impossible at secondary schools. It does not matter if one will ever need to speak English. What really matters is the status of being able to speak it. The colonised attitude on the part of Brazilian EL teachers and pupils is indicated by findings from Tilio (1980) and Moita Lopes (1981).

Tilio (1980:321) in her research to gauge Brazilian teachers' and pupils' attitudes[30] to English-speaking people expresses the view that they all have favourable attitudes. Actually, she points out that 60.6% of the teachers and 45.8% of the pupils she interviewed believe that "on the whole, English speaking people have more culture (are more educated) than Brazilians" (Tilio, 1980:322). She also indicates that 66.2% of the pupils think that English speaking people have made an important contribution to Brazil. She justifies this finding, which was not detected among teachers, on the grounds that the pupils "based their judgement on the sort of influence they like most, namely, tee-shirts with sayings in English, pop-songs and singers, and American films and TV series" (Tilio, 1980:323).

Moreover, although the following item, as Tilio (1980:335) notes, got very little positive response, I want to claim that the results obtained are quite significant in view of the issue involved: 30.8% of the teachers, 34.4% of the student-teachers and 57.1% of the pupils she interviewed agreed that "the study of English can be important to them because: G - It should enable [them] to think and behave as do the English-speaking people" (Tilio, 1980:332).

Moita Lopes (1981) also found the same highly positive attitude towards English speaking peoples. One of the items of the questionnaire he utilised contained a list of positive and negative adjectives which teachers were asked to equate with Brazilians and with English speaking peoples. His results show that all positive adjectives (for example, polite - 61% (of the teachers); hard-working - 56%; disciplined - 82%) were equated with English speaking peoples in opposition to negative adjectives which were equated with Brazilians (for example, impolite - 45%; lazy - 57%; indisciplined - 72%). Also detected was a very racist and ethnocentric attitude among teachers towards their own culture, which seems to be due to a colonised attitude. 71% of the teachers agreed that there are specific Brazilian cultural traits, such as lack of self-control, of organisation at work and of seriousness, which prevent Brazil from developing.[31] Further, 38% (45% was in doubt) of the population of teachers interviewed agreed that this incapacity to develop was due to the Brazilian mixed cultural and biological heritage. These results seem to point to the existence of anomie feelings in the population of teachers he interviewed. Tilio's findings (1980) however point out that most of her population (80% of the teachers, 60% of the student teachers and 42.4% of the pupils) rejected anomie feelings, contradicting consequently Moita Lopes' results (1981).

While in Brazil teachers and pupils seem to have an extremely favourable attitude towards the target language culture and negative towards their own culture, which I want to claim is an effect of the widespread colonising ideology, in the US one of the problems that FL teachers face has to do with how to eliminate negative attitudes on the part of the students (cf Gardner and Lambert, 1972:57 and 134), since they may be harmful to the teaching-learning process. According to Joiner (1974:242), for example, exclamations such as "that is strange!" or "what nonsense!" are frequent in FL classes in the US. Therefore, Tilio (1980:317), mistakenly, to my mind, suggests that EFL teachers in Brazil should make use of this positive attitude on the part of the pupils in their tasks of "propagators of the English language and culture" (my underlining). This view of EFL learning, I think, is a result of the existing colonised attitude on the part of pupils and teachers.

In my view, rather than making use of this positive attitude to propagate the English language and culture, the teacher should rely on this attitude to help pupils learn the English language and then use this language as an instrument to look critically at English language cultures. He should therefore aim at developing a critical attitude towards the values of the target language cultures, rather than at propagating them, so that in fact learners can critically assess their own values as well. By doing that, the teacher ensures that learners develop the ability to make their own choices and to fight whatever imposed ideology. In the syllabus advanced in this thesis this critical attitude towards the FL cultures is accounted for by a methodological device which centres on critical reading (cf 5.2.5.6 below).

As pointed out in 2.1, although this syllabus is informed by the existing local conditions, it also requires that certain prevailing norms, ie, attitudes to EFL in this case, should be changed when they contradict the educational principles which guide this thesis. It was in this sense that the approach to syllabus design here was described as dialectical(cf 2.1 above).

The solution to this colonised attitude to ELT however seems to be related to a change in the whole educational programme of EFL teachers. That is, learning a different kind of attitude towards ELT in the University courses will certainly affect the teacher's future attitude towards the education of his pupils, who, as a consequence, will develop a different attitude towards EFL. Addressing this issue however is beyond the limits of this work.

2.2.5.3 Type of motivation to EFL in Brazil

In trying to account for the socio-psychological conditions in the Brazilian ELT classroom, I have already discussed pupils' and teachers' attitudes. I want now to tackle the issue of the type of motivation towards EFL normally emphasised by teachers and pupils.

Gardner and Lambert (1972:3) have identified two different types of motivation towards FL learning, ie, instrumental and integrative motivation:

> "the orientation is said to be instrumental in form if the purposes of language study reflect the more utilitarian value of linguistic achievement, such as getting ahead in one's occupation. In contrast, the orientation is integrative if the student wishes to learn more about the other cultural community because he is interested in it in an open-minded way, to the point of eventually being accepted as a member of the other group".

Gardner and Lambert (1972), Jakobovits (1970), Lambert and Lambert (1973) and Lambert (1972b) have provided evidence which shows a correlation between success in FL learning and integrative motivation.

However, Lukmani's (1972) and Oller, Lori and Vigil's (1977) findings contradict this correlation between integrative motivation and success in FL learning. Their data have shown that proficiency in a FL correlates significantly with instrumental motivation. Recently, Strong (1984) has found evidence that integrative motivation, rather than promoting second language acquisition, follows it. That is, successful second language acquisition leads into integrative motivation and is not caused by it. Therefore, the existing empirical evidence for the relationship between type of motivation and FL learning success is not conclusive.

In Brazil, in the light of the type of attitude towards EFL discussed in 2.2.5.2 and in the sort of social context in which EFL teaching takes place (cf 2.2.5.1), one would expect an integrative type of motivation dominating EFL. Therefore, it is not surprising that Tilio (1980:338) has found that her 3 populations (teachers, student-teachers, and pupils) "exhibit more an integrative orientation than an instrumental one". She however indicates that while pupils have shown a very clear integrative orientation to EFL, teachers seem to be inclined towards an instrumental sort of motivation. In this connection, it is noteworthy that the examination of the official guidelines for ELT in 2.2.1 above has shown that when the type of motivation to be emphasised is suggested, there is a preference for an instrumental type of motivation. Below in 2.3, I will argue for an instrumental orientation towards motivation in the teaching of EFL in Brazilian schools. Again, as indicated in 2.1 above, the syllabus to be developed in this thesis will not be sensitive to another feature of the Brazilian ELT situation, namely, pupils' preference for an integrative motivation, for it goes against the educational principles which this thesis seeks to realise.

2.3 Conclusion

This section presents a summary of the existing local conditions in the Brazilian EFL classroom (cf Figure 2.3). These factors are also looked into critically here, particularly in view of the objective of ELT in Brazil put forward in chapter 1, namely, providing for the capacity of reading in English, and also in the light of the position toward FL teaching as an educational enterprise also advanced in that chapter.

In general terms, Brumfit's (1980f:123) description of the normal beginner's teaching situation in a secondary school seems to summarise

FIGURE 2.3

Summary of the extrinsic conditions in the Brazilian EFL secondary school classroom

POLICY RELATED VARIABLES		TEACHER-PUPIL VARIABLES		
Socio-political	Logistico-administrative	Learner's m.tg & lg learning experience	EFL teaching tradition	Socio-psychological
Official guidelines: . Skills to be emphasised: oral skills . General objectives: 4 lg skills . Type of motivation: non specified, but tendency towards instrumental . Type of syllabus: grammatical . Teaching approach: non-specified	. Classroom setting: basic: chairs, desk, blackboard, chalk and duster no. of pupils per class: 35 to 45 pupils' age group: 11 to 14 (1st grade) and 15 to 18 (2nd grade) . Mode of instruction: teacher centred . Timetable two 50' classes per week . Duration of course: from 1/3 to 7 years . Administrative support non-compulsory official guidelines	. Lg learning experience: elementary school: NL learning secondary school: English (or French) and NL . Contrastive aspects between English and Portuguese similarities (though no formal evidence)	. Type of syllabus grammatical . Methodology: eclecticism, though tendency towards gr-translation and audio-lgal/visual . Formal exams: reading skills . Textbooks: Brazilian textbooks (4 lg skills) stereotypical and colonialist cultural content . Teachers' qualification BA and teaching certificate better command of receptive skills, particularly reading	. Social context: under American influence (neo-colonising power) . Teachers' and pupils' attitudes to EFL: colonised . Type of motivation to EFL: integrative motivation (though teachers and official guidelines tend towards instrumental motivation)

the local conditions of the Brazilian EFL classroom (cf in particular the logistico-administrative conditions in 2.2.2 above):

> "By 'normal' I mean the situation in which classes are large (30+), pupils not exceptionally highly motivated, expensive equipment not readily available and teachers only rarely able to discuss their ideas and innovations with more than the occasional colleague".

In light of the logistico-administrative conditions (cf 2.2.2) operating in the Brazilian EFL classroom, it is not difficult to see the incompatibility between the reality of this type of classroom and the existing socio-political norms (cf 2.2.1), ie, the official guidelines provided by the state councils of education. Essentially, the problem has to do with the fact that the general objective (acquisition of the so-called four language skills with emphasis on oral skills) is not achievable within the conditions under which ELT takes place: very basic resources, large groups, very few classes, teachers' competence in English etc. Not to mention, of course, the usefulness of achieving those objectives in the Brazilian context. As discussed in chapter 1, the objectives of ELT should be a reflection of the real role of English in Brazil, ie, what most people do with English in the country. As argued for there and throughout this chapter, the role of English in the country is related to its use as a resource for reading.

Therefore, on the one hand, we have objectives which are unrealistic within the "learning milieu" where they are supposed to be realised and, on the other, even if these learning objectives were possible to achieve, they would not correspond to the real need that most people have for the use of English in the country. Actually, the emphasis on oral skills is also contradictory to the very command that teachers have of these skills, ie, Brazilian EFL secondary school teachers have better command of reading skills (cf 2.2.4 above) and to the fact that formal exams in Brazil focus on reading skills (cf 2.2.4.1 above).

It should also be noted that the EFL specialists (cf Tilio, 1980; Whitfield, 1982; Vereza, 1982) who have directly or indirectly addressed the issue of syllabus design for Brazilian secondary schools have incorrectly, I think, insisted on the importance of the function of English in Brazil as an oral instrument of international communication and on the need of a four language skill syllabus. These aims, as already indicated, seem to be totally misconceived, not to mention their unfeasibility,since the chances the average Brazilian pupil will have of using oral English are almost none. These specialists have made the same error detected in the examination of the official guidelines of the state councils of education for ELT, ie, they have tackled the syllabus design activity as a simple translation of conventional general English four language skill theoretical syllabus models to the Brazilian EFL classroom (cf my criticism in 2.1 above).

Also, Tilio (1980:323) and Whitfield (1982:98) have argued for emphasis on oral skills in the EFL secondary school syllabus as a way of responding to Brazilian students' enthusiasm for American films and songs. From the perspective of this thesis, such claim is politically naive or uninformed, for it totally ignores the general use of English in the country and the social context in which ELT takes place. That is, it is only expected that EFL pupils would have such enthusiasm for American songs and films in view of the Brazilian context described above in 2.2.5.1, ie, they are simply reflecting a colonised/colonising dominant ideology. And therefore, if one sees EFL learning as an educational activity, one should not be putting forward a type of EFL syllabus which is accountable in terms of a colonised attitude on the part of the pupils.

As regards the type of motivation to be emphasised, Tilio (1980), as seen in 2.2.5.3 above, has argued for an integrative type of motivation since her research has indicated that this is the kind of orientation prevailing among pupils and also because, on the basis of Gardner and Lambert's (1972) research, there is evidence that that type of motivation facilitates FL learning. The position taken in this thesis is diametrically opposite to Tilio's (1980) and is in agreement with teachers' tendency towards instrumental orientation, as indicated by Tilio's research (cf 2.2.5.3),and with the view presented in the official guidelines (cf 2.2.1). That is, I want to argue for an instrumental type of motivation for the following reasons:

a) As far as I know, there is no conclusive evidence to back up a correlation between an integrative type of motivation and success in FL learning (cf 2.2.5.2 above); and

b) In the sort of social context described in 2.2.5.1 above and in view of the kind of attitude to EFL in Brazil discussed in 2.2.5.2 above, I would want to claim that the emphasis on integrative motivation is particularly non-educational since it would emphasise the colonised attitude that permeates EFL in Brazil.

Teaching EFL in Brazilian schools therefore should be oriented by an instrumental type of motivation in the sense that one is not teaching English to integrate pupils in a foreign culture, which happens to be a neo-colonising culture, but as a means of providing them - through teaching them how to read in English - with greater access to information in general, and to other cultural values, due to the status of English as an international language.

This orientation, I think, should cooperate with an educational process which aims at integrating the pupil in his own society, since by being exposed to different views of the world, he will gain a greater insight into his own culture. This language therefore is a resource which can collaborate with an educational process geared towards the development of critical consciousness. In this way, the kind of motivation to be emphasised in the syllabus is instrumental as the means since the ends of learning are integrative in a wider sense, for ELT here is oriented by a view of education which helps to transform the learner into a human being who can consciously choose from the alternatives the world offers.

English language learning in this view will be used as a liberating force by students and teachers at the secondary school level, and it will be accessible to the social classes which cannot afford to attend private language schools. In other words, rather than making pupils follow syllabuses which are unrealistic and socially unjustifiable, this thesis aims at the development of a syllabus which is socially accountable, feasible in the secondary school context and which can collaborate with an educational process centred on the role of man as an important element in the transformation of his world: education for liberation (cf 1.4 above).

2.4 Summary

This chapter has defined the types of determining conditions (intrinsic and extrinsic) on syllabus design to be considered in this thesis and has concentrated on the study of the extrinsic conditions through an analysis of the characteristics of the Brazilian ELT classroom. With this objective, it has looked into socio-political, logistico-administrative and socio-psychological issues and aspects which have to do with the nature of the learner's mother tongue, language learning experience, and EFL teaching tradition.

These conditions were summarised and criticised from the perspective of the view of the educational process which guides this work.

This thesis now moves on to the analysis of the intrinsic conditions on the syllabus model.

NOTES

1 Some aspects of this chapter appeared in a briefer form in my 1983 MA dissertation (cf Moita Lopes, 1983).

2 This position seems to coincide with Lee's view (1977:248) of the activity of syllabus design: "To some extent 'how' and 'whether' determine 'what'".

3 Allen seems to imply the same criticism when he refers to "the tyranny of the textbook writer who often does not hesitate to prescribe detailed programmes for students he has never seen, or even for countries he has never visited". (1984:62)

4 cf van Els (1981:54): "part of the FL policy-making business may actually consist of bringing about changes in prevailing norms and values".

5 cf The distincition between curriculum and syllabus made in 4.2 below.

6 The terms socio-political and logistico-administrative are borrowed from Munby's taxonomy of constraints (1978:217).

7 Note that in the syllabus to be developed in 5.2 below the educational aspect of language learning, ie, education for critical consciousness is represented in the syllabus not only as a goal to be achieved through the language course but also through the very process of teaching the language, ie, through the use of appropriate pedagogical devices (cf the Post-reading phase in 5.2.5.6, language awareness activities in 5.2.5.3 etc.)

8 cf My translation from Portuguese: "Nenhuma nação atualmente por maior que seja sua autonomia cultural, poderia prescindir, em seu sistema escolar do ensino de línguas estrangeiras".

9 cf My translation from Portuguese: "Seu estudo será geral como aquisição de um instrumento de comunicação aplicável a todos as situações, mas surgirá como especial na perspectiva de uma habilitação profissional".

10 The data included in this figure were taken from the official guidelines (cf bibliography) published by each corresponding state council of education. It should be noticed that the factor type of motivation is not explicitly stated in the guidelines and has therefore been inferred.

11 Note that the point I am making is not against the use of oral skills nor, for that matter, of any other skills as enabling/learning devices, but against the use of oral skills as eventual objectives.

12 Hereafter, I will use the phrase Brazilian school(s)/classroom(s) to refer to Brazilian secondary schools of the public sector.

13 This research survey is part of a National Project for the Development of FL teaching in Brazilian Secondary Schools currently in elaboration. Although some criticisms could be levelled at this survey mainly as regards the design of the research instrument and statistical procedures used in the analysis of the data, its findings do bear out teacher intuition.

14 My concern in this thesis is with students in the mainstream secondary school educational system of the public sector. This thesis does not account for the types of learners who are part of the so-called supplementary educational system (Educação Supletiva) which caters for adults who have not completed their secondary school education. Nevertheless, the general guidelines of the syllabus to be put forward in this thesis could be adpated to suit that particular body of students.

15 FLs are compulsory at 2nd grade schools but their inclusion in the curriculum may vary from one to three years depending on the nature of the school curriculum, ie, technical, commercial etc. (cf opinion 4.418/76).

16 In this connection, also note the preference for grammatically graded syllabuses on the part of the teachers who first evaluated the experimental materials used in the empirical part of this thesis (cf Appendix C).

17 Foreign books are only used in the more expensive private secondary schools and of course in the FL schools.

18 In my syllabus proposal below (cf 5.2.1 and 5.2.5.6) I include a Parallel Auxiliary Component wnich accounts for this potential that EFL offers.

19 This trend in the education of EFL teachers seems to be based on the assumption that FL learning necessarily involves certain essential conditions (number of classes in the curriculum, number of students per class etc.) not met by the secondary school ELT classroom (cf 2.2.1 above).

20 Some of the issues discussed in this section appeared in Moita Lopes (1981).

21 The history of colonialism in Brazil however starts out with the Portuguese in the 16th century, continues with British imperialism in the 19th century and with American imperialism in the 20th century (cf Ianni, 1976; Baeta Neves, 1978 and Chiavenato, 1980). Nevertheless, the colonisation pattern has been the same: an inequitable exchange of the "benefits" of the intellectual and technical culture of the imperialist for the exploration of the natural resources and the cheap labour of the colonised country.

22 By stating an anti-imperialist position here, my argument runs the risk of sounding simplistic since I am not proposing any alternative for cultural contact and technological imbalance. I am aware however of the complexity of the issue and of the fact that cultural contact and technological cooperation are inevitable. Nevertheless, the elaboration of an alternative position, because it would involve questions related to political theory, economics etc., is beyond the scope of this thesis.

23 Morisset (1985) in an interesting article entitled "yes, we speak English" considers the status of English in Brazil and the reasons why English is taken as the only linguistic alternative in the country. In this regard, also note Ballalai (1982) in which he shows that most of the bibliography used in post-graduate courses in the area of education in Brazil is American.

24 cf My translation from Spanish: "Siempre la lengua fue compañera del imperio".

25 In this regard, A. Bell (1982) shows that New Zealand, an ex-British colonial country which tended to lean towards British English as the "standard" to be followed, is shifting towards and American variety of English due to the fact that the US constitute the culturally and economically dominant power now. Also Schroder and Zapp (1981:105) indicate that this tendency towards the use of English as an international language, due to American imperialism, is also found in Europe.

26 Brumfit (1980d:94) goes as far as indicating that "if we really want to consider English as a world language, we must be prepared to recognise dialectical differences whenever a different cultural framework is to be expressed through English and not only in the second language situation".

27 An attitude is defined here as "an organised and consistent manner of thinking, feeling and reacting to people, groups social issues or, more generally, to any event in the environment" (Lambert and Lambert, 1973:72).

28 Note in this regard the scene of the play by Alves de Souza (1982:42-49) which features an English class and which criticises the colonialist content of ELT in Brazil.

29 It is quite common to see people who after 7 years at an EL school continue attending conversation courses not to lose contact with English irrespective of whether they need spoken English or not.

30 It should be noted that Tilio (1980) does not see her subjects' attitudes as colonised. She totally ignores the social context where these attitudes have developed. My interpretation of her data however in the light of the social context described in 2.2.5.1 points in that direction.

31 In this regard, note that Ballalai (1982:18) argues that "many teachers until now justify ... that they teach a FL to import a more developed culture" (cf my translation from Portuguese: "Muitos professores de línguas estrangeiras, ainda nos dias de hoje, justificam ... que ensinam uma língua estrangeira para que possam importar uma cultura mais desenvolvida".)

CHAPTER 3

DETERMINING THE INTRINSIC CONDITIONS ON DESIGN: A READING COMPREHENSION MODEL

3.1 Introduction

In chapter 2.1 I have accounted for the extrinsic conditions to be taken into consideration in the elaboration of the syllabus model. In this chapter I want to start considering the intrinsic conditions on the model. With this objective, this chapter aims at the elaboration of a theoretical model of the reading comprehension process which together with aspects derived from FL learning and syllabus design theories (cf chapter 4) provide for the intrinsic conditions (cf 2.1 above) on the design of the reading syllabus in chapter 5.

The chapter starts with a review of existing theories of the reading comprehension process (the decoding and the psycholinguistic models of reading) and moves on to the discussion of schema theories of reading comprehension which side by side with a view of reading as communication between participants in discourse interaction (ie, the reader and the writer) provide the framework for the interactive schema theoretic model of reading argued for in this thesis.

After the discussion of this model of reading, the chapter concludes with a review of illustrative empirical evidence in L_1 and L_2 reading comprehension research for certain constructs of the model.

The task of developing a model of the reading comprehension process comprises the use of research both of a speculative and of an empirical nature. This is because most of the time one can but presume what occurs in the reader's mind: many of the processes involved in the reading act are not immediately open to observation.

The difficulties in accounting for the reading comprehension process however have not deterred linguists, psychologists and psycholinguists from attempting to explicate the reading phenomenon. Reading research has been a constant pursuit, particularly because of its obvious implications for education, and specifically, literacy.

Beaugrande (1981), in fact, identifies as many as ten different models of reading or understanding in the literature. In my discussion below however rather than detailing how each of these models differ from one another, I want to concentrate on a crucial difference which seems to cut across the spectrum of reading models: the sort of direction the flow of information takes in the reading process.

Broadly speaking, reading models can be categorised on the basis of whether the information flow in text processing is seen as being bottom-up, top-down or bottom up/top-down consecutively. Bottom-up processing is equated with a decoding model of reading. The reader only relies on the data presented in the text in the process of reading comprehension. Information flows from the text to the reader. This type of processing is said to be data-driven. Reading is basically taken as a perceptual process. Top-down processing, on the other hand, heavily emphasises the contribution of the reader to the reading task. The meaning of the text is in the reader's mind, so to speak. Therefore, text processing of this kind is said to be concept-driven: information flows from the reader to the text. Normally, the models which centre on this type of processing are labelled psycholinguistic models of reading: reading is primarily taken as a cognitive process. The third type of model is the kind in which text processing is seen as operating in both directions at the same time: bottom-up and top-down. That is, reading is both a perceptual and a cognitive process. This type is the one equated with the schema theoretic model which provides the main framework of the model I will advocate here.

The discussion that follows then looks into these three models of reading comprehension.

3.2 The decoding, the psycholinguistic and the schema theoretic models of reading

3.2.1 The decoding model of reading

Decoding models of reading comprehension (cf Gough, 1976; Gibson and Levin, 1975; LaBerge and Samuels, 1974; Gibson, 1976; inter alia) centre on the assumption that reading comprehension is limited to decoding the linguistic system. In other words, reading and understanding a passage is an activity which solely involves the processing of the information given on the printed page: from letter to words, from words to sentences and then to meaning:" the reader really plods through the sentence, letter by letter, word by word" (Gough, 1976:532). The reader therefore starts processing data on the printed page - at a lower level, so to speak - and ends up with meaning at a higher conceptual level. It is in this sense that text-processing is said to be bottom-up or text-based. The meaning of the text is on the printed page the reader has to decode.

Gough (1976) in his account of "One Second of Reading" takes the position that we read letter by letter which are recoded phonically so that our mental lexicon can be accessed and meaning therefore achieved. He argues that the reader, in the interests of cognitive economy, assigns a phonological representation to lexical entries and accesses meaning through that phonological representation of the printed word. The other alternative, he says, going from the printed word directly to meaning, though possible, does not suit readers of alphabetic orthography. His point therefore is that "the reader .... converts graphemes to speech, and then listens to himself" (1976:514).

Less extreme advocates of text-based models of reading however do not require the recoding of the text into speech (cf McConkie and Rayner's Direct Perception Model, 1976) or argue that the phonological recodification may be alternatively not realised (cf LaBerge and Samuels, 1974).

Within this sort of framework it is not difficult to see that reading is virtually reduced to a mechanical act of decodification of the linguistic system and that there is a connection between this view of reading and the principles of behaviourism and structural linguistics. Reading is a mechanical identification of the written word with meaning through the mediation of sound, which does not seem to require the activation of cognitive structures.[1] This process seems to be related to an associationistic view of learning in the sense that the human organism is assumed to be directed by sensory inputs, ie, it is controlled by outside stimuli. Also, one should note that the emphasis on the phonological level of language given by the decoding models of reading seems to be a reflection of the widely-held view in structural linguistics that language is primarily an oral phenomenon. Hence, the need for the recodification of written language into speech for meaning to be accessed.[2]

The equation of the recodification of the written language into speech with reading comprehension has been called "the great fallacy" (Smith, 1973c:70) in the teaching of reading, for it seems to ignore the fact that after transforming the written text into speech, the reader is still left with the problem of comprehension. Therefore, bottom-up processing models take care of lower level (perceptual) processes but cannot account for higher-level (cognitive) processes.

3.2.2 The psycholinguistic model of reading

The main criticism of the decoding model of reading has been put forward by the proponents of the so-called psycholinguistic model of reading (Smith, 1982, 1973a, 1978; Goodman, 1973a, 1973b, 1976; Kolers, 1973; inter alia). Their view is that information processing in reading comprehension mainly flows from the reader to the text. The reader makes use of his background knowledge in reading a text. And it is this knowledge which helps him to make sense of the printed page. Reading therefore is a process which seems to be based on top-down processing. Rather than finding meaning in the text - as proposed in the decoding view of reading - the reader brings meaning to text in the act of reading. This view is also known as the reader-based model in opposition to the text-based model of the decoding view of reading comprehension.

The reader therefore in the psycholinguistic perspective of reading utilises two types of information in the act of reading: non-visual information (his background knowledge) and visual information (the information in the printed text) (cf Smith, 1982:10). But it is the non-visual information which is crucial in reading comprehension. The visual information, ie, graphic input, is simply sampled by the reader to confirm or not the hypotheses[3] about the meaning of the text he has developed on the basis of the non-visual information he approaches the text with. The reader's non-visual information therefore constitutes expectations about the meaning of the text activated in reading comprehension. It is in this sense that the reader-based model posits that the reader proceeds in a top-down direction. That is, the reader starts with hypotheses about the meaning of the text and then checks them by sampling textual information. On the other hand, the text-based model would argue that the reader starts by processing textual information.

Non-visual information is thus more important to the reading process than the information the reader finds on the printed page. Smith (1982) has argued that only poor readers are dependent on visual information and that "the less non-visual information the reader can employ, the harder it is to read" (1982:11). Kolers (1973:46) goes as far as saying that the reader "disregards, in a certain sense, the actual printed text". In their view, understanding a text is, in a way, an act which seems to pre-exist reading, since it is related to the non-visual information the reader carries in his brain. It is the reader's role therefore to select the appropriate non-visual information in the act of comprehending a text. And that has to do with the purpose the reader establishes before reading. We read with a certain purpose, ie, to answer particular questions that we are asking about a text (cf Smith, 1978:85).

The non-visual information is the knowledge the reader has in his mind - his cognitive structures - which are activated in the act of reading and, for that matter, in any act of comprehension. This knowledge is a result of our experiences in the world and it is through the use of this knowledge stored in our long term memory (hereafter, LTM) that we make sense of what goes on around us. As Smith (1982:54) puts it, this knowledge is "a theory of what the world is like, a theory that is the basis of all perceptions and understanding of the world". And it is in the light of this theory of the world - our non-visual information - that we understand a text.

An interesting aspect of this view of reading therefore is that it is part of a more general theory of comprehension and in fact of learning (cf Smith, 1982:93). We comprehend and learn because we are able to relate what is going on in the world to what we have in our heads - our background knowledge. Learning is therefore an analogical activity, as learning theorists (cf Piaget, 1954; Ausubel, 1963; Bruner, 1972; inter alia) have pointed out. In this sense, we see in the world what our theory of the world allows us to see. On the basis of this theory, we develop hypotheses about the possible meaning of an object in the outside world and check whether this meaning matches our theory. In fact, testing hypotheses is how we develop the theory of the world in our heads, being therefore the way we learn to apprehend the world around us.[4]

The influence of Chomskyan linguistics is patent in the psycholinguistic model of reading. Actually, Goodman (1976:503) makes explicit reference to generative transformational grammar: "readers who have achieved some degree of proficiency decode directly from the graphic stimulus in a process similar to Chomsky's sampling model and then encode from the deep structure, as illustrated in Chomsky's model of sentence production". That is, in the Chomskyan model (1965) the semantic interpretation and the phonological interpretation are independent of each other. Accordingly, the psycholinguistic model of reading does not require the mediation of the sound structure of language to access the meaning of the text. In fact, Chomsky (1970) shows that the printed word allows a more direct semantic interpretation than its phonological realisation. For example, the meaning of the word "medical" and "medicine" are more easily recovered if one follows the cues of the written language than of the oral language.

In accordance with this line of reasoning, Smith (1982:154) suggests that "the visual appearance of each word indicates meaning directly". He posits that alphabetic written languages are read as non-alphabetic written languages like Chinese: "we treat our written language as if it were ideographic" (Smith, 1973b:118).[5] In his view, the recourse to subvocalisation when our reading slows down is simply a "regression to classroom induced behaviour" (Smith, 1973c:81). This position is diametrically opposite to Gough's (1976), as seen in 3.2.1 above, in his decoding view of reading.

It should be remarked however that despite the influence of the Chomskyan model (1965), which particularly centres on sentence level phenomena, taking no account of pragmatic level phenomena, ie, meaning in reading comprehension therefore in this perspective is in the text (as in the decoding model of reading), the psycholinguistic model of reading appears to be excessively pragmatic since, as mentioned above, meaning is brought to the text by the reader without very much reference to semantic facts. Thus, in this view, the reader interprets the text pragmatically by forming and checking hypotheses on the basis of his background knowledge. This is very different from the Chomskyan concept of interpretation on the basis of semantic knowledge, where the text provides the primary basis for interpretation. Therefore, as regards the psycholinguistic model, rather than claiming semantic interpretation without phonological recodification as in the Chomskyan paradigm (1965), it seems more appropriate to talk about pragmatic interpretation without phonological recodification.

Another aspect of the psycholinguistic model which makes contact with transformational linguistic theory is the claim of the universality of the reading process (cf Goodman, 1973b). This point seems to be parallel to Chomsky's view of the existence of linguistic universals in his theory of the innate capacity for language acquisition. According to the reader-based model of reading, if one allows for reading skills that have to tackle the details of the orthography and the grammatical structure of different languages, reading skills constitute psycholinguistic universals. I will return to this issue below in 3.4.2.2 where I discuss research in text processing in

L_1 and L_2 reading comprehension.

3.2.2.1 Criticism of the psycholinguistic model

Three main aspects of the psycholinguistic model of reading however have been questioned. The first has to do with the way this model has underplayed the importance of grammatical and lexico-semantic knowledge in reading, which seems to be due to the exaggerated emphasis given to top-down processing or to what Smith (1982) calls the use of non-visual information in reading. It is true that in the reader-based model it is allowed that the reader can occasionally operate in a bottom-up direction when he does not have enough background knowledge of the content of the text. Nevertheless, the preference in this model is for top-down processing. It seems that in a reaction to the decoding model of reading (the text-based model), the reader-based model has almost totally disregarded the printed text. As seen in 3.2.2 above, the reader interprets the text only pragmatically and ignores its semantic interpretation.

Also, this disregard for the printed text does not account for the fact that sometimes certain kinds of visual information, which are typical of written texts (graphs, diagrams etc.), are crucial to the meaning of the text and may in fact represent a short cut to its comprehension.

The second aspect normally criticised is related to the psycholinguistic view of reading as rapid cycles of hypothesis testing which prevent the reader from getting bogged down on the printed text. This position seems to overlook the fact that with texts which are highly informative readers do get involved with the printed text. Readers sometimes subvocalise a section of the text they cannot understand or even segment it syntactically (cf Kato, 1983:31). In other words, rather than being harmful to the flow of comprehension, interrupting the flow of reading to elucidate a misunderstanding is sometimes quite necessary. In this sense, Smith's claim that subvocalisation is a "regression to classroom induced behaviour" (1973c:81), which reveals poor reading skills, seems not to be true. In fact, Stanovich (1981) reviews an impressive amount of literature which provides evidence that the account of individual differences in reading by the psycholinguistic model is quite inadequate. There is evidence that poor readers can rely more on top-down processing to compensate for lack of knowledge of the linguistic system (cf 3.4.2 below). Also, this same author shows that empirical research findings "indicate a greater attention to graphic information on the part of the better readers" (Stanovich, 1981:48) contrary to Smith's (1982) claim that poor readers pay too much attention to print. Actually, research has shown that poor readers who are deficient in bottom-up processing may rely on contextual factors for top-down processing (cf Stanovich, 1981:63).

The third point generally criticised is the vagueness of the psycholinguistic model. McConkie and Rayner (1976:157) and Gibson and Levin (1975:450) have argued that it is not clear enough in the psycholinguistic model what the reader makes guesses about, ie, whether about words, grammatical form or the content of the text: the model is "too vaguely specified to be checked" (Gibson and Levin, 1975:450).[6]

The greatest contribution the psycholinguistic model made to reading research, to my mind, was to free the reading act from the compulsory recodification of the written language into speech and to call attention to top-down processing, ie, the role cognitive processes play in reading comprehension. Also, some intuitive aspects of the psycholinguistic model (universal reading hypothesis, pragmatic interpretation without phonological recodification, etc.) have been very influential pedagogically. That is, they have been useful constructs in a pedagogical model of reading comprehension.[7] However, the model does not seem to correspond to what is actually going on in the reading comprehension process, as research has shown (cf Stanovich, 1981; Rumelhart, 1977a; inter alia). By overemphasising top-down processing, the model has underplayed the importance of the use of the language system in the reading task: bottom-up processing also has a role to play in reading comprehension. Further, as in the decoding model, socio-psychological aspects related to a view of reading as communication between the reader and the writer are not taken into account (cf 3.2.3 below) in the reader-based model.

3.2.3 The schema theoretic model of reading

In the two models of reading comprehension discussed so far, the flow of information goes either in a bottom-up direction (cf 3.2.1 the decoding model) or in a top-down fashion (cf 3.2.2 the psycholinguistic model). That is, reading comprehension is essentially taken either as a perceptual process or as a cognitive process.

Therefore, the two models imply different views of what meaning is. In the decoding model, meaning is in the text; consequently, the reader has to decode the printed page. In the psycholinguistic model, meaning is brought to the text by the reader, ie, meaning is in the reader's mind.

In the third model of reading comprehension I want to discuss here - the schema theoretic model, the flow of information is represented as going in both directions, ie, top-down and bottom-up consecutively. That is, these two processes occur interactively. The non-interactive models of reading comprehension seem to miss the point that "reading is at once a 'perceptual' and a 'cognitive' process" (Rumelhart, 1977a: 573). That is to say, it involves both the information found in the printed page and the information the reader brings to the text - his background knowledge - in the act of reading comprehension.

Both Rumelhart (1977a) and Stanovich (1981) review empirical research findings which present problems for accounts of the reading comprehension process which are basically either bottom-up or top-down models, ie, non-interactive. Rumelhart (1977a) presents evidence which contradicts a reading model which "assumes that information flows strictly from lower to higher levels" (Rumelhart, 1977a:578), ie, in a bottom-up direction. And Stanovich (1981:43) shows that the claim of top-down theorists (Smith, 1982, for example) that poor readers tend to overrely on bottom-up processing is not supported by empirical evidence. The literature he reviews shows that a deficit in one sort of information processing direction will result in reliance on the other processing mode type independently of individual differences among readers. Therefore, both Rumelhart (1977a) and Stanovich (1981) argue that "Interactive models of reading appear to provide a more accurate conceptualisation of reading performance than do strictly top-down and bottom-up models" (Stanovich, 1981:32). Reading comprehension is data driven and concept driven at the same time.

3.2.3.1 Schema theories

Interactive theorists of reading comprehension (Rumelhart, 1977a, 1980; Adams and Collins, 1979, inter alia) have relied on the framework of schema theories[8] to account for the interactive mode of information processing, ie, the interplay between bottom-up and top-down processing in reading comprehension.

Schema theorists have argued that schemata[9] are cognitive structures stored in units in LTM, which are employed in the act of comprehension - no matter the kind of peceptual input - and which are acquired throughout our lifetime. The human memory is then said to consist of these units of information - symbolic representations of knowledge - related to one another which are activated in the act of comprehension.

The concept of schema[10] is thus very similar to the notion of non-visual information and background knowledge discussed above in connection with the psycholinguistic model of reading. That notion however has been better formalised by schema theorists, who have also provided a more adequate account of background knowledge activation in comprehension in general. In schema theory, the input data necessary to instantiate schemata are made available to the comprehender through bottom-up processing, ie, data-driven processing, whereas the schema stored in LTM in a top-down mode predicts what the input will be like through a conceptually driven process.

The interactive flow of information in perceptual comprehension is well exemplified by Bobrow and Norman (1975:142): "having seen a desk, be prepared to see a chair", meaning, presumably, that the input 'desk' will activate a schema (a school/office schema, as it were) in the comprehender's mind, which through top-down processing will predict the element 'chair'.[11] By the same token, in reading comprehension the text "The policeman held up his hand and stopped the car" (quoted from Collins and Quillian, 1972:327) would in a bottom-up direction invoke a schema for traffic policemen at work, so to speak. Nevertheless, this interpretation of the text would have to be altered if the following were added: "He was superman". That is, a different schema would have to be activated. The reader would have to modify a possible interpretative hypothesis of the text on the basis of incoming data - this process being thus data driven - and, at the same time, through top-down processing he would have to select another schema from his store, ie, through a conceptually driven process. In brief, the reader's background knowledge, his schemata, stored in his LTM, "informs in top-down fashion information from the text that is being processed from the bottom-up" (Spiro, 1980:262). It is this sort of interactive information processing that both the decoding model and the psycholinguistic model of reading fail to capture.

One of the main implications of this interactive formalisation of the flow of information of the comprehension process is that difficulty with reading comprehension may be explained not only through problems with decoding the text, as traditionally supposed, but also through difficulties caused by the lack of appropriate schemata on the part of the reader (cf empirical research reviewed in 3.4.1.1 and 3.4.2.1 below). Accordingly, a more skilled reader could also be described in terms of schema availability, which will vary from reader to reader on the dependence of his "age, subculture, experience, education, interests and belief systems" (Anderson, et al., 1977:378). The more familiar the reader is with the content area of the text, ie, the more easily he can access the necessary schemata to understand a text, the more skilful his reading will be. Also, as Rumelhart (1977b:268) puts it, one's objective in reading a text and the presence of appropriate schemata in one's knowledge structures will define the depth of one's understanding of a given text. The role of background knowledge in reading comprehension, as, in fact, pointed out by the psycholinguistic model theorists (cf 3.2.2 above), seems to be crucial. I will come back to this issue below (cf 3.3.2 and 3.4).

It should also be noted that schema theorists, like psycholinguistic model theorists (cf 3.3.2), also envisage the act of comprehension as a process of theory construction: the reader is developing and testing hypotheses about the meaning of the text (cf Rumelhart, 1980:44) in the same way that a scientist is formulating hypotheses to account for the data he is confronted with. Reading in both models is seen as problem-solving: hypothesis testing about the meaning of the text. However, the way these hypotheses are said to be formed in each of these two models is different, for in the psycholinguistic model bottom-up processing is underplayed.

3.2.3.2 Complementing the schema theoretic model

The schema theoretic model of reading comprehension, as well as the two other non-interactive models of reading above (cf 3.2.1 and 3.2.2), address the issue of reading comprehension from the perspective of information processing theory, ie, the direction of information flow in reading. And, as discussed above, schema theorists' interactive account of information processing and their formalisation of background knowledge seem to be more adequate. However, none of these three models is concerned with a view of reading as communication, ie, with aspects which have to do with how language is used in a communicative interaction between participants in discourse - sociolinguistic and socio-psychological aspects.

Therefore, although out of the three models under review the schema theoretic model seems to be the most appropriate, it needs to be complemented with insights from the tradition of discourse analysis in which discourse is taken as the actual process of meaning negotiation[12] between participants in a communicative interaction, in the case in point, the reader and the writer (cf Widdowson, 1984c:219 and elsewhere).

It should be observed that in the model I will adopt here the term interaction is used in two senses. It refers both to the interactive mode of information processing - in line with schema theories - through which reader's knowledge (schemata) are engaged, and to the interactive process of communication between the reader and the writer, as it were, in their effort after meaning. In this sense, what seems to be occurring in reading comprehension is that the reader is utilising his competence as a reader (cf 3.3.1 below) by interacting with the writer, so to speak, through the linguistic cues the writer has chosen to include in the written text. Thus, the meaning of the text is neither in the text (as in the decoding model tradition) nor in the reader's mind (as in the psycholinguistic model), but it is a process achieved by interactive procedures between the reader and the writer through the text. These interactive processes then are the means through which the reader's schemata and the writer's, as presented in the text, are negotiated.

The general structure of the interactive schema theoretic reading model I will advance below (cf 3.3) is particularly derived from Widdowson's (1983) theory of language use, in which, to my knowledge, for the first time these two traditions of research - schema theory and discourse analysis - are put together in a congenial framework. I will however also draw on other sources, which, I think, will help to illuminate the model.

3.3. An interactive schema theoretic model of reading comprehension

3.3.1 Textual competence: linguistic competence and discourse competence

In his account of language use, Widdowson (1983:57) defines two different kinds of knowledge a language user - hereafter a reader - makes use of: systemic knowledge and schematic knowledge. Systemic knowledge has to do with what is equated with linguistic competence in mainstream linguistics. It accounts for the reader's knowledge of language at the phonological, syntactic, lexical and semantic levels.

In the model advocated here, systemic knowledge however comprises the reader's knowledge of the system of the language at the syntactic, lexical and semantic levels. The phonological level is therefore not included. That is, I am incorporating into this model the position taken in the psycholinguistic view of reading, namely, that semantic interpretation[13] does not require phonological interpretation in accordance with the Chomskyan tradition (cf 3.2.2 above). The reader interprets the meaning of words directly from print.[14]

The other kind of knowledge that readers utilise is schematic knowledge - conventional knowledge of the world (cf its theoretical underpinning in 3.2.3 above) - which provides readers with expectations about what to find in the text and which embodies the reader's background knowledge of the content area of the text (what Widdowson (1983) calls "frames of reference" and Carrell (1983c) refers to as "content schemata") and the knowledge that readers have of routines of language interaction as expressed in the rhetorical structures of language (what Widdowson (1983) calls "rhetorical routines" and Carrell (1983c) calls "formal schemata"). Schematic knowledge then is the stereotypic knowledge, derived from the readers' experiences as language users, which prepares them for language communication (cf Widdowson, 1983:37). It is this kind of knowledge that readers project on the written page in bottom-up/top-down directions to actualise the text as discourse. This type of knowledge therefore relates to what Hymes (1972) has referred to as communicative competence (cf Widdowson, 1983).

In addition to the phonological, syntactic, lexical and semantic levels, Widdowson (1983) is then postulating another level of linguistic organisation in his theory of language use: the schematic level. In the same way that the phonological structure of language has no function by itself, ie, it services the syntactic and lexico-semantic levels, the syntactic and lexico-semantic structure of language has no role to play by itself in language use either. That is, it has to do with the structure of the sentence - a level of linguistic organisation at the language usage level - and it services the schematic level in the actualisation of language as use. The schematic level therefore relates to the realisation of sentences as utterances in actual discourse.

Following Widdowson (1983:36), I would like to claim that frames of reference (hereafter content schemata[15]) are schemata stored in human memory instantiated in discourse processing and which account for the propositional content of discourse whereas rhetorical routines (hereafter formal schemata) are schemata which account for the rhetorical value of what is being read. In interpreting discourse, the reader has to follow the instructions given in the text by the writer, making use of the two types of knowledge (systemic and schematic) described above. This process is of an interactive nature, ie, an interaction between the reader's world, represented by his systemic and his schematic knowledge, and the writer's world expressed in the text: "a cryptic recipe that can guide" the reader (Anderson, 1977:417).

The reader is then involved in a process of meaning negotiation with the writer, as it were, by following the directions the writer included in the text in the same way that two interlocutors are interacting with each other in their effort after meaning by adjusting their respective schemata. These interactive processes are what Widdowson (1983) calls interpretative procedures, which are part of the reader's capacity to engage in discourse by operating on the pragmatic level of language.

Besides accounting in his theory of language use for the notions of linguistic competence and communicative competence of the Chomskyan (1965) and Hymesian (1972) traditions respectively, Widdowson (1983) formulates the concept of capacity.[16] This notion has to do with the ability to realise language in use. In opposition to the concepts of linguistic competence and communicative competence, which are analytical constructs and therefore focus on language behaviour from outside, the notion of capacity is a user's construct, being hence "essentially ethnomethodological" (Widdowson, 1983:23) (cf 3.3.1 below). It focuses on language behaviour from the point of view of a participant in language communication. Thus, capacity is a construct related not to linguistic analysis - language as product - but to meaning negotiation - language in process - an ability to interpret discourse which involves shared knowledge and intention.

Morgan and Sellner (1980:171), discussing the sort of competence involved in understanding and constructing discourse, have made a distinction between linguistic competence and discourse competence which seems to have some relevance here. Linguistic competence has to do with systemic knowledge, and discourse competence has to do with "the human ability to use language for the multitude of purposes it serves" (Morgan and Sellner, (1980:171). By discourse competence therefore they seem to be referring to what in Widdowson's terms comprises both communicative competence and capacity - the reader's projection of his schematic knowledge on the written text through procedures of interpretation. Discourse competence together with linguistic competence account for what Beaugrande (1980: 23 and 24) has described as "textual competence" - a notion that embodies the kinds of competence required from a reader.

In the other units of this section I am concerned with what is involved in discourse competence, namely, schematic knowledge (cf 3.3.2 and 3.3.3) and capacity (cf 3.3.4)

3.3.2 Content schematic knowledge

As seen above, in his effort after meaning the reader is equipped with two different kinds of schematic knowledge, of which this section centres on the content schematic type.

As already discussed (cf 3.3.2), to understand a text, the reader operates alternately in two directions: via schematic knowledge, ie, in a top-down mode, and via the cues presented in the text, ie, in a bottom-up direction. In other words, in the process of interpretation the reader is utilising his knowledge of the language system to make sense of the sequence of propositions in the text by relying on the cohesive devices (cf Halliday and Hasan, 1976) in a bottom-up mode and, at the same time, by imposing coherence on the text through the activation of a content schema in a top-down fashion. It is through this interactive process therefore that reader's knowledge - schemata - is engaged.

In this regard, it is interesting to note that the notion of cohesion is being interpreted here differently from the way it is presented in Halliday and Hasan (1976). In line with Urquhart, 1983; Brown and Yule, 1983; Carrell, 1982; Morgan and Sellner, 1980; Beaugrande, 1980; inter alia; and with the reading model adopted here, I am looking into text as a result of the process of interaction between the writer and the reader, whereas Halliday and Hasan (1976) look into text as product, ie, as an example of language usage in Widdowson's terms (1978). In Halliday and Hasan's sense (1976), coherence is viewed as present in the text instead of being a result of the reader's activation of a particular schema in the process of meaning negotiation, which imposes coherence on the text. As Beaugrande (1980:132), criticising the notion of cohesive device as expressed in Halliday and Hasan (1976) points out, "Often, no special consideration [is given] to the underlying connectivity of text knowledge and world knowledge that makes these devices possible and useful". Thus, text meaning in Halliday and Hasan (1976) is considered a "primarily linguistic phenomenon" (Carrell, 1982:480) rather than a result of the interaction between systemic and schematic phenomena.

Whereas in Halliday and Hasan (1976) cohesion is taken as the cause of coherence, in this thesis it is taken as the effect of coherence (cf Carrell, 1982). Coherence is not established by the cohesive devices, but rather by the assumption that the text is coherent on the part of the reader[17] and by the consequent instantiation of a schema that makes the text cohere. A good illustration of this fact is that text users can interpret discourse whose sequence of propositions (propositional meaning) is not explicitly marked by cohesive devices such as connectives, as in the following example:

> I couldn't take her anymore. I put an end to our marriage.

Also, as the example given by Widdowson (1979d:96) shows, a text can be coherent despite being incohesive:

> A - Can you go to Edinburgh tomorrow?
>
> B - B.E.A. pilots are on strike.

Conversely, it is possible for a text to be cohesively built but totally incoherent if it does not manage to activate appropriate content schemata in the reader's mind. In the example below, the cohesive links are clearly in place; however the reader does not manage to impose coherence on the text. The text is simply a chain of propositions, which does not seem to instantiate adequate content schematic knowledge. In other words, the systemic level of language organisation does not succeed in servicing the schematic level.

> The mayor loves cars. Cars are built in S. Paulo. S. Paulo is a big city.

3.3.3 Formal schematic knowledge

The other kind of schematic knowledge that language users possess is related to the rhetorical value of discourse, the so-called formal schemata. To interpret written discourse, readers in general make use of two different types of formal schemata: knowledge about the local rhetorical organisation of discourse and knowledge about general discourse patterns, which I am going to refer to as local formal schemata and global formal schemata,respectively.

3.3.3.1 Local formal schemata

By local formal schemata I have in mind the sort of patterning of discourse values indentified in the work of Winter (1977 and 1982), Hoey (1979 and 1983) and Crombie (1985a and 1985b) as clause relations or semantic discourse relations. That is, in interpreting written text, ie, in imposing coherence on the text, readers are following the sequence of discourse and therefore interpreting a new utterance in relation to a previous one in an integrative manner. In doing that readers are operating on the binary structure of discourse[18]and assigning rhetorical value to a proposition in the light of another, ie, in the light of the co-text and also in relation to the general context in which these propositions occur as expressed in the content schematic area of the text.

Therefore, to understand the text below, the reader is interpreting proposition 2 in relation to proposition 1 and assigning a binary discourse value which contains the members: Reason-Result. He is also relating these two propositions to the general context in which they occur, say, the discussion of a divorce case. That is to say, in a bottom-up direction the discourse marker Because activates a Reason-Result discourse relation which in a top-down direction helps the reader to understand the text. Thus, the reader's formal schematic knowledge is also activated interactively.

(1) Because I married her, (2) she quitted her job.
(Reason) (Result)

3.3.3.1.1 Types of local formal schemata

In addition to the Reason-Result type of binary discourse value, which is a kind of semantic relation under the more encompassing relation type of Cause-Effect, Crombie (1985b) distinguishes eight other categories of semantic relations involving binary discourse values: Temporal, Matching, Truth and Validity, Alternation, Bonding, Paraphrase, Amplification and Setting/Conduct. These binary discourse values, as Crombie (1985b) shows, can be implicitly and explicitly signalled. When implicitly signalled, the discourse value is inferred through the lexical items used, anaphora, discourse deictics, juxtaposition, the sequencing of the members of the relation and appropriate content schemata. In the example below, the Reason-Result binary discourse value is assigned on the basis of anaphora, the juxtaposition of the propositions and the activation of the adequate content schema:

(1) He didn't take the bus.	(2) It was packed.
(Result)	(Reason)

When made explicit, the relations are signalled by discourse markers - what Winter (1977) has called vocabulary 1 (subordinators), vocabulary 2 (conjuncts), vocabulary 3 (open-class lexical items which play a similar signalling role as connectors) and systematic repetition.[19] In this case, therefore, besides utilising elements which indicate implicit discourse values as shown above, the reader recovers the discourse values or the local formal schemata by relying on the signposts (discourse markers) of the surface structure of discourse which the writer has included in the text. In the example below, the Cause-Effect (Reason-Result) relation is signposted by the vocabulary 3 item reason:

> She didn't come over last night. I'll tell you the reason. She was angry with him.

3.3.3.1.2 An interpreter's perspective of discourse structure

This type of analysis of discourse structure into binary discourse values - local formal schemata - is in agreement with the interactive view of reading I have been arguing for in this thesis. In fact, this view of discourse is "heavily biased towards the reader/listener rather than towards the producer" (Hoey, 1983:19). It is a way of looking into the discourse structure from the point of view of the reader/listener, ie, trying to detect in the surface structure of discourse the elements which allow the reader/listener to interpret text.[20] In this sense, the surface structure of discourse points to its own organisation. Or, as Hoey (1983:33) posits in discussing this type of discourse analysis, "the emphasis is placed on the ways in which the surface of the discourse (...) contains sufficient clues for the reader/listener to perceive accurately the discourse's organisation".

In terms of my interactive view of reading, this means that a signal in the surface structure of discourse in a bottom-up fashion activates a binary discourse relation (a local formal schema) which in a top-down mode assigns a discourse value to a segment of the text. Therefore, discourse signals have a predictive function in the reading task, which facilitates discourse engagement. It is in this way that discourse was taken in this thesis as a unit recovered from the actual process of meaning negotiation through procedures of interpretation. I will come back to this issue below (cf 3.3.4), where I discuss the procedures of interpretation which characterise the notion of capacity.

In my framework therefore binary discourse values are units at the schematic level, which, as already discussed, are realised by interpretative procedures - pragmatic level phenomena. However, in Crombie (1985a and 1985b) and Winter (1977 and 1982) discourse values are units pitched at the systemic level. Although from my theoretical perspective Crombie's and Winter's definitions[21] of these discourse relations actually place them at the pragmatic level, these relations seem to be represented in their framework as semantic relations (cf "Words and expressions of this type [ie, discourse signals] are semantically important ..." (Crombie, 1985b:4)), ie, pragmatic meaning is not taken into account. Indeed, Crombie (1985a and 1985b) refers to these relations as semantic relations and Winter (1977) as clause relations, ie, systemic level phenomena. The semantic and pragmatic division of labour in the interpretation task is not taken into consideration. It could be said that in their view pragmatic level phenomena may have been assimilated into semantic level phenomena. In my scheme of things, binary discourse relations are manifested through resources in the language system, but they however have a schematic function since they seem to prepare the reader for the recovery of discourse from the written text through interpretative procedures-pragmatic level phenomena.

Also, note that by looking into discourse signals and the relations they imply solely as systemic level phenomena, Crombie (1985a and 1985b) and Winter (1977 and 1982) sometimes give the impression that these signals are always reliable as unambiguously marking discourse relations. Nevertheless, by acknowledging that their meanings are realised by interpretative procedures, ie, are pragmatic level phenomenon, one gives full credit to the fact that discourse signals may be unreliable and ambiguous.

3.3.3.2 Global formalschemata

In addition to schematic knowledge related to the local level of rhetorical organisation of discourse structures, as described in 3.3.3.1 above, readers also possess formal schemata of a global nature in the sense that they encompass the global rhetorical organisation of the text, ie, how the different elements of the communicative dynamics of the text make it hang together as a whole. This type of knowledge that readers have is what I am calling here global formal schemata and it corresponds to what Smith (1982:63) has termed "genre schema", van Dijk (1977:16) "superstructures", Crombie (1985:63) "discourse genre" and Beaugrande (1980:377) "text types".

Beaugrande (1980) and Beaugrande and Dressler (1981) have attempted to systematise global formal schemata, in their terms, text types. They discuss the following kinds of texts: descriptive, narrative, argumentative, literary, poetic, scientific, didatic and conversational texts. They argue however that the descriptive, narrative and argumentative text types seem to be the most general ones, which co-occur in the others in general combinations. Hence, in my framework, global formal schemata are minimally equated with texts of the descriptive, narrative and argumentative types which are distinguished here in terms of their social purpose or function in communication. In this sense, descriptive text types are utilised to focus attention on states of affairs and their relationships; narrative text types are used to organise events/actions and their relationships; and argumentative text types are used to draw attention to concepts and how they are related.[22]

The reader's perception of text types (global formal schemata) is also part of the total knowledge readers utilise in interpreting written discourse. The use of this knowledge is a kind of heuristics that readers possess for interpreting information they find in a text. This awareness of text types on the part of readers[23] is a condition that Beaugrande and Dressler (1981:182) describe as intertextuality. That is, readers possess conventional knowledge about the structure of texts which helps them in reading comprehension: by predicting the rhetorical structure of the text, readers facilitate text comprehension.

The structure of narratives seems to be the global formal schema which has been most thoroughly investigated, particularly the kind identified as story schema. Research in story schema is normally associated with the work of Rumelhart (1975 and 1977b) in cognitive science and with the tradition exemplified by the work of Todorov (1969), Barthes (1971), Propp (1968), in literary theory.

In brief, these researchers have indicated that story telling and interpretation, at least in the western tradition, seems to be guided by the following story schema: the description of a situation in which the protagonist has to reach a goal and is faced with an obstacle, defeat or success, ie, the main character is confronted with a problem to be solved. Evidence for the use of story schema in reading comprehension abounds in the literature (cf 3.4 below) and is particularly detected when readers are asked to recall a scrambled story. They tend to retell or summarise it, following the story schema described above (cf Kintsch, 1977). Or, as Beaugrande (1980:275) puts it, "All participants-story tellers, story-receivers, characters in story worlds - utilise whatever is necessary and accessible to solve their problems and attain their goals in a cooperative enterprise whose texts, though highly varied and flexible,are suitably designed for those tasks".

The characterisation of a story schema or a narrative global formal schema as containing a problem to be solved is also part of a recent trend of research in discourse analysis initiated by Winter (1982 and 1977) and followed up by Hoey (1979 and 1983), Crombie (1985a and 1985b) and Jordan (1984).[24] These researchers have called particular attention to a type of discourse macro-patterning (cf Crombie, 1985a:58) which seems to be typical of English texts in general and not specifically of a narrative text type: the Problem-Solution pattern.[25] Hoey (1983) has also referred to a general-particular pattern and Crombie (1985a) has described a Topic-Restriction-Illustration (hereafter TRI) pattern.

These discourse macro-patterns then organise the general structure of global formal schemata. That is, text types (narrative, descriptive and argumentative text types) are structured into what I have called above discourse macro-patterns (minimally equated here with Problem-Solution, General-Particular, and TRI).[26] At a lower level of organisation however discourse is organised into local formal schemata or binary discourse values (cf 3.3.3.1 above). In other words, discourse is framed at a lower level into binary discourse relations which are themselves part of a general level of organisation called here discourse macro-patterns which make up the overall discourse into global formal schemata. It is therefore the patterning of both local and global formal schemata which account for the rhetorical value of a text as a whole. In the next section I want to discuss the three types of discourse macro-patterns identified in the literature.

3.3.3.2.1 Discourse macro-patterns

Hoey (1979 and 1983), Jordan (1984) and Crombie (1985a and 1985b) largely discuss the Problem-Solution discourse macro-pattern. [27] Crombie (1985a:58), looking into the functional patterning of discourse has argued that texts are "divisible into discourse elements in terms of the way in which their parts function to convey various types or categories of information". One type of division of a text into discourse elements is expressed in the discourse macro-pattern of Problem-Solution. In this pattern the discourse element problem, for example, by being combined with another - solution - conveys a certain kind of information about the communicative function of these two elements in relation to the whole discourse.[28]

In the example below (quoted from Jordan, 1984:24), the complete discourse macro-pattern of Problem-Solution is identified: (1) as the situation; (2) as the problem; (3) as the solution and (4) as the evaluation.

> (1) I was very pleased to see my article in 'Advertising Management Services' in the January issue of your Journal.
>
> (2) However, you omitted to mention my affiliation with this company as their advertising manager, and this omission has caused me a little embarrassment here.
>
> (3) Would it be possible for you to include this information as a simple 'correction' in the next issue?
>
> (4) This would give this company credit for encouraging the use of the techniques I described and for allowing me to publish them.

In terms of the model of reading I am advancing here, to understand the text above, besides utilising systemic knowledge, content schematic knowledge and local formal schematic knowledge, readers seem to activate their knowledge about how global formal schemata are organised into the Problem-Solution discourse macro-pattern. That is, in finding, say, a problem in textual organisation, be prepared to find a solution.[29]

As Crombie (1985a:64) has indicated, the basic pattern of Situation-Problem-Solution-Evaluation may be modified in three ways: by addition (what Hoey (1983:81) calls multilayering, ie, a principle of recursiveness through which more than one Problem-Solution pattern is made possible in the same discourse macro-pattern); by conflation (what Jordan (1984:53) calls condensed structures in which the discourse elements may be conflated into one grammatical unit; note, for example, "I'll give you some of these really effective new painkillers" (cf Crombie, 1985a:65) in which Solution and Evaluation occur together); and by reordering, ie, the typical ordering of discourse elements into Situation-Problem-Solution-Evaluation may be varied.

The Problem-Solution discourse macro-pattern has been said to be a very common way of organising different kinds of global formal schemata (cf Hoey, 1979 and 1983 and Crombie, 1985a). This claim about the general organisation of discourse coincides with problem-solving views of oral and written interaction (cf the view of reading comprehension in 3.2.2 and 3.2.3),[30] of learning in general (cf 3.2.2 above) and of the sorts of activities which characterise scientific inquiry (cf note 4). Therefore, it is not surprising that the Problem-Solution discourse macro-pattern has been said to be a general pattern underlying discourse, for this pattern may be said to be a reflection in discourse organisation of human cognitive structure.

The two other kinds of discourse macro-pattern identified in the literature, as said above, are the General-Particular and the TRI. Hoey (1983:134) argues that the General-Particular pattern may be of two types: Generalisation - Example and Preview-Detail. The Generalisation - Example pattern consists of a first discourse element which involves a generalisation for which the discourse elements to follow provide examples. In the example below, quoted from Hoey (1983: 136), element (1) functions as the generalisation and elements (2) and (3) as examples.

(1) Maps and architects' models, although both types of iconic model, are very different in a number of important respects.

(2) For example, a map will only contain ....

(3) While architects' models, on the other hand, will be limited to include ...

The Preview-Detail pattern consist of an element which has the function of previewing what is to come next followed by the details which were previewed. These details may then function as previews of other details to follow. In the example below, quoted from Hoey (1983:159), element (1) functions as a preview and elements (2) and (3) as details:

(1) Gases act on metal in 2 ways - by adsorption and by absorption ...

(2) Adsorption is the term applied to ...
(3) Absorption is the term applied to ...

Crombie (1985a:61) describes another discourse macro-pattern which she refers to as the TRI pattern. This pattern consists of a Topic (T), which is outlined in the first element, followed by another discourse element-Restriction (R) - which narrows the topic down at a lower level of generality. This element, in its turn, is followed by an Illustration or Exemplification (I). In the example below (quoted from Crombie, 1985a:62) (1) corresponds to the discourse element Topic, (2) to Restriction and (3) to Illustration.

(1) Rare and unusual aspects of Hertforshire's history are the subject of a book to be released at Christmas.
(2) Hertfordshire yesterdays (Kylin Press, £7.50) is the work of Frank Ballin and Malcolm Tomkins.
(3) Among the tales retold are the landing of Vincenzo Lumardi, the first man to fly a balloon in England; the lighting of beacons with the news of the Armada; the building of Digswell Viaduct; and the happenings along the 'Highwayman's highway'.

In a way, the TRI discourse macro pattern introduced by Crombie (1985a) is similar to Hoey's (1983) General-Particular patterns since the same relation of generalisation-particularisation is implied in both. However, the elements which constitute the General-Particular patterns are of a more specific nature in the sense that they typically refer to discourse patterns which imply a generalisation (followed by particulars, ie, examples or details). The TRI pattern is more general and, I would think, encompasses the General-Particular patterns as well. In Crombie's terms element (1) of Hoey's example of a Preview-Detail pattern above would be the Topic and (2) and (3) would be Illustrations. Note that the element Restriction would be missing.[31]

3.3.3.3 The patterning of formal schemata

In my discussion above, I have looked into each type of formal schematic organisation (discourse macro-pattern and binary discourse value) separately. Nevertheless, as already mentioned, it is the patterning of both kinds of formal schemata, which accounts for the rhetorical organisation of the text as a whole. That is, discourse macro-patterns co-occur with binary discourse values (cf Crombie, 1985:57). In this sense, a binary discourse value can be detected within a discourse element, say, a Problem, but also across discourse elements, say, Problem-Solution. In the text below (quoted from Crombie, 1985:61), there are two discourse elements - Problem (1) and Solution (2) - which therefore constitute the Problem-Solution discourse macro-pattern, ie, at a higher level of discourse organisation. At a local level, ie, in terms of binary discourse values, the first proposition which constitutes the first discourse element (Problem) is related to the first proposition of the second discourse element (Solution) through a concession-contraexpectation binary discourse relation. This patterning thus shows that binary discourse relations can occur across discourse elements. The second discourse element is structured into the following binary discourse elements: Result-Reason, Condition-Consequence, Means-Purpose.

Concession-Contraexpectation
(1) The worst thing about having a dinner party is cleaning up the debris afterwards } Problem

Result-Reason
Condition (as Directive)-Consequence
Means-Purpose
(2) However, you don't have to worry about this particular problem any longer. Just 'phone us at DIALAMAID and we'll send someone round to do it for you. } Solution

It should be remarked therefore that the distinction between the two levels (ie, local and global) of discourse organisation is a matter of delicacy of analysis, ie, from a more general/global level to a more local level since one discourse element, as (1) in the example above, may function as a problem at the global level and as a member of a binary discourse relation of concession-contraexpectation at the local level. The relationship between the global and the local levels is thus a matter of increasing delicacy of analysis: from a general level of analysis to a more focussed analysis level which reveals the constituents of the discourse macro-pattern, ie, the binary discourse values and the systemic level resources which realise them. From the point of view of the reader, one may say that he may sometimes choose to focus on a more global formal schematic level and sometimes on a more local formal schematic level, depending on his purpose in reading a text.

A last point I want to deal with in this section is related to the possible constraints of one level of discourse organisation on the other, ie, whether there are implications of the local level for the global level of discourse organisation. Although this is a crucial area of research which would reveal the underlying structures of specific textual organisations, nowhere in the literature have these implications been clearly defined yet.[32] I would think that in principle certain kinds of binary discourse relations are more likely to occur in some discourse macro-patterns than in others. For example, a story schema is likely to contain Cause Effect binary discourse relations. Nevertheless, in this thesis no claims are made as regards the possible constraints of one level of discourse organisation on the other. I would like to draw attention however to the fact that the very experience of developing materials for a reading course, which is concerned with the rhetorical organisation of texts, may reveal the relationships between local and global formal schemata (cf 5.2.1.3 below).

3.3.4 Procedures of Interpretation

In trying to account for "textual competence" on the part of the reader (cf Beaugrande, 1980:23) in the interactive schema theoretic model of reading comprehension, being developed here, I have already considered the two types of knowledge (systemic and schematic) which are part of the reader's linguistic and communicative competence, respectively. Nevertheless, I still have to account for capacity, namely, the procedures associated with text interpretation, so that I can fully point out what is involved in discourse competence (cf 3.3.1 above).

The notion of procedures of interpretation seems to embody a feature typical of human social interaction. These procedures are at the base of the process through which we relate to each other, being therefore one of the sources of social organisation (cf Cicourel, 1974:37). In reading therefore we are carrying out an activity with which we are familiar in our daily life: meaning negotiation with our peers. This view thus seems to emphasise the relevance of the interactional context[33] in the process of language comprehension. It is in this way that the concept of meaning adopted in this thesis is process-oriented - an ethnomethodological view of meaning - ie, from the point of view of the participants in language communication (cf Sacks, 1974 and 1979; Heritage and Watson, 1979).

This position contrasts with the mainstream linguistics conceptualisation of meaning as product, idealised from context. Or, as Cicourel (1974:99-100) puts it, "the linguist [ie, the mainstream linguist] relies heavily on a conception of meaning based on syntax, while the ethnomethodologist addresses the intepretive abilities presupposed by the necessary interplay between competence and situated performance", ie, what has been referred to here as capacity.

In the light of the view of meaning above, it is clear that basically capacity comprises the contractual nature of communication expressed through the reader's and writer's effort after meaning, operating under what Grice (1975) has called the cooperative principle in the context of conversation, namely, interlocutors are normally aware of four basic maxims: be informative, sincere, relevant and clear. In reading, this same contractual agreement is said to exist between the reader and the writer: "there exists an implicit allowability contract governing the role of writers during discourse production and readers during discourse comprehension" (Tierney and LaZansky, 1980:606).

This contractual agreement on the part of the reader is manifested through procedures of interpretation which, in top-down/bottom-up directions, are used by the reader to relate his schematic knowledge (content and formal schematic knowledge) to the writer's, by projecting it on the writer's clues in the text. This process is what has been characterised here as schema negotiation between the reader and the writer.

While following this contractual agreement, readers are also imposing on the reading task what Tannen and Wallat (1982) and Cavalcanti (1983) have called interactive frames of interpretation[34] which orient readers' interpretation of the text. These interactive frames are determined by, among other factors, the reason why readers are reading a text, the type of text they are reading, the level of comprehension they want to have of a text, the readers' knowledge of the content and formal schemata in the text etc. That is, readers must be aware of within which interactive frame a given text is to be interpreted.[35]

It is therefore by subscribing to the cooperative principle and within a particular interactive frame that the reader actualises capacity, ie, interprets text by establishing common ground between his expectations and the writer's through what he (the reader) finds in the text.

3.3.4.1 The given-new contract

One of the ways through which the reader actualises capacity is by realising his presuppositions on the basis of the informational structure of the text, the so-called given-new contract (cf Clark and Havilland, 1977). In the same way that we comprehend the world on the basis of the background knowledge we possess (cf Piaget, 1954 and Neisser, 1976), we interpret new information in discourse utilising information already given or that the writer assumes us to have - old information.[36] In my terms, readers, by relying on the resources of the language system, interpret text by relating old content schemata (or schemata they already possess) to new content schemata and by interpreting a new proposition and a new discourse element (Problem etc.) in the light of a previous one.[37]

The given-new contract relies on certain resources of the language system (devices such as anaphora, word repetition etc.), which signal to the reader what the writer wants to be interpreted as new or given information. In the example below (quoted from Carpenter and Just, 1977b:124), the lexical item Killer, which is the agent of the verb murder, and the definite article cue the old information to the reader, ie, the terms The Killer are interpreted on the basis of the information the reader has foregrounded in his short term memory.

> It was dark and stormy the night the millionaire
> was murdered. The killer left ...

Like the cooperative principle (as expressed in Grice's (1975)four maxims), the given-new contract, as Clark and Havilland (1977:4) have argued,also embodies a maxim the interlocutors should ideally follow in the process of meaning negotiation: look for the relevant antecedent. This maxim is in fact what Carpenter and Just (1977a:219) have called the integrative nature of the reading process, which has been one of the features of the view of reading adopted here, ie, we interpret discourse in the light of previous discourse (cf 3.3.3 above).

It is relevant to note however that the reader in connecting what is new with what is given, ie, looking for the appropriate antecedent, is not simply making use of cohesive elements in discourse - simply relying on the resources of the linguistic system - by merely realising the linguistic signs as symbols. The reader is in fact imposing coherence on the text (cf 3.3.2 above), consequently activating appropriate content and formal schemata within which he can realise the linguistic signs as indices[38] (cf Widdowson, 1983). Otherwise, he would not be able to connect the lexical item "beer" with the phrase "picnic supplies" in the example below, quoted from Clark and Havilland (1977:21):

> Horace got the picnic supplies out of the car.
> The beer was warm.

As Sanford and Garrod (1981:101) make clear, the Clark and Havilland's given-new model, which is data driven, needs to be augmented with a concept driven process.[39]

3.3.4.2 Problem-solving heuristics

In line with the view of reading adopted here, which sees discourse comprehension as a problem to be solved by the formulation of hypotheses about the meaning of the text, procedures of interpretation can be ultimately defined in terms of general problem-solving: a kind of heuristics that readers employ. In fact, the same could be said about the activity of writing. The writer, subscribing to the cooperative principle, ie, given that he wants to convey meaning by activating appropriate schematic knowledge - both formal and content schemata - in the reader's mind, has to make choices from the linguistic system which will make his interaction with the reader more effective.[40] That is the problem-solution pathway that he has to follow. From the perspective of the reader, the problem-solution route is an interpretative one. He makes use of the clues the writer gives in the text to sort out the schemata, as it were, the writer is aiming at, in the light of the schematic knowledge he (the reader) approaches the text with.

Thus, the procedures which characterise discourse interpretation seem to indicate that reading is problem-solving. These procedures involve activities such as finding connectivity in discourse through the devices of the language system, making use of the predictability of the discourse structure by relying on the signals of the formal schematic structure of discourse, utilising the informational structure of language, making inferences, etc.

3.3.4.3 Text - openendedness

A last point I want to tackle in connection with the procedures of interpretation has to do with a view of reading as an open-ended act, as accounted for in the interactive schema theoretic model of reading developed here. That is, reading is an open-ended act, to the extent that: a) text interpretation involves the reader's schematic knowledge - his vital contribution to reading comprehension without which text understanding would be impossible; and b) schematic knowledge is by definition a result of the activation of the individual's cognitive structures, which reflect his past experiences in general (education, beliefs etc.) and in particular as a reader.

Nevertheless, text openendedness here does not imply that a reader can impose whatever interpretation he likes on a given text. Only a view of reading with an excessive emphasis on pragmatic interpretation would take that position (cf the pyscholinguistic model of reading in 3.2.2 above). Reading as an interactive communicative process implies a contractual agreement between the reader and the writer. Thus, the reader should be able to limit the kind and amount of schematic knowledge necessary to understand a text. This, I believe, is what Beaugrande and Dressler (1981:43) have called "the threshold of termination where the comprehension and integration of the text is deemed satisfactory". In this way, reading involves freedom of interpretation with respect for the contractual agreement between the participants in interaction, the reader and the writer. Certain kinds of texts however, literary texts, for example, admit a wider margin of possible interpretations than non-literary texts.[41] Scientific texts, for example, if interpreted too loosely might affect, say, the performance of an experiment. Thus, a reader must keep in mind the purpose (literary text, instructions, scientific text, etc.) for which the text was written, so that he can engage the correct interactive frame and cooperate with the writer, as it were, in their effort after meaning.

Widdowson (1984c:223-225) however has drawn attention to the fact that, because of the non-interpersonal character[42] of the reader-writer interaction, since one of the interlocutors, so to speak, of the communicative act is always absent contrary to conversational interaction, the reader can more freely choose either to accept the writer's schemata as expressed in the text or to opt out and reaffirm his own. The former type of reading is what he has referred to as submissive and the latter as assertive. While I would agree that in principle reading could be strictly either submissive or assertive, normal reading involves a balance between submissive and assertive reading, ie, respect for the contractual agreement between participants in reading interaction: a process described here as meaning negotiation between the reader and the writer.

In brief, in the interactive schema theoretic model of reading comprehension advanced here[43], the reader, who was seen as a text analyst in the decoding model of reading (cf 3.2.1) and as a builder of the meaning of the text in the psycholinguistic model of reading (cf 3.2.2), is a participant in a co-operative interaction with the writer in the search for the meaning of the text (cf Kato, 1984:134).

In the remainder of this chapter I want to report on some empirical evidence in both L_1 and L_2 reading acquisition research for the interactive schema theoretic model of reading comprehension I have argued for here.

3.4 Empirical evidence for the interactive schema theoretic model of reading comprehension

This section has a twofold objective. The first is to provide empirical evidence for some of the constructs of the model introduced in this chapter. The evidence presented here is illustrative, for it focuses only on the studies more often cited in the area of schema theory and reading comprehension in both L_1 and L_2[44] reading research. The second objective is to reveal the main issues with which researchers have been concerned in this area and what their main findings are. Some of these issues have a direct bearing on certain aspects of the syllabus model to be developed in chapter 5.

It should also be observed that the empirical research carried out in this thesis (cf chapters 6 and 7) tried to validate, in the context of the classroom, some of the findings of the research to be reported in the next sections, which was conducted in laboratory conditions.

3.4.1 Evidence in L_1 reading comprehension

Research in this area appears to concentrate on three main issues: the psychological reality of schemata in reading comprehension, performance level in reading comprehension and schema use, and the effects of teaching schematic knowledge on reading comprehension.

3.4.1.1. The psychological reality of schemata in reading comprehension

Research into the psychological reality of schemata in L_1 reading comprehension can be divided into research on the use of content schemata and the use of formal schemata.

3.4.1.1.1 The use of content schemata

Much of the research into content schema use has centred on the relevance of the reader's cultural background knowledge of the content schematic area of the text in reading comprehension, ie, looking into schema use from a cross-cultural perspective. Research has shown that texts whose content schematic area corresponds to the readers' cultural background are more easily processed.

Schreck (1981) examined the relationship between content schemata and reading comprehension for 5th and 6th grade readers from 3 different American cultural groups (Hispanic, Black and White). His results show that familiarity with the cultural content schematic area of the text facilitates reading comprehension. Pickens (1982) did a similar study in which he used 6th graders from 3 American cultural diverse groups (Hispanic, American Indian and Anglo-American). He also found that culturally specific passages were comprehended significantly better. Another sort of research design (English readers reading and recalling North American Indian stories) has shown the use of cultural content schemata in reading by indicating that readers when asked to recall a text which did not correspond to their cultural background tend to alter the text in the direction of their own cultural background knowledge (cf Bartlett, 1932).

The use of content schemata, which do not involve cultural specific knowledge, has also been examined. Bransford and Johnson (1972) have shown that subjects find it difficult and sometimes impossible to understand a text when they cannot access its content schematic area if there are not enough clues in the text. They have shown that sometimes a title to the passage or a drawing make the content schema accessible and consequently the passage is understood.

Anderson, et al. (1977) have also presented empirical evidence for the use of content schemata in reading comprehension. In their experiment they used two written passages to which at least two different interpretations could be given. One of them could be interpreted as an escape or as a wrestling fight and the other as friends playing cards or as a rehearsal of a musical group. They had subjects from the physical education department and from the music department read these two texts. Their results show that the interpretations that each group gave reflected the use of content schemata corresponding to their backgrounds.

Carrell (1983b) investigated the role of three components of background knowledge as identified in the literature in L_1 reading comprehension: 1. context or no context (indicated by clues like title and picture preceding the text) facilitating top-down processing; 2. transparency or opaqueness of lexical items in the text (which provide clues to the content schematic area of the text) facilitating bottom-up processing; 3) reader's familiarity or not with the content schematic area of the text. Her results indicate that these three components affect the way native speakers read, understand and recall passages.

Beaugrande (1980) presents evidence through miscues in oral reading that subjects activate content schemata in the sense that miscues are signals of their predictions on the basis of the content schemata they have instantiated. For example, a subject reading a text about a rocket which was fired in the presence of generals read 'war' for 'roar' (cf Beaugrande, 1980:227). He also shows that subjects tend to add information to a text they read when asked to recall it on the basis of the content schema activated (cf Bartlett's experiment (1932) with culture specific content schemata above). When recalling a text about the launching of a rocket from a desert, they added information about the brightness of the sun in the desert, which seems to be evidence of schema use in reading comprehension.

3.4.1.1.2 The use of formal schemata

Research[45] here has looked into the use of formal schemata, more specifically, global formal schemata in reading comprehension. Mostly, research has concentrated on story schemata. Thorndyke (1977) and Kintsch, et al. (1977), for example, have found that stories which follow normal story schema organisation are better understood and recalled than when their story schema is presented to subjects in a disorganised way. Kintsch (1977) reports on an experiment involving American college students as subjects, who were asked to write summaries of the Decameron tales and of Indian stories they had read. His results show that the summaries of the Decameron tales were better. He claims that was due to the fact that the subjects had an appropriate story schema to project on those tales, which reflect the European-based story schema with which the subjects were familiar. Note that his findings provide evidence for a cultural relativist view of global formal schemata, namely, story schemata.

Hinds (1983b), looking into expository prose, has also found evidence for a relativist position. He had English and Japanese readers read texts with a typical Japanese expository formal schema - the so-called ki-sho-ten-ketsu - written in their respective native languages. His results have indicated that these texts were more difficult for English readers since they could not activate the adequate expository formal schema to interpret the text.

One should note however that there is evidence which supports a universalist hypothesis of story schemata derived from experiments based on recall from oral comprehension. Johnson and Mandler (1980) have claimed that some types of story schema seem to be universal. Mandler, et al.'s (1980) report that the recall among the Liberian subjects they used in their experiment was not different from American subjects when asked to retell the same American stories. They used European stories translated into the subjects' native language. This aspect of the experiment however, as Carrell (1983c:87) claims, has made their results doubtful since they have translated certain concepts in English into what is culturally meaningful for the Liberian subjects. This translation seems to affect the content schematic level and hence compromises their findings because they failed to distinguish between formal and content schemata. I will come back to the issue of the universality of schematic knowledge in 3.4.2.3 below.

3.4.1.2 Performance level in reading comprehension and schema use

Research has shown that good readers seem to make better use of schematic knowledge in reading comprehension than poor readers. Hansche (1981) investigated the relationship between 1st graders' reading ability and the use of formal schema, ie, story schema. She had 16 good and 16 poor readers create written and oral stories which were scored for the elements of story schemata (setting, initiating event, response, attempt, consequence and reaction) as in Stein and Glenn (1979). Her results show that good readers are more aware of story schemata than poor readers.

White (1980) examined 10 proficient adult readers and 10 non-proficient readers. Her research indicates that proficient readers seem to instantiate schematic knowledge earlier than non-proficient readers in the process of reading. She also argues that good readers were operating interactively but with emphasis on the top-down direction: they seemed to be paying attention to the overall text structure, ie, global formal schemata in my terms.

3.4.1.3 Effects of teaching schematic knowledge on reading comprehension

Research has demonstrated that the teaching of schematic knowledge before the reading task improves performance in reading comprehension.

Freedle and Hale (1979) have noted that 5 and 6 year olds have difficulty in understanding texts which contain an expository schema although these children have the ability to understand narrative texts. Their results however have shown that these children can acquire expository schema by being instructed to transfer their knowledge of narrative schema (story schema) to expository texts through having their attention drawn to the differences and similarities between both types of global formal schemata.

Ottinger (1982) has described the effects of teaching the Stein and Glenn (1979) story schema on the reading comprehension and story writing of American third graders. She found that her experimental groups did significantly better on the reading comprehension post tests. However, there was no significant difference between her control and experimental groups as regards the effects of the story schema taught on her subjects' story writing.

Singer and Donlan's (1982) experiment has shown that instructing readers (American 11 graders) how to pose questions about a story which were guided by the story schema (main character, goal, obstacle, defeat or success) can improve their comprehension of narrative prose. They have argued that this technique accounts for the fact that readers not only "need to have schemata but also need to learn how to use this knowledge" (1982:170), ie, readers may have the story schema but may not be using this knowledge while reading the story.

Finally, Gordon (1980) examined the effects of three different instructional strategies derived from schema theoretic notions of reading comprehension on the comprehension of narrative texts. Her subjects were 42 American 5th graders who were divided into three groups: group 1 received instruction to improve pre-existing content and formal schemata; group 2 was trained in the use of metacognitive strategies with the objective of improving ability to make text-based inferences and to relate content schemata to textual elements (the emphasis here was on content schemata) and group 3 was the control group, which received some differential instruction (literature appreciation). Her results show the superiority of the first group on reading comprehension performance and, consequently, the positive effects of instruction of schematic knowledge (both content and formal) on reading comprehension. This group outperformed not only the control group but also group 2 which received instruction only in content schema use. It should be observed that Gordon's study (1980) is rather different from the three other pieces of research I have reported on in this section, for it leads to more specific suggestions for methodology.

Next, I review some empirical evidence for the interactive schema-theory based model in L_2 reading comprehension.

3.4.2 Evidence in L_2 reading comprehension

As Carrell (1983a:29) posits, the amount of research on the role of schematic knowledge in L_2 comprehension is inferior to what has been done in L_1.

Research in this area has focused on four main issues: the psychologicial reality of schemata in reading comprehension, the difference in terms of text processing between L_1 and L_2 reading comprehension, the universality of content and formal schemata, and the effects of teaching schematic knowledge on reading comprehension.[46]

3.4.2.1 The psychological reality of schemata in L_2 reading comprehension

Research into the use of schemata in L_2 reading comprehension has also looked into both formal schema use and content schema use; however most of the research has concentrated on content schema use.

3.4.2.1.1 The use of formal schemata

Carrell (1984c) shows that formal schemata are also activated in L_2 reading comprehension. She asked two groups of ESL students (40 subjects in total at the intermediate level) of various native language backgrounds (Arabic, Spanish, Malaysian/Indonesian, Japanese, African (sic), Greek, Turkish, Chinese and Korean) to read two different types of stories - two followed the structure of a story schema and two others violated it, despite keeping the same content. Her results demonstrate that the stories which did not follow the story schema were poorly recalled, affecting thus reading comprehension. Also, she points out that the recalls of the group which read stories whose story schema was violated reflected the story schema rather than the input order. Her findings seem to provide evidence for the universality of story schemata (cf 3.4.2.3 below). Kintsch (1977), as seen in 3.4.1 above, nevertheless has taken a relativist view of story schemata.

Stanley (1984) conducted an exploratory study to see if non-native and native readers of English utilise the Problem-Solution discourse macro-pattern in reading comprehension. She asked 9 subjects (4 English native readers, 4 EL_2 readers and 1 EFL) to rank the quality of four summaries of two different texts. Her findings show that the summary which clearly corresponded to the Problem-Solution discourse macro-pattern was homogenously chosen as the best.

3.4.2.1.2 The use of content schemata

Research here has mostly focused on the effects of culture specific content schemata. P. Johnson (1982) analysed the effects on reading comprehension of previous knowledge of the content schematic area of a particular text. She shows that her subjects - advanced ESL students - could better recall a passage about a subject - Halloween - which they had culturally experienced. She also demonstrates that cohesive links are correctly understood when the reader makes use of appropriate schemata in comprehending a passage (cf the view of cohesion in 3.3.2 above as the effect of the coherence principle imposed on the text). Further, she points out that the activation of appropriate content schemata helps L_2 readers to cope with unfamiliar lexis. In another article, P. Johnson (1981), she has shown that the schematic knowledge of the text has more effect than its linguistic complexity level on the reading comprehension of her subjects (intermediate and advanced ESL students). They tended to have problems for reading unadapted texts (ie, not syntactically and semantically simplified) when they were not familiar with the cultural content schema of the text. However, the same was not true when comprehending a passage with whose cultural content schemata they were familiar. This supports my main thesis that comprehension performance is not simply a function of language proficiency and that schematic knowledge plays a major role in reading comprehension.

Likewise, Koh (1984) has shown that the ESL readers (Singaporean students) she used in her research performed better when reading texts whose content schematic area was related to their field of study,[47] independently of their systemic knowledge proficiency in English. Her results have clearly indicated that ESL readers with low systemic knowledge of English perform significantly better when reading texts with whose content schematic area they are familiar. Both the works of P. Johnson (1981) and Koh (1984) provide evidence for the interactive aspect of the model of reading presented above since they clearly account for the interaction between schematic and systemic knowledge.

Alderson and Urquhart (1983) have also examined the effects of content schemata specifically related to knowledge of an academic field on the reading comprehension of foreign students attending British universities. Despite acknowledging that their results were conflicting, they posit that their three studies confirm the effects of discipline-related content schemata in ESL reading comprehension.

Two other examples of the preponderant role that cultural content schematic knowledge plays as a factor in reading comprehension are the studies of Carrell (1981) and Steffensen, et al. (1979). Carrell (1981) had Chinese and Japanese advanced ESL readers read English translations of folktales from their own native culture, western European culture, and American Indian culture. Then she asked them to rate each text as to the degree of difficulty in understanding and to write down their recalls of each story. Her results showed that the degree of difficulty as judged by the subjects and ease in recall were determined by the cultural proximity of the text.

Steffensen, et al. (1979) had two groups of adult subjects from two different cultural backgrounds - Asian Indian ESL readers and Americans - read two personal letters written in English with similar formal schematic organisation and with controlled syntactic and rhetorical complexity but with different cultural content schemata -

one about an Indian wedding and another about an American wedding. Their findings show that subjects read faster and recalled better the text related to their own culturual background. Further, as in Beaugrande (1980) (cf 3.4.1 above), when recalling the text, their subjects tended to add information culturally relevant but which was neither found in nor inferrable from the text, ie, they modified the text in the direction of their own cultural content schemata. It is also relevant that despite the control on the rhetorical and syntactic structure of the letters, subjects could still recall the text corresponding to their cultural background more easily.

3.4.2.2 The difference in terms of text processing between L_1 and L_2 reading comprehension

The crucial point of research in this area has been to clarify whether L_1 and L_2 readers process text in the same way since the L_2 reader is faced with the problem of language competence ceiling which affects text processing. That is, the bidirectionality of L_1 text processing (top-down/bottom-up) cannot effectively occur.

Research findings are inconclusive. On the one hand, there is evidence for the view that L_2 readers process text with a bottom-up bias, ie, text-based processing, and on the other research shows that L_2 readers seem to be oriented in a top-down direction. It is not surprising, I think, that this is so since there are so many factors affecting text processing (namely, proficiency level, age, literacy/ oral orientation of society etc.)

Among those who present evidence for a bias towards a bottom-up direction in L_2 text processing are Carrell (1983b), Clarke (1979) and Cziko (1978). Carrell (1983b) found evidence that background knowledge affects native speakers' reading comprehension (cf 3.4.1.1 above). However, her results show that non-native speakers (66 advanced and 42 high-inermediate ESL learners) do not process text as native speakers do. According to her findings, neither contextual clues (top-down processing) nor textual clues (bottom-up processing) are effectively used. Further, familiarity with the content schematic area of the text affects only the recall of advanced students (contrary to Koh's findings (1984) in 3.4.2.1.2 above). Carrell's results suggest that ESL readers seem to be totally dependent on linguistic decoding skills, not utilising therefore processes which activate content schematic knowledge because of their lack of systemic competence.

Clarke's (1979) and Cziko's (1978) data have also revealed that L_2 reading comprehension is based on decoding skills because systemic competence places a ceiling on their reading skills. These two researchers were concerned with the application of the psycholinguistic view of reading to the L_2 reading comprehension process (cf Clarke and Silberstein, 1977). That is, basically the notion that good reading skills are reader-based (ie, they involve top-down processing).

These researchers argue that the good reading skills of the L_1 reader are not directly transferred to L_2 reading, for the restricted command of the systemic knowledge on the part of the L_2 reader causes what Clarke (1979) has called a "short circuit" in the good reader's system. Nevertheless, both Cziko (1978) and Clarke (1979) found evidence that the good L_1 readers still did better than the poor L_1 readers at the same level of L_2 systemic competence when reading an L_2 passage. That seems to show that something other than linguistic competence is operating, ie, good L_1 readers are activating schematic knowledge.

Another group of researchers however present results which suggest a bias in the top-down direction in L_2 reading comprehension: Steffensen et al. (1979), P. Johnson (1981), Carrell (1981), Koh (1984), whose works were reviewed in 3.4.2.1 above, and Hudson (1982).

Hudson (1982) set up an experiment to investigate the role of schematic knowledge in L_2 reading comprehension. More particularly, he was concerned with showing the effects of externally induced content schemata on L_2 reading and its relationship with the L_2 reader's linguistic proficiency level. Roughly, the same issue addressed by Koh (1984), although in her research design, content schemata were not externally induced but already part of the subjects' background knowledge. Contrary to Koh's results[48] (1984) which show that L_2 readers perform better when reading texts with whose content schematic area they are familiar, irrespective of their linguistic proficiency level, Hudson's findings (1982) reveal that content schema inducement had a stronger effect on the reading comprehension of his ESL subjects at the beginning and intermediate levels of linguistic proficiency. He posits that this seems to show that different levels of linguistic proficiency affect the ability to use schematic knowledge and that schema inducement can override the lack of systemic knowledge on the part of the reader. Hudson's results are clear evidence for the interactive model of reading argued for here: both modes of processing (top-down/bottom-up) need to be occurring interactively. I will come back to this point below.

Carrell (1984b) suggests five possible causes for this unidirectional bias especially in L_2 text processing: schema availability (ie, the reader does not possess appropriate schemata to interpret the text); schema activation (ie, failure in activating schemata because there are not enough clues in the text, for example); cognitive style (ie, some readers may be stimulus-bound in processing any bit of incoming information and therefore may have difficulty with concept-driven processing); skill deficiencies (both linguistic and reading skill deficiencies); and conception about reading (ie, some readers may have a conception of reading as a decoding activity imposed by the classroom situation, ie, meaning is in the text). However, what is apparent in her paper is that she is dealing with the problem at the level of individual differences which are true of both L_1 and L_2 readers. Further, the evidence she provides to support her points is derived from L_1 reading comprehension research. Therefore, although her research does not say much about the unidrectionality of text processing in L_2 reading comprehension, it indicates possibilities for explaining the existence of this unidirectional bias.

In general terms, if one allows for individual differences among readers, research has shown that for L_1 and L_2 reading comprehension to proceed adequately, both systemic and schematic knowledge have to be accessed consecutively. Consequently, the transference of the so-called L_1 good reading skills to the L_2 reading task minimally requires both systemic knowledge and schematic knowledge on the part of the reader and the capacity for procedural work.

In regard to the so-called "short circuit" detected in L_2 reading comprehension, it should be noted that the same "short circuit" may be said to occur, although in the opposite direction, in L_1 reading comprehension. Research (cf for example, Bransford and Johnson (1972) in 3.4.1 above) has demonstrated that L_1 readers cannot understand a text with which they have no difficulty in terms of systemic knowledge but whose content schematic area they cannot access.

It is also worth emphasising that Hudson's research (1982) presents evidence that schematic knowledge is more powerful in the reading comprehension process, for it can make up for the reader's lack of systemic knowledge. I believe that is related to the fact that activation of schematic knowledge involves a type of information processing which seems to account not only for how we understand written texts but also for how we learn and comprehend the world around us (cf 3.3.2 above). Or, as Beaugrande (1980:30) puts it, "The question of how people know what is going on in a text is a special case of the question of how people know what is going on in the world at all". It is on this cognitive basis that I want to propose that L_1 and L_2 reading comprehension are essentially the same[49], agreeing therefore in this aspect with the psycholinguistic hypothesis of reading universals[50](cf 3.2.2 above). This proposal actually underlies the syllabus model presented in chapter 5.

3.4.2.3 The universality of content and formal schemata

Some of the research reviewed above has already addressed this issue indirectly. Conclusions in this area are provisional since not enough contrastive research across languages has been undertaken.

As regards formal schemata, only story schemata have been more amply investigaged. Research (cf Carrell (1983c) and Johnson and Mandler (1980) above) has shown that at least in some languages story schemata is a universal. However, there is evidence (cf Kintsch, 1977 above) which demonstrates that a European-based story schema is different from story schema in non-European cultures, ie, evidence for a culture relativist position of story schema.

In the area of contrastive rhetoric, the position has also been in the relativist tradition. Kaplan (1966 and 1972) has argued that different languages or groups of language families seem to possess different general discourse structures. Although his formulation is intuitively appealing, his methodology of analysis, ethnocentric view of English rhetorical structure and geographical rather linguistic typological groupings of languages have been criticised (cf James, 1980 and Hinds, 1983a). Also, in the relativist tradition Hinds (1983a) examined a type of expository schema highly valued in Japanese (the Ki-shoo-ten-Ketsu) which has no equivalent in English.

Widdowson (1979c:24), discussing scientific discourse, nevertheless has postulated the hypothesis of a universal structure of scientific discourse. His argument is based on the fact that scientific discourse structure reflects the concepts and procedures typical of ways of doing science which are cross-cultural (cf in 3.3.3.2 the discourse macro-pattern of Problem-Solution as a reflection of the scientific inquiry and in fact of human cognitive processes). Evidence for his hypothesis has been found in Mage (1981) who compared scientific discourse in English and Romanian.

Therefore, as regards the issue of the universality of formal schemata, research is not conclusive. On the basis of the existing evidence however one could speculate that some discourse macro-patterns may be typical of groups of languages which share European culturual traditions. In this sense, cultures which share the traditions of, say, story telling and scientific inquiry as existing in the western hemisphere are likely to use the Problem-Solution discourse macro-pattern in texts which narrate stories or deal with scientific investigations.

With reference to content schemata, research (cf Alderson and Urquhart (1983) and Koh (1984) above) has shown that content schematic knowledge is not necessarily dependent on one's cultural origin since it can be related to knowledge of content specific areas, say, an academic field, what Widdowson (1979b:51) has called a sub-culture, which cuts across national boundaries. In this sense, content schematic knowledge may vary within the same culture and be stable across cultures, ie, speakers of a same language may have different kinds of content schematic knowledge whereas speakers of different native languages may have the same content schematic knowledge, at least when they share the same sub-culture.

3.4.2.4 Effects of teaching schematic knowledge on L_2 reading comprehension

Contrary to the amount of research into the effects of teaching schematic knowledge on L_1 reading comprehension, research in L_2 has been scarce. There is little empirical evidence of the effects of teaching schematic knowledge on L_2 reading comprehension performance. Research in L_2 reading comprehension, as shown above, has concentrated on empirically demonstrating that formal and content schemata are activated in L_2 reading comprehension and that they interact with systemic knowledge.

Carrell and Eisterhold (1983) and Johnson and Sheetz-Brunetti (1983) have looked into the implications of schema theory for ESL reading pedagogy but provide no empirical evidence for the effectiveness of the pedagogical insights they recommend.

Hudson (1982) however has looked into the effects of inducing content schemata in teaching L_2 reading comprehension. His results have indicated that content schema inducement improves reading comprehension and, further, content schema inducement can make up for the lack of systemic knowledge competence. Hudson (1982) has also tested three different kinds of activities to induce content schemata (pre-reading, vocabulary presentation and read-test-read-test activities). His research has shown that pre-reading activities, which included presentation of cue pictures, use of questions related to the pictures and students' self-generated predictions about the reading passage, have had a stronger effect on his ESL subjects' reading comprehension performance than the other two activities.

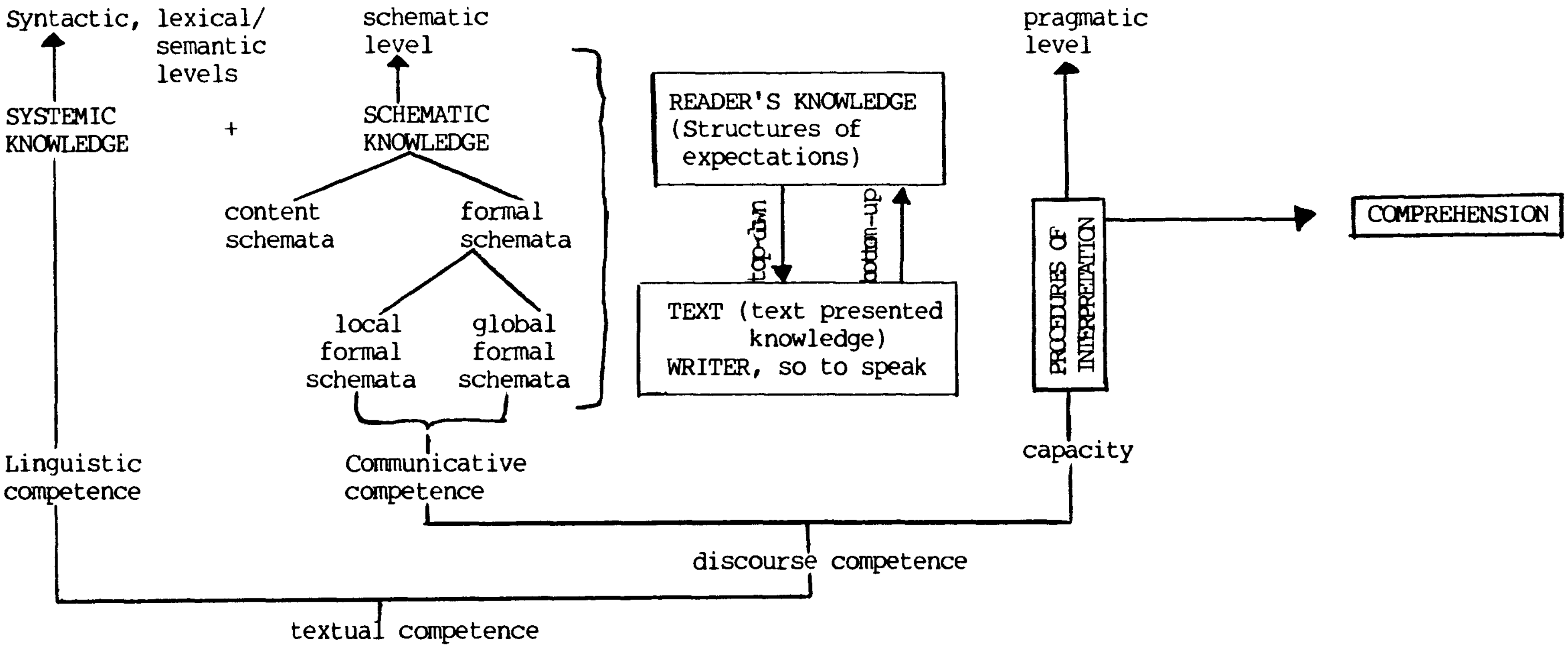
Carrell (1984a) reports on a study currently in progress, in which she is trying to find out if teaching formal schemata can facilitate ESL reading performance. Her research, like the other experiment reported above, centres on the effects of teaching a specific kind of schematic knowledge. No research, to the best of my knowledge, has been done on the effects of both types of schematic knowledge as part of a complete teaching programme in ESL/EFL reading comprehension. There have been interesting syggestions of approaches (cf Lima (1983), Figueiredo (1984), Baltra (1983); inter alia) to the teaching of reading in the area of ESP/EAP, which have taken aspects of the formal schematic structure into account. However, these authors were not concerned with demonstrating the effects of their approaches empirically. Also, these approaches assume systemic knowledge on the part of the learner-reader. As far as I know, the research project developed in this thesis is the first attempt to provide empirical evidence for the effectiveness of a comprehensive EFL reading comprehension teaching programme (a syllabus, cf chapter 5) in which both kinds of schematic knowledge are included and which assumes no systemic knowledge on the part of the learner-reader.

3.5 Summary

This chapter has examined the decoding, psycholinguistic, and schema theoretic models of reading and concentrated on the development of a model of reading comprehension which utilises the theoretical frameworks of schema theories and of the tradition of discourse analysis which looks into discourse as the actual process of meaning negotiation. According to this model (cf Figure 3.1 below), a reader utilises two types of knowledge in reading comprehension: systemic knowledge and schematic knowledge. Systemic knowledge corresponds to the reader's

FIGURE 3.1

AN INTERACTIVE SCHEMA THEORETIC MODEL OF READING COMPREHENSION


Syntactic, lexical/ semantic levels
SYSTEMIC KNOWLEDGE
+
schematic level
SCHEMATIC KNOWLEDGE
content schemata
formal schemata
local formal schemata
global formal schemata
READER'S KNOWLEDGE (Structures of expectations)
top-down
bottom-up
TEXT (text presented knowledge) WRITER, so to speak
pragmatic level
PROCEDURES OF INTERPRETATION
COMPREHENSION
capacity
Linguistic competence
Communicative competence
discourse competence
textual competence

linguistic competence whereas schematic knowledge (content and formal schematic knowledge) has to do with the kind of knowledge which prepares the reader for language use - his communicative competence. It is by relating schematic knowledge to systemic knowledge in bottom-up/top-down directions consecutively and dialectically that the reader processes the text. The reader in this process is interacting with the writer, so to speak, in order to negotiate the meaning of the text. This interaction involves the activation of the reader's capacity as a language user by adhering to the cooperative principle, by imposing an adequate interactive frame on the text and by utilising procedures of interpretation through which the text is actualised as discourse. Reading comprehension is therefore defined here as a procedural activity between the reader and the writer in their effort after meaning. In sum, textual competence, ie, what is required from the reader, involves both discourse competence (communicative competence and capacity) and linguistic competence.

This chapter concludes with a review of empirical evidence for some aspects of the model. The main findings may be summarised in the 7 points below:

1. Schematic knowledge (formal and content schemata) is activated in reading comprehension;
2. Schematic knowledge interacts with systemic knowledge in both L_1 and L_2 reading comprehension;
3. Better performance in reading comprehension seems to be related to the use of schematic knowledge;
4. Lack of systemic knowledge can be overridden by schematic knowledge;
5. Text processing in both L_1 and L_2 reading comprehension appears to be the same;
6. The universality of content and formal schemata is an issue to be considered with caution;
7. Teaching schematic knowledge seems to have positive effects on reading comprehension (although most evidence provided in L_1 reading comprehension research).

The reading comprehension model developed here together with the review of theories of syllabus design and foreign language learning to be undertaken in the next chapter provide the determining conditions on the intrinsic organisation of the syllabus model to be designed in chapter 5. Note however that these intrinsic conditions are informed by the analysis of the extrinsic conditions undertaken in chapter 2.

NOTES

1 Cavalacanti (1983:24) in fact points out that a survey of the reading literature shows that the interest in mental processes detected in the beginning of the 20th century becomes rare between the mid 30's and the later 60's. Research then focussed on the physical aspects of reading (eye-movement, for example) and on the product of reading derived from controlled experiments and measured through reading comprehension tests.

2 The influence of this view of the reading process has given rise to the development of the so-called phonic methods of reading instruction in native language teaching (cf Venezky, 1967:102). In teaching reading in a foreign/second language, the same influence has been felt: "...it is possible to read a second language for limited purposes superimposing the native language sound system upon it. This is sometimes taken to mean that the spoken language is not involved in reading". (Lado, 1964:131).

3 This view of reading as a cycle of hypothesis testing also accounts for the existence of erros (miscues in Goodman's terms, 1973a) in reader's comprehension. When reader's expectations are not confirmed, they have to be modified so that comprehension can proceed.

4 This conceptualisation of the reading act as a way of testing hypotheses about the meaning of a text derived from our background knowledge is in fact similar to the scientific operation: a scientist sees in the data he observes what his theory allows him to see. Or as Kuhn (1970:122) points out, "the scientist who embraces a new paradigm is like the man wearing inverting lenses".

5 Empirical evidence here is inconclusive, though (cf note 14 in 3.3.1 below).

6 Baltra (1982:94) however has argued that psycholinguistic theories of reading are useful from a pedagogical perspective and that they are not meant to be validated empirically as the literature reviewed by Stanovich (1981) does. He also argues that these theories are only inexact from a scientific positivistic point of view. Mistakenly to my mind, he finds reasons for the vagueness of these theories in the fact that they describe an inexact process. The fact that the reading process is inexact does not necessarily imply that the theory which accounts for this process has to be vague. Inexactness in reading comprehension models seems to be due to the fact that we still know very little about the reading process or to the fact that because the reading process is not totally open to investigation, intuition plays a major role in model construction. Nevertheless, I feel Baltra (1982) has a point if one takes the psycholinguistic model strictly as a pedagogical model.

7 Baltra (1983), for example, has designed an EAP reading course which is based on the psycholinguistic model of reading.

8 Schema theories of language comprehension have sprung from a body of research in both artifical intelligence and cognitive psychology which tries to account for the use of prior knowledge in comprehension in general.

9 I am using the label schema (cf Bartlett, 1932; Adams and Collins, 1979; Rumelhart and Ortony, 1977; inter alia) to refer to the organisation of knowledge in memory because that is the earliest term used and also the most commonly found in the literature. Nevertheless, different terms have been coined to refer to the same phenomenon or virtually the same phenomenon: frame (Minsky, 1975; Charniak, 1975; inter alia); scripts, plans and goals (Schank and Abelson, 1977); scenario (Sanford and Garrod, 1981); stuctures of expectations (Tannen, 1979); and event chains (Warren, et al., 1979).

10 This concept finds its way into modern psychology through the work of Bartlett (1932). However, its origin has been traced as far back as Kant (1781) (cf Rumelhart and Ortony, 1977, inter alia). This notion has also been influential in the work of Piaget (1954, for example) and of the American educators Bruner (1972 and 1977) and Ausubel (1960, 1963, 1968). It has also proved to be an extremely powerful construct in theories of language comprehension (Rumelhart, 1980; Rumelhart and Ortony, 1977; Beaugrande, 1980; inter alia) and of language production (Chafe, 1977; Tannen, 1979; inter alia). Recently, Widdowson (1983) has used the concept in his theory of language use and applied linguists have started to consider the usefulness of the concept in the teaching of reading comprehension in both native language and foreign/second language teaching (Singer and Donlan, 1982; Ottinger, 1982; Carrel and Eisterhold, 1983; inter alia).

11 Elements which are part of a particular schema do not have to be specified in the input to be called up in the process of comprehension, ie, they may be activated by default (cf Minsky, 1975). That is, they may be given in the schema the comprehender has stored in his mind, being therefore assumed by the comprehender. For example, to understand a wedding ceremony, the comprehender needs to activate a wedding ceremony schema, as it were, in his LTM. This schema is likely to contain the following default values corresponding to most wedding situations in the western world: a bride in white, a bridegroom in a suit, a bouquet, etc.

12 The concept of discourse used in this thesis therefore is different from certain traditions of discourse analysis (cf Grimes, 1975; Webber, 1980; inter alia) in which discourse implies a unit larger than the sentence, ie, discourse is simply a question of the size of the unit.

13 Note however, as discussed in 3.2.2 above, that in terms of the psycholinguistic model it seems more appropriate to refer to pragmatic interpretation without phonological recodification.

14 Empirical evidence in this area nevertheless is inconclusive. On the one hand, there are findings which support the position adopted here: alphabetic writing provides access to meaning without recourse to the sound structure of language (cf Makita, 1968; Nehr, 1984; inter alia). On the other, Meara (1984) has indicated that research on dyslexia has shown that English speakers may utilise two routes to access the meaning of English words: a phonological route and another which accesses the mental lexicon directly. He has hypothesised that access to the meaning of words via phonological interpretation may be dependent on the regularity or irregularity of each language's orthographic system. That is, Spanish, which has a simple regular orthography , may not require a lexical route from Spanish readers.

15 The choice between the pair of terms frames of reference/ rhetorical routines and content/formal schemata was arbitary.

16 Gumperz (1982) criticising the Hymesian notion of communicative competence seems to be pointing to the same concept of capacity as stated in Widdowson (1983). Gumperz argues that communicative competence has to be redefined to account for conversational involvement: "an ability to involve others in discourse". (1982:325).

17 In this connection, note Charolles' remark (1983) that the imposition of coherence on text as a general principle in the interpretation of discourse, as introduced here, is a reflection of the same principle operating in the interpretation of human actions. "It is impossible to see someone accomplish two successive actions without supposing that the two constitute a whole: we necessarily imagine that they form part of a single global intention justifying their having been undertaken one after the other" (Charolles, 1983:71).

18 This notion is being used here in accordance with the distinction drawn by Crombie (1985a) between binary and unitary discourse values. A binary discourse value is dependent on two related propositions or groups of propositions for its realisation. For example, the expression of the binary discourse value of Reason-Result requires two members, ie, "You cannot simply have a reason, you must have a reason for something" (Crombie, 1985a:4). Unitary discourse values however have to do with "segments of language .... which .... do not presuppose that there will be other segments to which they will be related in specific definable ways" (Crombie, 1985a:5). Unitary discourse values are rhetorical acts such as warning, threat, insult, etc. - what Searle (1969) calls illocutionary acts. They are nearly always non-linguistically marked within discourse and are identifiable in relation to the situational context in which they occur.

19 Winter (1977) lists examples of discourse markers. Vocabulary 1 (the subordinators of English): after, (al)though, as though, apart from-ing, as, as far as, as well as-ing, at the same time as, on the basis of that, because, before, by-ing etc. (cf Winter, 1977:14). Vocabulary 2 (the sentence connectors of English): accordingly, in addition, all the same, also,

alternatively, anyway, as such, as a result, thus, etc. (cf Winter, 1977:16). Vocabulary 3 (lexical items of connection): achieve, addition, affirm, alike, analogous, antithesis, attribute, basis, care, cause, method, etc. (cf Winter, 1977:20). The following examples below quoted from Winter (1977) demonstrate the use of these 3 types of discourse signals signposting the Cause-effect Relation (Means-Result) according to Crombie's taxonomy (1985b).

> By appealing to scientists and technologists to support his party, Mr Wilson won many middle class votes in the election.(vocabulary 1) (Winter, 1977:49)
>
> Mr Wilson appealed to scientists and technologists to support his party. He thus won many middle class votes in the election.(vocabulary 2) (Winter, 1977:49)
>
> Mr Wilson's method of winning so many middle class votes in the election was to appeal to scientists and technologists to support his party.(vocabulary 3) (Winter, 1977:51)

The last example below shows the use of systematic repetition as a connector of the Matching Relation. That is, "the substitute does (not) repeat the predicate (finds it hard) and the subordinate clause (so that...)" (Winter, 1977:53).

> The adult finds it hard to rephrase his problems so that they are amenable to solution by computer; the school boy does not.

20 Actually, this is one of the two reasons why I have preferred binary discourse values to unitary discourse values to account for discourse structure at the local formal schematic level. The other reason is that binary discourse values have been systematised (cf Winter, 1977 and 1982, and Crombie, 1985a and 1985b) and are said to have cross-linguistic validity whereas unitary discourse values or illocutionary acts have not been successfully identified (cf Levinsohn, 1983:226-278). Austin (1962), for example, has suggested the existence of as many as 10 000 illocutionary acts.

21 cf "In dealing with discourse values, we are dealing with language in use, with the significances that attach to units of language by virtue of the linguistic context (co-text) and situational context in which they occur" (Crombie, 1985b:2) and "A clause relation is the cognitive process whereby we interpret the meaning of a sentence or group of sentences" (Winter, 1977:5).

22 Note that these are just working definitions. For a more thorough characterisation of text types see Beaugrande (1980: 197-198) and Beaugrande and Dressler (1981:184-186). They define traditionally established text types in terms of their function in society, surface structure features, type of stored knowledge activated (frame, schema etc.), conceptual relations (local formal schemata in my terms). They acknowledge however the difficulties of systematising text types and determining

their characteristics, ie, "the type can hardly provide absolute borderlines between its members and non-members" (Beaugrande and Dressler, 1981:186). Also, see Faigley and Meyer (1983) for a review of different rhetorical theories of text types from classical rhetoric (Aristotle's Poetics) to present work in text linguistics.

23 With reference to this, see the research done by Faigley and Meyer (1983) to investigate the cognitive basis of the classification of texts into types (text typology). Their findings indicate that readers (familiar and unfamiliar with rhetorical theory) consistently identified text types.

24 Note however that research in story schema in the cognitive science and literary theory traditions seems to identify the Problem-Solution patten in terms of the goals (ie, problems to be solved) the actors of the narrative have to achieve and therefore by reference to the structure of the world. In other words, the Problem-Solution pattern is internally interpreted. In the discourse analysis tradition, the Problem-Solution pattern may be marked just in the textual world (through a discourse signal (cf note 29) and is identified from the perspective of the reader rather than from the point of view of the characters of the narrative. That is, the pattern is externally interpreted.

25 Whereas in the story schema research tradition the Problem-Solution pattern is said to be typical of story schema, in the discourse analysis tradition it is a general pattern detected across different text types. In this connection, Hoey (1979:60) has argued that the Problem-Solution discourse macro-pattern "can be applied effectively to discourse as disparate as fairy tales (...) and interviews".

26 No claim is being made here thatthis is an exhaustive list of discourse marcro-patterns in Enlgish. To my knowledge, these are the patterns which have been distinctively identified in the literature so far.

27 van Dijk (1977:245-246) has also drawn attention to the Problem-Solution pattern of discourse organisation: "At another level we have conventional organisation of discourse like introduction-problem-solution-conclusion, in which the structure also parallels that of the corresponding global speech acts, and of action (for example, problem-solving) in general".

28 The Problem-Solution discourse macro-pattern seems to be a reflection in written discourse of the organisation of adjacency pairs in conversational discourse in which a response move can be envisaged as a solution to the problem put in the first move of the exchange. As Schegloff (1982:72) claims, all forms of discourse are subvariates of conversation.

29 The elements (Problem, Solution, Topic etc.) of discourse macro-patterns are not identified simply by intuition (cf Hoey, 1979 and 1983) in the sense that a discourse element, say, the discourse element Problem, is detected as such because it reflects a real world problem. In fact, there is no need for a linguistic

problem to reflect a real world problem to be interpreted as such. Elements of discourse may be marked by resources of the linguistic system in the text itself in the same way that binary discourse relations may also be signalled in the surface structure of discourse (cf 3.3.3.1 above). In the example below, the element Problem is lexically signalled by the item 'trouble':

Situation	There is certainly nothing wrong with sun-bathing.
Problem	The trouble is that people sometimes overdo it and get sunburnt.

30 In this respect, also note Leech (1983:X): "A speaker, ... , has to solve a problem: 'given that I want to bring such and such a result in the learner's consciousness, what is the best way to accomplish this aim by using language?'"

31 As Crombie (1985a:62) says, "not ... every text of a similar discourse type [ie, discourse macro-pattern, in my terms] will necessarily have all these elements (and no others) in that order". In fact, discourse macro-patterns may occur in combination. For example, a TRI discourse macro-pattern may co-occur with a Problem-Solution discourse macro-pattern (cf Crombie, 1985a:64). Also, in creative writing, in particular, typical discourse macro-patterns are violated (cf Crombie, 1985a:78).

32 In this regard, note Lackstrom, Selinker and Trimble (1973) and Selinker, Trimble and Trimble (1976) in which a Rhetorical Process Chart which tries to account for the hierarchial rhetorical organisation of EST discourse in 4 levels is introduced. However, they make no claims as concerns the implications of one level of discourse organisation for the other, ie, the elements of one level which realise the other are not made clear. More recently, Beaugrande and Dressler (1981: 184) have suggested conceptual relations (local formal schemata, in my terms) which should be frequent in certain text types (global formal schemata, in my terms).

33 cf Cicourel (1974:140): "The interactional context, as reflexively experienced over an exchange, or as imagined or invented when the scene is displaced or is known through a text remains the heart of a theory of meaning". Also, note M. Buber (as quoted in Cook, 1985:7): "Meaning is not in us or in things, but rather between us and things it can happen".

34 The concept of interactive frames has been introduced by Tannen and Wallat (1982) to refer to guiding structures which the language user imposes on language interaction. These structures guide what participants in language communication choose to say on the basis of their schemata. Tannen and Wallat (1982) investigated interactive frames imposed on oral communication between a child, a pediatrician and the child's mother. Cavalcanti (1983) examined interactive frames in FL reader-text interaction.

35 It should be observed that although the type of formal schemata involved in a text, among other factors, helps to define the interactive frame to be imposed on the reading task, the two concepts, ie, interactive frame and formal schemata, are quite distinct from each other. An interactive frame has to do with the actual act of reading as a communicative enterprise whereas the concept of formal schemata refers to a type of knowledge that readers utilise in this enterprise.

36 Carpenter and Just (1977a:219) have called the given-new contract the integrative function of comprehension. New information is to be added to given information stored by the reader in his short term memory, so that he can make sense of the text by inferencing. The old information stands for what the writer believes the reader already knows and the new information for what the writer believes the reader not to be aware of (cf Chafe, 1970 and Halliday, 1967). The old information is what is "foregrounded" (Chafe, 1972:50): what is taken to be in the interpreter's mind.

37 This feature of reading comprehension and of the informational structure of language, on which both writers and readers operate, seems to be a reflection of a general characteristic of our cognitive structure. As Carrell (1984d:15) has claimed, "the given-new ... distinction may be a psychological universal in both first and second language processing".

38 Widdowson (1983:51-52) has drawn a distinction between the identification of the linguistic sign as symbol and its realisation as index. The linguistic sign is identified as symbol at the sentence level, ie, idealised from context, and it is realised as index when actualised by the language user in the context of occurrence at the discourse level.

39 In this regard, also note the criticism of Halliday and Hasan's (1976) notion of cohesion in 3.3.2 above.

40 The linguistic choices the writer makes provides evidence of this interactive effort on his part. In the same way that conversationalists "may formulate what it is they have been saying" (Heritage and Watson, 1979:123), the writer in his conversation with the reader, so to speak, provides formulations of what he has been discussing. Phrases such as "In sum ..." "What I am trying to say is ..." are typical of writers' reliance on the linguistic system as an interactional resource.

41 Eco (1981:51) has argued that the interpretation of literary texts is open : "Indeed, according to how he feels at one particular moment, the reader might choose a possible interpretative key which strikes him as exemplary of his spiritual state". In fact, novelists are commonly surprised at what readers make of their texts; "how odd it is to have, as author, such a clear picture of a book, that is seen so very differently by its readers" (Doris Lessing as quoted in Anderson, 1977:415). Also in this connection, note Barthes' distinction (1975) between "le scriptible" and "le lisible". Literary texts are "scriptible" in the sense

that the reader rewrites them as he reads exploring the myriad of meanings that the text offers: "The goal of literary work (of literature as work) is to make the reader no longer a consumer, but a producer of the text" (Barthes, 1975:4). However, texts which are only "lisible" require that the reader pursue the meaning the writer wants to convey: "The reader is left with the poor freedom either to accept or reject the text: reading is nothing more than a referendum" (Barthes, 1975:11).

42 Alderson and Urquhart (1984:229) in a postscript to Widdowson (1984) have criticised the view that reading does not have an interpersonal nature. They argue that a reader may be interpersonally affected when he considers the writer as an authority in the field he is reading. I think however that this still does not make reading interpersonal. The decision on whether to consider the writer as an authority or not does not depend on the writer's personal interference in the reader-writer interaction but solely on the reader's choice. In conversational interaction however interlocutors can personally influence the interaction. In this sense, the reader is in a unique position of freedom in the communicative interaction due to the non-interpersonal nature of reading in opposition to the interpersonal character of conversational interaction.

43 In the design of this model of reading, I have taken for granted aspects of a motor-perceptive nature (letter recognition, eye fixation, left to right sequencing etc.) which are also an important part of the reading process. However, because I am particularly concerned with reading in a foreign language, I have considered it unnecessary to include these aspects in the model since they are already part of the reader's repertoire as a reader in his native language.

44 L_1 here is equated with English as a native language and L_2 with both English as a foreign and a second language.

45 The research reported here is restricted to the use of schemata in reading comprehension. However, there is also evidence of formal schema use in both oral production and oral comprehension (cf Mandler; 1978, Mandler and Johnson, 1977; Stein and Glenn, 1979; inter alia).

46 Note that two of these areas of research (the psychological reality of schemata in reading comprehension and the effects of teaching schematic knowledge) were discussed in 3.4.1 above in reference to L_1 research in reading comprehension.

47 In agreement with Widdowson (1979b:51), I consider content schemata related to a field of study as cultural content schemata since an academic field may be taken as a kind of sub-culture which some human-beings share (cf 3.4.2.3 below).

48 A possible explanation for this difference in results could be the fact that these two researchers utilised different research designs. In other words, it could be that when schematic knowledge is induced, it is affected by the level of systemic knowledge proficiency.

49 I want to draw attention to the fact that the point I am making has to do with the objectives of L_1 and L_2 reading which must be the same. However, in respect to the actual processes of acquiring these objectives, L_1 and L_2 reading may well differ.

50 The position taken in this thesis therefore is one that sees the "language competence ceiling hypothesis" as complementing "the universal reading hypothesis". The general psycholinguistic reading strategies are universals, ie, they cut across languages; however their activation depends on a minimal language competence ceiling.

CHAPTER 4

DETERMINING THE INTRINSIC CONDITIONS ON DESIGN: FL SYLLABUS MODELS AND FL LEARNING THEORIES

4.1 Introduction

This chapter discusses theories of syllabus design and FL learning with the intention of revealing the aspects of these theories which jointly with the interactive schema theoretic reading model (henceforth, the ISTR model) put forward in chapter 3 delimit the principles which guide the internal organisation of the reading syllabus. In this sense, this chapter and chapter 3 systematise the intrinsic conditions on the syllabus which in conjunction with the extrinsic conditions examined in chapter 2 define the sorts of issues taken into account in the design of the syllabus here.

This chapter starts with a definition of the concept of syllabus as used in this thesis. Next it reviews syllabus design and FL learning theories and concludes with a discussion of the aspects of these theories from which the syllabus model advocated here takes its bearings.

4.2 The concept of syllabus

As the term syllabus has been used differently in applied linguistics[1], a definition of what the notion of syllabus entails in this thesis seems essential so that the parameters which will guide syllabus design here are made clear from the start. In this task three main distinctions have to be made.

The first has to do with a terminological distinction between the terms curriculum and syllabus since sometimes these two terms are used interchangeably (cf Yalden, 1983:18; Allen, 1984:61; inter alia). Curriculum is taken here as an instrument which accounts for the overall learning experience in an educational institution (kinds of subjects, number of subjects, time allotted to each subject, instructional objectives, discipline norms etc.) and is guided by philosophical, socio-political and administrative decisions (cf Allen, 1984:61).[2] Syllabus in this thesis however refers specifically to the total plan of teaching of a particular subject within a specific curriculum (cf Widdowson, 1984b:23).

The second distinction refers to an issue which has underlain much of the discussion about the nature of syllabus design: the goal or process orientation of the syllabus. That is, whether a syllabus should be essentially concerned with the goals of learning, ie, with what eventually has to be learned (the content of the syllabus) or with the actual process of learning (methodological solutions).

Traditionally, syllabus designers have taken a goal orientation. Wilkins (1976, 1981a, 1981b), Munby (1978), Crombie (1985a), Yalden (1983), Allen (1984); inter alia follow this position: "A syllabus ... is concerned with a specification of what units will be taught (as distinct from how they will be taught, which is a matter of methodology)" (Allen, 1984:61). And the definition of the content units of the syllabus has normally reflected paradigms in linguistics, themselves often affected by inquiries in psychology and sociology, which have modified applied linguists' views of the nature of language and of how languages are learned.[3]

Other applied linguists (Brumfit, 1980c; Johnson, 1979; Prabhu and Carroll, 1980; Breen and Candlin, 1980; Breen, 1984; Candlin, 1984; Stern, 1984; Widdowson, 1984b; inter alia), although they may differ in taking a strong or a weak version of the issue involved here, have argued for a process-orientation in syllabus design. Their view is that a syllabus has to account for the processes involved in language learning.

Those who have taken the weak version of this position (Brumfit, 1980c; Widdowson and Brumfit, 1981; Widdowson, 1984b; inter alia) have argued that a syllabus may be process-oriented and include content specifications. Basic to this view is the notion that the content units of the syllabus by themselves do not account for the capacity to use language in communication. Hence, it is paramount to design a methodology which activate learners' communicative abilities so that they can develop capacity in FL use. That is, this version argues that a syllabus which contains content specifications can be organised as a process-oriented syllabus through appropriate methodological devices.

Others (Candlin, 1984; Breen, 1984; Prabhu and Carroll, 1980; inter alia) have taken the strong version: a syllabus should contain no content specifications, at least not in the sense traditionally known, ie, graded linguistic content units to be internalised by the learner. In their view, a syllabus should have to do solely with the elaboration of methodological activities which provide for the adequate conditions for language learning. This position therefore is that a process-oriented view of syllabus disregards questions of linguistic content specification.

The underlying argument in the strong version is that, because we do not know how languages are learned, any attempt to design a syllabus containing linguistic units sequenced according to whatever criteria constitutes an intervention with the learners' built-in syllabus. Therefore, a syllabus should centre only on methodological solutions in order to create the conditions for the development of the learners' natural syllabus, through the activation of learners' communicative skills. It is in this sense that these applied linguists have argued that a syllabus should be process-oriented: it should exclusively have to do with the processes involved in language learning.

It seems to me however, as I will further argue below (cf 4.3.2 and 4.4), that taking a process-oriented view of syllabus design does not require us to think of a syllabus solely in terms of methodological devices. In this way, the position to be followed in this thesis corresponds to what I have called the weak version of the process-orientation to syllabus design. In theoretical terms, this decision is based on the assumption that language use in communication (cf the theory of language use in 3.3.1 above) involves knowledge of language both at the systemic (linguistic competence) and at the schematic levels (communicative competence) represented in the content units of the syllabus, and the capacity to realise language as use (procedures for producing and interpreting language) embodied in the methodological devices.

It should also be indicated that in this thesis I take a more comprehensive view of syllabus design by including methodology as one of the components of the syllabus. This is not to imply however that a process-oriented pedagogy depends on this view of syllabus design. Nevertheless, I think that to bring the content unit components and the methodological component together within one scheme is useful in two ways: 1. it gives coherence to the teaching programme as a whole; and 2. it adds to the central status that methodology should have in the elaboration of FL teaching programmes.
Such a position seems to be theoretically motivated (as seen in the previous paragraph) and coincides with the views of Stern (1984) and Brumfit (1980c): "a syllabus must offer a methodology which enables students to become comfortable in the negotiating process of language use" (Brumfit, 1980c:105).

So far I have made two distinctions in order to clarify the notion of syllabus as used in this thesis. The third distinction I want to make involves the issue of whether syllabuses are instruments for learners or for teachers. Corder (1973:288) posits that "the syllabus is a guide or set of instructions to the learner about how he is to devote his time and what he should direct his attention and energies to". He seems to imply therefore that syllabuses are instruments in the hands of learners: learners use syllabuses. Brumfit (1981b and 1984b), Yalden (1984), inter alia take a position which is supported in this thesis: a syllabus is "a device for teaching with, not for learning from" (Brumfit, 1981b:90).[4]

Syllabuses are therefore instruments in the hands of teachers, ie, they are essentially about teaching. That is to say that a syllabus reflects a particular syllabus designer's view of how a particular subject should be taught. A syllabus should be informed by language learning theory and/or learning theory in general, whose principles may have a bearing on the methodological component; however, because it is impossible to foresee when learning is taking place, a syllabus has to do with teaching and not with learning. It is nevertheless an attempt to match teacher's behaviour with learner's behaviour since "a learner's speed of learning is different from the teacher's speed of teaching" (Brumfit, 1981c:7).

In the light of the points raised in this section, a syllabus in this thesis refers to how the entire EFL teaching programme should be organised, which includes not only the linguistic content of the syllabus but also methodological issues and is an instrument to be used by teachers.

In this definition it is also implicit that teachers cannot do without a syllabus. A syllabus is a document which offers access to the guidelines that teachers followed in the classroom and therefore it functions as a frame of reference among syllabus designers, learners and teachers for further improvement. From a syllabus one can more easily point out what is going wrong and suggest new directions to follow. Without a syllabus one is walking blindfold (cf 4.3.2.2 below).

4.3 Syllabus design models[5] and foreign language learning theories

This section reviews existing syllabus design models and the foreign language learning theories implicit in them. I will first deal with goal-oriented syllabuses and then with process-oriented syllabuses.

As will become apparent in my discussion below in 4.3.1 and 4.3.2, however the distinction between goal-oriented syllabuses and process-oriented syllabuses has essentially a theoretical import. In practice, this theoretical distinction is not so clear. That is, even typical goal-oriented syllabuses, which concentrate on content unit specifications, include in their principles particular views of how content may be taught, graded etc, which are process-oriented criteria. Also, it will be seen that at least one type of process-oriented syllabus, which by definition centres on methodology, may be said to be making use of a hidden inventory of grammatical units, ie, a goal-oriented criterion (cf 4.3.2.1 below). The distinction therefore should be seen as a matter of the type of emphasis put on the design, ie, focus on the goals to be achieved or on the processes of learning.

4.3.1 Goal-oriented syllabuses

Foreign language syllabus models have traditionally had a competence orientation to the objectives of learning. That is, they have derived from a knowledge-based view of language in which language learning basically involves the acquisition of knowledge. Therefore, in goal-oriented syllabus learners are presented with pieces of language previously ordered by the syllabus designer, ie, the content units of the syllabus, and asked to internalise this knowledge somehow.

In this view, what matters in syllabus design is the nature of the types of competence involved in language learning expressed in the content units of the syllabus.[6] Although goal-oriented syllabuses suggest certain principles for teaching and grading the content units (ie, the learnability and teachability of linguistic items)— process-oriented criteria (cf 4.2 above), these principles are secondary to the main focus of attention in syllabus design: the definition of the content of the syllabus or the types of knowledge that need to be learnt (a goal-oriented criterion). Language learning in this view essentially involves either only linguistic competence or linguistic competence and communicative competence, which in fact embody the two types of knowledge activated in language use (cf 3.3.1 above).

In the discussion that follows I will examine four syllabus model types (structural, situational, notional and relational) in terms of their respective content units as a reflection of linguistic theory and of the corresponding assumptions about FL learning that these syllabuses imply. I will first look into the main claims that each type of syllabus makes and will subsequently criticise them.

4.3.1.1 The structural syllabus

Until the 70's, when linguists started to address issues not solely restricted to systemic level phenomena, syllabuses were mainly organised on the basis of grammatical structures. In fact, structural syllabuses are part of a very long tradition in FL teaching, which seems to have been inherited from the teaching of Greek and Latin. Correctly, I think, the assumption has been that by teaching the grammatical structures of a FL, a great part of what is involved in language learning has been accounted for. This view seems to be a reflection in FL syllabus organisation of a position prevalent in linguistics until the 70's, which defined linguistic knowledge in terms of what is involved in linguistic competence in the Chomskyan sense.

In addition to the long tradition of FL teaching on the basis of a structural syllabus, there are a few other reasons in favour of this type of syllabus. The main one, I think, is that while other types of syllabuses centre on partial descriptions of language (cf the notional syllabus, for example, in 4.3.1.3 below), the structural syllabus consists of units which have been systematised in different models of language description.

Also, the systematic organisation of language detected in grammar provides a way through which the items in the syllabus can be sequenced[7] in terms of their linguistic complexity (ie, a process-oriented criterion), as represented in a particular linguistic model[8], and in terms of their usefulness for the learner (ie, a goal-oriented criterion). Although this type of grading does not have any psychological validity in the sense that linguistic complexity is not the same as psychological complexity (cf Corder, 1973:308), it provides the syllabus with some sort of structure which may be useful in learning terms. As Bruner (1977:7) has shown, there is evidence from learning theory that human-beings learn by systematising, therefore teaching items which are part of the grammatical system can make learning more economical (cf Brumfit, 1981b:91). Further, because of the generative capacity of the grammatical system, learning this system represents great benefit in terms of investment. That is, learners are investing on a type of linguistic knowledge which can be deployed in various forms when they have to face real language communication.

The structural syllabus has however been criticised in respect of its goal and process orientation. As regards the goal orientation of the syllabus, criticism has been mainly voiced by Wilkins[9](1976, 1979a and 1979b). That is, he is basically concerned with the change of the content unit of the syllabus. His argument centres on the idea that a structural syllabus cannot account for communicative competence because its content involves language usage level units. What is required, he argues, is a syllabus where content units have to do with language use. A structural syllabus, he maintains, accounts for grammatical competence - form - but it does not account for meaning or what in his view is involved in communicative competence. Therefore, he reasons that a FL syllabus should have to do with the kinds of meaning categories that language users want to express. I will take up these points in 4.3.1.3 below,where I review his proposed alternative to a structural syllabus.

The other criticism normally levelled at the structural syllabus has a process-oriented perspective and has been put forward by those who argue for process-oriented syllabuses (cf Tongue and Gibbons, 1982; Prabhu and Carroll, 1980; inter alia). The issue is that, because grammatical grading is not based on findings from second language acquisition research, which would determine the so-called natural syllabus, it constitutes interference with the language learning process. In fact, this same argument has been used against all kinds of goal-oriented syllabus by those who advocate a process-oriented syllabus (cf 4.3.2 below). However, since the area of second language acquisition research has not yet provided representative evidence which could orient FL syllabus design, teaching from a structurally graded syllabus still finds strong support in the literature (cf Brumfit, 1981b; Widdowson and Brumfit, 1981; Paulston, 1981; inter alia), particularly in view of the three points mentioned above, namely, the principles of economy and investment in learning and the long language teaching tradition based on structural syllabuses.

In this connection, Widdowson and Brumfit (1981:202-203) have argued that linguistic description cannot account for linguistic complexity in terms of language learning because it never claimed to take learning processes into consideration. They point out however that structural syllabus grading intuitively reflects "the discourse function of the formal items". That is, structural grading in their view seems to be, to some extent, based on a functional view of language. By determining that the pattern "This is a pen" comes before the pattern "The pen is on the table" in the units of a structural syllabus, the syllabus designer is using functional criteria in the sense that one needs first to identify what one is talking about (the topic), then locate it for the interlocutor and next comment on it. The items however are presented as sentences, ie, as examples of language usage and not as utterances, ie, language use level units. What is missing therefore are methodological devices which teach grammatical items as a resource for meaning so that usage may be realised as use. Simply changing the nature of the content unit of the syllabus - a goal-oriented criterion - as Wilkins (1976 and elsewhere) has suggested - cannot account for the realisation of language as use. I will come back to this position below in 4.3.2,where I discuss process-oriented syllabuses.

In the next section,I want to discuss the alternative to a structural syllabus represented by a situational or thematic syllabus.

4.3.1.2 The situational syllabus

Rather than organising the syllabus on the basis of grammatical structures - an intrinsic type of organisation (cf note 7 above) - a situational syllabus is said to be organised according to situational criteria - an extrinsic kind of organisation. The units of the syllabus are situations in which learners are supposed to function linguistically, ie, at school, at the airport etc. The connection between the units of the syllabus instead of being based on the intrinsic organisation of the language system, is derived from external criteria: situations in which learners are expected to need to use language. And the inclusion of linguistic items in the syllabus is determined by these particular contexts. For example, to use language in the context of an airport, learners need to learn particular lexical items (check-in, customs, boarding-card etc.) and grammatical structures (general polite forms of addressing people, of inquiring about timetables etc.) which are said to be typical of that context. In principle a situational syllabus could be organised in terms of tasks which will make learners use particular types of language in specific contexts (cf the procedural syllabus in 4.3.2.1 below), ie, a situational syllabus could be process-oriented. But traditionally this type of syllabus has been defined in reference to the types of language content typical of certain situations, ie, a goal-oriented criterion.

An interesting contribution of the situational syllabus model to syllabus design theory is that it represents a first attempt to account for the fact that languages are not context free: learners' sociolinguistic needs have to be considered.[10] This type of syllabus therefore may be said to be concerned with both linguistic and communicative competence. As Wilkins (1976:16) posits, situational syllabuses have been designed because language acquired through a structural syllabus is not appropriate for situational needs. Since languages are context bound, the syllabus designer in this view must account for that in the syllabus itself, ie, he must predict the contexts in which the learner is going to use the language he is learning:

> "Structural syllabuses are based on the assumption that it is enough to grade the material from a linguistic point of view, ie, to look at the grading from the point of view of the structures and words to be taught. A purely contextually graded syllabus would approach the problem from a radically different point of view, ie, from the point of view of the situations which the pupils are to be taught to respond to" (Hill, 1967:115).

The main criticism of the situational syllabus has been levelled at the assumption of the inherent connection between language and context. That is, the assumption that the situation in which speakers find themselves will necessarily define what they want to express (cf Yalden, 1983:38). Only in ritualised language use (waitressing, praying etc.) can one predict the language to be used in a particular situation. Therefore, it seems inappropriate to take as the major criterion for designing a syllabus the selection of the types of language which are predictable in certain contexts since one cannot foresee what the language user wants/needs to say on the basis of contextual features.

It has been argued however that a situational syllabus may be useful in courses in which learning a phrase-book language is all that is required, ie, courses for tourists and waiters, for example, since in these courses there is a strict connection between context and language and a very limited sort of language or language-like behaviour is involved. In this respect, it may be said that underlying the conceptualisation of the objectives to be achieved through the situational syllabus, there seems to be a rehearsal principle (cf Widdowson, forthcoming). That is, language learning in this perspective involves accumulating language items which are typical of certain real life situations so that learners can use these items when these situations are encountered. Differently, the structural syllabus seems to be characterised by an investment principle (cf 4.3.1.1 above). That is, investing in learning the grammatical system which, due to its generative capacity, prepares the learners to face unmet situations where the acquired linguistic knowledge can be appropriately deployed (cf Widdowson, forthcoming).

Situational syllabuses have also been said to be structural syllabuses organised under specific situational contexts. That is, the grammatical criteria are still said to be paramount in the organisation of the units of the syllabus, at least in the manner through which situational syllabuses have been actualised by textbook writers (cf my point above about the possible task-based organisation of a situational syllabus). It should also be indicated, in this regard, that the units of a situational syllabus are not different from the units of a structural syllabus. In both types of syllabus they are language usage level units.

The concern with meaning in a situational syllabus by virtue of the emphasis on language and context is greater than in a structural syllabus; however, meaning is equally seen as being intrinsic to language. The units of the situational syllabus are also presented as sentence level units and the procedures which participants in language communication use to realise the functional values of these units are not taken into account.

Wilkins (1976, 1979a, 1979b), as pointed out above in 4.3.1.1, introduces a syllabus which in his view presents an alternative to the weaknesses of both a structural and a situational syllabus: a notional syllabus.

4.3.1.3 The notional syllabus

The basic argument of Wilkins' proposal (1976, 1979a, and 1979b) is that the content units of a FL syllabus should have to do with language units at the language use level, so that communicative competence could be accounted for in the FL syllabus as distinct from structural and situational syllabuses whose units are at the language usage level. Therefore, the central objectives of learning should no longer be the grammatical units of structural and situational syllabuses but units which have to do with language put to use in communication.[11] In this sense, a syllabus should be organised on the basis of what learners want language for (their conceptual/communicative needs) and of the kind of language necessary to express these needs. The content of the syllabus hence should be the notions and functions[12] learners want to express. In Wilkins' framework, these are the semantico-grammatical categories and the communicative categories, respectively. They correspond to the kinds of meaning categories which in his view account for language use and which determine the inclusion of grammatical forms in the syllabus. The point therefore is not that grammar is not handled in the syllabus but that it is subordinated to items at the language use level.

In this connection, Wilkins (1979a:82) has also argued that because a notional syllabus is organised in terms of the kinds of meaning categories that learners want to express, it guarantees a more immediate return in learning investment. Hence, he posits that it has a greater effect in sustaining motivation than syllabuses which emphasise the grammatical system.

Wilkins (1976) also claims that the notional syllabus, unlike structural syllabuses, is derived from a view of FL learning which more clearly reflects language learning processes, ie, a process-oriented criterion is involved here. Whereas a structural syllabus implies a synthetic approach to language learning - the learner is required to reconstruct the language presented to him by cumulatively putting together pieces of language - the notional syllabus, he argues, follows an analytic approach: the learner himself analyses the language he is exposed to as in native language acquisition. What is implicit here is that the syllabus designer does not analyse the language that is going to be presented to the learner since that is part of the learner's task.

In sum, a notional syllabus in Wilkins' perspective has the following main advantages over other types of syllabuses: 1. Language use is accounted for in the organisation of the syllabus itself by virtue of the nature of the content unit of the syllabus: notions and functions (ie, a goal-oriented criterion); and 2. The analytic language learning process implied in the syllabus more satisfactorily reflects the processes through which people learn languages (ie, a process-oriented criterion).

These main advantages of the notional syllabus have nevertheless been severely criticised (cf Brumfit, 1978; 1980c; 1981b; Widdowson, 1979e; and Paulston, 1981; inter alia). There are two issues here. The first has to do with the attempt to account for language use on the basis of the content unit of the syllabus. A basic misunderstanding in notional syllabus theory has been the fact that in trying to incorporate into the FL syllabus units which account for language use (illocutionary acts), Wilkins (1976) seems to believe that language use has been taken into consideration in syllabus design (cf Widdowson and Brumfit, 1981:205). Searle's (1969) description of illocutionary acts or unitary discourse values (cf note 18 in 3.3.3.1 above), which Wilkins' communicative categories reflect, are analytical constructs which have to do with one type of knowledge (communicative competence) involved in language use. However, language use, besides involving two types of knowledge (linguistic and communicative competence), also comprises the procedures utilised by participants in language communication (cf the notion of capacity in 3.3.1. above) in producing and interpreting language.

In this sense, the recovery of propositional meaning and illocutionary meaning from language is a result of a process of meaning negotiation between participants in language communication: an ethnomethodological rather than an analytical construct (cf 3.3.4 above). Contrary to this view, meaning in the Wilkins' perspective is intrinsic to language. That is, in his framework propositional meaning is dealt with by reference to the grammatical system (his semantico-grammatical categories) and illocutionary meaning by reference to units which describe the social function of utterances (communicative categories) The procedures which we utilise to recover both propositional and illocutionary meaning from language (capacity) are not taken into account. It is in this way that Wilkins has mistaken the description of language use for use.

Thus, the claim that the notional syllabus accounts for language use in the very organisation of the syllabus can be refuted since syllabus content - no matter whether it involves grammatical structure (linguistic competence) or notions and functions (communicative competence) - by itself cannot account for what is involved in language communication. Only methodology by taking into consideration the procedures which realise language as use can account for this capacity. Like the structural and situational syllabuses, a notional syllabus is also concerned with a view of language as knowledge-based, therefore it cannot account for the procedures which realise language in use - a process-based view of language.

The second criticism concerns the concept of an analytic approach to FL learning. Despite Wilkins' claim that the notional syllabus relies on the learner's cognitive capacity to analyse the language he is exposed to in order to internalise linguistic data - an analytic view of FL learning, the notional syllabus is in fact also based on a synthetic view of FL learning. The syllabus is specified on the basis of notions and functions - as learning objectives - previously analysed by the syllabus designer. As K. Johnson (1979:193) notes "Wilkins' semantico-grammatical categories" and his "categories of communicative function" represent "one attempt to itemize use for the purpose of syllabus design". Therefore, as in a structural syllabus, the view of learning implied in a notional syllabus also requires that learners internalise language previously analysed by a linguist or a syllabus designer (cf Brumfit, 1978:80). That is, the notional syllabus also presents items to be stored in the mind by the learner. It consists of an inventory of notional categories, which in fact,because they do not seem to be systematisable,[13] relate to learning procedures still less satisfactorily than structural syllabus items since, as seen above in 4.3.1.1, learning from a system is more economical.

In addition, Wilkins (1976:57) contradictorily, I think, seems to imply that because the notional categories are realised by grammatical forms, grading in the notional syllabus should deal with these grammatical forms.[14] In other words, Wilkins seems to recognise that a notional syllabus is neither essentially different from a grammatical syllabus[15] nor implies a different view of FL learning.

The difference, as Widdowson (forthcoming) has argued, has to do with how the goals to be achieved through the syllabus have been conceptualised. While in a structural syllabus the objectives are based on an investment principle, ie, learning the grammatical system (cf 4.3.1.1 and 4.3.1.2 above), in a notional syllabus, just like in a situational syllabus (cf 4.3.1.2 above), the goals to be achieved are grounded on a rehearsal principle. Although in a situational syllabus the content units are different from a notional syllabus, ie, they are language usage level units like those in a structural syllabus, the same rehearsal principle is implied in the situational and in the notional syllabus. In a notional syllabus the content units are at the language use level but are taught as a language repertoire for communication which is to be accumulated by the learner and used when necessary, ie, a rehearsal principle is involved.

Notional syllabuses nevertheless have been said to be useful in LSP courses because of their specifications in terms of learners' behavioural needs (cf Brumfit, 1981b and Morrow, 1981). Morrow

(1981:52) has actually argued that the most interesting contribution of notional syllabuses has been to encourage "us to look carefully at the reasons why learners are in fact learning a foreign language". It should be remarked however that LSP courses may run the risk of developing language-like behaviour, which is very different from what is involved in actual language use. In other words, by emphasising language which is adequate to fulfil certain behavioural needs, an LSP course may be preparing learners to use particular types of language in very restricted contexts, ie, learners who can perform within certain limits (cf the rehearsal principle above) but who cannot get involved and involve others in discourse. Therefore, it is not the type of structures, words, notions and functions that are central but the capacity to realise them in producing and interpreting language.

4.3.1.4 The relational syllabus

The last type of goal-oriented syllabus model I want to examine is the relational syllabus, as presented in Crombie (1985a). This type of syllabus represents an attempt to re-address the issue of the content unit of the syllabus and it aims at providing for an alternative to a structural syllabus on the grounds that the notional and situational syllabus did not succeed in such a task.

The linguistic basis for the relational syllabus is derived from a particular tradition of research in discourse analysis, started out by Winter (1977 and 1982) and followed up by Hoey (1979 and 1983) and Crombie (1985a and 1985b) (cf 3.3.3.1 above). Basic to this view of discourse is the notion of binary discourse values or local formal schemata (cf 3.3.3.1 above), which is a reflection in discourse structure of the human capacity to understand the world in terms of relational values (temporal and causal relations, for example), which are therefore said to be conceptual universals.[16] These binary discourse values underlie the construction and interpretation of coherent discourse.

The central units of a relational syllabus are hence binary discourse values. Like a notional syllabus, a relational syllabus aims at accounting for language use in FL syllabus design. However, a relational syllabus has the advantage of concentrating on units - binary discourse relations - which have been reasonably well systematised (cf Crombie, 1985b), whereas a notional syllabus has been criticised for, among other reasons, trying to account for language use in terms of unitary discourse values, ie, the categories of communicative function in the notional syllabus, which have so far proved to be unsystematisable (cf 4.3.1.3 above).

Another favourable aspect of the relational syllabus is the fact that it does not try to underplay the importance of the grammatical component in language learning as the situational and notional syllabuses do. The syllabus is discourse motivated but the resources of the language system which realise discourse are clearly accounted for. That is, the relational syllabus tries to mediate between the language use and language usage levels. Also, although the relational syllabus, like the notional syllabus, is a projection from grammar, it involves a different level of projection. While in the notional syllabus the notional units are confined to the sentence level, in the relational syllabus the units, ie, binary discourse relations, imply not only relations between clauses but also a projection from the clause level into larger texts. It implies in fact a relation between form and function (discourse value). Such a projection is not provided for in the notional syllabus.

To my mind, these three aspects above, namely, systematisibility of the units of the syllabus, the fact that systemic level units are accounted for in a discourse motivated framework and the type of projection made possible through a relational syllabus from the clause level to larger texts are the main general characteristics of the relational syllabus.

Essentially, a relational syllabus consists of binary discourse relational frames (eg Reason-Result, Condition-Consequence etc.) under which systemic level items (syntactic, lexico-semantic, and phonological items) are inserted, ie, systemic level units are brought into the syllabus through a discourse-oriented framework. The claim is that by making these binary discourse relations central, the syllabus is accounting for a view of language as coherent discourse, since these are the discourse units which language users engage with in both discourse production and interpretation by assigning different values (communicative function) to systemic level units in relation to the linguistic context (ie, interpreting one proposition in the light of a previous one) and to the situation in which these units occur. Meaning therefore is recovered from the use of language in communication and is not seen as a property of units at the systemic level. Whereas in the other syllabuses discussed above meaning is intrinsic to language - a property of the systemic level or language usage level units - in the relational syllabus meaning is seen as being made possible in the communicative process. The syllabus then focuses on the type of units (binary discourse values) which language users project on language usage level units to realise language in use.

It should also be noted that this syllabus "moves beyond the idea of a syllabus as being constituted necessarily of an inventory of discrete units only" (Crombie, 1985a:8). Because structural and notional syllabuses centred on language units in isolation, they were virtually confined to a view of syllabus construction as the elaboration of inventories of units, ie, they comprise a paradigmatic type of syllabus organisation in the sense that the units of the syllabus reflect the paradigmatic relationships in the structure of language. The relational syllabus nevertheless reflects how the items of the syllabus are organised in discourse structure, which is expressed in a relational syllabus through a series of relational frames, ie, it comprises a syntagmatic type of syllabus organisation in the sense that the units of the syllabus embody the syntagmatic relationships of actual discourse.

As regards the grading of the units of a relational syllabus, Crombie (1985a:85 and 88) suggests that criteria that have been normally associated with structural syllabuses may be used. These will determine the order of inclusion of specific relational frames and particular relational cues (discourse markers, in my terms) in the syllabus. These criteria may involve, for example, contrastive difficulty when designing a syllabus for learners with the same NL. That is, relational frames and cues which have similar realisations in the NL should be introduced earlier (ie, a process-oriented criterion is involved here). These principles therefore take into consideration the learners' contribution to the learning task by relying on the sort of linguistic knowledge that learners already have. She also suggests that the ordering of the units may be defined in LSP courses on the basis of the purpose for which a language is being learned (ie, a goal-oriented criterion). This purpose may determine the amount of emphasis to be put on particular relational frames and cues and may also define their order of precedence in the syllabus.

Also, because binary discourse values reflect conceptual universals (cf note 16), this type of syllabus implies a particular view of FL learning. That is, learners have to acquire specific ways of realising these binary discourse values,with which they are familiar in their native language, through the systemic level units of the FL they are learning. It is therefore a view of language learning which relies on the knowledge the learner already brings to the classroom: "The new is presented as far as possible in the context of the existing" (Crombie, 1985a:83). This view is consistent with cognitive learning theories (cf Neisser, 1976; Bruner, 1976; inter alia).

The relational syllabus, I think, represents the best attempt to date to account for language communication in terms of the units of a FL syllabus, since the central units of the syllabus seem to reflect the elements of discourse used in both language interpretation and production, ie, what in the framework I introduced in chapter 3 accounts for communicative competence or the type of knowledge which prepares language users for language communication: schematic knowledge.

However, like the other syllabuses reviewed so far, a relational syllabus does not consider what is involved in the notion of capacity (cf 3.3.3.1 above). Since a relational syllabus is mainly concerned with issues connected with the content unit of the syllabus, it cannot in fact account for capacity which is a process-oriented notion. Only methodology can take that into consideration. The relational syllabus thus embodies a static concept of syllabus, as do the three other syllabuses discussed above: a view of syllabus organisation as content rather than as process. Again here, as in the notional syllabus, description of language use was taken for use (cf 4.3.1.3 above). It is true however that because the units of the relational syllabus (binary discourse values), unlike the units of the other goal-oriented syllabuses, have to do with a view of language as a process of meaning negotiation, they provide the potential for the design of classroom methodology. Yet, that is not the same as accounting for language use in syllabus design.

It should also be observed that the only example offered in Crombie (1985a:92-94) of materials designed as a possible realisation of a relational syllabus does not differ, I think, from other kinds of materials elaborated under the guidance of other types of syllabuses. To my mind, this is a further hint that in order to take into consideration language use in FL syllabus design, it is not enough to have, as the central content units of the syllabus, items which prepare the reader for language use. The central issue is of a methodological nature.

Having discussed goal-oriented syllabuses, which essentially have to do with the eventual objectives of learning, this thesis then moves into the analysis of syllabus types which focus on methodology, ie, process-oriented syllabuses.

4.3.2 Process-oriented syllabuses

Two main aspects characterise process-oriented syllabuses: a process view of language learning and the assumption of a certain ideology. The first aspect is related to a particular view of how languages are learned: language acquisition is seen to be an interactive process between participants in discourse. Languages are acquired as a result of this interaction in the process of meaning negotiation rather than learned in a step by step sequence of knowledge accumulation as in goal-oriented syllabuses. What is required from the language learner is "a capacity for communication" rather than the acquisition of a "repertoire for communication" (Breen, 1984:51). Therefore, the emphasis here is on methodological procedures which facilitate language learning. Also, as already mentioned in 4.2 above, a syllabus which specifies and grades the content to be learned is said to be an interference with the learner's natural syllabus since no sequencing of whatever kind has any psycholinguistic validity.[17] Therefore, a syllabus rather than containing content specifications should consist of methodological activities which make language acquisition possible. In this sense, the process of language communication as embodied in methodological solutions should have priority over content specifications. Content should be negotiated between learners and teachers on the ongoing process of language acquisition in the classroom.

The other aspect has an ideological import, namely, syllabuses, as traditionally conceived, are imposed on learners and teachers by educational institutions. In other words, those who are more directly affected by the syllabus have no say in its elaboration. According to this view therefore traditional syllabuses are said to be used to support the status quo whereas syllabuses which are conceived as a challenge to the established world order are negotiated between teachers and students in the classroom (cf Candlin, 1984:33). In this view, the whole process of syllabus design rather than occurring before the teacher actually enters the classroom, ie, a prospective syllabus, should be transferred to the classroom situation. That is, the entire syllabus should be negotiated in the classroom: "A negotiation, if you like, both of knowledge and of the procedures for engaging that knowledge" (Candlin, 1984:30). The syllabus then loses the character of being prospective, ie, of pre-establishing what is going to happen in the classroom,and becomes a retrospective instrument on which what occurred in the classroom is recorded.

The position described here as process-oriented can be associated, albeit in different ways,[18] with Newmark (1966), Allwright (1977), Tongue and Gibbons (1982), Prabhu and Carroll (1980), Breen and Candlin (1980), Breen (1984), Candlin (1984), inter alia. As far as I know, the only attempt to fully implement a process-oriented syllabus, ie, to test it in the classroom rather than simply discuss it as a theoretical possibility is represented by Prabhu and Carroll's (1980) procedural syllabus[19] (cf 4.3.2.1 below). It should be remarked nevertheless that the procedural syllabus differs from other kinds of process-oriented syllabuses since it is prospective rather than a retrospective syllabus and it centres on the learning activity rather than on the learner's contributions to the learning task (ie, his expectations, needs, decisions as to what and how will be taught etc.)as in Breen and Canlin's (1980) "negotiable syllabus" proposal (cf 4.3.2.1). These are the two types of process-oriented syllabuses this thesis will deal with now.

4.3.2.1 The procedural syllabus

In agreement with the first aspect presented above in favour of a process-oriented syllabus, namely, psycholinguistic motives for non-intervention, Prabhu and Carroll (1980), Prabhu (1982, as quoted in Brumfit, 1983), and Prabhu (forthcoming), arguing for a procedural syllabus, point out that what a syllabus should contain are tasks and activities in which learners need to use language in order to solve particular problems[20] and which will trigger off the natural syllabus that every learner possesses. That is, the view of language learning implicit in this syllabus is derived from the Chomskyan notion of language learning as organic growth. The human mind is predetermined for language acquisition and what is necessary for a language to be acquired is that the environment provide triggers which facilitate language acquisition. The tasks of the procedural syllabus are then the triggers. In this connection, it should be observed that the procedural syllabus focuses on the development of grammatical competence and not of communicative competence: the development of grammatical competence in a language is seen as a result of learners' involvement with meaning-focused activity, as represented in the problem-solving tasks. In other words, one kind of cognitive process (problem-solving) activates another (language acquisition).

This type of syllabus therefore presupposes an inherent connection between cognitive operations and language acquisition. Grammar is in this way introduced in the syllabus covertly[21] through the problem-solving tasks that learners have to solve. No use is therefore made of explicitly language focussed activities since "Evidence of language acquisition is valid only when it arises spontaneously (ie, in the course of performing a task)" (Prabhu and Carroll, 1980:1). The emphasis is thus on the learning process: learners are expected to internalise the rules of the language from the linguistic data they are exposed to and engaged with through the tasks they have to carry out.

The proponents of the procedural syllabus also favour a delayed start in production on the basis that production is preceded by the development of reception and when learners are ready for production, they will do it of their own accord. Despite the fact that there is no guarantee in this sort of methodology that the basic linguistic items will be covered, the proponents of the procedural syllabus argue that if learners are able to learn certain parts of language structure without being deliberately taught, they will learn what is missing when it is necessary since "they have learnt to learn language structure in the process of having to use it" (Prabhu and Carroll, 1980:12)

According to the procedural syllabus, to replicate true language acquisition in the classroom, no syllabus with content would be required since "genuine acquisition of language demands activity which selects its own (much less predictable) language inputs and outputs" (Prabhu and Carroll, 1980:1). Therefore, the procedural syllabus is concerned with what is to be done in the classroom (methodological issues) and not with the specification of syllabus content. The syllabus then, as already seen, consists of problem-solving tasks (reading and interpreting timetables and maps, for example). These tasks are normally preceded by pre-tasks performed by the teacher in conjunction with the class, which function as rehearsals for the development of the tasks themselves. After the task is carried out by the learner, his performance is evaluated not in terms of his use of English but in terms of whether he has solved the problem presented in the task.

The grading principles in the syllabus are said to be expressed in the sequencing of the problem-solving tasks listed in the syllabus in terms of "a commonsense judgement of increasing complexity, the latter tasks being either inclusive of the earlier ones or involving a large amount of information or an extension of the kind of reasoning done earlier" (Prabhu, forthcoming) in such a way that the tasks continually offer a challenge to the learner. In other words, grading here seems to involve some kind of impressionistic criteria for determining the cognitive complexity of the task. This type of sequencing provides the syllabus with a type of extrinisic organisation (cf note 7).

In Prabhu and Carroll's view (1980), the procedural syllabus may then be said to be a syllabus in so far as it contains sequentially graded tasks which: a) teachers will make recourse to ~~to~~ teach the FL; b) ensure progression in the course; and c) provide a means for comparing classes (cf Prabhu and Carroll, 1980:1).

Three main points have been made against the procedural syllabus:

1. The notion that the procedural syllabus implies no grammatical content syllabus

While one may say that there is no evidence in the procedural syllabus of progression derived from grammatical categories, since grading in the syllabus is said to be derived from the sequencing of the tasks, there is a possibility that the pre-task phase which involves a rehearsal of the activity of the main task may become a stage where linguistic items are taught for their own sake (cf Brumfit, 1983:13 and K. Johnson, 1982:140-141). In other words, a hidden grammatical syllabus (ie, a goal-oriented criterion) may be involved in the procedural syllabus.

2. The efficiency of spontaneous learning in formal language learning contexts

This criterion in fact affects the argument for a process-oriented syllabus as a whole. One could question whether in a formal language learning situation spontaneous learning of the kind advocated in a process-oriented syllabus is the best alternative. The expectation that the learner will derive the linguistic rules from the data he is exposed to and engaged with seems to be unrealistic. The FL classroom sets up conditions very different from the informal language learning situation, where immersion in the language is on a level that will never be attained in the classroom. Furthermore, since, as already pointed out in 4.3.1.1 above, there seems to be evidence that human-beings learn by systematising (cf Bruner, 1977), it is plausible to suppose that the overt teaching of items which are part of a system may be helpful to the learning task. The proponents of the procedural syllabus, I think, would reply to this criticism by arguing that because the problem-solving tasks the syllabus centres on are structured, they provide ample opportunities for learners themselves to systematise by getting involved with language. Although I see that this could be a possible counter argument to my criticism, I think that when one is concerned with language learning in formal contexts, the advantage of overtly emphasising system still stands.

3. The feasibility of the procedural syllabus in the real language classroom

Even if one agrees with the theoretical principles (view of language learning etc.) which have informed the design of a procedural syllabus, one still has to consider the feasibility of implementing such a syllabus in the classroom. A process-oriented syllabus of this kind would certainly pose problems to a tradition of FL teaching which has centred on goal-oriented syllabuses.[22] Also, other aspects such as time constraints, teachers' level of language proficiency, learners' expectations etc. would make the feasibility of the procedural syllabus, and for that matter, of any process-oriented syllabus questionable. So far there is little information available on how feasible the syllabus has been in the classroom. However, it has been indicated that the sort of proficiency level in English required from teachers to use this syllabus is unrealistic in the very areas where the syllabus has been used so far (cf Brumfit, 1983:11). In fact, because a procedural syllabus, due to its own nature, exherts no control in terms of the kinds of language inputs necessary to carry out the tasks listed in the syllabus,and because classes are to be conducted in the target language, it demands a target language competence level from teachers which is unrealistic in most parts of the world.

As regards the greater effectiveness of the procedural syllabus over traditional ones, not enough evidence is available. As far as I know, the only attempt to evaluate the effects of the procedural syllabus is Beretta and Davies' (1985). These authors conducted a quasi-experimental evaluation of the procedural syllabus by comparing the performance on proficiency and achievement tests of pupils taught through this syllabus (meaning-focused teaching) with that of pupils taught through a structural syllabus (form-focused teaching). Their findings, albeit tentative (due to the limitations of their experimental design),show that pupils taught through a meaning-focused approach can develop grammatical knowledge and that some of the groups which followed this treatment did better than structural syllabus groups on some of the proficiency tests.

If in the future, as Brumfit (1983) points out, there is firm evidence that groups taught through a procedural syllabus perform better, the analysis of the sequencing of the materials used might reveal "a developmental sequence of language structure". If no such a sequence is found, it would be interesting to examine how the so-called cognitive complexity of the tasks interacts with language acquisition. Hence, rather than revealing the acquisition order of language structure from conducting formal experimental research, the results of the Bangalore project may reveal such order from the classroom experience. Also, the procedural syllabus in common with other kinds of process-oriented syllabus by virtue of its focus on FL teaching methodology may disclose particular kinds of methodological devices which can be incorporated into other kinds of syllabuses. But, generally speaking, the main contribution of the procedural syllabus is still to be demonstrated.

4.3.2.2 The place of negotiation in syllabus design

Prabhu and Carroll (1980) and Prabhu (forthcoming) as well as other advocates for a process-oriented syllabus (cf Tongue and Gibbons, 1982; Newmark, 1966; inter alia) seem to be mainly guided by psycholinguistic reasons, as discussed above. In addition to psycholinguistic motives, Candlin (1984) and Breen (1984) have indicated ideological grounds for their claims for a kind of process-oriented syllabus, which, for ease of reference, I am going to call here the negotiable syllabus.[23] What is typical of this kind of syllabus is that both content and methodology are negotiated in the classroom with learners. It is in this sense that Candlin's (1984) and Breen's (1984) process-oriented syllabus may be seen as having a focus on the learner, ie, on his involvement with syllabus planning, whereas the procedural syllabus, as seen above in 4.3.2.1, centres on learning or on the sorts of tasks which make language acquisition possible (also cf 4.3.2 above).

As discussed in 4.3.2 above, Candlin and Breen's claims are based on the idea that syllabuses which are designed before the teacher enters the classroom constitute an imposition on those who should have more to say about its design: teachers and students. Prospective syllabuses in their view are conceived as instruments to make those directly involved in the learning process conform to the status quo. Therefore, if syllabuses as educational instruments are to challenge the established order, they have to be negotiated in the classroom between the teacher and students. In this view, syllabuses are restricted to a retrospective role since they constitute the teacher's record of what happened in the classroom.

In my view of a syllabus as a plan of the total teaching process (cf 4.2 above), a negotiable syllabus is equal to no syllabus at all. While I agree that a FL syllabus should cooperate with an educational process geared towards the questioning of the status quo,[24] I see no reason why only a negotiable syllabus meets this requirement. In fact, in the Brazilian context because of the alienated attitude toward ELT on the part of teachers and pupils (cf 2.2.5.2 above) as a reflection of the pervading dominant ideology in the country, a syllabus solely negotiated between teachers and pupils would be more likely to be responsive to the established order than to be an instrument to challenge it (cf 2.3). Therefore, depending on the social context, a negotiable syllabus may be contradictory with the very ideological principles which underlie it.

The approach to syllabus design to be used in this thesis, by considering the extrinsic conditions as determining factors on design, accounts for part of the role that teachers and pupils should play in the negotiating process of syllabus design. Yet, these conditions are disregarded when they contradict the socio-political stand towards education taken in this thesis (cf 1.4 and 2.1 above). In this way, the syllabus to be advanced here is a negotiated syllabus but not a negotiable syllabus. In addition to ideological motives, I also see pragmatic and theoretical reasons against a negotiable syllabus.

It seems highly unlikely that a negotiable syllabus would be adequate to most ELT situations all over the world. On practical grounds, a negotiable syllabus in which both content and methodology are decided in the classroom seems to be impossible. Firstly, because the tradition of FL teaching and of teaching in general would make it very difficult for teachers to accept such a syllabus. This type of syllabus would place demands on the average teacher which he cannot fulfil. It would in fact generate a state of insecurity among teachers and students. Secondly, there are practical considerations such as time constraints, discipline problems, the influence of prospective syllabuses followed in other subjects, formal final exams etc. which cannot be disregarded and which make the use of a totally negotiable syllabus unfeasible. Furthermore, this type of syllabus would make comparisons among classes - a source of syllabus improvement - very difficult, if not impossible, since teachers would be working from whatever syllabus was negotiated in a particular classroom.

I would also like to argue that a fully negotiable syllabus is theoretically undesirable. If teachers operate from a prospective syllabus of whatever theoretical orientation, they are more likely to perceive what went wrong than if they work in total darkness at the sole mercy of content and methodology negotiated in the classroom. As Bacon (quoted in Kuhn, 1970:18) has pointed out, "Truth emerges more readily from error than from confusion".

It is necessary to make the point however that in arguing against process-oriented syllabuses in the form of a procedural and a negotiable syllabus above, I am not underplaying the importance of the methodological component in syllabus design. In fact, the definition of the concept of syllabus (cf 4.2) which guides this work explicitly includes methodology as part of the task of the syllabus designer. I am however arguing against two aspects which are symptomatic of the strong version of the process-orientation to syllabus design (cf 4.2 above). The first is the assumption that the design of a syllabus which is process-oriented precludes content specifications and solely requires methodological devices. And the second is the reduction of syllabus design to a negotiable activity in which content and methodology are decided in the classroom, ie, in my perspective a claim which can be refuted on ideological, pragmatic and theoretical grounds.

I am not denying that there must be negotiation between syllabus desingers, teachers and learners during the syllabus design process and actually in the implementation phase. In fact, a syllabus should be open for improvement, adaptation to make it suit specific classroom conditions, teachers' different interpretations of the syllabus guidelines, and different methodological solutions. In other words, negotiation is essential and a continual enterprise in the actual implementation of the syllabus in the classroom (cf 8.3 below). What I am denying nevertheless is the fact that syllabuses as prospective principle-based guidelines in the form of content specifications and types of methodology, from which teachers can operate, criticise and improve their teaching, are unnecessary.

4.4 Conclusion: Theoretical principles for the EFL reading syllabus model

I want now to put together the points from the syllabus models and FL learning theories reviewed in 4.3 above, which will inform the design of the EFL reading syllabus in the next section.

In accordance with the theory of language use which orients this thesis (as perceived in the ISTR model developed in chapter 3 and in the criticisms levelled at syllabus models in 4.3 above), language use includes both knowledge and behaviour. That is, language use comprises systemic knowledge (linguistic competence), schematic knowledge (communicative competence) and the ability to realise language in use (capacity). Therefore, language use involves aspects both of a knowledge-based and of a process-based nature. Hence, syllabuses which essentially concentrate solely on a knowledge-based view of language - no matter what sort of content unit they emphasise (structures, notions, binary discourse relations etc.)[25] or solely on a process-view of language (methodological devices) miss the point that if one is to account for language use in syllabus design both types of knowledge (systemic and schematic) and the procedures through which these two types of knowledge are related to each other in discourse production and interpretation have to be taken into consideration.

Thus, if a syllabus is necessary and useful (cf 4.2 and 4.3.2.2 above), a syllabus designer should address issues connected not only with the content units of the syllabus but also and, above all, with the methodology through which these units will be activated in language learning. In this sense, a syllabus designer should offer guidelines not only in terms of content but also in terms of types of methodology so that he accounts for the procedural aspect of language communication in the syllabus itself.[26]

It seems useful to incorporate into the content of the syllabus the knowledge accumulated through research in the area of discourse analysis. This type of knowledge seems to provide for the formal schematic level units which facilitate discourse engagement. I have in mind in particular research done on binary discourse relations and discourse macro-patterns (cf Winter, 1977 and 1982; Hoey, 1979 and 1983; and Crombie, 1985a and 1985b) which in fact, as indicated in 3.3.3.1.2 above, is extremely useful in the reading syllabus to be developed in chapter 5, for it approaches discourse from the perspective of the language interpreter.

On the other hand, the sort of legacy provided by the tradition in language teaching of a structural syllabus type has provided for grading criteria derived from the complexity of the grammatical system, as represented in a particular linguistic model, which seems to be still useful today. In fact, even more recent proposals of syllabus models, namely, the relational syllabus and the procedural syllabus, seem to make use of the grammatical system either in an explicit way (cf the relational syllabus) or in a covert way (cf criticism of the procedural syllabus in 4.3.2.1 above).

Further, from the perspective of a process-oriented view of language, research into the procedures involved in language use (cf 3.3.4 above) seems to be helpful in informing methodological solutions which activate linguistic competence and communicative competence. In Widdowson's words (1982:2), "the strategies that language users employ in the discourse process should provide us with a description of activities to be incorporated into course content". In fact, as pointed out in 4.3.1.4 above, the role of the methodological component seems to be central since only methodology can account for the procedures which characterise language put into use in communication. And although the learner is familiar with these procedures in his native language, he still needs to learn to use them through the medium of the FL. Therefore, centering on the methodological component, one is giving full credit not only to the importance of a view of language as a process of meaning negotiation, but also to the contribution that the learner can bring to the learning act. He already knows a lot about language communication in his native language.

What is apparent in this position therefore is that it is not enough for a learner to acquire knowledge. He also has to learn how to use this knowledge. This, I believe, is what Widdowson and Brumfit (1981:300) have equated with the need for "teaching a capacity to behave". It is also on the basis of the same sort of argument, I think, that: Bruner (1972) has called attention to the fact that one learns physics by learning how to be a physicist, ie, learning "physics (or mathematics or a language or some other subject) is not something that one 'knows about' but is, rather, something one 'knows how to'"

(Bruner, 1972:109); Kuhn (1970:109) has argued that

> "In particular, our most recent examples show that paradigms provide scientists not only with a map but also with some of the directions essential for map-making. In learning, a paradigm the scientist acquires theory, methods and standards together, ..."

and Singer and Donlan (1982:170) in reading research have empirically shown that it is not enough for a reader to have schematic knowledge: he also needs to know how to apply this knowledge. These claims seem to indicate that knowledge acquisition and use of this knowledge are interdependent.

Accordingly, the reading syllabus I will advocate here tries to replicate the process of language use, ie, the reading comprehension process, by making the methodological component central. Methodology, as far as possible, should reflect the procedures reader-learners employ while using language, ie, reading. In this way, the methodological component should transform the static product of the linguists' description into the processes involved in language use, ie, meaning negotiation.

This view of learning how to read ensures that the skill of reading will outlast the language course since one is acquiring language (knowledge) through learning the capacity to use this knowledge in reading. I will return to this point in the next chapter.

The sort of approach to syllabus design I will take therefore tries to reconcile tradition (represented by goal-oriented syllabuses) and innovation (represented by process-oriented syllabuses) in syllabus construction theories. It is however informed by a particular theory of language use (cf Widdowson, 1983). Basically, this approach is process-oriented since it centres on the procedures which participants in discourse interaction use (as embodied in the methodological component), but it also involves content specifications.

In K. Johnson's (1981) terms, syllabus design in this work tries to account for what is systematic in language learning (systemic and schematic knowledge) expressed in the content units of the syllabus through what is non-systematic - the procedures which characterise language interpretation, as expressed in the methodological component of the syllabus.

4.5 Summary

This chapter has examined syllabus models and FL learning theories with the purpose of putting forward the theoretical principles which jointly with the interactive schema theoretic reading model developed in chapter 3 constitute the intrinsic conditions to be taken into consideration in the design of the syllabus in chapter 5.

Both goal-oriented syllabuses, which emphasise content specifications (structural, situational, notional and relational syllabuses), and process-oriented syllabuses, which essentially involve methodological activities (the procedural and the negotiable syllabus) and the FL learning theories they imply were reviewed. The chapter has argued in ideological, theoretical and pragmatic terms for a view of syllabus design which includes both content specifications and methodological guidelines. In this sense, the point was made that the elaboration of a syllabus comprises the specification of content units in a process-oriented framework. That is made possible by making central in the syllabus the methodological component which reflects the procedures used in language communication (in the case in point, reading) and which activates the types of knowledge involved in language use, as embodied in the content units of the syllabus.

NOTES

1 cf Tongue and Gibbons' (1982:63) and Brumfit's attempt (1984b: 2 and 3) at putting together the different views of the concept of syllabus as held by different applied linguists.

2 In this thesis, issues at curriculum level, which provide input for the syllabus developed here, are discussed in 1.2, 2.2.1 and 2.2.2 above.

3 Note, for example: a) the notional syllabus which is a reflection in syllabus design of a development from a linguistics of language usage (a syntactically based grammar) to concerns in linguistics with sociolinguistic aspects in language communication (cf 4.3.1.3 below); and b) the relational syllabus as a reflection of recent interest in discourse analysis (cf 4.3.1.4 below).

4 It is in this way, I think, that Crombie (1985a:9) claims that "Language learners are unlikely to come into direct contact with syllabuses" and Bruner (1977:XV) argues that "A curriculum [a syllabus, in my terms] is more for teachers than it is for pupils".

5 The syllabus models to be reviewed in this section are essentially connected either with content specification or with methodological solutions, ie, either goal oriented-or process-oriented, therefore the phrase syllabus design models is not used here in the comprehensive sense of my approach (cf 4.2 above).

6 Crombie (1985a:x) in fact has implied that progress in syllabus design theories is directly linked with research on the content unit of the syllabus.

7 This type of syllabus organisation has been referred to by Brumfit (1981b:90) as intrinsic organisation, ie, when "the items in the syllabus are elements of a system", in opposition to a type of organisation dependent on external elements (extrinsic organisation), which provide the syllabus with an apparent cohesion: a story line, tasks etc.

8 Note therefore that linguistic complexity is a matter of the conceptual model of language description being used. That is, no absolute measure of linguistic complexity exists.

9 Wilkins (1976), as discussed in 4.3.1.3 below, has also criticised structural syllabuses from a process-oriented perspective.

10 Note therefore that some kinds of ESP syllabuses by virtue of their emphasis on the learners' linguistic needs in particular contexts (for example, ESP courses for air-traffic controllers) can be said to be a type of situational syllabus.

11 This proposal reflects concerns in linguistics and in the philosophy of language with the semantic rather than the syntactic component of language (cf Fillmore, 1968, for example)

and with the way people use language in communication (cf Hymes, 1972; Halliday, 1970; Labov, 1970; Searle, 1969 and Austin, 1962).

12 The concept of notions and functions was developed in connection with the Council of Europe Project in FL education as a response to the needs of permanent education (cf van Ek, 1975; Trim, 1973 and Wilkins, 1976).

13 See in this connection the notion of unitary discourse values in notes 18 and 20 in 3.3.3.1 above.

14 cf "the criteria developed ... for the operation of grammatical and situational syllabuses are ... no longer the first consideration but still help determine which linguistic form should be taught at a particular stage" (Wilkins, 1976:57).

15 In fact, in his reply to Paulstons's (1981) and Brumfit's (1981b) criticisms, Wilkins (1981b:100) surprisingly posits that "teaching based on a notional syllabus may not always prove to be as radically different from structural language teaching".

16 cf "Although there may be differences between one language and another in terms of which relational values are distinctively encoded, it would appear to be the case that, except for a few peripheral relational distinctions which may be specific to a particular language or a particular group of language, relational values are conceptual universals" (Crombie, 1985a:83).

17 cf Allwright (1977) (as reprinted in Brumfit and Johnson, 1979: 170): "any attempt at control would be most likely to interfere with learning, since, given the state of our knowledge in such matters, it could only be appropriate by chance".

18 I am generalising here. In fact, some applied linguists (Prabhu and Carroll, 1980; Prabhu, forthcoming; inter alia) who advocate a process-oriented syllabus have claimed no ideological reasons and have actually argued for a prospective syllabus.

19 The procedural syllabus is being experimented with in south India in what has come to be known as the Bangalore project.

20 Note that the procedural syllabus could be said to be a type of ESP syllabus in which the situations/tasks in which learners need to use language by focussing on meaning are defined in the interest of the learning process (ie, a process-oriented criterion), whereas in ESP the tasks are defined in terms of what learners need language for (ie, a goal-oriented criterion), as in situational syllabuses (cf 4.3.1.2 above).

21 In this respect, note that in A. Brumfit and Windeat's Communicative Grammar (1984) a similar approach is used to teach grammar, ie, a connection is also made between problem-solving tasks and language acquisition. In their approach however the connection between problem-solving and grammar is overtly made. That is, problem-solving activities are clearly used to teach grammar.

22 Brumfit (1983) has argued that it is likely that teachers who are taking part in the Bangalore project have reverted to structural procedures, which are part of a long FL teaching tradition in India.

23 The label negotiable syllabus has been coined here as a way of differentiating Candlin's (1984) and Breen's (1984) conceptualisation of a process-oriented syllabus from Prabhu and Carroll's (1980) procedural syllabus, which implies no negotiation.

24 In this regard, see the view of libertarian education which informs this thesis in 1.4 and 2.2.1 above.

25 In this connection, it should be observed that some applied linguists (cf Yalden, 1983; Allen, 1984; Bell, 1981; inter alia) have argued for a type of syllabus model in which different kinds of content units are accounted for in the syllabus on the grounds that each type of unit reflects a partial view of the nature of language (cf for example, Allen's (1984) and Allen and Howard's (1981) "variable-focus approach" and Yalden's (1983) "proportional syllabus"). Nevertheless, their approaches still have the same product orientation to syllabus design typical of approaches which have centred on only one type of unit. Further, the principles by which these content units are brought together into the syllabus do not seem to be informed by a coherent theoretical framework.

26 Brumfit (1981a) puts forward an approach to syllabus design which is similar to the one I am arguing for here. He suggests a type of syllabus model which accounts for different types of content units (a structural core supplemented by different checklists of notions and functions, situations etc.), ie, a goal-oriented criterion, and which also includes methodological devices, ie, a process-oriented criterion.

CHAPTER 5

THE ISTR SYLLABUS MODEL

5.1 Introduction

So far in the development of this thesis I have taken into consideration the two types of conditions involved in the activity of syllabus design as defined here: extrinsic conditions, which have to do with an analysis of the "learning milieu" where the syllabus elaborated in this thesis will be implemented (cf chapter 2) and intrinsic conditions, which relate to the internal organisation of the syllabus. The latter type of conditions have been addressed in chapter 3, where the ISTR model was put forward, and in chapter 4, where the principles derived from theories of FL syllabus models and FL learning, which inform the syllabus model in this thesis, are made clear. Bearing in mind these two types of conditions, I want in this chapter to introduce an interactive schema theoretic reading syllabus model (henceforth, the ISTR syllabus model). It is here then that an attempt will be made to mediate between theoretical principles and language teaching pedagogy through the design of a syllabus.

It should also be noted, as in fact perceived in the very kinds of conditions which inform syllabus design in this thesis, that the type of research conducted here is dialectical in the sense that practice and theory reciprocally inform each other. That is, decisions made on theoretical grounds have been guided by practical issues which in their turn have been informed by theoretical knowledge. In an applied area of research such as language teaching, this approach is essential, for what works in the researcher's laboratory or in theory may not work in the classroom. Hence, in this chapter I am concerned with finding a balance between the theoretical consistency of the syllabus (as expressed in the intrinsic conditions) and its appropriateness to the Brazilian EFL classroom (as expressed in my analysis of the existing extrinsic conditions). Aspects related to the effectiveness of the syllabus in the Brazilian classroom are tackled in chapters 6 and 7, where an attempt is made to evaluate it.

5.2 An interactive schema theoretic EFL reading syllabus model

5.2.1 The components of the syllabus

In view of the ISTR comprehension model advanced in chapter 3 and of the theoretical principles discussed in chapter 4, in the design of the reading syllabus here I will be dealing with three main components (cf Figure 5.1 below). Two components have to do with the units of the syllabus and are responsible for the two different types of knowledge that readers utilise: the systemic and the schematic. That is, these two components account for linguistic phenomena at the syntactic, lexico-semantic and schematic levels. Thus, the reading syllabus here makes use of 4 inventories of units. The schematic component exploits inventories of content schemata and formal schemata (both global and local) whereas the systemic component comprises two other different inventories: syntactic and lexico-semantic.[1]

The third component has to do with methodology which is crucial here, for it tries to stimulate the types of procedures which readers use in interpreting discourse by relating schematic knowledge to systemic knowledge, ie, the types of knowledge which in this syllabus are embodied in the two other components. The methodological component therefore addresses linguistic phenomena at the pragmatic level. As pointed out in 4.4 above, this syllabus tries to account for what is systematic in language (expressed in the units of the syllabus) through what is unsystematic (expressed in the methodology) (cf K. Johnson, 1981). Learning what is unsystematic, the procedures of interpretation, is paramount, not only because, as seen above in 4.4, knowledge acquisition and use of that knowledge are intrinsically related but also because it will allow learners to proceed on their own after the course is over since learners will be learning language through learning how to use it in reading. This aspect in fact is connected with one of the educational principles which underlie this syllabus (cf 1.5 and 2.3 above), namely, education should make one capable of independent critical thought. Therefore, rather than teaching knowledge (the units of the syllabus) as an end in itself, I am aiming at providing students with an ability to activate that knowledge so that they can go on learning how to read on their own. This capacity can only be imparted if this procedural operation of meaning negotiation is taken care of in the syllabus itself. It is for this reason that the methodological component has a major function here.

This syllabus also consists of two Parallel Auxiliary components (cf Figure 5.1). One of them comes into the syllabus through the units of the schematic component and is responsible for bringing new cultural information to the learner. The other is brought into the syllabus through the systemic component and aims at complementing native language teaching by helping to augment learners' awareness of the language phenomenon. Both auxiliary components therefore have educational objectives which go beyond the acquisition of a language skill. I will return to them below in 5.2.3.1 and in 5.2.4.2.

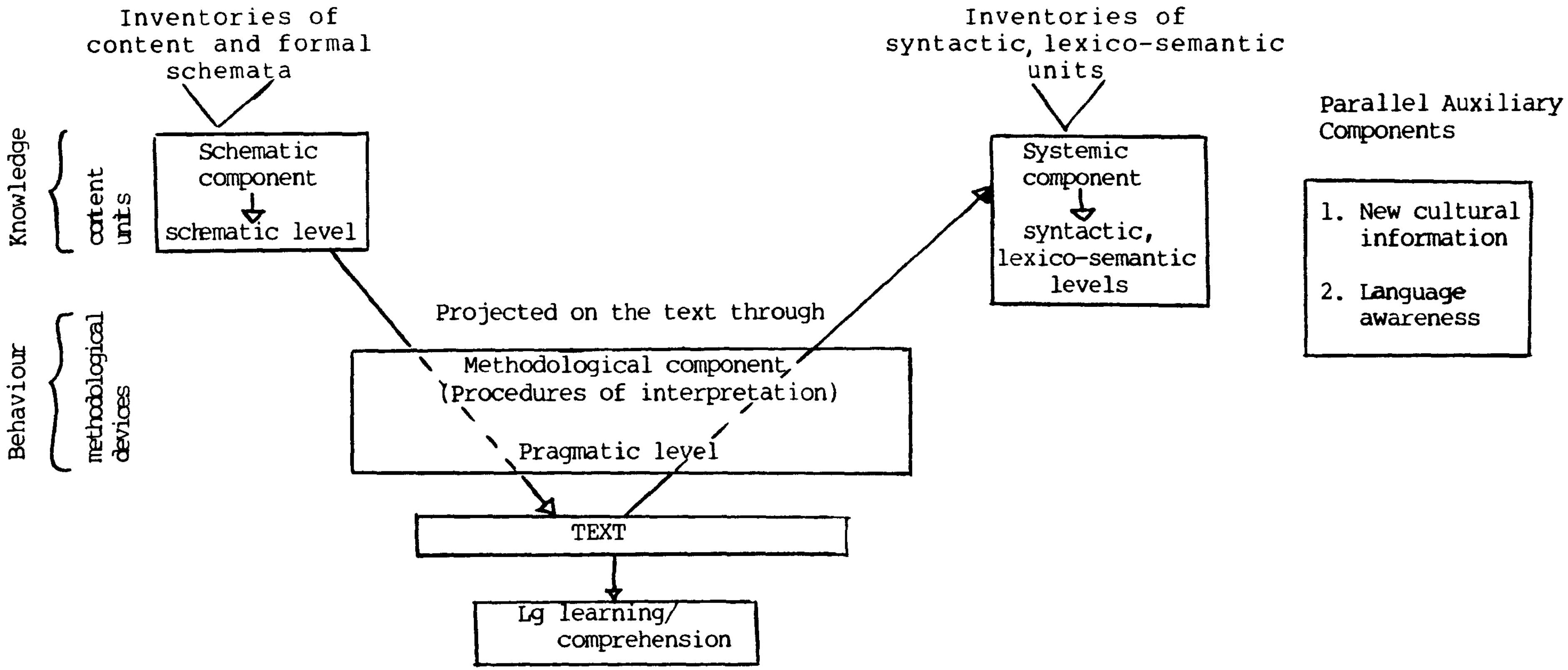
5.2.2 The grading of the units

Before looking into each of these components separately, I want to introduce the general grading criteria to be utilised in the syllabus. The sequencing of the units of the syllabus is to be mainly determined by their contrastive difficulty with the learners' knowledge of their mother tongue and background knowledge. That is, the main grading criterion is ease and familiarity of the TL units for the learners.[2] This principle is derived from the contrastive analysis (henceforth, CA) assumption that difficulty in FL learning is essentially caused by the FL items which are different from units in the learners' native language.[3] That is, language distance was set into correspondence with language learning difficulty. This assumption however has been challenged on the grounds that items of the L_2 which are similar to items of the L_1 are not necessarily easier to learn than items which are different. Actually, it has been suggested that "relative similarity rather than difference, is directly related to levels of difficulty" (Whitman and Jackson, 1972:40 as quoted in James, 1980:188). That is, difference does not necessarily determine language learning difficulty. Therefore, the contrastive difficulty criterion cannot be seen as implying any FL acquisition sequence structure which could be imposed on a FL syllabus. Accordingly, in this thesis the use of this sequencing criterion has no psycholinguistic validity. This however is probably the case in all syllabuses despite the claims generally made.

It has also been argued (cf James, 1980:153) that since the linguistic units of the NL system may have different functions from the corresponding units in the TL system, it seems inadequate to use CA principles as criteria for sequencing the units of the TL system in the syllabus. That is, postponing the teaching of a unit of the TL

FIGURE 5.1

AN INTERACTIVE SCHEMA THEORETIC EFL READING SYLLABUS MODEL


Inventories of content and formal schemata
Inventories of syntactic, lexico-semantic units
Parallel Auxiliary Components
Knowledge
content units
Schematic component
schematic level
Systemic component
syntactic, lexico-semantic levels
1. New cultural information
2. Language awareness
Behaviour
methodological devices
Projected on the text through
Methodological component (Procedures of interpretation)
Pragmatic level
TEXT
Lg learning/ comprehension

system because it is not found in the NL system may actually affect the pupils' learning of the other items in the TL system. Therefore, no claim is being made that the contrastive difficulty criterion is being used to teach the TL system.

The claim here however is that the contrastive difficulty principle may be used in a reading syllabus as a general grading criterion which exploits learners' existing cognitive structures, ie, the learners' contribution to the learning task,which may facilitate the acquisition of new knowledge.[4] And CA is useful as an instrument that reveals what is new in the TL for the learner. In view of the fact that there is no available psycholinguistic evidence which could perhaps be useful in informing the sequencing of the units of a FL syllabus, I believe that it is reasonable to base the grading criteria on principles which are warranted by general cognitive learning theories (cf Piaget, 1954; Neisser, 1976; Bruner, 1972 and 1977; Ausubel, 1960, 1963, 1968; inter alia): new learning is only possible if the learners' existing knowledge structures - in this case the learners' knowledge of his NL and of the world - are taken into account.

Thus, CA is not being used here to produce a language acquisition structure to match the learners' but as an instrument which may remove obstacles for the learners, and, in so doing, it creates facilitating conditions which may help them to learn.

Grading in this syllabus therefore basically involves an extrinsic difficulty criterion since it derives from what the learner already knows from his NL and background knowledge and not from the inherent organisation of the units of the syllabus in a system (ie, an intrinsic difficulty criterion) as in a structural syllabus. The extrinisc difficulty criterion will affect the order of inclusion of the five types of units in the syllabus: content schematic units, local and global formal schematic units, syntactic and lexico-semantic units.

It is an impressionistic type of sequencing since it is based on the syllabus designer's knowledge of the learners' native language and world knowledge, for very little contrastive work of English and Portuguese has been done[5](cf 2.2.3 above). That is, this type of grading like any other can claim no credit in terms of precision. As Breen (1984:50) points out, " grading criteria themselves can never be strictly 'objective' and they will be assumptions or good guesses rather than established 'facts'". Further, with the type of grading argued for here there is the extra difficulty of accounting for the individual learner's knowledge of his NL and world knowledge, ie, the suggested sequence for the units in this syllabus reflects a large degree of idealisation.

In addition to this major criterion above, I also want to include in the syllabus two secondary grading principles. The first has to do with the frequency of occurrence of items in written discourse. That is, items which are more commonly found in written discourse are introduced earlier in the syllabus. The rationale behind this criterion is that becoming acquainted with items which more frequently occur in written discourse should facilitate learning to read. This principle is an adaptation of the frequency of occurrence criterion, as discussed in Halliday, et al. (1964) and Mackey (1965), for grading items in a four language skill syllabus: "items that are in frequent use need to be taught before those that are more rare" (Halliday, et al. 1964: 210). Here this principle has to do specifically with trying to account for items which are more useful for teaching how to read, ie, more common in written language. Therefore, question-tags, items which have a connative function (for example, well, you know, etc.), lexical items which are more typical of oral language (for example, quid, swop, ouch, etc.) give way to items which are typical of written English, (written) discourse markers, for example (cf 3.3.3.1).

The other secondary grading principle has to do with the intrinsic difficulty of items in terms of their organisation in the TL system, as represented in the structural or taxomonic model of language description.[6] As Halliday, et al. (1964:211) have pointed out, there are "several examples of linguistic theory dictating in broad outline the sequence of linguistic items". However, in this thesis I have chosen the structural model because it seems to be the one most commonly used in grading the language system in a syllabus. Although this type of grading has no psycholinguistic validity either, and is secondary here to the main criterion of contrastive difficulty above, it has been included in the syllabus not only because this type of sequencing has found both overt and covert support throughout the existing practice of FL syllabus design (cf 4.4 above) but also, and above all, to respond to the very strong tradition of structurally graded syllabuses in Brazil (cf 2.2.4 above and 5.2.4.2 below).[7] I will come back to this issue in 5.2.4.1, where the sequencing of the syntactic units is dealt with.

It should also be noted that these 3 criteria will in practice overlap one another[8] and they should be seen as general principles which offer some informed guidelines for structuring the syllabus. In the following sections I analyse the three components which comprise this syllabus.

5.2.3 The schematic component

One of the principles (cf 3.4.2.2 above) on which this syllabus is based is that, by virtue of the cognitive basis of the reading process, L_1 and L_2 reading comprehension processes are taken to be the same. One has however to allow for the unidirectionality (bottom-up direction) in text-processing on the part of the beginning L_2 learner-reader due to his lack of systemic knowledge (cf 3.4.2.2 above) and also perhaps to the type of model of language teaching from which FL teachers operate. This model may discourage pupils from using in FL learning procedures with which they are familiar in native language use. Thus, in teaching reading in a FL the crucial task is how to get the learner to process text bidirectionally (as depicted in the ISTR comprehension model introduced in chapter 3) in the FL, for he is familiar with this process in reading in his native language. That is to say that the fact that the FL learner can read in his native language is very much to his advantage and is in fact an aspect to be fully exploited in this syllabus.[9]

In view of this argument, the function of the schematic component is critical since it embodies a type of knowledge which, if adequately graded into the syllabus, has to do with the sort of knowledge the learner already has before the reading class, ie, his knowledge of the world (content schemata) and of the rhetorical conventions (formal schemata) as realised in his native language (cf 3.3.2 and 3.3.3 above). Systemic knowledge, although appropriate sequencing devices (cf 5.2.4 below) can make it more easily accessed, constitutes what is mostly new for the learner-reader. To override the lack of systemic knowledge on the part of the learner-reader, great emphasis is put on the sort of knowledge which the schematic component brings into the syllabus. I will come back to this aspect in 5.2.4 below, where I discuss the relationship between the schematic and the systemic components in the syllabus progression.

The schematic component involves two types of knowledge. One kind is schematic knowledge of the content area of the text (represented in the content schematic units of the syllabus) and the other is formal schematic knowledge which has to do with knowledge of binary discourse values (represented in the local formal schematic units) and of text types (expressed in the global formal schematic units).

5.2.3.1 Content schematic units

The content schematic units are brought into the syllabus on the basis of the grading criteria of contrastive difficulty. The syllabus designer makes use of an inventory of content schematic areas which are listed in a cline in terms of familiarity for the learner, ie, from areas with which the learner is familiar to areas which are unfamiliar to him. In other words, at the beginning of the course, the content schematic areas of the text deal with topics which are part of the learner-reader's everyday life, ie, culturally meaningful to the learner since there is evidence (cf 3.4.2.1 above) that both the reader's familiarity with the content area of the text and its cultural proximity facilitates L_2 reading comprehension.

As the FL syllabus progresses, content schematic areas which are new to the learner in cultural terms are brought into the syllabus through what I have called above a first Parallel Auxiliary Component (cf Figure 5.1 above). It should be observed however that in fact these new cultural content schematic units are part of the schematic component itself and that I have chosen to frame them separately in a parallel component for the sake of emphasis. This auxiliary component introduces into the FL syllabus content schematic areas which are distant from the learners in the sense that they are related to cultures where English is used not only as a native language but also as a second language (cf 2.2.5.1 above). This new cultural information is to be treated through methodological devices (cf the Post-reading Phase in 5.2.5.6 below) which emphasise critical reading.

5.2.3.2 Global formal schematic units

The other types of unit in this component have to do with the rhetorical structure of the text, namely, local and global formal schemata. First, I want to discuss how global formal schemata (equated here with narratives, descriptions, and arguments) are brought into the syllabus. Again, the same criterion of contrastive difficulty is used: going from a text-type schema (narrative, more specifically, story schemata) with which the learners are quite familiar in their use of the native language to types with which they are less familiar (arguments),[10] ie, an extrinsic difficulty criterion. In fact, narratives (story schemata, in particular) correspond to the types of text schema of which pupils, at the teaching stage (10/11 year olds) where this syllabus is to start being used, have a complete grasp. The conventions of story schemata besides being acquired early on by children,[11] seem to be the same in English and in Portuguese.

It should be remarked that an intrinsic difficulty criterion is also involved here since a narrative seems to be simpler than an argument in terms of ease of comprehensibility. A narrative appears to present events in a way which corresponds to a familiar perceptual order, and therefore is easier to understand than an argument which involves a conceptual sequence of events.

The progression of the teaching units therefore follows two routes or what I am going to call here two kinds of gradation. One has to do with the familiarity and cultural proximity of the content schematic area of the text (cf 5.2.3.1 above) and the other with the familiarity and ease of comprehensibility of global formal schemata.

The development from one text type schema and content schematic area to another should be done gradually in order to allow the learner-reader to develop a firm grasp of the procedures (cf the methodological component in 5.2.5 below) involved in text interpretation by invoking the same content and formal schemata. This feature of the syllabus can be equated with what Krashen (1981) has called "narrow reading". That is, the emphasis on teaching how to read at the beginning of the course should be on reading texts whose content and formal schemata are familiar to facilitate discourse engagement.

Kleiman (1984) however has presented evidence that teaching learner-readers to utilise formal schematic knowledge in reading through the use of simplified pedagogic texts can be harmful to the process of learning how to read if this type of knowledge is used mechanically. Although this kind of knowledge activation is necessary for the reader, if used exclusively, can become a mere automatic device which makes the learner-reader develop stereotypical reading schemes for textbook materials (pedagogic texts), ie, it does not really account for the development of the capacity of reading beyond the limits of the textbook. Correctly, to my mind, she points out that "the solution is not to change the pedagogic reading text but to teach the pupil how to read"[12] (Kleiman, 1984:100). That is in fact the reason why in this syllabus the emphasis is on the procedures of interpretation utilised by the reader. Conventional schematic aspects are used as a pedagogical device to initiate the reader into the reading act, but care is taken to expose learners to a variety of text types and content schemata (as the syllabus progresses), to the fact that the reader should question the text etc., so that what is made crucial in learning how to read is the interaction between the reader and the writer, so to speak (cf 5.2.5 below).

5.2.3.3 Local formal schematic units

The other type of unit related to the rhetorical structure of the text is what I have called local formal schemata or binary discourse relations (cf taxonomy in Crombie, 1985b) and which are also brought into the syllabus on the basis of their contrastive difficulty for the learner, ie, their extrinsic difficulty. Although, in agreement with Crombie (1985a), binary discourse values are taken here as conceptual universals which have different realisations across languages, the discourse values which are more conceptually simple, ie, spatial, time and contrast relations, for example, are included earlier in the syllabus, ie, an intrinsic difficulty criterion is also involved. What is required here is that through the identification of a particular discourse marker (cf Winter's (1977) vocabulary 1, 2 and 3) in a bottom-up direction the learner-reader should access the binary discourse value of a segment of the text in a top-down mode. As discussed in 5.2.5 below, methodological solutions are used to activate these signposts (discourse markers) of the discourse structure in the learner-reader's mind in such a way that the focus is on learning systemic level units not as formal elements but as they are realised within discourse. It should also be emphasised that although there seems to be a relationship between particular types of local formal schematic units and types of global formal schematic units (for example, time/spatial local formal schematic units and the narrative) no such claims are made in this syllabus since so far research has not clearly pointed out the implications of one level of formal schematic organisation for the other (cf 3.3.3.3 above). However, as pointed out in 3.3.3.3 above, these implications may be revealed through the actual practice of designing materials for a reading course concerned with the formal schematic organisation of texts, such as the one which will actualise the syllabus introduced in this thesis.

A last point on the use of local formal schematic units in the syllabus relates to the fact that the first teaching units of the syllabus will tend not to include explicit discourse markers (cf 3.3.1.1 above). Due to the lack of systemic knowledge on the learner-reader's part, he cannot utilise the resources of the language system, which in a bottom-up direction identify binary discourse values. To counter balance this lack of systemic knowledge, emphasis is put on the learner-reader's knowledge of the world in text interpretation. Therefore, to understnad the text, the learner-reader relies on the correspondence between the structure of the text (textual world) and the structure of the world (cf Beaugrande, 1980). That is, while interpreting the text, the learner-reader relies on the juxtaposition of propositions and accesses text as a reflection of the structure of the world through the activation of content schemata (cf 3.3.2 above). As the syllabus progresses and the readers' systemic competence grows, explicit signalling of the discourse structure is included in the syllabus since the learner-reader will be able to process texts bidirectionally more easily.

It could be argued however that if one removes discourse markers from the text and relies on the learner-readers' use of schematic knowledge to understand the text, one is actually forcing the learner-reader to focus on systemic knowledge without providing any cue which could facilitate the use of this type of knowledge in reading comprehension. On the other hand, if discourse markers are provided from the beginning, systemic knowledge is more easily accessed through the use of these markers and schematic knowledge is consequently called up. It should be noted however that in the approach to the teaching of reading I will put forward here I will not simply rely on the learners' use of schematic knowledge. I will actually teach them how to use this type of knowledge in reading comprehension through inducing both content and formal schemata in Pre-reading Phase A (cf 5.2.5.1 below). In this sense, the possible problem caused by the absence of discourse markers from the text which could make access to systemic knowledge difficult seems to be overcome.

5.2.4 The systemic component

This component consists of syntactic and lexico-semantic units which constitute the two other types of inventories that the syllabus incorporates. The kind of knowledge involved in this component, in a bottom-up mode, will help the learner to instantiate schematic knowledge.

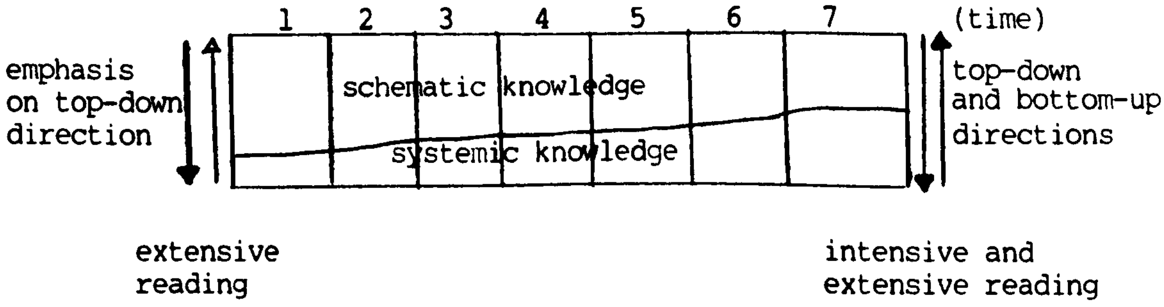
Contrary to existing FL reading syllabuses, which take for granted some sort of systemic competence on the part of the learner-reader, the ISTR syllabus model assumes no systemic knowledge. Therefore, if text processing is to occur interactively, linguistic competence has to be accounted for in the syllabus. Also, the type of knowledge at issue here represents what is mostly new for the learner. Whereas schematic knowledge can be incorporated into the syllabus by relying on the kind of schematic knowledge the reader brings from his experience as a reader in his native language and on his knowledge of the world, systemic knowledge constitutes a new acquisition.

Besides utilising appropriate grading criteria (cf 5.2.2.1 and 5.2.2.2 below) to ease the task of learning systemic knowledge, this syllabus also makes use of a device in syllabus progression which through the maximisation of schematic knowledge tries to make up for the lack of systemic knowledge on the part of the learner-reader (cf Figure 5.2 below). That is, at the beginning of the syllabus schematic knowledge, which in normal reading would be called up in a bottom-up direction, is induced through methodological devices (cf 5.2.3.1 below).

At this point in the syllabus, one should note, the focus is on extensive reading. Nevertheless, as the syllabus progresses (cf Figure 5.2 below), and the learners' systemic competence increases, the reader can read both intensively and extensively. Although the capacity to read extensively in normal reading presupposes the ability to read intensively (cf Widdowson, 1980:10), I have inverted this sequence in the syllabus progression in order to account for the lack of systemic knowledge on the learner-reader's part so that he will still engage in discourse, by reading extensively from the beginning of the syllabus. It does not necessarily follow that this dependency of extensive reading on intensive reading in use should be the same in teaching and learning to read. As the syllabus advances, both systemic and schematic knowledge are given equal emphasis and therefore both extensive and intensive reading are then possible.

Figure 5.2

Syllabus Progression


1
2
3
4
5
6
7
(time)
emphasis on top-down direction
schematic knowledge
systemic knowledge
top-down and bottom-up directions
extensive reading
intensive and extensive reading

The component in focus here also allows for the inclusion in the FL syllabus of a second Parallel Auxiliary component (cf Figure 5.1 above), namely, Language Awareness, which, like the first Parallel Auxiliary component (cf 5.2.1.1 above), has the function of furthering the educational role of FL learning. By focussing on language awareness, FL learning makes a unique contribution to the learner's education by making him less parochial (cf Hawkins, 1981:32). The methodological solutions which exploit language awareness are discussed in 5.2.3.3 below.

In the following sections I discuss how the systemic component units are graded into the syllabus.

5.2.4.1 Lexico-semantic units

As pointed out in 5.2.4 above, the systemic component includes two types of units: syntactic and lexico-semantic units. However, the central units of this component are the lexico-semantic units, since there is evidence in L_1 (cf Schlesinger, 1968) and in L_2 (cf Ulijn and Kempen, 1976) research that readers tend to rely more on lexical semanitc strategies to understand a text than on syntactic strategies. Ulijn and Kempen's results (1976) indicate that syntax is significant only when the reader is not familiar with the content schematic area of the text. That is, the reader in this circumstance needs to resort more fully to syntactic knowledge.[13] Lexical knowledge then is in close correspondence with the content schematic area of the text.

The role of vocabulary teaching in reading instruction is then crucial since lexical items in a bottom-up direction will help to call up content schemata and will then account for the bidirectionality of text processing. That is the reason why in this syllabus the teaching of vocabulary items has precedence over syntax. Syntax comes into the syllabus to enhance the association between the lexical items. While lexical knowledge, as said above, is in close correspondence with content schemata, syntactic knowledge is in closer contact with formal schemata. Teaching syntax, one is working towards the development of formal schematic knowledge on the learner's part (cf 5.2.4.2 below).

Lexico-semantic units are included in the syllabus on the basis of the semantic field determined by the content schematic area of the text, which is previously defined on grounds of familiarity and cultural proximity to the learner-reader (cf 5.2.3 above).

The sequencing of these units is determined by two criteria: contrastive difficulty of the lexical items and frequency of occurrence in written discourse. The first criterion suggests that items whose meanings are transparent for the learner are included earlier, ie, the syllabus heavily exploits the use of cognates to facilitate text interpretation. The second criterion suggests that the syllabus should favour lexical items which are typical of written discourse (cf 5.2.2 above).

5.2.4.2 Syntactic units

As regards the syntactic units, three grading criteria are used: contrastive difficulty of grammatical items, frequency of occurrence of items in written discourse, and the intrinsic difficulty of the items. The criterion of contrastive difficulty is the most important here. As with the grading of all the other units of the syllabus, grammatical items which are similar to items learners find in their native language are included earlier in the syllabus.

The criterion of frequency of occurrence in written texts aims at including in the syllabus first grammatical items which are more commonly used in writing and which will therefore prove to be more useful for the learner in facilitating bottom-up processing.

The other criterion, the intrinsic difficulty of the item, in terms of its complexity as represented in the structural model of language, implies that grammatical items which are more complex in terms of the target language system are introduced later.

However, as indicated in 5.2.2 above, this type of grading is secondary to the major criterion of contrastive difficulty for the learner. In other words, grammatical items which, because of their intrinsic difficulty are introduced quite later in a structural syllabus, may be forwarded in the ISTR syllabus if they offer little difficulty for the learner in contrastive terms with his native language. For example, passive voice structures which in structural syllabuses are introduced quite late should be anticipated in the reading syllabus here because they pose little difficulty for the native speaker of Portuguese. It should also be noted that, because in this syllabus the concern is with only one receptive skill, ie, reading, grammatical items which in conventional four language skill structural syllabuses would be postponed until much later in the syllabus are anticipated here since only receptive knowledge of these items is required. For example, irregular past forms, which are traditionally taught much later, are forwarded here because the grammatical knowledge involved in these items required from learners has to do with the recognition that these forms indicate the past tense morpheme.

The subordination of the intrinsic difficulty criterion to the extrinsic difficulty criterion should follow a principle which I am going to call here negative grading. Rather than defining the sequence of what should be included in the syllabus - typical of positive grading, negative grading implies sequencing by avoiding certain items. In this sense, intrinsic difficulty is subordinated to extrinsic difficulty provided that structures which are potentially disruptive of meaning because of their syntactic complexity are avoided at the beginning of the syllabus.

It should also be indicated that my attempt to favour grading determined by contrastive difficulty instead of intrinsic difficulty faced problems in the real FL classroom due to the FL tradition in Brazil, which emphasises structural control. When carrying out the empirical part of this research,[14] I found that grading in terms of the intrinsic difficulty of the items, which had first been introduced in this syllabus because of its wide support in the tradition of FL syllabus design (cf 4.4 above), was almost a necessity in order not to frustrate teachers' expectations. Therefore, a compromise had to be made. This decision exemplifies one of the main concerns in the syllabus design activity here: the operation of the syllabus should be taken into account in its design (cf 2.1 above).

In this sense, in the grading of the syntactic units of the syllabus I try to reconcile grading criteria derived from the intrinsic difficulty of the items, as used in structural syllabuses (namely, regular forms before irregular forms, simple forms before compound forms, active verb forms before passive verb forms etc.) with more general and more important criteria here which have to do with the extrinsic difficulty of the items for the learner. It is in this way that this thesis tries to mediate between the intrinsic conditions (theoretical issues) and the extrinsic conditions (the actual characteristics of the classroom) on the design of the ISTR syllabus (cf 5.1 above).

While lexico-semantic units are included in the syllabus by constraints imposed by the content schematic area of the text (cf 5.2.2.1 above), the syntactic inventory seems to be constrained by the types of local formal schemata used in the text. As indicated in 5.2.4.1

above, syntactic knowledge is in closer correspondence with formal schemata. Although there is no rigorous systematic attempt to introduce syntactic units into the syllabus, syntax seems to emerge in the syllabus on the dependence of the formal schematic level, with the limitation of avoiding structures which may inhibit the reading process because of their syntactic complexity (cf negative grading above in this section). I am suggesting therefore that there may be implications of the syntactic level for the local formal schematic level: an area which awaits future research. As Crombie (1985a:35) points out,

> "We can see, then, that each type of signal [ie, discourse marker] may be associated with a range of [syntactic] structures and, therefore, that the selection of a particular signal within the environment of a particular relational frame [ie, local formal schemata] has implications as far as the introduction or consolidation of [syntactic] structures is concerned".

5.2.5 The methodological component

As already argued for above (cf 4.4 and 5.2.1), the methodological component is the central component in this syllabus. Its major aim is to activate the procedures involved in text interpretation with which learners are familiar in reading in their NL.

In the ISTR comprehension model introduced in chapter 3, the reading process was framed as problem-solving, which, as pointed out there, is in fact how human beings typically proceed in making sense of the world around them. Accordingly, the methodological component in this syllabus is essentially founded on the Piagetian idea that any learning situation should present something which is problematic for the learner, and which will make him strive for comprehension.[15] In this task however the teacher tries to bring the learners' points of reference to new learning tasks, ie, to new problems to be solved. Note that it is also in this sense that grading in this syllabus primarily relies on the learner's points of reference in his knowledge of his NL and of the world. The methodological component is then characterised by posing problems for the learner and offering, at the same time, clues to facilitate problem-solving.

In this sort of framework the meaning of the text is to be taken as the central problem which the learner-reader has to solve. That is, the text is defined as a problem in the sense that it is "a stimulus situation for which the learner-reader does not have a ready response" (Davis, 1973:12). To understand the meaning of the text, ie, to find a solution to this problem, the learner-reader has to employ a kind of heuristics, represented here by the so-called procedures of interpretation. Different methodological solutions[16] will be introduced below with the objective of making the learner-reader apply the procedures involved in reading comprehension.

I want to suggest six phases for the methodological component which are discussed separately below: Pre-reading Phase A; Reading Phase A; Pre-reading Phase B; Reading Phase B; Comprehension Testing Phase; and Post-reading Phase (cf Figure 5.3 below). These six phases involve methodological devices which are applied from the beginning of the syllabus and are exemplified in the form of materials in Appendix A.

Figure 5.3

Methodological component

I	Pre-reading phase A (schematic knowledge inducement)
II	Reading phase A (superficial reading)
III	Pre-reading phase B (systemic knowledge learning)
IV	Reading phase B (deeper comprehension level)
V	Comprehension testing phase
VI	Post-reading phase (personal responses to the text)

5.2.5.1 Pre-reading Phase A

As pointed out above (cf 5.2.4 and Figure 5.2), the emphasis at the beginning of the process of learning how to read in this syllabus is put on schematic knowledge to outweigh the lack of systemic knowledge on the part of the learner-reader, ie, top-down processing is stressed. This phase of the methodological component includes devices which have the purpose of accounting for that emphasis through the inducement of schematic knowledge.

This inducement will have to be done in terms of both content schemata and formal schemata, ensuring that schematic knowledge be more easily instantiated. This device will also call the learner-reader's attention to the contribution that he brings to the reading task by utilising his own frames of reference and will prepare the reader for a first attempt at reading, albeit at a superficial level, in Reading-Phase A. This methodological procedure therefore tries to guarantee that the learner-reader engage in reading comprehension from the first teaching unit of the syllabus.

Content schema inducement is to be carried out through activities which require the learner-reader to look at and discuss photos/drawings in Portuguese.[17] These activities will bring to the learner-reader's mind the content schema of the text. In fact, there is evidence that pre-reading activities, for example, looking at photos/drawings are more effective to call up content schemata than other techniques such as presentation of vocabulary items and read - reread activities (cf 3.4.2.4). Other possible activities would include the discussion of a topic in Portuguese related to the content schematic area of the text, the prediction of the content schematic area of the text on the basis of the examination of titles and sub-headings, ie, the reading text is used as data for problem-solving.

Note however that content schema inducement should be done at a level which does not disclose the meaning of the text to the learner-reader, so that interest in the text is sustained. That is, content schema inducement should be a way of motivating the learner-reader to approach the text. If content schema inducement makes the interpretation of the text too easy, it has the same effect of a text whose content schematic area is impenetrable for the learner-reader: the text becomes a non-problem.[18] Therefore, content schema inducement has a dual function: at the same time that it calls up the content schematic area of the text to the reader's mind, it also challenges him to find the meaning of the text.

As regards formal schemata, inducement is to be carried out through pre-reading activities such as listening to or reading a text in the NL which is representative of the same formal schema as the FL text, so that learners will transfer the formal schema of the text in their NL to the text in the FL. As discussed in 3.4.1.3 above, Freedle and Hale (1979) have demonstrated with their experiment in L_1 reading comprehension that by showing the differences and similarities between two different text types, it is possible to instruct learners to transfer their knowledge of a type of global formal schema to a text whose global formal schematic structure is new to them. In the ISTR syllabus formal schematic inducement is undertaken through the use of a text in the NL which contains the same formal schemata of the FL text. Teachers are required to draw the learners' attention to the formal schematic organisation of the text in the NL and to its similarities with the text in the FL.

The principles behind the pedagogical device of formal schema inducement seem to be similar to those underlying a traditional translation task in which learners are supposed to learn the FL by casting a NL text into the FL and vice-versa. Here however translation is used in a wider sense: learners are required to translate only the formal schematic organisation of a NL text into a FL text which contains the same formal schematic structure. The translation device is used to induce the formal schematic structure of the TL text and therefore only the first phase of a translation operation, namely, the appraisal of the rhetorical structure of the text, is involved.

With more advanced classes, use could be made of composite texts (ie, texts written in both English and Portuguese) which may serve as a device of formal schema inducement and also play a role in facilitating discourse engagement in the FL.

While reading the native language or the composite text with the class, teachers should help learners become aware of the strategies they use when they read a text in their own native language, namely, that they can predict the meaning of the text on the basis of their schematic knowledge by examining headings, titles, illustrations etc., that they do not need to comprehend the meaning of every word in the text, that we read for different purposes etc. In other words, the Pre-reading Phase A also has the objective of enhancing the reader's metacognitive skills (cf Flavell, 1976 and Brown, 1980) since "when students learn to understand their own cognitive processes they are better able to control their own learning" (Babbs and Moe, 1983:422).

In the act of reading the learner-reader by resorting to metacognitive skills can more easily select the strategies necessary to read a text by choosing the appropriate interactive frame (cf Tannen and Wallat, 1982), to apply adequate schematic knowledge, to recognise failure in comprehension etc. Hence, reliance on metacognition is also a way of helping the learner learn how to read by using his knowledge about the reading task.[19] This syllabus therefore besides trying to account for cognitive aspects of learning (cf attempt to match the learners' cognitive structures through the grading of the units of the syllabus, for example), also considers metacognitive aspects by developing the readers' awareness of their cognitive processes.[20]

In brief, the Pre-reading phase A is designed to sensitise the reader-learner towards the reading text in terms of formal and content schemata and to make him conscious of the processes involved in reading comprehension.[21]

5.2.5.2 Reading Phase A

This phase of the methodological component aims at providing for a first contact of the reader with the reading text at a superficial level of comprehension. What is required from the learner-reader is that he should read the text with whatever available resources, which include particularly the use of the formal and content schemata induced in the Pre-reading phase A and of the cognates found in the text (cf grading of the lexical content units in 5.2.2.2 above). That is, the learner-reader has to make use of what he already knows (part of which was called to his mind in Pre-reading phase A) by relating it to the clues he finds in the text. This phase also relies on the learner-reader's ability to use the same motor-perceptive skills (reading from left to right, word recognition etc.) he uses when reading in his native language.[22]

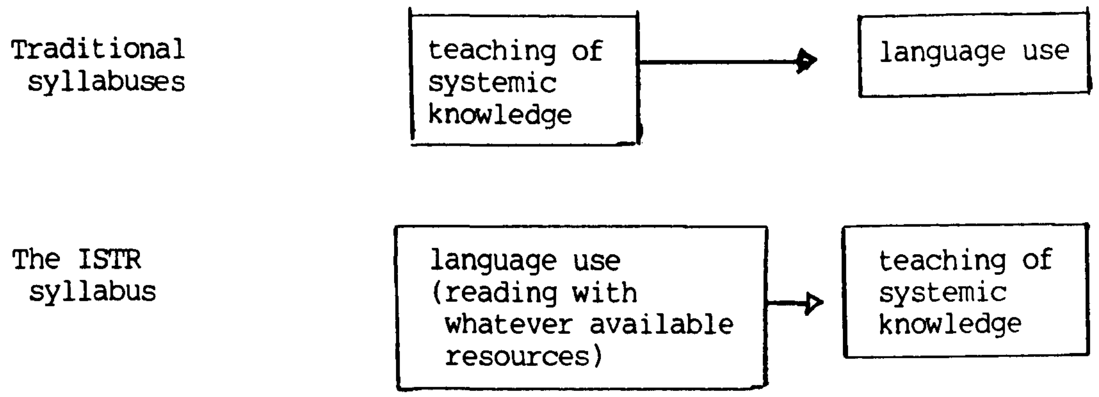
The aim here is to show the learner-reader that reading involves risk-taking and that it is not an activity totally dependent on what is written on the page, ie, his contribution to the reading task is crucial. The pedagogic device implied in this phase is an adaptation of Brumfit's (1979 and 1980b) suggestion that language use in communicative language teaching, contrary to traditional methodological principles (cf Figure 5.4 below), should precede the actual teaching (presentation and drilling) of language items to familiarise learners with the negotiating process of language use. K. Johnson (1981:63) has referred to this device in language teaching as the deep-end strategy which "involves an initial risk-taking stage for which there was no preparation". In the case at issue however there is some preparation in terms of schematic knowledge in the Pre-reading Phase A (cf 5.2.5.1 above), where learners are provided with some ways of dealing with an initial interaction with the writer through the text.

Exposure to systemic knowledge however only comes into the methodological component in Pre-reading Phase B after the learner has had some opportunity to understand the text, albeit at a superficial level. The learner-reader then tries to make some sense of the text by simply getting involved with its interpretation through the use of whatever resources available (cf Figure 5.4). By doing that, the syllabus is from the very beginning emphasising a view of language as process since what matters is the interaction between reader and writer in the negotiation of the meaning of the text and the reader's purpose in reading it.

Therefore, what is made central is the capacity to use language and not the accumulation of linguistic knowledge in the learners' minds as is the case with syllabuses derived from a knowledge-based view of language (cf 4.3.1 above). It is in this sense that this syllabus tries to account for what is systematic in language (the units of the syllabus) through non-systematic means by focussing on the process of meaning negotiation (cf 5.2 above).

Figure 5.4

Traditional syllabuses and the ISTR syllabus


Traditional syllabuses
teaching of systemic knowledge
language use
The ISTR syllabus
language use (reading with whatever available resources)
teaching of systemic knowledge

By requiring a first superficial level of comprehension, this phase also indicates to the learner-reader that a same text can be read at different levels of comprehension, depending on the reading purpose the reader has in mind for the particular text. And one of the high priorities in the ISTR syllabus is exactly to persuade learners that reading is a purposeful activity.

In this syllabus however the level of comprehension required from the text is pre-defined by the syllabus designer and is signalled here by the questions inserted in the text. These questions aim at simulating the interaction between the reader and the writer in the sense that they are the questions that the reader, so to speak, wants to ask the writer about the text, in trying to solve the problem that the comprehension of the text represents. That is, the approach proposed here is task-controlled and not text-controlled. What determines the approach are tasks (in this phase, a set of questions) which are derived from particular views of the nature of language use, reading comprehension, learning and teaching how to read etc., and not the text used in each teaching unit. In fact, as it will be seen in 5.2.5.3 below, certain segments of the text will even be disregarded in this approach. I will address the rationale for the inclusion of questions as a teaching device in Reading phase B, where they are also used (cf 5.2.5.4).

5.2.5.3 Pre-reading Phase B

In this phase systemic knowledge is accounted for. That is, only after the learner-reader has had a chance of getting involved with the interactive process of meaning negotiation is he taught to apply systemic knowledge. The organisation of the methodological component therefore tries to account for language use before formally introducing the learner-readers to linguistic units at the language usage level. The objective of this phase is to provide for the necessary systemic knowledge so that the comprehension of the text can be realised at a deeper level in Reading Phase B. In other words, this phase will make top-down and bottom-up processing proceed more efficiently by providing for the sort of knowledge which in a bottom up direction activates top-down processes. As already indicated in 5.2.4.1 above, lexico-semantic units are to be given more emphasis than syntax since readers seem to rely more on lexis in reading comprehension. In Reading Phase A the tasks exploited lexis (cognates) to help the reader's interaction with the text. In this phase, syntactic knowledge comes into the syllabus to enhance the relationship between lexical items and therefore to prepare the reader for a deeper comprehension level in Reading Phase B.

In accordance with the problem-solving learning framework argued for in 5.2.3 above, systemic knowledge is to be taught through tasks which present a problem for the learner.[23] These tasks normally consist of activities with which learners are familiar, ie, puzzles, matching games etc. That is, the heuristics to be employed to find the solution to the presented problem is part of the learners' repertoire, the task posed however is new. Or, as Resnick and Glaser (1976:209) put it, "The particular task ... is new for the individual, although processes or knowledge already available can be called upon for solution".

These tasks therefore exploit "usual routines" that the learners have for problem solving and also the fact that learners' normal response when confronted with a problem is to attempt to use these routines (cf Resnick and Glaser, 1976:217). What is required here is that the learner use his sytemic knowledge to reach an objective beyond the language learning task per se. That is, rather than simply applying systemic knowledge to a language exercise as in traditional methodologies, learners here use their systemic knowledge with the purpose of solving a problem and by so doing they learn language contingently. Therefore, the learners' attention is directed at what they are using language for and away from the language itself. This approach has obvious motivating effects for the learner since these problem-solving activities exploit procedures with which learners are familiar in playing games, ie, a ludic aspect is involved.

In line with the ISTR comprehension model (cf chapter 3) put forward in this thesis, systemic knowledge here excludes the phonological structure of language. The meaning of words is interpreted directly from the printed text without any recourse to its phonological recodification (cf Smith, 1982). In fact, there is evidence that "It is possible to learn to read a FL without recourse to aural or oral reading" (Nehr, 1984:83). In this syllabus oral reading may be used by the teacher as a management device to make the whole group work together and to control large classes (cf the logistico-administrative conditions discussed in 2.2.2 above). No oral reading on the learners' part is involved. What is required from learners is the capacity to recover meaning from text.[24] Skills other than reading comprehension (oral and writing skills, for example) however may be made use of in the syllabus as process/methodological devices to help learning how to read.

It should also be observed that not every systemic knowledge item found in the reading text should be taught. That is, this syllabus systematises the notion of exposure to language in a control situation (ie, the approach is task-and not text-controlled): learners are exposed to more items than the syllabus focuses on. Therefore, rather than teaching every linguistic item present in the teaching unit as in traditional syllabuses, the reading syllabus here focuses on items differentially. In this sense, the syllabus designer chooses the lexical and grammatical items to be centred on in a particular unit on the basis of their relevance for the level of comprehension he has predetermined for the text in Reading phase B. This aspect clearly indicates to the learner-reader, from the beginning of the syllabus, that there is no need for him to understand every item when reading a text.

As discussed in 5.2.4 above, because this phase centers on systemic knowledge, it favours the inclusion in the syllabus of the second Parallel Auxiliary Component. This component has the objective of augmenting learners' awareness of language. Hence, this phase of the syllabus in addition to providing for systemic knowledge preparation also contains learning tasks which aim at making learners more aware of language, ie, activities which emphasise the existence of cognates accross languages, how lexical items categorise experience in L_1 and L_2, how language structures are contrasted in both languages, how different languages may use different writing systems etc. Although this parallel component can be more fully exploited as the syllabus progresses, tasks which draw the learners' attention to the existence of cognates, differences between languages etc. can be used from the beginning of the syllabus. In more advanced clases more complex activities could be realised as projects to be developed in conjuntion with the FL reading syllabus. For example, getting pupils in pairs/ groups to create messages to be transmitted without language, to invent secret codes, to write a report in the NL on the different countries which use English both as a first and a second language (cf Hawkins, 1981: 292-306 for further examples of activities concerning language awareness).

5.2.5.4 Reading Phase B

In this phase the same text used in Reading phase A is read again at a deeper level of comprehension. Whereas in Reading phase A reading comprehension is mostly a top-down process since the learner-reader is nearly totally relying on the use of the schematic knowledge induced in Pre-reading phase A (except of course for his use of cognates in a bottom-up mode), in Reading phase B the learner-reader can make use of the systemic knowledge he acquired in Pre-reading phase B so that now text-processing seems to be closer to the interactive (bidirectional) mode.

Reading, as discussed in 3.3.4 above, is seen here as an integrative act through which the reader must interpret each new sentence (new information) in the light of the previous one (old information) so that through inferencing the reader can solve the problem that the comprehension of the text represents. One possible way of accounting for this integrative aspect of reading in pedagogical terms is by operating on the interactive nature of written discourse and hence guiding the learner-reader's inferencing through questions. Such questions should mirror the reader's interaction with the writer through the text, ie, answering the questions the writer wants the reader to answer, as it were, to interpret the text. (These questions are in fact the reader's questions, as I will presently show.) They are problems the learner has to solve in trying to understand the text, ie, heuristics procedures for comprehending the text. Note that this same device is used in Reading Phase A. It should also be remarked that at the same time that this device operates on the interactive nature of discourse, it also exploits other features of discourse structure (predictability, informational structure, connectivity etc.). As the learner-reader goes on reading, he is led by questions which focus on these aspects of written discourse, making him strive for the meaning of the text.

A possible way of displaying these questions in the teaching unit is by inserting them in the text itself in a different typescript so that further emphasis is put on the integrative aspect of reading in the sense that the learner-reader's attention is not driven away from the reading text. The inserted questions make him go to the next segment of the text in trying to understand it.

In the last analysis, the question device checks the instantiation of appropriate content and formal schematic knowledge, so that systemic knowledge is realised at discourse level. In this sense, it is crucial that these questions focus on the discourse signals which signpost local and global formal schemata in order that discourse engagement be facilitated. By doing that, these questions will be calling to the learner-reader's mind the cognitive processes he has to activate to understand the text. The underlying principle here is that learners should be aware of their own learning process in contrast to the traditional pedagogical belief that learners should not think about what they are doing in the learning task.

Note however that the local formal schemata, which the questions will call attention to, will have been previously selected in terms of the reading objective the syllabus designer has defined for the text. This in fact is carried out within a single teaching unit since the same text is read twice at different comprehension levels. Yet, as the syllabus progresses and intensive reading becomes a goal (cf Figure 5.2 above), all the binary discourse relations of a particular text have to be accounted for. The elements of the linguistic system which signpost the binary discourse values, ie, which have formal schematic value (cf discourse markers in 3.3.3.1 above), could be highlighted in the text. They are paramount in making the learner-reader operate on the predictability of discourse structure by utilising elements of the surface structure of discourse which signal binary discourse values and discourse macro-patterns.

The use of questions as a procedural device the learner-reader utilises to interpret the text also draws his attention to the fact that we read for different purposes (skimming, scanning, intensively etc.), depending on the sorts of question we, as readers, want to ask from a text. That is, the questions, by guiding the learner-reader, will determine the sort of reading objective required from a specific text. In this connection, a spiral concept of syllabus design could be used here since at a later date a text which was read at a level of comprehension x in a particular unit can be reread at a deeper level in another unit. In the same way that readers may go back to a text which they had first only skimmed through. Therefore, these questions are in fact the questions that the reader has to learn to ask in his co-operative interaction with the writer through the text.

Besides, the spiral type of syllabus also offers a strategy of course organisation which can be exploited in two directions. On the one hand, the same text can be used again with emphasis on systemic level items and formal schematic aspects which were not focussed on in the first reading of the text and require therefore a deeper comprehension level from the learner (cf for example, the realisation of this strategy within each teaching unit, ie, Reading phase B includes systemic and schematic elements not dealt with in Reading phase A). On the other hand, the same formal schematic and systemic elements can be used in different textual organisations to account for the consolidation of those elements. The strategy of using the same text twice within the same unit may be however criticised on the grounds that by recycling the text, the learner's interest in it may be lost. The issue here involves the pedagogical effectiveness of the strategy adopted which, I think, can only be investigated through the continual exploration of this methodology in the classroom (cf chapter 8).

As pointed out above, the questions inserted in the text have the function of calling up content and formal schemata in the reader-learner's mind by focussing on the text elements (systemic level units) which in a bottom-up direction will instantiate schematic knowledge. However, at the beginning of the syllabus because the formal schematic knowledge required from the reader is fairly obvious to the learner (cf grading criterion introduced in 5.2.1 above) and is determined by the juxtaposition of the propositions (few overt discourse signals are used) and learners' knolwedge of the world, the questions will tend to centre on systemic level units (lexical items) which activate content schemata. As the syllabus progresses nevertheless the formal schematic structure becomes more complex and knowledge of the world therefore is not enough to instantiate formal schematic knowledge. The learner-readers consequently have to make use of the overt discourse markers. The questions then will concentrate on the use that the learner-reader will have to make of the signals of the surface structure of discourse to interpret the text. Although the methodological procedures are all applied right from the start of the course, at the beginning the questions are mostly a device to make use of lexical items to instantiate content schemata.

In this connection, one should note that the questions used in Reading Phase A, ie, before systemic knowledge is dealt with in Pre-Reading Phase B, will mostly centre on lexical items which are cognates (cf grading criterion discussed in 5.2.2.2 above). Nevertheless, use is also made of lexical items whose meaning is not transparent to the learner-reader but are essential for comprehension in Reading Phase A. The device of questions is also exploited as a way of handling these items. As the questions are asked in the native language (ie, in Portuguese), they themselves contain a clue to the meaning of the item by requiring the learner to rely on his world knowledge and cognate items. For example, in the sentence below, the question, by relying on the learner-reader's knowledge of two cognates (Pedro and coffee) and background knowledge, provides the learner-reader with a clue to the meaning of the items he does not know, even if it is at a general level of comprehension of these items (cf Menezes de Souza, 1983).

		Pedro drank coffee and milk
Question in Portuguese	=	What did Pedro drink?

This device to help the learner-reader instantiate content schemata is derived from the psychological concept known as the "Aha-hypothesis", namely, "effort toward comprehension can be viewed as an "aha" experience (ie, a state of non-comprehension followed by comprehension of the sentence)"(Auble, et al., 1979:426). Essentially, the 'aha' process is characterised by two steps: the first is equated with the non-comprehension of a segment of text and the second is related to its comprehension due to a contextual reference provided by an adequate cue. In the methodological device I have argued for here the first step is represented by the learner-reader's attempt to read and the second by the cue given by the question which help the learner-reader understand the text.[25] Thus, the use of questions has the function of making discourse engagement possible from the very beginning of the reading course (cf the strategy of reading with whatever resources availabe in Reading Phase A) and also of indicating to the learner-reader that total comprehension of every word in the text is unnecessary.

5.2.5.5 Comprehension Testing Phase

Despite agreeing with Smith (1982) that normally no one reads a text to have its comprehension tested, in the context of the classroom, comprehension testing seems to be inevitable to provide teachers with evaluation of their teaching and students with a sense of achievement. However, comprehension testing here tries to be consistent with the reading model which informs the design of this syllabus.

In this way, it emphasises activities which focus on the interaction of the learner-reader with the text in the process of negotiating his schematic knowledge with the writer. Instead of asking the learner to provide exact answers for specific questions, a testing strategy typical of text-based approaches to reading comprehension (cf 3.2.1 above), testing here should try to centre on the procedures that readers use to read a text. That is to say, rather than emphasising product measures of text comprehension, the focus is on process measures.

At the beginning of the course, in which the emphasis is on a global comprehension level, ie, extensive reading is involved (cf 5.2.4 above), the testing comprehension tasks should involve the general comprehension of the text negotiated in the class by requiring that learners present arguments to back up their answers. This type of testing clearly draws on the readers' contribution to the reading task and therefore calls attention to the fact that meaning is a result of a procedural interaction between participants in discourse, in the case at issue, the learner-reader and the writer (cf 3.3.4 above).

Therefore, comprehension tasks which rely on the reader's contribution to the reading task rather than centering solely on text presented knowledge are stressed here: asking pupils to draw diagrams/drawings which schematise the meaning of the text, to retell the passage individually and in group, to act it out, to complete a drawing which summarises the passage etc. Again, in agreement with the problem-solving view of learning which has been adopted in this thesis, the comprehension tasks tend to be introduced as problems for which the learner-reader has to present possible solutions through heuristic procedures.

However, as the syllabus progresses, and intensive reading also becomes a goal (cf 5.2.4 above), a local type of comprehension testing needs to be taken into consideration as well. Since testing at a global level of comprehension (extensive reading) essentially relies on the learner's use of global formal schematic knowledge, and at a local level of comprehension (intensive reading) involves his use of local formal schematic knowledge, testing for these two different levels of comprehension is necessary because it accounts for the interplay between the local and the global formal schematic levels in normal reading comprehension. I would think that similar types of process-oriented activities described above in connection with the global level of comprehension could be devised. These may involve problem-solving activities which test the procedural work necessary to process binary discourse values and their signals, cohesion markers etc. It should be noted however that at the local level of comprehension interpretation will become more semantic and less pragmatic.

It is hoped that the ISTR syllabus in advanced classes will be supplemented by extensive reading activities which will require reading comprehension which is not to be tested but used as a catalyst for classroom discussion of varied content schematic areas (cf the first Parallel Auxiliary Component discussed in 5.2.1.1 above).

5.2.5.6 Post-reading Phase

The last phase of the methodological component is the Post-reading Phase. Its aim is to call up further personal responses from the learner-reader towards the reading text, ie, the focus is on critical reading (cf the view of education which underlies this syllabus in 1.4 above).

This phase exploits the content schematic area of the text through posing questions to the learner-reader which relate this content schematic area to others, to different views of the same subject matter etc. In so doing, the methodological component connects the reading task with the world around the learner-reader and therefore shows that learning to read in a FL has an immediate role to play in the learner's life, ie, an activity which is meaningful to the learner. It is in this sense that this reading syllabus has educational aims which go beyond the act of learning how to read in the classroom (cf 1.3 and 2.2.1.2 above) and which are in fact achieved by pedagogical means such as the ones utilised in this phase[26] (cf note 7 in chapter 2).

As the learner-reader's capacity develops, this Post-reading Phase acquires a more relevant role, for the texts used will include cultural content schemata with which the learner is not familiar (cf the first Parallel Auxiliary Component introduced in 5.2.1 above). As indicated in 2.2.5.1 and 5.2.3.1 above, these content schemata will be related to the various cultures where English is used either as a first or a second language in order to question the tendency to equate ELT with American values in Brazil.

In Piaget's terms, this phase will then account for schema change (cf Anderson, 1977:419) - accommodation - ie, the learner-reader will reorganise his cognitive structures in such a way as to include the content schematic area of the text he reads. This type of intellectual process is what is considered true learning, ie, the learner adjusts his existing cognitive structures to account for new information in order to make it his own. In the previous phases the emphasis is on learning to read whereas in the last phase the direction of dependency changes: the focus is on reading to learn.

Although this phase is included in the syllabus from the start, the accommodation process, as said above, will be typical of more advanced units. At the beginning of the syllabus, because of the grading criteria used to facilitate discourse engagement, ie, familiarity and cultural proximity of the content schematic area of the text (cf 5.2.3.1 above), the intellectual process emphasised is schema usage - assimilation - since all that is required from the learner is the ability to handle incoming information in terms of his existing cognitive structures.[27]

In conclusion, it is worth observing that the methodological component by placing a problem to be solved in Pre-reading Phase A and by presenting steps for solving this problem in the following phases embodies an approach which has similarities with the type of discovery work typical of other subjects in the curriculum. Also, the Post-reading Phase by relating classroom work with the real world involves the use of activities which are common in project work. In other words, the approach to the teaching of reading in a FL suggested in this

thesis is not essentially different from the approach of other school subjects and therefore has a general educational value which goes beyond the FL learning task. Thus, the approach as a whole keys in with the educational objectives of the two Parallel Auxiliary Components included in this syllabus (cf 5.2.3.1 and 5.2.4.2).
If this approach to FL teaching proves to be effective, it will have accounted for two aims: learners' FL proficiency as expressed in their ability to read and their general education.

5.3 Summary

This chapter has advanced the ISTR syllabus model. The syllabus consists of two components (systemic and schematic components) which embody the units of the syllabus, and a methodological component, which accounts for the processes involved in language interpretation.
This latter component plays a major role in the sense that it has to do with the procedures of interpretation which relate the two types of knowledge represented in the two other components and which a learner-reader has to learn to use in his interaction with the writer, so to speak. The methodological component consists of: a) Pre-reading Phase A, which induces the schematic knowledge present in the text; b) Reading Phase A (superficial reading), which requires that readers get to grips with discourse interpretation by making use of whatever resources available; c) Pre-reading Phase B, which accounts for the systemic knowledge necessary for a deeper level of comprehension; d) Reading phase B, which aims at a deeper level of comprehension, ie, a more effective top-down/bottom-up text processing; e) Comprehension Testing Phase, which centres on process measures of text comprehension; and f) Post-reading Phase, which focuses on aspects related to critical reading. By making the methodological component central, this syllabus tries to account for the content units of the syllabus in a process-oriented framework.

The next chapter looks into issues related to the empirical part of this thesis, namely, how the syllabus put forward here was evaluated.

NOTES

1 These inventories are exemplified with the design of particular teaching units in Appendix A where the rationale for the design of the materials used by the experimental group in the empirical part of this research is discussed.

2 This type of grading has also been recently claimed by Crombie (1985a) in her relational syllabus (cf 4.3.1.4 above).

3 cf Lado (1957:2): "Those elements that are similar to the learner's native language will be simple for him and those elements that are different will be difficult".

4 This view of learning has actually informed the ISTR comprehension model developed in chapter 3 and it will be prevalent in the design of the methodological devices discussed in 5.2.5 below.

5 Note that in principle a thorough CA of English and Portuguese could perhaps help to make this type of grading preciser by making explicit what is new in the TL for the learner. However, global CAs are non-existent. As James (1980:61) posits, "Such CAs are infeasible simply because linguistics is not yet in a position to describe language 'in toto', so there are no pairs of total descriptions for input to CA".

6 See James (1980:36) for a summary of the structuralist or taxonomic model.

7 In this connection, also note that the teachers who first evaluated the materials designed in this research, as a possible realisation of the ISTR syllabus model, were reluctant to accept grading based solely on the contrastive difficulty criterion (cf Appendix C).

8 In 5.2.4.2 below however I put forward a possible way of determining a hierarchial application of these criteria in the syllabus.

9 In this regard, see the major grading criterion put forward in 5.2.1 above which takes into consideration the learners' contribution to the process of learning how to read.

10 In this regard, note that there is evidence that familiarity with the global formal schemata of the text has positive effects on reading comprehension (cf 3.4.2.1)

11 There is evidence (cf Kintsch, 1977:55 and Freedle and Hale, 1979:121) that children as young as four or five years old have already acquired story schemata.

12 My translation from Portuguese: "A solucão não é reformular o texto didático mas ensinar o aluno a ler".

13 cf Hatch (1979:137): "If we can identify content words and if we use our knowledge of the real world, we can make fairly successful guesses about what we read without always paying attention to syntax".

14 cf in Appendix C the comments made by teachers in the questionnaire of the first evaluation of the experimental materials.

15 cf Prabhu and Carroll's (1980) problem-solving tasks which involve learner's cognitive capacity in meaning negotiation (cf 4.3.2.1 above).

16 The methodological solutions are offered here as guidelines (cf 4.4 above) which can be modified, improved or used differently (ie, group work etc.) to suit particular language teaching situations.

17 The language of instruction in the ISTR syllabus is the native language, ie, Portuguese.

18 The guiding principle here is Piagetian: "the individual is most interested in that which is moderately novel", as McNally (1977:11) puts it.

19 In fact, there is evidence that emphasis on metacognitive skills can imporve reading comprehension performance (cf Hosenfeld, 1984).

20 The use of the learners' NL as a device to teach a FL is what Riley (1981) calls sensitisation, ie, a pedagogical technique which exploits the learners' personal constructs.

21 The rationale for this phase is therefore essentially based on the work of cognitive learning theorists, namely, Neisser (1976),Piaget (1954), Bruner (1972 and 1977) and Ausubel (1968, 1963 and 1960), which Ausubel (1968:VI), to my mind, well summarises: ..."the most important single factor influencing learning is what the learner already knows. Ascertain this and teach him accordingly".

22 As indicated in 2.2.3 above, the motor-perceptive aspects of reading appear to transfer directly from Portuguese to English.

23 It will be seen in Appendix A, where the materials which realise this syllabus are presented, that some of the tasks in this phase were designed in the form of traditional language exercises due to the lack of systemic knowledge on the part of the learner which made it sometimes impossible to pose a problem-solving task. However, these more traditional activities may be seen as having the role of mediating for the teacher the innovations within the materials. Because they are not too different from activities teachers are used to, they help them approach the materials more easily.

24 If the need for the use of other linguistic skills in the learner's later life arises, the task of learning how to use them will be facilitated if the learner is competent in reading comprehension. I would think that the strategies for tackling language use - engaging in discourse - acquired through learning how to read would help the acquisition of

other skills since those strategies underlie language use in general, ie, in whatever form, writtern or spoken. Therefore, reading instruction can provide FL learners with an appropriate linguistic foundation - a general language competence -upon which the speaking and writing skills can be built,if necessary (cf Widdowson, 1978 and Krashen and Terrell, 1983).

25 Auble, et al. (1979) present evidence that the recall of an incomprehensible sentence is facilitated by the use of appropriate cues that make the sentence comprehensible.

26 Other pedagogical devices which have a clear educational purpose involve language awareness activities (cf 5.2.5.3), activities which involve metacognitive skills in reading which may help to improve leaners' general reading skills (cf 5.2.5.1 and 1.3 above) etc.

27 It should be observed however that accommodation implies assimilation, ie, every learner necessarily goes through an assimilation phase through which he tries to adjust incoming new information to his own existing schemata: "Accommodation of mental structures to reality implies the existence of assimilatory schemata apart from which any structure would be impossible" (Piaget, 1954:352).

CHAPTER 6

THE RATIONALE FOR THE EMPIRICAL RESEARCH

6.1 Introduction

In this and in the following chapter I want to consider the empirical part of this thesis, ie, the evaluation of the syllabus introduced in chapter 5. This chapter starts with an analysis of the issues connected with FL syllabus evaluation and with the rationale for the type of research paradigm employed in this part of the thesis. It focusses on the description of the research procedures to be used.

Although the ISTR syllabus model put forward in this thesis has been designed in a principled manner, ie, it has taken into account the local conditions of the ELT Brazilian classroom (cf chapter 2), theoretical and empirical research in the areas of discourse analysis and schema theories of reading comprehension (cf chapter 3), theoretical knowledge of the areas of syllabus design and FL learning (cf chapter 4), the effectiveness of this syllabus can only be checked in the real FL classroom. In other words, although a syllabus may be theoretically sound, before it is actualised in the classroom, there is nothing we can say about its efficiency in language teaching terms.

Some of the theoretical issues involved in the elaboration of the ISTR model, which guided the construction of the ISTR syllabus model, have been tested and confirmed in laboratory conditions (cf 3.5 above, where illustrative empirical evidence for the ISTR model is reviewed). Nevertheless, that is a long way from assuming that these will also be valid in the classroom, ie, whether the hypotheses about the reading comprehension process as incorporated into the syllabus really correspond to what is involved in learning and teaching how to read in the context of a classroom. Furthermore, the existing empirical evidence for the reading model argued for in this thesis mostly addresses issues connected with the psycholinguistic validity of the model or issues related to teaching learners how to use a certain type of knowledge (schematic knowledge) - as represented in a construct of the model - which research seems to indicate as facilitative of reading comprehension. As far as I know, the empirical research to be discussed here constitutes the first attempt to validate an integrated complete programme of teaching reading in EFL, ie, a syllabus in its comprehensive sense (content specifications, grading criteria, methodology etc. (cf 4.2 above), oriented by a schema theoretic view of reading and which assumes no systemic knowledge competence in the target language on the part of the learner-reader (cf 3.4.2.4 above).

The paradigm followed in FL syllabus evaluation is far from definite (cf 6.2 below). Allen (1984:70), for example, suggests that syllabus evaluation can take place at "any one of the five levels of concept formation, administrative decision-making, syllabus planning, materials design and classroom activity". In other words, a syllabus can be evaluated in terms of: a) its theoretical underpinnings and the procedures utilised in its elaboration, ie, at the levels of concept formation and syllabus planning; b) its usability in the school setting, ie, at the level of administrative decision-making; and c) its success in the language teaching classroom, ie, at the materials design and classroom levels. The first two levels are accounted for in this thesis by previous chapters which take into consideration the criteria utilised in the elaboration of this syllabus (cf chapter 2) and the theoretical bearings of the syllabus (cf chapters 3 and 4). That is, evaluation consisting in this case of making these principles explicit and arguing for them in the context of conflicting views. The other three levels which address issues related to the usability of the syllabus in administrative terms and to the success of the syllabus in the classroom are the focus of this chapter.

Syllabus evaluation at these three levels would involve the design of materials which would be utilised at different levels of learning for several years in order to investigate whether the syllabus meets its stated aims, ie, whether it is operable in the classroom and successful in teaching pupils how to read. This task therefore would involve the complete implementation of the syllabus in the school system so that it could then be scrutinised in terms of its effects on the language teaching-learning activity and of its usability in schools. Within the scope of this thesis, it is obvious that such an endeavour would be impossible. Therefore, to operationalise this research, an alternative had to be considered.

I have disregarded the administrative decision making level because it would be impossible within the limits of this research to implement the syllabus in several schools of the educational system in order to have it then evaluated by administrators. However, as regards the materials design and classroom activity levels, a compromise can be made. I have chosen to design some teaching materials for a beginner's course in the light of the syllabus model advanced in this thesis and evaluate the practical effectiveness of the syllabus, as reflected in the materials. To do that, these materials will be tried out in beginners' classes in the context of Brazilian schools during a limited period of time.

As will presently be shown in 6.3 below, in evaluating the syllabus in this way, this thesis has a twofold objective. On the one hand, it will try to examine teachers' and pupils' attitudes to the ISTR syllabus model (as represented in the materials) in comparison with existing syllabuses in Brazilian secondary schools (ie, the affective domain is involved here) and, on the other, it will attempt to investigate whether the approach embodied in this syllabus (as reflected in the materials) is more adequate than traditional ways of teaching reading in a FL (ie, the effectiveness of the syllabus in terms of pupils' performance is the issue here). This second objective is within the research tradition I reviewed in 3.4.1.3 and 3.4.2.4 above,which tries to show the efficiency of insights of schema theories in helping pupils to learn how to read.

It should be observed from the start that the evaluation to be discussed here has a very restricted scope due to the limited period of time in which this empirical work was conducted and also to the small number of groups and teachers who took part in it. Only the actual implementation of the syllabus in the classroom can offer a more realistic evaluation and at the same time indicate possible improvements and adjustments. From the perspective taken in this thesis, which sees the syllabus design activity as an operational and dialectical procedure (cf 2.1 and 5.1 above), it would in fact be contradictory to put forward a final evaluation of the syllabus from a single application of the materials which actualise this syllabus in the classroom. Nevertheless, the evaluation to be undertaken here has the function of preparing the ground for further investigation. In other words, it is to be seen as the beginning of a process rather than its end. In this sense, this research has a dual role. On the one hand, it offers some preliminary evaluation of the ISTR syllabus but, on the other, it projects the focus of this research into the future development of the syllabus in the real context of classrooms (cf 7.4.4 below).

6.2 Rationale for the type of research paradigm employed

Research in the social sciences has traditionally followed the nomothetic tradition of the natural sciences, ie, it has followed the experimental method of research through which the researcher tries to predict the effects of a particular variable provided that certain variables are under control.

Accordingly, in applied linguistics, evaluation of innovations in language teaching has normally been undertaken along the lines of this experimental paradigm (cf Allen and Davies, 1977; Hatch and Farhady, 1982, inter alia). Basically, this involves the performing of an experiment. The testing of a hypothesis through: a) the manipulation and/or control of variables - which account for the internal validity of the experiment - so that it can be shown that the outcome of the research is "a function of the factor you have selected rather than other factors you haven't controlled" (Hatch and Farhady, 1982:7); and b) the analysis of the independent and/or interaction effects of independent variables on a dependent variable. These effects are expressed through objective quantifiable data which are analysed in order to show the statistical significance of a specific innovation in language teaching, ie, of the hypothesis being tested. These results are then generalised to other populations provided that certain variables which may affect the external validity of the experiment are also controlled. In other words, we can explain the effects of the innovation because we can predict their cause. And by describing the experiment, ie, making explicit all the variables under control, statistical analyses used etc., the researcher provides other investigators with the necessary instruments for the replication and cross validation of his research.

More recently however another kind of research paradigm has been gaining support in the social sciences. Several specialists in innovative programme evaluation in the field of education, for example, have shown their disagreement with the experimental type of evaluation and have suggested a different paradigm: the so-called illuminative evaluation model or the non-experimental type of evaluation. This sort of programme evaluation is normally identified with the work of Parlett and Hamilton (1972). These authors have particularly argued against what they call the artificiality and restricted scope of the experimental paradigm of evaluation since by controlling extraneous variables to the experiment and by relying only on quantifiable outcome oriented data, the experimental type of research ignores qualitative and process oriented data, which are derived from the observation of the innovation in the "learning milieu". Therefore, they argue for an anthropological research paradigm in which the investigator assumes the role of a participant observer in the innovation rather than the traditional role of an experimental researcher as an outside observer. In this way, instead of isolating the innovation from the school context by controlling as many variables as possible through an experiment, the illuminative paradigm aims at looking into the innovative programme in the context where it is to be used. Applied linguists are also increasingly arguing for the use of the anthropological research paradigm instead of the restriction to experimental research models prevalent in their field: " a shift from what we normally consider important (ie, experimental research) to other forms of research (ie, non-experimental research)" (Ochsner, 1979:58).

The illuminative investigator observes what is going on in the classroom through the eyes of the participants. He interviews the participants, asks them to keep diaries and to fill in questionnaires about their attitudes to the innovation and in the light of their observations he tries to interpret the effects of the innovation. That is, the researcher exherts no control on the variables influencing the teaching-learning situation, and does not aim at generalising his results. The effects of the innovation are interpreted in relation to the context where it took place but cannot be expressed through general laws.

Fundamental for those who argue for an anthropological paradigm is the notion that the complexity of the social fact makes it questionable to utilise the same sort of research paradigm typical of the natural sciences in the social sciences. It is impossible to control and predict the laws which regulate human behaviour. Therefore, the objective data provided by experimental research are of doubtful value and consequently the results of any research can only be evaluated subjectively and not on the basis of statistical data.

The distinction between these two types of research is therefore clear. Essentially, it has to do with whether the researcher operates with a standardised reality or not. Experimental research by eliminating extraneous variables, which could interfere with the researcher's explanations of what caused the experimental results, works with a standardised reality. That is, anything that is not relevant to this model of reality is stripped away so that the researcher can provide an explanation to the effects of the innovation. Quantitative data are then used to explain what happened. On the other hand, non-experimental research involves no standardisation of reality.

In fact, this paradigm implies a way of getting closer to reality as it is, ie, the contextualisation of the research is its main characteristic. And the researcher wants then to understand how a particular innovation functions amidst the complexities of reality rather than explain its effects by standardising reality. Therefore, the more subjective type of data (qualitative and process-oriented data) ignored by an experimental evaluation is made use of since it is more sensitive to the educational context. Also, while the experimental type of research focuses on confirming or not a given hypothesis, ie, it has a retrospective character, the non-experimental kind has a prospective nature in the sense that it allows for continuing improvements of the innovation in the actual process of its application.

In the field of FL syllabus evaluation specifically applied linguists have differed as regards the type of research paradigm to employ. Candlin (1984), for example, argues that his totally negotiable syllabus (cf 4.3.2.2 above), which takes the form of an account of what happened in the classroom, includes an evaluative component in the very process of developing the syllabus. That is, "these accounts offer 'illuminative evaluation' on the operation of the programme, the influences and constraints upon it, the advantage and disadvantages for its participants and the effect it has on them and their learning" (Candlin, 1984:36). Evaluation in this sense is equal to syllabus development.

Brumfit (1984b:79) takes the view that because a syllabus expresses a social policy, it cannot be evaluated with objectivity. He argues however that constant feedback from teachers and pupils is necessary so that the syllabus can be improved. With this objective, he posits that use should be made of diaries (ie, qualitative data) and quantitative data in discussing the adequacy of the syllabus, "but we cannot expect to express the success of a social policy, which is what a syllabus really is, with any formal rigour" (Brumfit, 1984b:79).

Allen (1984:70-73) however, as pointed out above (cf 6.1), argues that a syllabus can be evaluated at five different levels (concept formation, administrative decision-making, syllabus planning, materials design and classroom activity). He holds that because the two last levels (materials design and classroom activity) have to do with issues directly connected with the success of the syllabus in the classroom, they tend to be the ones in which evaluators are more interested. In his view, the procedures involved in syllabus evaluation at these two levels should make use of quantitative and qualitative research methods because "they are not mutually exclusive and because they tend to throw useful light on one another when they are used concurrently in the same study" (Allen, 1984:73).

I agree with Brumfit (1984b) as regards the difficulty in terms of lack of objectivity involved in syllabus evaluation since a syllabus as a social policy entails many personal factors, particular views of the educational process, of FL learning, of the syllabus design activity etc. That is, syllabus evaluation as a form of research cannot be realised with objectivity because it might be affected by the values of the researcher. However, research is never value free anyway. What a researcher sees in the world depends on what his paradigm allows him to see, which has to do with "what courses he has had, what texts he has read, and which journals he studies" (Kuhn, 1970:50).[1] The crux of the matter, I believe, has to do with the sort of attitude towards research that the investigator has. Particularly in an area such as syllabus evaluation, the researcher should try to make his biases and evaluative research procedures as clear as possible so that the results of his evaluation can be publicly scrutinised (cf chapters 2, 3, 4 and the present chapter, where this researcher's view of the educational process, of the social context where this syllabus is to be used, of the theoretical leanings of this syllabus and the research methods used in this evaluation are discussed).

In accordance with Brumfit (1984b) and Allen (1984), since Candlin's (1984) suggestion for FL syllabus evaluation is not applicable to the nature of the syllabus developed in this thesis, the type of FL syllabus evaluation to be used here will try to provide for both quantitative and qualitative data. That is, rather than following one line of investigation and disregarding the other, the research to be discussed here tries to approach the evaluation of the syllabus both from an experimental and from a non-experimental perspective. Each of these approaches provides data of a different nature which can be equally useful in the task of evaluation, making it more thorough by providing different sorts of data which can then be played against each other in the interpretation of results. In this sense, instead of restricting this research to a quantitative paradigm, which provides for objective data in the context of an experiment, related to the outcome of the innovation (product-oriented data), the type of research to be undertaken here is supplemented by a qualitative approach, which puts forward data connected with the actual process of the teaching/

learning experience and which draws on the participants' (teachers and students) view of this process, rather than on the observer's. This perspective on research has been proposed by different applied linguists working in different areas of research (cf Ochsner, 1979; Long, 1980 and 1984, Paulston 1984 (as quoted in Allen, 1984), Allen 1984; inter alia).

I also find support for this rationale in the areas of behavioural research: "Ideally, we should, whenever possible, approach research problems and test research hypotheses both experimentally and non-experimentally" (Kerlinger, 1973:346); and in the area of evaluation of educational and social programmes:

> "Enthusiasts have championed two competing styles of inquiry: one requires pointed questions and strong controls while the other is naturalistic, broad and exploratory. These two styles are not mutually exclusive and should be combined in various proportions for various purposes" (Cronbach, 1982:x).

> "Experimental control is not incompatible with attention to qualitative information or subjective interpretation nor is open-minded exploration incompatible with objectification of evidence" (Cronbach, 1982:44).

The desirability of bringing these two perspectives of research together then has to do with the fact that each one of them gives us something different about the nature of the fact we are examining, ie, two different sorts of insights into the innovation are put forward. While the experimental paradigm decontextualises the research and narrows its focus on the outcome of the innovation, in terms of learners' performance, the non-experimental paradigm contextualises the investigation and broadens its scope by considering variables related to the actual process of learning and teaching and to the participants' perception of this process. In this way, by bringing these two different research perspectives together, an attempt is made to account for their intrinsic limitations. Or, as Cronbach (1982:45) puts it,

> "Something is gained when an evaluation becomes more objective, more reproducible, more concentrated ... Something else is gained when the evaluation becomes more phenomenological, more flexible, broader in its coverage".

Furthermore, due to the pedagogic nature of the inquiry undertaken in this thesis (cf 1.1 above), it is crucial that this research make use of these two types of data so that an insight may be gained not only in terms of the effects of the innovation as regards learners' performance but also in terms of the conditions within which investigation in the classroom has to take place.

In line with this sort of attitude towards research, the difficulty the investigator faces, I think, has to do with the ability to alternate between the two types of paradigm, since both styles of research are derived from different views of the research act, which therefore involve different instruments and procedures. Crowle (1976:163, as quoted in Ochsner, 1979:64) has argued that despite the differences in both approaches to research, it is "possible with careful gear changing to alternate between them". The central issue in my view however has to do with reconciling a kind of research paradigm which is exploratory (non-experimental) with one which has clear research mechanisms predetermined before the research act itself (experimental) and which involves hypothesis testing. To my mind, if the researcher agrees with the position taken in this thesis that it is necessary to have access to both types of data, he has to decide on the paradigm which provides for the kind of data he is primarily interested in and which better fits the circumstances in which he is going to carry out his research, and then somehow try to account for the other type of data which the chosen paradigm does not tap. In other words, the investigator will operate according to the principles of a particular research paradigm, ie, his primary research focus, but at the same time through the use of specific research instruments he will try to consider a different sort of data, ie, his secondary research focus. Therefore, his primary research focus sometimes becomes peripheral and allows for the provision of secondary data.[2] In this way, his research design will make it possible for him to have access to both quantitative/outcome-oriented data and qualitative/process-oriented data concurrently, which he can then use simultaneously in the interpretation of the results.

In accordance with this position towards research, the design adopted in this thesis follows an experimental paradigm, but it also tries to account for non-experimental data as secondary data. Despite acknowledging the difficulties in undertaking an experiment when dealing with social behaviour, which is an aspect to be taken into consideration when the experimental results are analysed in chapter 7, I still found the two following reasons for choosing an experimental paradigm as the main research focus: a) Although I agree that process-oriented data are crucial in making the evaluation more complete by being more phenomenological, in the present research I was particularly interested in investigating the effectiveness of the ISTR syllabus approach to the teaching of reading in terms of learners' performance (ie, product-oriented data). To the best of my knowledge, there is no empirical evidence of the effects on L_2 reading comprehension performance of a teaching approach which involves instruction in the use of both types of schematic knowledge such as that in the ISTR syllabus model[3](cf 3.4.2.4 above). Therefore, if I focused on process-oriented data, product-oriented data would be made less relevant since the research would not involve hypothesis testing, control groups etc. b) To make use of a fully participant observation type of evaluation, I would have needed more time than I had to carry out this empirical work. It would have been necessary to spend some time exploring the school environment, before the materials actually started being used, in order to decide on the issues to be inquired into (cf Parlett and Hamilton, 1972). Further, more time would also have been needed to train teachers in undertaking a fully qualitative type of evaluation.

Therefore, the paradigm used here is experimental on grounds related to the nature of the data particularly relevant to this inquiry and also to pragmatic constraints. However, this research also tries to account for data of a qualitative and process-oriented type in the light of which I will try to further interpret the quantitative findings. Normally, the interpretation of experimental findings rests solely on speculation; yet, here I will make use of non-experimental data to justify my speculations. As I will discuss in 6.3.2 below, the non-experimental data will also provide means of checking the external and internal validity of the experiment by putting forward information on whether teachers really followed the treatments assigned to their groups, their biases etc.

It should also be noted, as I will further discuss in 7.4.4 and 8.2.2, that this research design, by centering on experimental data which are in their turn illuminated by non-experimental data, indicates that experimental findings will be used here not only for their own sake but also a means of pointing to directions for further investigation, taken up by non-experimental research. In this sense, it will be argued (cf 7.4.4 below), both types of research perspectives (experimental and non-experimental) project the findings of this thesis into the actual implementation of the ISTR syllabus model through non-experimental action research (cf 8.3 below).

In the next section, I deal with the design of the research procedures to be utilised in the evaluation of the syllabus. Section 6.3.1 centres on experimental data (outcome-oriented data) and 6.3.2 on non-experimental data (subjective and process-oriented data).

6.3 The research design of the syllabus evaluation

6.3.1 Experimental research data procedures

6.3.1.1 A quasi-experimental research design

As I have indicated in 6.1 above, the main concern of the evaluation to be carried out here is with the effectiveness of the ISTR syllabus model in the context of Brazilian schools. However, setting up an experiment in the classroom brings about specific difficulties for the experimental researcher. Essentially, the problem has to do with the impossibility of controlling all the extraneous variables occurring in the classroom so that it is not feasible to show that the findings of the research are a result of the independent variable(s) chosen and not of other uncontrolled variables. That is, the researcher cannot fully account for the internal validity of the experiment. In fact, in most experiments which are undertaken in natural social settings, in my case, the school context, there is no way a true experiment can be realised, since the randomisation of the subjects, the history factor, and other variables are not fully controllable. As Hatch and Farhady (1982:22) put it, "it is ... very difficult to carefully define many of the numerous variables involved in most Applied Linguistics research".

The researcher however can in due course look for factual data which may show: a) whether the pupils used as subjects had been assigned to their classrooms on a random basis; and b) whether the findings of the research are due to another factor which may have occurred when the experiment was taking place; etc. However, there is no a priori guarantee that these factors are under control. In other words, if there are doubts about the validity of the use of experiments in social sciences in general even in laboratory conditions (as seen in 6.2 above), the situation becomes even more complex in natural social settings.

Nevertheless, despite the difficulty of putting together a true experiment in the classroom, researchers still find cause to make use of a quasi-experimental design (cf Campbell and Stanley, 1966; Hatch and Farhady, 1982) or compromise designs (cf Kerlinger, 1973). What is essential is that the investigator make clear the variables his experiment does not control and take them into consideration when interpreting his results so that the probability that his results were due to uncontrolled factors is assessed. As R. Clark (1977:141) points out,

> "Circumstances may make it difficult to perform experiments which are fully rigorous with respect of sampling procedures and measurement but if the limitations are kept in mind when the results are being interpreted, the performing of even a small experiment can be of great value in sharpening observation and developing intuitions".

Therefore, as pointed out in 6.2 above, in addition to making his biases explicit when conducting particular research, it is also crucial that the researcher clarify his research methods and the circumstances in which the research was undertaken so that his findings can be interpreted accordingly.

On the other hand, quite apart from the desirability of undertaking research under very narrow control constraints for the sake of the internal validity of the experiment, when conducting research in the classroom, one also has to consider its pedagogic purpose. If the typical features of the "learning milieu" are stripped away, the classroom loses its representativeness and the external validity of the research and its pedagogic concern are in fact affected. What seems to be essential then is a situation in which there is a balance between the internal and the external validity factors. In this sense, a quasi-experimental research design seems to be a quite adequate alternative for experimental research in the classroom context.

6.3.1.2 The internal validity of the experiment: eliminating extraneous variables

One way of eliminating extraneous variables in experimental designs which involve the use of intact classes, as the one at issue here, is to recruit groups for the experiment whose pupils (the subjects of this research) are as homogeneous as possible. In this research care has been taken to select groups of pupils who were as equivalent as possible in terms of age group, sex, social background, previous exposure to EFL and general learning abilities. Other factors which may affect the internal validity of the experiment, ie, previous EFL instruction before joining the schools where the experiment was undertaken, parallel private language school attendance and interest in reading in Portuguese were checked post-hoc (cf 7.2.1.3 below). On the one hand, it would have been impracticable to select groups on the basis of so many specific criteria and on the other my intuition indicated, not so correctly as will be seen in 7.2.1.3 below, that those latter set of factors would be homogeneously present across the groups.

Out of the five factors which were checked in the selection of the groups, I could more easily account for the age group and social background variables. In the school system of the city of Rio de Janeiro,where this experiment was undertaken,the only determining criterion for grouping the pupils is age group. Although there is no absolute guarantee of randomisation, the existing factual evidence seems to show that the children have been put into groups on a random basis.

The social background factor was the element which guided my choice of the schools. I was particularly interested in having this experiment carried out in schools whose pupils come from working-class[4] families. Therefore, I selected schools located in working-class areas. As the lists of parental occupation in Appendix D indicate, all the children have a working class background.

There were two objectives in trying out these materials with working-class children. First, one of my central purposes in carrying out this research was to reinstate FL education in the state school curriculum through a syllabus which would make FL learning a worthwhile experience and therefore accessible to the social classes which cannot afford to attend private language schools (cf 1.2 and 1.4 above). Second, because I have always found a general negative attitude toward working-class children on the part of the FL teacher in Brazil, I wanted to investigate the use of this syllabus in schools which have a typical working-class clientele. It is generally believed in Brazil that children of this sort of background find it hard to learn a FL or that FL education should not be part of these children's education either because they will never use it or because they have more basic things to learn. My position, as introduced in 1.2 above, is that: a) FL education in Brazil is part of the general educational process,and therefore denying working-class children the chance of true access to a FL in a society where this sort of knowledge is so highly valued (cf 1.3 and 2.2.5.2) is also a way of depriving them of a possible social mobility; b) The fact that these children need to learn more basic things (native language, history, etc.) is of itself no argument for excluding FL learning; and c) Working-class children are not capable of learning a FL because of the inadequacy of the existing syllabuses in Brazilian secondary schools (cf 2.2.1 and 2.3 above).

In trying to account for the internal validity of the experiment, I also looked into the sex factor and the groups' general learning abilities. The sex variable was difficult to take into consideration since the classes used in the experiment were intact, thus there was no way I could find exactly the same number of boys and girls in each group. Yet, as will be shown in 7.2.1.3 below, the groups have approximately the same number of boys and girls. As regards the equivalence of the groups in terms of their general learning abilities, I had to rely on teachers' subjective evaluation of their classes. They pointed out that their groups were of average ability.[5] I took the further precaution of choosing classes which did not consist of pupils who had already failed that form in a previous year.[6]

Another concern in designing this research was to utilise groups which were zero-beginners in EFL, for I was interested in showing the syllabus in use with learners who had no systemic competence in English since the ISTR syllabus in contrast with existing reading syllabuses assumes no systemic knowledge on the learners' part (cf 3.5 and 6.1 above). However, because of time constraints, which made it impossible for me to reach the schools in Rio at the beginning of the school year, I could not make use of groups which were true zero-beginners. All the subjects I could possibly have had access to at that point would have had one semester of English (approximately 26 hours). To account for this problem, which could seriously affect the internal validity of the experiment, I looked for classes which had been taught through the same sort of syllabus and which had covered approximately the same sort of material. The first task offered no difficulty since most teachers follow a structural syllabus (cf 2.2.4.1 and 2.2.1 above). Therefore, through consultation with teachers, their diaries and textbooks, I selected groups in which structural syllabuses had been employed.

The second task however was a major difficulty, for it was impossible to find classes which had covered exactly the same lexis and grammatical aspects. Again, by consulting with teachers and their diaries, I chose the groups which seemed to have covered almost the same kind of material. In Appendix _E_, I list the material covered by each group. A close inspection of that list reveals that group 4 had covered a few more lexical items (verbs of movement and clothing items) and grammatical items (prepositions) than the others. As this group could be expected to do better due to its greater linguistic competence, I decided that this group would be one of the control groups so that its possible existing bias would be made to work against my hypothesis. However, experimental and control treatments were assigned to the other three groups involved in this experiment on a random basis. Hence, although the subjects were not randomly assigned to the groups, the treatments were.

To further account for the subjects' homogeneous competence level in EFL, I administered a pre-test (cf 6.3.1.3 below) to check the subjects' similarity of knowledge of English. This precaution was considered totally unnecessary by all the four teachers, who claimed that their pupils' knowledge of English could be considered as that of zero-beginnners. Nevertheless, I decided to go ahead and have the pupils take the test before the experiment began. (As discussed in 7.2.2.1 below, the teachers' subjective evaluation of their pupils was confirmed by the pre-test).

It should also be noted that all the four teachers taking part in the experiment are equally competent in ELT and had the same academic qualification (a BA in English and Portuguese plus a teaching certitificate from a School of Education).[7] Also, the four of them are very experienced (nine years, at least) in ELT in the public sector and, albeit the present ELT situation, are equally enthusiastic about the profession. Therefore, I have no reason to suspect any reactive effect caused by the individual teacher's qualification and professional interest on the results of his or her group on the post-tests.[8]

Each teacher was individually briefed about how to use the materials and received some written instructions about them (cf in Appendices _A_ and _B_ the instructions for the teachers in both control and experimental materials). I met the teachers every week to provide them with a new teaching unit.[9] In this occasion, I also had a chance to discuss, among other aspects, the procedures they were using while teaching, making sure that they were equally keeping to my guidelines. This aspect can be checked by analysing the sort of qualitative and process-oriented data recorded in the non-experimental research instruments (cf 6.3.2 below).

The precautions I have taken in trying to account for the homogeneity of the groups increase the possibilities of accounting for the internal validity of the experiment. As Kerlinger (1973:342) has put it:

> "Although one cannot have the assurance that randomisation gives, if these items are all checked one can go ahead with the study knowing at least that there is no evidence against the equivalence assumption".

6.3.1.3 Description of the Pre-test

A standardised elementary vocabulary test (cf Appendix F) was administered to the four groups as a pre-test to check the similarity of the subjects' knowledge of Enlgish. I selected the twenty easiest items of the Vocabulary in Context Examination, ELI English Achievement Series, by A. Palmer, R. Trasher and J. Upshur. English Language Institute, University of Michigan, 1967. The decision on 20 items was determined by the fact that I did not want to make the test load heavy for the subjects.

Although this selection of 20 items out of a standardised test, which originally contained 50 items, affected the reliability of the test, I decided that it was still safe to utilise these items which had been individually scrutinised when the original test was validated. I was operating within certain time constraints which would have made it impossible for me to go through the normal procedures for the validation of the pre-test before the actual experiment started. Further, I am aware that some of the items may have drawn on linguistic knowledge other than lexical knowledge. However, owing to the fact that the objective of the test was simply to confirm the teachers' subjective evaluation as regards the subjects' lack of knowledge of English, I considered the test good enough.

The test contained instructions in Portuguese as to how the pupils should proceed to take it. These instructions also required that they should only start answering it when they were sure they had understood the procedures. It should be added that Brazilian pupils are quite familiar with the format of the items (multiple-choice items). Also, to eliminate any sort of Hawthorne effect caused by the administration of this pre-test, pupils were informed that this test was simply to check their knowledge of vocabulary items at that point in their course and no connection was made between the pre-test and the experiment which was to start in the next class. In other words, the pre-test was presented as a normal activity of the EFL course they were following. Pupils were given as much time as they felt necessary to complete the test, which involved no more than 25 minutes.

The results of the pre-test were analysed through a one-way analysis of variance (ANOVA) of the means of the four groups (cf 7.2.2.1 below). The null hypothesis tested was that there would be no statistically significant differences between the groups' means on this test.

6.3.1.4 The external validity of the experiment

As to the generalisability of the results of the experiment to other populations, care has been taken to eliminate the reactive effects of testing and of experimental arrangements (Hawthorne and expectancy effects). As pointed out above, when discussing the pre-test, the tests were administered as a normal procedure of the pupils' school life and the subjects were not made aware that they were taking part in an experiment. I have no reason to suspect that the pupils' results in the pre- and post-tests were a reaction to the experimental arrangement. The pupils were told they were going to learn how to read in English for the following ten weeks, ie, until the end of the school year, and test taking is a normal procedure in their school life.

It is also worth remarking that the design employed in this research does not involve the contact of the investigator with the subjects. The usual teachers of the groups taught the reading classes and were required to take the reading course as a routine activity of the pupils' English course, ie, not to mention the experiment to the pupils. Therefore, it is unlikely that the pupils realised that they were being used as subjects in an EFL teaching experiment.

Furthermore, the research design itself, as shown in 6.3.1.5 below, by controlling for teachers' expectations, also accounts for a possible Hawthorne effect on the part of pupils (cf Tuckman, 1972: 129 and 130). As the teachers in one of the experimental groups and in one of the control groups had the wrong expectations towards their groups, the pupils' expectations in these groups were also manipulated. As a consequence, these pupils' possible reactive attitude towards the experiment was controlled.

Besides, as pointed out in 6.2 and further discussed in 6.3.2 below, the access to process-oriented data that this research design provides further tries to take into account the external validity of the experiment.

6.3.1.5 A factorial design: independent and dependent variables

The quasi-experimental design involved the use of two experimental groups and two control groups, two independent variables and one dependent variable. The two independent variables were the treatment of the materials used and the teachers' expectations. The dependent variable was the subjects' scores on two achievement post-tests. Therefore, the dependent variable comprised one construct, performance in reading comprehension, operationalised through two different test measures.

The treatment of the materials were of two kinds: the experimental treatment, which corresponded to the materials designed as a possible realisation of the ISTR syllabus put forward in chapter 5 (cf the rationale for the design of the experimental materials and the materials themselves in Appendix A), and the control treatment, which corresponded to the materials designed as a possible realisation of a traditional methodology for the teaching of reading. This methodology is informed by the principles of the "reading method" (as presented in Rivers, 1972) and West's guidelines (1941 and n.d.) for reading instruction, which equally reflect a text-based model of reading comprehension. Although normally the treatment of control groups is the same in use in the school context, such a procedure could not be followed here due to the fact that there is no syllabus being used in Brazil for the teaching of reading in secondary schools. Therefore, I designed some materials which follow a traditional approach to the teaching of reading so that it could be contrasted with the ISTR syllabus approach. It should also be indicated that the same kind of systemic and schematic units are used in the control materials, ie, the same reading texts are used. The essential difference between the experimental and control treatments is the methodology used. See Appendix B for a detailed discussion of the rationale for the design of the control treatment approach, its actualisation in the form of materials and for the control materials themselves.

The other independent variable was the teachers' expectations. The inclusion of this independent variable was due to the need to control for the reactive effects of teachers' expectations towards their groups since the teachers were aware that I was conducting an experiment. Their attitudes towards the groups were likely to affect the pupils' achievement post test scores. Therefore, I included four groups in the experiment and controlled each teacher's expectations towards his/her particular treatment, as I will presently show.

Further, this design by controlling for teachers' expectancy effect, as pointed out in 6.3.1.4 above, also increases the external validity of the experiment. It eliminates the reactive effects of the experiment on the part of both teachers and pupils since two of the four teachers have incorrect expectations. Due to this need to control for teachers' expectancy effect, I chose groups which attended different schools, so that there would be no communication between the teachers and pupils involved in the experiment.[10]

Thus, on the one hand, the experiment (cf Figure 6.1) involved the use of two experimental groups (groups 1 and 2), whose teachers were led to believe that their groups were experimental (group 1) and control groups (group 2). That is, the teacher of the experimental group 2 had control group expectations towards her group, ie, no expectations for success, whereas group 1 teacher had the correct expectations, ie, experimental group expectations. And, on the other, the experiment comprised the use of two control groups (groups 3 and 4), whose teachers were led to believe that their groups were control (group 3) and experimental groups (group 4). In other words, the teacher of control group 4 had experimental group expectations towards her group, ie, she had expectations for success, whereas group 3 had the correct expectations, ie, control group expectations. I carried out the manipulation of the expectancy variable by informing each teacher individually about whether his or her approach was experimental or control.

This design therefore aims at accounting for the following effects on the dependent variable, ie, on the subjects' achievement scores in

FIGURE 6.1

COMBINATION OF THE INDEPENDENT VARIABLES: TREATMENT AND EXPECTATIONS

EXPERIMENTAL GROUPS		CONTROL GROUPS	
GROUP 1	GROUP 2	GROUP 3	GROUP 4
teacher had experimental group expectations	teacher was led to believe the treatment was only a control condition, therefore teacher had control group expectations	teacher had control group expectations	teacher was led to believe the control treatment was an experimental innovation, therefore teacher had experimental group expectations
combination of experimental treatment with teacher's expectations for success	combination of experimental treatment with no expectations for success	combination of control treatment with no expectations for success	combination of control treatment with expectations for success

the post-tests of the experiment (cf 6.3.1.6 below): a) two independent effects: the experimental treatment versus control treatment and control group expectations versus experimental group expectations; and b) the interaction effects of treatment with teachers' expectations. As Kerlinger (1973:243) makes clear, this sort of design calls for the type of statistical treatment known as factorial analysis of variance (cf Figure 6.2): "Factorial analysis of variance is the statistical method that analyses the independent and interactive effects of two or more independent variables on a dependent variable". A two-way ANOVA therefore will be the statistical test used here.

Figure 6.2

Factorial design of the experiment

Independent variable A: treatment

independent variable B: teachers' expectations		A_1 Experimental Group	A_2 Control Group
B_1	exp/al group expectations	Group 1 A_1 B_1	Group 4 A_2 B_1
B_2	control group expectations	Group 2 A_1 B_2	Group 3 A_2 B_2

dependent variable: reading comprehension achievement test scores

6.3.1.6 Description of the Post-tests: the dependent variable

The dependent variable is expressed in the scores of the post-tests, which the subjects took after the 6 units[11] of both experimental and control group materials were taught in ten weeks (cf 7.2.1.1 below). These scores were measurements of the subjects' achievement in reading comprehension tests.

Two tests, each corresponding to the experimental and control group treatments (cf Appendix G), were designed. The four groups had to take both sorts of tests so that the possible backwash effect of a group's specific treatment on the pupils' scores on the post-tests was also taken into consideration. That is to say, the four groups sat for exactly the same test measures.

Each test consists of two texts about which ten test items were written. Therefore, each test contains twenty items. On the whole, the tests involved forty items and four texts. Although the short length of these tests was likely to affect their reliability coefficients (cf 6.3.1.6.2 below), I decided that to require 11/12 year olds to respond to more than forty test items at a time would be unrealistic.

Each test had instructions in Portuguese and teachers were required to read the whole test with the class before they actually asked students to take the tests. Each group first took the kind of test which corresponded to the rationale behind their materials. That is, experimental groups first did the experimental group tests and control groups first did the control group tests.

Both kinds of test were first written in English and examined by a specialist on language testing before the pilot work was actually done. I translated the items into Portuguese and had my translations checked by two Brazilian EFL teachers.

Contrary to the pre-test which was a standardised test (cf 6.3.1.3), the post tests were ad hoc tests which had to be specifically constructed for this experiment. Consequently, they had to be piloted and evaluated in terms of validity and reliability before they were actually used in the experiment.

6.3.1.6.1 Pilot study and reliability of post-tests

As it was impossible to utilise subjects in the pilot study of the post-tests who were identical to the subjects of the major study (1st from pupils)[12], for they would not be able to take the test, I used a population of 55 subjects of the 3rd form of the school of group 1 and a population of 53 subjects of the 3rd form of the school of group 4 as test-groups for the experimental group test and the control group test, respectively. Care was taken to select subjects who were as similar as possible to the subjects of the major study. Although I could have used subjects (2nd form pupils) who belonged to an age group closer to the major study subjects, I decided to choose 3rd form pupils as pilot study subjects even though they are slightly older (13-14 years) than the major study subjects (11-12 years). I feared that the tests would be too difficult for 2nd form pupils. The group 1 school subjects consisted of 27 boys and 28 girls whereas the group 4 school subjects of 23 boys and 30 girls. The teachers[13] who administered the tests were also required to check any problem with the comprehension of the instructions. No problems were noted. Sufficient time was given for the subjects to finish the test.

The reliability coefficients of both tests were checked by measuring the internal consistency or homogeneity of the items through the use of the Kuder-Richardson 20 formula (cf Hatch and Farhady, 1982:245). That is, the reliability was estimated from a single administration of the test. The experimental test proved to have a reliability coefficient of .52 and the control test of .7. Although the experimental test reliability coefficient was not high, I considered it acceptable for research purposes[14], particularly because, as I pointed out above in 6.3.1.6, one of the main factors which is likely to increase the reliability of a test, its length (cf Davies, 1977:58 and Hatch and Farhady, 1982:250), could not be taken into account in the design of the tests. I was afraid I would make the test load too heavy for the major study subjects. As indicated in 6.3.1.6 above, each test consists of only twenty items; therefore, both types of test were considered adequate for the purposes of the present study.

6.3.1.6.2 Validity of post-tests

The post-tests were evaluated in terms of face, content and construct validity. The examination of the test items reveals that the tests have face validity. However, it is necessary to check if the items are valid beyond face validity.

Content and construct types of validity have to do with "examining what goes into the test items" (cf Ingram, 1977:21-22). To the extent that the two tests at issue were achievement tests, in order to check their content validity it was paramount to investigate whether the items included in the tests measure a representative sample of the content of the teaching units of the materials and how well the instructional objectives are represented in the test (cf Thorndike and Hagen, 1977:58). The analysis of the control group tests reveals that all the items were adequately selected from the units of the control materials and the type of comprehension required involved all the items in the text, which is in fact an instructional aim of the control group materials (cf rationale for the control treatment approach in Appendix B). The experimental group test however, because of a theoretical construct derived from the view of reading comprehension on which the experimental materials are based, contains lexical items which are not part of the teaching units of the materials (cf cat, ball, exercises, stories, prefer, reading, biscuits, until, programme in text 1 and difficult, wrong, club in text 2).[15] Nevertheless, the presence of these lexical items does not harm the content validity of the experimental tests because learning how to cope with items in reading comprehension with which one is not familiar is part of the instructional objectives of the experimental group syllabus (cf 5.2.3.3 above where it is indicated that the ISTR syllabus model focusses on items differentially). Therefore, both experimental and control group tests appear to have content validity.

In regard to construct validity, I am concerned with demonstrating how each type of test embodies the constructs which define the reading comprehension models on which the tests are based (cf Davies, 1977:62 and 63 and Ingram, 1977:22). It will be shown that both types of test also appear to have construct validity.

The experimental group test (cf Appendix G), as a reflection of the ISTR model, centres on global comprehension and on activities which try to represent the interaction of the reader with the text by emphasising process-measures of comprehension. In this sense, the items pose problems which try to simulate the procedures for text interpretation. Text 1 (An afternoon at home) is followed by three activities. They require[16] that readers: number the paragraphs according to the label provided in each box (activity 1); identify the paragraph which describes a cat in the story (activity 2); and identify five statements, which summarize the story, as true or false (activity 3).

Text 2 (A visit to Italo and Bia) is also followed by three activities. They require that the reader: number each paragraph according to the labels provided, which identify the rhetorical value of each paragraph (activity 1); use a given map to show the way two characters in the story took (activity 2a); write the names of the streeets on the map according to the text (activity 2b); complete a summary of the text (cloze procedure technique), in which every 9th word has been omitted. It should be noticed that the fact that the amount of material covered in the teaching units is very limited imposed certain restrictions on the design of the experimental post-tests such that they could not more widely represent the constructs embodied in the experimental treatment. However, I would still argue that these tests seem to have construct validity.

The control group test (cf Appendix G) in line with the rationale for the control group treatment (cf Appendix B) focuses on the comprehension of every item of the text and emphasises product measures of text-comprehension in the sense that the test items measure the outcome of the comprehension act. All the items have been constructed in a multiple-choice format, involving both reference and inference questions. Text 1 (The football fans) and text 2 (Sunday) are each followed by ten multiple choice reading comprehension items which focus on details of the information presented in the text. The control group tests also appear to have construct validity.

6.3.1.7 Research hypothesis

The subjects of the experimental group will have higher scores on both types of post-tests administered at the end of the reading course. The level of statistical significance pre-established for the ANOVA is .05.

6.3.2 Non-experimenal research data procedures

The procedures discussed in 6.3.1 above have been concerned with the experimental findings of this evaluation. That is, issues connected with the outcome of the implementation of the ISTR syllabus model in terms of learning effectiveness as expressed in the achievement post-test scores. The focus there was on product-oriented data. In the present section I want to address non-experimental qualitative aspects of this research design,which try to provide for a subjective type of evaluation as represented in the view of the participants in this research. This type of data also aims at putting forward information about the actual language teaching process that went on in the classroom - process-oriented data - so that the external and internal validity of the experiment described above in 6.3.1 may be further checked (cf 6.2 above). As pointed out above in 6.2, where I discuss the rationale for the type of research design employed in this part of the thesis, qualitative data here are secondary and are used to illuminate the experimental findings. It is true nevertheless that non-experimental data will be paramount here in projecting the findings of this thesis into future research (cf 6.2 above).

The qualitative process-oriented type of evaluation undertaken in this thesis makes use of three research instruments introduced in the following sections: pupils' questionnaires (cf 6.3.2.1), teachers' diaries (6.3.2.2), and teachers' final evaluation report (cf 6.3.2.3).

6.3.2.1 Pupils' questionnaires

The main objective of the pupils' questionnaires as a research instrument (cf Appendix H) is to provide for an evaluation of how the reading course and materials were affectively perceived by the pupils. That is, while the experimental evaluation (cf 6.3.1) centres on the pupils' behaviour on reading comprehension test measures, ie, outcome oriented-data, the questionnaires try to tap data of a subjective nature, ie, pupils' degree of positive or negative attitude towards the reading course. These questionnaires by expressing the pupils regard for the materials and reading course are as good a measure as any of their effectiveness since it seems plausible to suppose that pupils' affective engagement with the materials may be a pre-condition for engagement for learning. In other words, the pupils' affective evaluation is important in pedagogic terms.

Therefore, the central part of the questionnaires (Part II) aims at gauging the subjects' attitudes although, as I will presently show, a scale which measures beliefs has also been included here. This section consists of five point Likert-type scales. These scales contain items involving questions about the reading course (Scale A - 4 items), issues related to the materials (Scale B - 13 items), issues that have to do with learning how to read in EFL (Scale C - 8 items), with whether the reading course affected the subjects' view of the reading process (Scale D - 5 items) and with learning English in general (Scale E - 7 items). Scales A, B, C and E are attitude scales and therefore have the objective of investigating how the subjects in the different groups reacted towards the reading course, the materials etc. Scale D however is concerned with beliefs. The aim here was to check whether the emphasis put on metacognitive skills in the experimental treatment (cf 5.2.5.1 above) affected the experimental group subjects' beliefs about the reading act in contrast with the control group subjects'.

The decision on a Likert-type scale was due to the fact that this kind of scale is reported in the literature as having a high reliability coefficient (cf Oppenheim, 1979:140 and Edwards, 1957: 156) and as being more easily constructed than other scales (for example, Thurnstone and Guttman scales). Further, this scale allows for the measurement of the strength of the attitude. And more importantly, it has been successfully used with Brazilian pupils of an approximately similar age group, ie, 14 year olds (cf Tilio, 1980).

Part I of the questionnaire (ie, the personal information section) includes wh- and yes/no questions on age, sex, EFL learning experience, interst in reading in Portuguese, and favourite reading topics.[17]

The last part of the questionnaires (Part III) contains open-ended questions, in which the subjects can more freely express their opinion about the materials and reading course using their own categories. They were asked what they liked best and least and if they had anything else to add.

The questionnaires were administered after the post-tests to avoid any reactive effects on the results of these tests.

6.3.2.1.1 Design of the questionniares

In line with the procedures indicated by Sudman and Bradburn (1982:119), I have put together a pool of items on the same topics of this instrument which have been used by other researchers (cf Yildz, 1984; Salimbene, 1983; Tilio, 1980 and Olomolaiye, 1979) and then either adapted them or borrowed them intact for my questionnaire. I also added to this pool items specifically related to the experimental and control materials used in this research.[18] I came up with a total of 84 items. Next, still following Sudman and Bradburn (1982:207), the items were examined for ambiguity, lack of clarity, redundancy, lack of discriminative character by a psychologist and myself. The items were then reduced to a total of 54 which were used in the piloting of the instrument. Due to the fact that the respondents were quite young, I tried to keep the questionnaire as short as possible.

Care has been taken in the construction of the questionnaires to provide the subjects with some training in using them before they actually completed the items (cf the instructions to the questionnaires in Appendix H). Also the administration of the questionnaires required that teachers read item by item and inquired whether the subjects had understood each one of them before proceeding to the next. I have also tried to avoid the so-called halo effect (cf Oppenheim, 1979:85) by organising the questionnaires in such a way that respondents had to concentrate on each item separately and also by mixing favourable and unfavourable items, which prevented subjects from using response-set. Further, to avoid socially desirable answers, I deliberately loaded items in the personal information section (Part I), which could be considered threatening (cf Sudman and Bradburn, 1982:75).

As the questionnaires were written in English, I had to translate them into Portuguese. My translation was checked by two EFL teachers in Brazil to ensure that the Portuguese version resembled the original in English as close as possible.

6.3.2.1.2 The pilot study of the questionnaires and the validity and reliability of the scales

The piloting of the questionnaires could not be done in full since it would require that the pilot subjects took the reading course developed in this research before they could adequately respond to the items in the questionnaires. Nevertheless, the questionnaires were piloted for comprehension by using a population of 40 pupils who belong to the same age group of the subjects of the major study (11 and 12-year-olds) and who attend the same school of group 4 and are at the same form (1st form). I also asked the four teachers who took part in the experiment to examine the questionnaires with the intention of detecting any possible misunderstanding that particular items and instructions could cause for the respondents. The pilot study brought about only two changes in the original version of questionnaires: 1) the need to make it explicit in the instructions that respondents should choose only one point in the 5 point Likert-type scales; and 2) to substitute the phrase typed materials for the word book in the phrasing of some of the items.

With this sort of pilot work, it is clear that the attitude scales could not be checked for reliability since the items were only piloted for comprehension, ie, the pilot work involved no access to scores that could be statistically analysed. I decided to examine the consistency of the scales as an instrument of measurement post hoc, ie, after the administration of the questionnaire in the major study, using the Cronbach α formula. This procedure is not ideal, but it was unavoidable in the circumstances in which this research was carried out. However, I tried to check the scales in terms of face, content and construct validity.

The examination of each item of the scales shows that the items have face validity. They appear to measure what they aim to measure. Each of the scales may also be claimed to have content validity since the variety of items tapping attitudes to specific aspects of the reading course, materials, reading in EFL and EFL learning, measured by the scales, is adequately sampled. Although some scales are small, approximately the same number of favourable and unfavourable items are put to respondents (cf for example, scale A which gauges attitudes to the reading course).

As regards construct validity, I am concerned with whether the type of psychological construct which is said to be underlying the scales accounts for test performance. Cronbach and Meehl, 1955 (as quoted in Olomolaiye, 1979:300) posit that construct validation is a logical process in which three steps should be followed. First, the researcher should put forward the construct which may account for the subjects' performance. In the study of the attitude scales here, the construct which may account for test performance is that the different sort of materials and treatment used in the experimental and control groups would explain the differences in attitudes on the part of each group's subjects. Second, the researcher should derive hypotheses from the theory supporting the construct. In the present study the hypothesis is that the attitudes of the subjects of the experimental groups will prove to be on the favourable end of the five point Likert-type scale in opposition to the control group subjects' attitudes. And third, the researcher should carry out an empirical study to test the hypothesis. Because the pilot study at issue here checked only difficulty in comprehending the items of the scales, the third step of construct validation (ie, the empirical test) will be carried out post hoc, ie, after the subjects of the major study complete the attitude scales. Again, this procedure is not ideal, but it was inevitable here.

6.3.2.1.3 Statistical treatment of the questionnaires

Following the factorial design of the experiment (cf 6.3.1.5 above), the attitude and belief scales (Part II of the questionnaires) were analysed through the use of a two-way ANOVA. The level of statistical significance pre-established was .05. The objective of this analysis was to examine the variability of the attitudes and beliefs across the groups (cf 7.3.1 below).

The personal information variables (Part I) which describe the population used in this research were measured in terms of frequency counts and the statistical significance of the distribution of these factors across the experimental and control groups were checked through the use of the Chi-square test. The pre-established level of statistical significance for this test was .05 (cf 7.2.1.3 below).

The open-ended questions (Part III) were coded and also analysed statistically for frequency counts (cf 7.3.1 below).

6.3.2.2 Teachers' diaries

The use of teachers' diaries has a twofold objective. On the one hand, it reveals data which inform the researcher about how the reading course, materials etc. were perceived by the teachers. That is, the diaries provide means for the researcher to look into the innovation through the teacher's perspective as a participant in it. And, on the other, they offer access to the actual teaching process in the experimental and control groups. In so far as diaries really reflect what went on in the classroom, they provide means for increasing the internal and external validity of the experiment in the sense that the researcher will be able to find out whether the teachers followed the teaching instructions of each type of treatment and also the extent to which their expectations towards the groups were really controlled. It is in this way that this research design also tries to account for process-oriented data.[19] Therefore, the sort of data recorded in the diaries, besides providing for teachers' subjective evaluation of the syllabus as reflected in the materials, can also be related to the experimental results in order to find out if they are supported.

I have designed a particular kind of diary (cf Appendix I) in which the teachers were asked to record three specific kinds of information for each lesson: a) The daily presentation of the materials and whatever problems they faced with them; b) Their pupils' attitudes to the materials and any hints of the pupils awareness of the reading process;[20] and c) Their own attitude to the materials. In addition to these three items, they were also asked to record whatever other sort of information they deemed relevant.

It should be observed that this instrument is in fact a cross between an open-ended questionnaire and a diary, ie, a guided diary, since I asked for information on particular issues in opposition to a true diary in which participants are invited to provide whatever information they themselves deem relevant. Although there is an obvious disadvantage here since I anticipate reactions by asking the teachers to pay attention to specific aspects, I wanted to make sure that I would have their views of these particular points. However, there is a section in the diary in which teachers can record whatever information they like, ie, a genuine diary is involved in this section.

As the diary was designed in English and as I thought that teachers would feel more at ease recording information in Portuguese, I decided to translate the diary instructions into Portuguese and have my translation checked by two EFL teachers in Brazil. Also, as the use of the diaries here involved only four teachers, I piloted the format and instructions of the diary with the same four teachers before they actually started using it in the classes of the experiment. That is, I had them use the diary to record a few of their other classes. The only problems raised were related to the difficulty in recording the information according to the scheme I had pre-established and also in finding the time to fill in the diary immediately after the class, as I had required. However, after some training in the use of the instrument, they appeared to use the diary adequately. The teachers' diaries are analysed through a hermeneutic mode of inquiry, which is discussed in 7.3.2 below.

6.3.2.3 Final evaluation report

At the end of the experiment I felt the need of having teachers look back at the teaching process as a whole and provide a final evaluation of what went on in the classroom.

I asked the four teachers to tackle three points at least in their evaluation, namely, their views of:

1. The syllabus they used in the reading course, as expressed in the materials, in comparison with existing syllabuses;
2. The materials of the reading course in comparison with materials previously used by the pupils;
3. The pupils' general attitude towards the materials and reading course.

The type of data put forward on this report is of a qualitative nature and will also be submitted to a hermeneutic mode of inquiry (cf 7.3.2 below).

6.4 Summary

This chapter has discussed the issue of FL syllabus evaluation and has put forward the rationale for the research design utilised in the evaluation here. It has also made explicit the limited scope of this evaluation but has drawn attention to the relevance of its findings in projecting this present research into the actual realisation of the ISTR syllabus.

It has argued for a research paradigm that centres on experimental quantitative data but also allows for qualitative and process-oriented data which can illuminate the experimental findings. The grounds for this rationale are that: a) since each of these two types of data is of a different nature and has inherent limitations, using them together in the same research design makes the evaluation stronger as a whole; b) due to the pedagogic concern of this inquiry, it is important to have access not only to data that focus on learner's performance (quantitative/outcome-oriented data) but also to data which contextualise this performance in the classroom (qualitative/ process-oriented data); and c) although it is impossible to concentrate on both types of research paradigm with equal emphasis at the same time because they imply different conceptualisations (assumptions, procedures etc.) about the research act, it is feasible to have a primary research focus (represented here by the experimental data) and a secondary research focus (expressed here in the non-experimental data). The choice of experimental data as a primary research focus has been determined by two factors: an interest in checking the effectiveness,in terms of learners' performance (outcome-oriented data),of an approach to the teaching of reading (the ISTR syllabus) which comprises instruction in both types of schematic knowledge; and pragmatic aspects related to time constraints which would have made the emphasis on non-experimental data impossible.

This syllabus evaluation has two objectives:

1. To try to show through the use of quantitative/outcome-oriented data that the ISTR syllabus model, as reflected in the experimental group materials, embodies a more adequate methodology for the teaching of reading in EFL than traditional methodologies; and
2. To try to investigate through the use of qualitative/ process-oriented data teachers' and pupils' attitudes to the ISTR syllabus model (as represented in the experimental group materials) in comparison with the control treatment approach and with existing syllabuses in Brazilian secondary schools.

Below I summarise the steps followed in the experimental and in the non-experimental evaluation.

6.4.1 Procedures for the experimental evaluation

- Quasi-experimental design
- Duration of experiment: 10 weeks
- School context: 4 schools of the public sector in the city of Rio
- Level of subjects: 1st year (1st form) of secondary schools; almost zero-beginners in EFL
- No. of groups: 4 groups (2 control and 2 experimental groups)
- Independent variables: A - treatment: experimental and control
  B - teachers'expectations: experimental and control
- Dependent variable: subjects' achievement scores on two reading comprehension tests (post-tests)
- Internal validity: checked in terms of subjects' social background, general learning abilities, sex, age group, material previously covered.
- External validity: controlled in terms of the Hawthorne and expectancy effects.
- Pre-test: 20 items selected from a standardised vocabulary test.
  Statistical treatment: one-way ANOVA; significance level: .05
  Objective: to check teachers' claim that learners were virtually zero-beginners.
- Distribution of independent variables across the Groups:

GROUP 1	GROUP 2	GROUP 3	GROUP 4
exp/al treatment	exp/al treatment	control treatment	control treatment
exp/al group expect	control group expect	control group expect	exp/al group expect

Statistical treatment: Factorial analysis of variance (two-way ANOVA)

Objective: To test the significance of the independent and interaction effects of the 2 independent variables on the dependent variable.

- Research hypothesis: The experimental group subjects will achieve higher scores on both types of post-tests.

  The level of statistical significance pre-established for the ANOVA is 0.5.
- Post-tests:
  Test description: two 20 item reading comprehension tests: one test corresponding to the experimental group treatment and the other to the control group treatment.

Test administration: the 4 groups will be required to take both types of post-tests.

Pilot work:

Subjects: 55 subjects of the 3rd form of the school of group 1 used as test group for the experimental group test. 53 subjects of the 3rd form of the school of group 4 used as test group for control group tests.

Tests checked for reliability: internal consistency (Kuder-Richardson - 20)

Reliability coefficient experimental test - .52

control test - .7

Tests checked for face, content, and construct validity.

6.4.2 Procedures for the non-experimental evaluation

Aim: to provide for qualitative and process oriented data.

Three research instruments: A - pupils' questionnaires
B - teachers' diaries
C - teachers' final evaluation report

A - Pupils' questionnaires

. Objective: to gauge the subjects' attitudes' and beliefs about the materials, the reading course, the reading process, learning how to read in EFL and EFL as a school subject (Parts II and III)

. to describe the population (Part I)

. Description: wh- and yes/no questions, 5 point Likert-type attitude scales, and open-ended items

. Pilot work: for comprehension

Subjects: 40 pupils of the 1st form of the group 4 school; (the 4 teachers who took part in the experiment also checked the possible comprehension difficulty of the items for the subjects of the major study).

Evaluation of attitude scales: validity: face and content validity checked; construct validity to be checked post hoc

reliability: internal consistency method (Cronbach α to be checked post hoc)

. Statistical treatment:
. attitude and belief scales → 2-way ANOVA
. items related to the description of the population → frequency counts
. open-ended items → frequency counts

B - Teacher's diaries

. Objective: to provide for the teachers' view of what went on in the classroom (qualitative and process-oriented data).

This kind of data by putting forward information on the actual language teaching process offers means for checking the internal and the external validity of the experiment.

- Pilot work: the instrument was piloted with the 4 teachers before the experiment started.
- Data to be analysed through a hermeneutic mode of inquiry.

C - Teachers' final evaluation report

- Teachers were required to provide a final evaluation report when the experiment was over.
- Data to be analysed through a hermeneutic mode of inquiry.

The next chapter deals with the empirical findings of this research.

NOTES

1 L. Hudson (1972:129), in this same sort of line, I think, argues that "to a remarkable extent, psychologists do research in their own image ... Convergers do research that bodes well for convergers; divergers, for divergers". In other words, "The researcher shapes his research findings, a fact that has been experimentally, and ironically, shown" (cf Ochsner, 1979:61).

2 By the phrase secondary data, I mean that due to the fact that the two types of research styles are intrinsically different, it is impossible to have access to both types of data as primary data at the same time and with the same rigour.

3 Note that the scarce evidence available focuses on the effects of teaching a specific kind of schematic knowledge in L_2 reading comprehension performance (cf 3.4.2.4 above).

4 The term working-class as used in England does not seem to be quite adequate to define the equivalent social class in Brazil. However, for the purpose of my argument, I have considered this term appropriate. More revealing of the subjects' social class is the examination of their parents' occupation (cf Appendix D).

5 In this respect, note that teachers' subjective evaluation of their pupils as zero-beginners in EFL proved to be correct when the results of the pre-test were analysed (cf 7.2.2.1). In other words, teachers' subjective evaluation may perhaps be considered reliable.

6 In the school system of the city of Rio there is a tendency to place together in a group pupils who fail a form when they return to school in the following year.

7 As seen in 2.2.4 above, this academic qualification is typical of the average Brazilian secondary school teacher. Also, note that state school teachers have to sit for competitive exams to get a teaching position.

8 Other variables however which have to do with what the individual teacher gives of himself while teaching are impossible to control.

9 Teachers preferred to give each new unit to the pupils one at a time. They were afraid the pupils could lose the units or not bring them to class when necessary. The units were kept at school and were only given back to the pupils in the week before the post-tests were administered.

10 Further, as indicated in 6.3.1.2 above, teachers were briefed individually.

11 Originally, the design included 7 units; however, due to unexpected time constraints, I had to reduce the number of units to 6. The school year ended earlier than I had foreseen (cf 7.2.1 below). In this regard, one should observe that the experiment was first planned for a total of 12 weeks but was in fact carried out in 10 weeks.

This is a factor one has to cope with when undertaking research in natural social contexts.

12 Note that in the Brazilian educational system the 1st form is equivalent to what is called in Portuguese the "quinta série do 1° grau".

13 The same teachers who took part in the major study (cf 7.2.1.2) were used in the pilot work of the post-tests.

14 Helmstadter (1964) as discussed in Olomolaiye (1979:295-296) argues that one of the factors to be considered in determining the acceptability level of the reliability coefficent of a test is the purpose it will be used for. He points out that the level of acceptability of the reliability coefficient of tests to be used as research instruments do not have to be as high as tests used for individual counselling and selection.

15 The reader was expected to guess the meaning of some of these items since they have cognates (cf 5.2.2.2 and 5.2.3.4 above) in Portuguese (cf ball, exercises, stories, prefer, biscuits, programme, difficult and club) or simply to ignore them on the grounds that it is not necessary to understand every item in a text (cf 5.2.3.1 above) in the reading comprehension task.

16 Note that the instructions for the tests are written in Portuguese.

17 Although the findings of this item (favourite reading topics) are not relevant to this evaluation in particular, they provide information which is crucial for a possible future implementation of the syllabus.

18 In this connection, it should be noted that because 7 items of the scales (items 18, 24, 25, 28, 29, 40, 41) deal specifically with each group's type of materials and methodology, they were excluded from the statistical analyses carried out here (cf 6.3.2.1.3 below). These analyses were comparative and therefore could only involve items equally answered by the 4 groups. In hindsight, I see that these items should not have been included in the questionnaires since there is no value in using them separately from a scale.

19 Long (1980 and 1984) discusses other instruments (video-taping and audio-taping classes, use of grids etc.) for collecting process-oriented data. However, because I am particularly interested in outcome-oriented data, I did not want to interfere with the actual teaching process in any way for fear that it should cause reactive effects towards the experiment on the part of the subjects.

20 This item was not included in the control group teachers' diaries since metacognitive skills were not part of the instructional objectives in the control groups.

CHAPTER 7

THE FINDINGS OF THE EMPIRICAL RESEARCH

7.1 Introduction

In the previous chapter I have put forward the research procedures used in the evaluation of the syllabus designed in this thesis. In this chapter I want to describe and discuss the findings of such an evaluation. As argued for in chapter 6, the research design utilised here is experimental, but it also tries to tap non-experimental data (qualitative and process-oriented data). Therefore, this chapter starts with the presentation and discussion of the experimental results, and then moves into the interpretation of non-experimental findings.

At the end this chapter relates these two types of data to each other and its conclusion shows that the findings of this research are relevant in projecting future research through the actual implementation of the ISTR syllabus in the classroom.

7.2 Experimental research findings: product-oriented data

In view of the research paradigm adopted in this thesis, quantitative outcome-oriented data constitute the primary focus of the syllabus evaluation. That is, I am particularly interested in analysing the effects of the ISTR syllabus model on teaching reading comprehension in EFL. With this aim, an experiment was set up in order to probe the hypothesis that the ISTR syllabus model, as reflected in the experimental materials, constitutes a more efficient way of teaching reading than existing traditional pedagogies. As will be shown in 7.4, qualitative and process-oriented data will also be used with the objective of providing not only for an affective evaluation of the syllabus but also for data which may check the internal and external validity of the experiment.

7.2.1 Description of the experiment

7.2.1.1 Duration

The experiment was carried out from 24.9.84 to 23.11.84, ie, a period comprising a total of 10 weeks. As already indicated in 6.3.1.6 (cf note 11), due to unforeseen time constraints, the experiment was reduced from 12 to 10 weeks. That involved the elimination of the last unit (unit 6) of the set of materials I had planned to use in the classroom (cf Appendices A and B). The experiment was therefore restricted to the use of an introductory unit and five main units.

On the basis of information provided by Teachers' First Evaluation of the Materials[1] (cf Appendix C), I assigned a total of three 45 minute classes to each unit, which proved to be enough. All the four teachers, except for group 1 teacher who needed only two classes for each of the last three units, used three classes for each unit (cf teachers' diaries in Appendix J). It should also be noted that these four schools include three EFL classes a week in the curriculum although the data I have on the average number of classes per week (cf 2.2.2.2 above) indicate two classes.

7.2.1.2 The context of the research: schools and teachers

The experiment involved the use of a total of 4 groups (2 experimental and 2 control groups) of 1st form pupils and of the following four teachers in four different schools[2] of the public sector of the city of Rio de Janeiro.

Group 1: experimental group
Teacher: Miriam Nunes
School: Escola Municipal Francisco Cabrita
Address: Rua Melo Matos, 20 - Tijuca

Group 2: experimental group
Teacher: Sandra Bedran
School: Escola Municipal Carlos Chagas
Address: Rua Romero Zander, 420 - Bonsucesso

Group 3: control group
Teacher: Sergio Pontes da Silva
School: Escola Municipal Maria Izabel Bivar
Address: Rua José dos Reis, 1305 - E. de Dentro

Group 4: control group
Teacher: Regina Gaya da Penha Valle
School: Escola Municipal João Kopke
Address: Rua Souza Cerqueira, 63 - Piedade

These teachers, as already indicated in 6.3.1.2 above, have virtually the same educational background and are equally interested in the profession. These schools are quite typical of the public sector and they would adequately exemplify my description of the logistico-administrative constraints in 2.2.2 above.

As pointed out in 6.3.1.2 above, the assignment of each groups to a specific type of treatment was made on a random basis. The only exception was group 4. Because this group had covered some more material (cf Appendix E) than the others, it was made into a control group so that its bias would work against my hypothesis.

7.2.1.3 Population

The experiment started out with a population of 133 subjects. That is, 133 pupils took the pre-test; however, for a variety of reasons, 4 subjects were absent[3] on the days the post-tests were administered. A total of 129 subjects took the post-tests. Figure 7.1 presents a breakdown of the population of subjects by group at the pre-test stage and at the post-test stage. The first number in each cell indicates N by group and the second the percentage in relation to the total number of subjects.[4]

Table 7.1 Breakdown of the population by group

Pre-test stage

Group 1 N = 30 22.6	Group 4 N = 36 27.0
Group 2 N = 34 25.6	Group 3 N = 33 24.8
64 48.1	69 51.9

Total N = 133
100.0

(Column total)

Post-test stage

Group 1 N = 30 23.3	Group 4 N = 35 27.1
Group 2 N = 33 25.6	Group 3 N = 31 24.0
63 48.8	66 51.2

Total N = 129
100.0

Because the experiment involved the use of intact classes, it was necessary to check the homogeneity of the groups in terms of several factors which I now want to discuss.

As indicated in 6.3.1 above, the only factor which determines the assignments of pupils to groups in the school system of Rio is age. Therefore, it is not surprising that 88.3% of the subjects belong to the 11-12 year old age group although there are a few subjects in other age groups. Table 7.2 below contains a crosstabulation of the subjects' age by group. The first number in each cell indicates the number of cases and the second the percentage in relation to the total number of subjects.

Table 7.2 Crosstabulation of age by group
Item 1: Part I Questionnaire[5]

Age	Group 1	Group 2	Group 3	Group 4	Row total
10	3 2.3	0 0.0	0 0.0	0 0.0	3 2.3
11	14 10.9	0 0.0	0 0.0	5 3.9	19 14.7
12	12 9.3	28 21.7	29 22.5	26 20.2	95 73.6
13	1 0.8	5 3.9	1 0.8	4 3.1	11 8.5
14	0 0.0	0 0.0	1 0.8	0 0.0	1 0.8
Column total	30 23.3	33 25.6	31 24.0	35 27.1	129 100.0

The homogeneity of the groups in terms of the sex variable was more difficult to control for. Although the groups seem to have approximately the same number of boys and girls, there are more girls than boys in one of the experimental groups (group 1) and in one of the control groups (group 4). Nevertheless, the application of the Chi-square test to check the statistical significance of the distribution of this variable accross the groups has shown that it is not significant at the .05 level (cf χ^2 (3) = 2.38, $p>0.05$). Table 7.3 below crosstabulates the variable sex by group. The first number in each cell indicates the number of cases and the second the column percentage.

Table 7.3 Crosstabulation: sex by group
Item 2: Part I Questionnaire

	Group 1	Group 2	Group 3	Group 4	Row total
MASCULINE	10 33.3	16 48.5	15 48.4	13 37.1	54 41.9
FEMININE	20 66.7	17 51.5	16 51.6	22 62.9	75 58.1
Column total	30 23.3	33 25.6	31 24.0	35 27.1	129 100.0

As regards the subjects' previous instruction in EFL before joining the schools where the experiment was carried out, it can be said that the majority of the pupils had never had any instruction in EFL prior to their attendance at those schools. Also, there is an almost even distribution across the groups of subjects who had had some instruction in EFL before coming to those schools. I applied however the Chi-square test to investigate the significance of the distribution of this variable across the experimental and control groups and it is not significant at the .05 level (cf χ^2 (1) = .78, $p>0.05$). Table 7.4 below displays a crosstabulation of previous instruction in EFL by group. The first number in each cell indicates N by group and the second column percentage.

Table 7.4 Crosstabulation: Previous EFL instruction by group
Item 3: Part I Questionnaire

	Group 1	Group 2	Group 3	Group 4	Row total
Yes	7 23.3	1 3.0	1 3.2	10 28.6	19 14.7
No	23 76.7	32 97.0	30 96.0	25 71.4	110 85.3
Column total	30 23.3	33 25.6	31 24.0	35 27.1	129 100.0

Another factor which I thought would be necessary to check on was the subjects' attendance at private language schools parallel to their taking part in the experiment. Although I suspected that there would be very few pupils, if any, attending language schools since the clientele of these schools is mostly middle-classes, I decided to get that information, for there are some less expensive language schools located in working-class areas. Confirming my suspicion, 90.7% of the total subjects do not attend a language school. Nevertheless, there was a small difference in the number of pupils across the groups who attended language schools. Yet, I applied the Chi-square test to investigate the statistical significance of the distribution of this variable across the experimental and control groups and it is not significant at the .05 level (cf χ^2 (1) = 2.56, $p>0.05$). Table 7.5 below presents a cross-tabulation of parallel language school attendance by groups. The first number in each cell indicates N by group and the second column percentage.

Table 7.5 Crosstabulation: Language School attendance by group
Item 4: Part I Questionnaire

	Group 1	Group 2	Group 3	Group 4	Row total
Yes	3 10.0	6 18.2	1 3.2	2 5.7	12 9.3
No	27 90.0	27 81.8	30 96.8	33 94.3	117 90.7
Column total	30 23.3	33 25.6	31 24.0	35 21.1	129 100.0

In describing the population, I also thought it would be relevant to find out whether the groups were equally interested in reading and whether the subjects had read any book in the past year. As the course I was experimenting with was a reading course, this sort of information would also be relevant in the interpretation of the findings.

More experimental group subjects have shown interest in reading in Portuguese and in fact indicated that they had read a book last year. In Table 7.6 below there is a crosstabulation of interest in reading in Portuguese by group.[6] I checked the statistical significance of the distribution of this variable across the experimental and control groups through the use of the Chi-square test and it is not significant at the .05 level (cf χ^2 (1) = 3.18, $p>0.05$) Table 7.7 below displays a crosstabulation of the variable subjects who read a book in the past year by group. In this case however the Chi-square test showed that the difference in terms of the distribution of this variable across the experimental and control groups is statistically significant at the .01 level (cf χ^2 (1) = 9.05, $p<0.01$). This factor will have to be taken into consideration when the results of the experiment are discussed. In the crosstabulations below the first number in each cell indicates N by groups and the second column percentage.

Table 7.6 Crosstabulation: interest in reading in Portuguese by group

Item 5: Part I Questionnaire

	Group 1	Group 2	Group 3	Group 4	Row total
Yes	27 90.0	27 81.8	26 23.9	21 60.0	101 78.3
No	3 10.0	6 18.2	5 16.1	14 40.0	28 21.7
Column total	30 23.3	33 25.6	31 24.0	35 27.1	129 100.0

Table 7.7 Crosstabulation: subjects who read a book in the past year by group

Item 6: Part I Questionnaire

	Group 1	Group 2	Group 3	Group 4	Row total
Yes	29 96.7	25 75.8	20 64.5	20 57.1	94 72.9
No	1 3.3	8 24.2	11 35.5	15 42.9	35 27.1
Column total	30 23.3	33 25.6	31 24.0	35 27.1	129 100.0

7.2.2 The Pre-test

The main objective of the pre-test was to check the subjects' homogeneity in terms of previous knowledge of English (cf 6.3.1.3 above). Although the subjects had had one semester of English (approximately 26 hours), the groups' teachers argued that no test would be needed because their pupils could be equally considered zero-beginners. However, I decided to administer a standardised vocabulary test (cf 6.3.1.3 above), and check the teachers' subjective evaluation. Furthermore, in view of the fact that 9 subjects of the experimental groups and three of the control groups attended a private language school (cf Table 7.5 above), it was still even more necessary to check the similarity of the subjects' knowledge of English before taking part in the experiment.

7.2.2.1 Statistical treatment of the pre-test

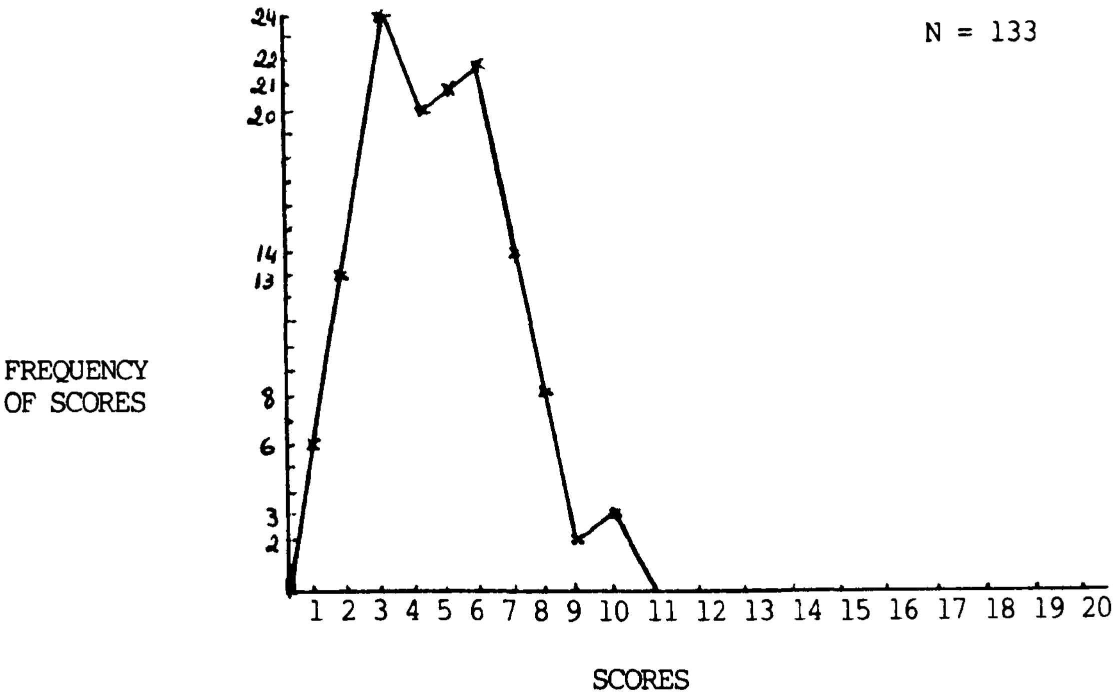
A one-way analysis of variance (ANOVA) of the means of the four groups' scores was undertaken in order to check the variability of the subjects' knowledge of English. The null hypothesis was that there would be no significant differences between the groups' means on the pre-test. Table 7.8 below presents the descriptive statistics of the groups' pre-test mean scores.

Table 7.8 Descriptive statistics of the pre-test mean scores

Group	MEAN	STD. DEV	N
1	5.0333	2.2816	(30)
2	5.2353	1.8101	(34)
3	4.4242	2.1070	(33)
4	4.3611	2.0860	(36)
Total	4.7519	2.0831	(133)

As predicted by the four teachers of the groups, the pupils' scores were equally low (cf means of the groups above in Table 7.8). In fact, the scores can be said to be distributed around zero (cf in Figure 7.1 below the distribution of the scores), since most scores are distributed around 5, ie, 5 items correct in a 20 item test with 4 alternative answers for each item. That is, a score of 5 in this test could be considered a score due to chance.

Figure 7.1 Distribution of the Pre-test score



The findings of the ANOVA (cf Table 7.9 below) did not reject the null hypothesis. That is, the variability between the groups' means is not statistically significant at the .05 level and therefore considered random (cf F (3,129) = 1.504, p=0.2165). Thus, the ANOVA confirms the teachers' prediction that the subjects' knowledge of English was equally non-existent. Also, there seems to be no evidence that whatever previous instruction in EFL the subjects may have had could have had a reactive effect on the post-test results of a specific group since the subjects' knowledge of English seems to be homogeneously low.

Table 7.9 ANOVA for the 4 groups' Pre-test mean scores

Source of variance	SS	df	MS	F	SIG
Between groups	19.362	3	6.454	1.504	0.2165*
Within groups	553.450	129	4.290		

*$p > 0.05$

7.2.3 Internal validity of the experiment

The description of the population of the subjects utilised in this research (cf 7.2.1.3) and the results of the ANOVA of the groups' means on the pre-test (cf 7.2.2) seem to indicate that the necessary precautions to account for the internal validity of the experiment (cf 6.3.1.2) were taken. If on the one hand it cannot be said that the groups utilised in this experiment were exactly equal,[7] on the other one could say that the groups seem to be fairly homogeneous in terms of age group, sex, previous instruction in EFL, previous knowledge of English, parallel language school attendance, and interest in reading in Portuguese, since in fact whatever differences found in the distribution of these variables across the experimental and control groups are not statistically significant at the .05 level. Three other variables, ie, social background, general learning abilities, previous material covered in each group, were checked in the selection of the groups and also support the claim that the groups are homogeneous (cf 6.3.1.2 above). The only variable which causes some concern as regards the internal validity of the experiment in the context of the experimental part of the research is the fact that more experimental group subjects have indicated that they read a book last year and this difference is statistically significant. This fact may be interpreted as an indication of greater interest in reading on the part of the experimental group subjects, and it therefore may be said to have had a reactive effect on the experimental results. I will come back to this factor in 7.2.5 below, where I discuss the findings of the experimental part of the evaluation.

7.2.4 Factorial design of the experiment

As discussed in 6.3.1.5 above, the experimental design here is factorial in the sense that it involves one dependent variable and two independent variables with two levels each, and it tries to look into the independent and interaction effects of the independent variables on the dependent variable.

The independent variables are treatment and teachers' expectations and the dependent variable involves one construct, performance in reading comprehension, operationalised through two different test measures. To recapitulate the design of the experiment so that the results can be more clearly understood here, Figure 7.2 below schematically represents the combination of independent variables in each of the 4 groups.

Figure 7.2 Combination of independent variables

TREATMENT

		A1	A2
EXPECTATIONS	B_1	GROUP 1 A_1 B_1	GROUP 4 A_2 B_1
	B_2	GROUP 2 A_1 B_2	GROUP 3 A_2 B_2

Indep. var. A:

Treatment < A_1 experimental
A_2 control

Indep. var. B:

Teachers' expectations < B_1 experimental
B_2 control

Depend. var. :
subjects' scores
on the post-tests

One should bear in mind that the subjects of the 4 groups took two different sorts of post-tests. Each test corresponded to the principles underlying each type of treatment. This procedure was necessary in order to check any possible backwash effect of each kind of treatment on test results. In this way, two different statistical analyses will have to be undertaken. Henceforth, the control group-type post-test will be referred to as CONPT and the experimental-group-type post-test as EXPT.

7.2.4.1 Statistical analysis of the post-test scores

The type of statistical test appropriate here is a two-way ANOVA (cf 6.3.1.5 above) since I am interested not only in the independent effects of the independent variables but also in their interaction effect on the subjects' post-test scores (cf Kerlinger, 1973 and Hatch and Farhady, 1982).

7.2.4.1.1 Statistical analysis of the CONPT scores

Table 7.10 below displays the descriptive statistics of the CONPT scores.

Table 7.10 Breakdown Statistics of the CONPT scores

GROUP	MEAN	STD DEV	N
1	9.4000	1.9582	(30)
2	10.5152	2.0019	(33)
3	8.7419	2.0325	(31)
4	9.1714	2.6511	(35)
Total	9.4651	2.2675	(129)

Figure 7.3 below shows the means of the 4 groups on the CONPT in the cells of the factorial design and the marginal means. These scores demonstrate that the experimental group subjects have achieved higher scores.

Figure 7.3 Means on the CONPT

	Exp/al Treatm.	Control Treatm.	
Experimental group expectations	GROUP 1 9.4	GROUP 4 9.1	9.25
Control group expectations	GROUP 2 10.5	GROUP 3 8.7	9.6
Marginal means	9.95	8.9	

The ANOVA (cf Table 7.11 below) has shown that the existing variability between the means of the groups on the CONPT is statistically significant as regards the independent effect of treatment (cf F(1,125) = 6.627, p=0.011),but it is not significant as concerns the independent effect of expectation (cf F(1,125) = 0.707, p=0.402). The ANOVA therefore indicates the significance of the main effect of treatment. However,the interaction effect of these two independent variables (treatment and expectation) on the dependent variable (ie, the CONPT) is also significant (cf F(1,125) = 3.978, p=0.048).

Table 7.11 ANOVA for the means of the groups on the CONPT

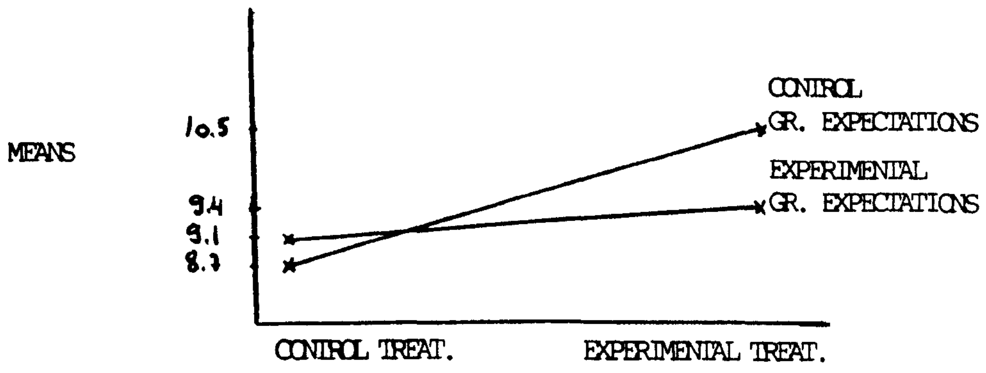
Source of variation	SS	df	MS	F	SIGNF. of F
A. Main effects	36.574	2	18.287	3.795	0.025
TREATMENT	31.934	1	31.934	6.627	0.011
EXPECTATIONS	3.405	1	3.405	0.707	0.402
B. Two-way interactions	19.169	1	19.169	3.978	0.048
TREATMENT by EXPECTATION	19.169	1	19.169	3.978	0.048
EXPLAINED	55.744	3	18.581	3.856	0.011
RESIDUAL	602.349	125	4.819		
TOTAL	658.093	128	5.141		

129 cases were processed

0 cases (0.0 pct) were missing

The results of this ANOVA indicate therefore that whereas the independent effect of treatment is significant and of expectation is not significant, the interaction effect between these two independent variables on the dependent variable CONPT is significant. In other words, the interaction effect between these two independent variables is influencing the results. Figure 7.4 plots the means of the groups for main effects and interaction effect and graphically demonstrates both that the experimental groups did better on the CONPT and that there is an interaction effect.

Figure 7.4 Main effects and interaction effect (CONPT means)



7.2.4.1.2 Statistical analysis of the EXPT scores

Table 7.12 below presents the descriptive statistics of the EXPT scores.

Table 7.12 Breakdown statistics of the EXPT scores

GROUP	MEAN	STD DEV	N
1	11.9667	2.3995	(30)
2	12.3939	3.1518	(33)
3	9.2258	3.3735	(31)
4	10.8857	2.6654	(35)
TOTAL	11.1240	3.1325	(129)

Figure 7.5 below displays the means of the 4 groups on the EXPT in the cells of the factorial design and the marginal means. These scores show that again the experimental group subjects have achieved higher scores.

Figure 7.5 Means on the EXPT

	Exp/al treatm.	Control treatm.	
Experimental group expectations	GROUP 1 11.9	GROUP 4 10.8	10.55
Control group expectations	GROUP 2 12.3	GROUP 3 9.2	11.55
Marginal means	12.1	10.0	

The ANOVA (cf Table 7.13) has demonstrated that the existing variability between the means of the groups on the EXPT is statistically significant in terms of the independent effect of treatment (cf F(1,125 = 16.893, p = 0.000),but it is not significant as regards the independent effect of expectation (cf F(1,125) = 1.541, p = 0.217). That is, the ANOVA again indicates the significance of the main effect of treatment. Nevertheless, the interaction effect of these two independent variables (treatment and expectation) on the dependent variable EXPT is significant (cf F(1,125) = 4.097, p = 0.045). Note however that the main effect of treatment (p = 0.000) is significant way beyond the effect of interaction (p = 0.045).

Table 7.13 ANOVA for the means of the groups on the EXPT

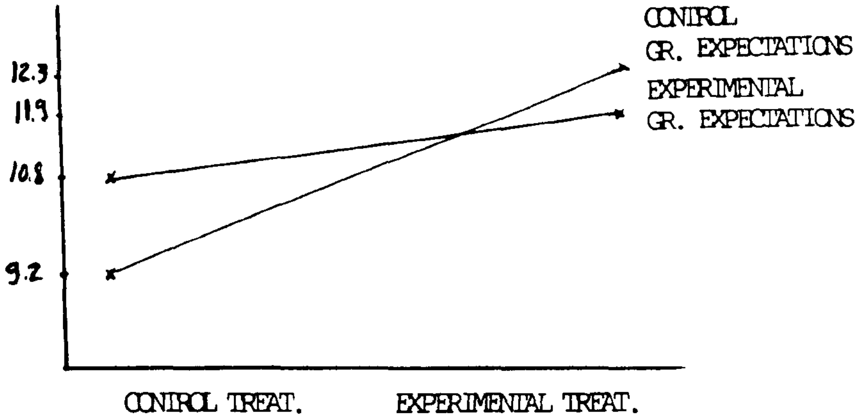
Source of variation	SS	df	MS	F	Signif. of F.
A. Main effects	153.208	2	76.604	8.967	0.000
TREATMENT	144.311	1	144.311	16.893	0.000
EXPECTATIONS	13.164	1	13.164	1.541	0.217
B. Two-way interactions	35.000	1	35.000	4.097	0.045
TREATMENT by EXPECTATIONS	35.000	1	35.000	4.097	0.045
EXPLAINED	188.208	3	62.736	7.344	0.000
RESIDUAL	1067.808	125	8.542		
TOTAL	1256.016	128	9.813		

129 cases were processed
0 cases (0.0 pct) were missing

The results of this ANOVA therefore have also shown that whereas the independent effect of treatment is significant and of expectation is not, the interaction effect between these two independent variables on the dependent variable EXPT is significant. In other words, exactly the same pattern of results detected in the ANOVA of the CONPT mean scores is found here. The groups' performance is consistent on both types of tests. That is, in both cases the interaction effect between the two independent variables may be affecting the results.

Figure 7.6 plots the means of the groups for main effects and interaction effect and again graphically indicates not only that the experimental groups did better on the EXPT but also that there was an interaction effect. However, if one compares Figure 7.6 with Figure 7.4, one sees that whereas in Figure 7.4, where the CONPT means are plotted, the larger distance between the scores is between the experimental groups scores, in Figure 7.6 below, where the EXPT means are marked, the larger distance between the scores is between the control group scores. I will come back to this issue in 7.2.5 below,where I discuss the experimental results.

Figure 7.6 Main effects and interaction effect (EXPT means)



7.2.5 Interpretation and analysis of the experimental research results

As pointed out in 6.2 above, the quantitative data described above, by virtue of the type of paradigm which is central in this evaluation, constitute the primary source of information on the practical effectiveness of the ISTR syllabus since they are of a product-oriented nature, namely, they express the outcomes of two different ways of teaching reading in EFL.

These findings nevertheless, as I indicated in 6.3.1 above, have to be analysed in the light of this researcher's biases towards the syllabus elaborated here and towards the research procedures used. Also,these results are to be examined in relation to the variables this experiment does not clearly control for. These three aspects are tackled in my analysis of the experimental results in 7.2.5.2 below. First, however I want to discuss my interpretation of these findings in the next section.

7.2.5.1 Interpretation of the experimental results

As the results of the ANOVAs of the groups' mean scores on both types of post-tests (EXPT and CONPT) have shown (cf 7.2.4.1.1 and 7.2.4.1.2 above), the directional research hypothesis of this experiment (cf 6.3.1.7 above) has been confirmed since the experimental groups had higher scores on both the EXPT and the CONPT and the variability of the groups' mean scores on both tests is significant at the .05 level, as previously established(cf 6.3.11). That is, the independent effect of the treatment variable, as hypothesised, is statistically significant and the independent effect of the expectation variable is not statistically significant. Yet, the ANOVAs have indicated that the interaction effect between these two independent variables is statistically significant.

The first comment one ought to make as regards these findings has to do with the consistency of the results of the groups on both types of tests. That is, the general pattern of results for the four groups is the same on the EXPT and on the CONPT. The groups therefore, in general terms, seemed to have behaved consistently irrespective of the kind of test they took. In this connection, it should be emphasised that the fact that the experimental groups did statistically significantly better than the control groups on both types of tests eliminates any possible claim for the existence of a backwash effect of the experimental treatment on the EXPT. However, what seems to be crucial in this discussion of the experimental results is the fact that there was an interaction effect of the two independent variables (treatment and expectations) on the dependent variable, ie, both on the EXPT and on the CONPT.

If one examines Figures 7.3 and 7.5, where the groups' means on both the EXPT and the CONPT are displayed in the cells of the factorial design, one sees that, despite the fact that there is an interaction effect on the result of both sorts of tests, the cause of the interaction effect seems to be different on each type of test. In Figure 7.3, where the CONPT mean scores are shown, the interaction seems to be more associated with an effect caused by the experimental groups since the larger distance between the mean scores of each type of treatment is found between the experimental group mean scores (cf in this connection Figure 7.4 above where this distance is graphically demonstrated). That is, it is likely that the interaction effect has been caused by the difference between the mean scores of group 1 (experimental group expectations) and group 2 (control group expectations). This situation is however reversed in Figure 7.5, where the EXPT mean scores are presented, since the interaction here appears to be due to an effect caused by the control groups' mean scores (groups 3 and 4). In other words, the larger distance between the mean scores of group 3 (control group expectations) and group 4 (experimental group expectations) may be said to be the cause of the interaction (cf Figure 7.6 where this distance is graphically shown).

What seems to be occurring here is that teachers' expectations interact with the treatment variable when there is no backwash effect of the test on the treatment. In other words, when the test is the EXPT, the experimental groups achieve similar results and in fact the difference between both experimental groups' mean scores is not statistically significant (cf t obs (61) = 0.58, $p > 0.05$). That is, the expectation effect between the experimental groups seems to disappear. However, it may be said to be the cause of the difference between the mean scores of the two control groups. Note that group 4, whose teacher had experimental group expectations did significantly better than group 3 (cf t obs (64) = 2.90, $p < 0.01$), whose teacher had control group expectations. That is, the fact that group 3 was faced with a double dose of misfortune, ie, control treatment and control group expectations, may have influenced the results. Therefore, it seems plausible to suggest that the control treatment does not seem to withstand teachers' expectations.

Nevertheless, when the test is the CONPT, the difference between the control groups' mean scores is not statistically significant (cf t obs (64) = 0.68, $p > 0.05$). The backwash effect of the control test on the control group appears to nullify the expectation effect. Yet, this effect may be said to be the cause of the difference between the mean scores of the experimental groups, which is statistically significant (cf t obs (61) = 2.34, $p < 0.05$). In this case therefore when the teacher's expectations were control group expectations (cf group 2), the subjects did significantly better than when the teacher had experimental group expectations (cf group 1). The situation described above as regards the CONPT results is thus different from that of the EXPT results.

In order to discuss the experimental group results on the EXPT, it seems to me that two aspects need to be considered. On the one hand, one could suggest that the experimental group 2's teacher in fact did not have control group expectations towards the treatment. That is, while it would have been ideal to control teacher's expectations for the purpose of this research, it was actually impossible to do so. This fact could then be said to be the cause of the experimental group 2's higher scores. On the other hand, assuming that group 2 teacher had control group expectations, these results could be said to indicate that whereas control group 3 had a double dose of misfortune when faced with the EXPT (cf control treatment and control group expectations), the experimental group 2, when faced with the control test, had but one problem, ie, control group expectations. In this sense, one could therefore suggest that the experimental treatment seems to withstand teachers' expectations. It is true however that this point still does not explain the reason why experimental group 2 did better than experimental group 1 despite the fact that group 2 teacher had control group expectations.

The existing difference between the two experimental groups on the CONPT may be due to sources which may have not been captured in the experiment. In this thesis, I can however check on that through examining factors which may have affected the internal and external validity of the experiment within the limits of the experimental part of this research (cf 7.2.5.2 below) or I can make recourse to non-experimental data (cf 7.3 below).

On the basis of my interpretation of the experimental findings discussed above therefore I want to suggest that the interaction effect does not appear to present any threat to the confirmation of my hypothesis (cf 6.3.1.7) since the interaction seems to be associated with a difference between groups of a specific treatment and not across experimental and control treatments.

7.2.5.2 Analysis of the experimental results

From the perspective of this thesis (cf 7.2.5 and 6.3.1 above), experimental findings need to be analysed in view of the researcher's biases towards the syllabus under evaluation and the research procedures used, and in light of factors which may affect the validity of the experiment.

In the development of my argument in previous chapters, I have tried to make explicit the biases which inform this thesis and the research procedures used so that they can be considered in conjunction with these results. Furthermore, to the extent that it is possible, the objective kind of data put forward in this experimental evaluation tries to investigate how important those biases may be.

Nevertheless, as regards the validity of the experiment, I still need to address a few factors which may have affected the internal and external validity of the experiment and may have consequently posed some threat to my results.

Since the experiment carried out here involved intact classes, the randomisation of the subjects was a factor about which I could not be certain. In other words, there could have been a bias in the distribution of the subjects to the individual groups which may have caused the above presented results. As indicated in 6.3.1.2 above, in order to take into account this factor, which affects the internal validity of the experiment, I tried to use groups which were as homogeneous as possible. Despite the fact that this procedure does not account for randomisation, it does provide me with grounds for qualifying my results.

As pointed out in 7.2.3, in the context of the experimental part of this empirical research, there is evidence that the groups used were fairly homogeneous in terms of age group, sex, previous instruction in EFL, previous knowledge of English, parallel language school attendance, social background, general learning abilities and interest in reading in Portuguese. The variable previous material covered in each group showed that groups 1, 2 and 3 were quite similar in this regard and that group4 had covered some more material, this being the reason why it was made into a control group whose teacher had experimental group expectations. That is, I tried to make this group's bias work against my hypothesis. However, as the results have indicated (cf 7.2.4.1 above), group 4's bias had no effects on the results since the experimental groups did statistically significantly better on both the EXPT and the CONPT.

There is but one factor which may constitute a more serious threat to the internal validity of the experiment. There is evidence in Table 7.7 above that more subjects in the experimental groups read a book in the past year and that the distribution of this variable across the 4 groups is statistically significant at the .01 level. This factor was detected at the end of the experiment through the administration of the questionnaire and therefore was not under control. This variable therefore indicates that the experimental group subjects may be more used to reading in Portuguese and that this fact, rather than the experimental treatment, may have caused their higher achievement on the reading comprehension post-tests. This factor is offered here as a shortcoming of the experiment in light of which the present results have to be evaluated.

Still in connection with the internal validity of the experiment, I would like to consider the measurement instruments utilised as post-tests. While I would agree that the results of the groups on both the EXPT and CONPT are to be taken with caution since these tests are not standardised, I think that their reliability coefficients are reasonable for research purposes (cf EXPT = .52 and CONPT = .7) particularly in view of the short length of the tests (cf 6.3.1.6.2 above) and their validity is acceptable specially in the light of the limited amount of material taught which imposed certain constraints on the design of the tests. It should be noted that the fact that the 4 groups behaved consistently on both tests seems to add to the validity of these measurement instruments.

As concerns factors which may have affected the external validity of the experiment, which would make it impossible to generalise from the present experimental findings to other populations, I have no reason to suspect any reactive effects on the part of the pupils and teachers since the design of the experiment tried to account for the Hawthorne and expectancy effects. The experimental arrangement was such that no reactive effects on the pupils would be likely since every effort was made not to let them perceive that they were subjects in an experiment.[8] In fact, as above mentioned (cf 6.3.1.4), the research design did not involve any contact of the researcher with the subjects. In this way, the administration of the tests and the reading classes themselves were conducted as normal procedures of the school life by the class teacher.[9] Further, the questionnaires which were an unusual activity in the pupils' school life were administered after the post-tests, so that no reactive effects of the questionnaires on the post-test scores can be claimed. Reaction effects towards the questionnaires however seem to have been quite possible since these effects were not controlled for, but that is an issue to be looked into when the non-experimental results are examined in 7.3 below.

The expectancy effect on the teachers' part, which could have influenced the pupils and their achievement, was also manipulated (cf 6.3.1.5). Within the limits of the experimental paradigm and from my view of what went on in the classroom on the basis of my weekly conversations with the teachers, I have no reason to suspect that the teachers' expectations were not under control.

Therefore, with the sort of data offered solely by the experimental evaluation, my interpretation of the interaction effect between both independent variables as identified in the ANOVAs (cf 7.2.5.1) is consistent with this analysis. In other words, there seems to have been an interaction of expectation with treatment within specific treatment groups when the test types does not correspond to these groups' treatment. That is, when the test is the EXPT, the expectation variable will interact with the control treatment, appearing therefore to cause the interaction effect. Conversely, when the test is the CONPT, the expectation variable will interact with the experimental treatment, which may be said to cause the interaction effect. Therefore, to my mind, this interaction effect offers no threat to the confirmation of the directional hypothesis of this experiment since it consistently occurs between groups of a specific treatment and not across the experimental and control treatments. However, on the basis of data provided by the experiment itself, I have no way of explaining why experimental group 2, whose teacher had control group expectations, did significantly better than group 1, whose teacher had experimental group expectations. I am left with the possibility, already suggested in 7.2.5.1, that the experimental treatment withstands teachers' expectations and that the factors which bring about the difference between these two experimental groups are not captured in the experiment. Different sort of data, related to the actual teaching process, ie, process-oriented data (cf 7.3.2 below),may clarify this issue above.

Despite the limitations of this experiment in terms of internal and external validity, as above discussed, I still think that there are grounds for saying that the outcome-oriented data of this experimental evaluation have put forward some evidence of the practical effectiveness of the ISTR syllabus as reflected in the experimental materials: this syllabus seems to embody a more efficient way of teaching reading than traditional pedagogies.

The non-experimental type of data to be discussed in the next section may provide further bases for the internal and external validity of the experiment. In 7.3 below I describe and discuss qualitative and process-oriented data and in 7.4 quantitative/outcome-oriented data and qualitative/process-oriented data are related to each other.

7.3 Non-experimental research findings: qualitative and process-oriented data

As I have made clear in 6.2 above, qualitative and process-oriented data here are secondary in that from the perspective of this thesis it is not possible for a researcher to have access to both sorts of data, ie, product-and process-oriented data, with equal emphasis and rigour at the same time because they imply different research procedures, different views of the research act etc. As argued for in 6.2 above, the research paradigm here is experimental, yet qualitative and process-oriented data are also accounted for through the use of a few research instruments. In other words, I do not subscribe to any qualitative/process-oriented research model such as the illuminative research paradigm (cf Parlett and Hamilton, 1972), for example, since due to the very procedures involved in experimental evaluation, which is central to this thesis, that subscription would have been impossible. Nevertheless, as I have already indicated in 6.2 above, this thesis can be seen as a preparation for non-experimental action research to be undertaken when the ISTR syllabus is actually implemented (cf 8.3 below).

What I want to do here with this type of non-experimental evaluation is to try to consider data of a subjective nature, which not only reflect how the participants (teachers and pupils) in the experiment affectively perceived what went on in the classroom but which also provide information on the actual language teaching process in such a way that the validity of the experiment can be further examined. Below I discuss the data put forward by the following research instruments: pupils' questionnaires in 7.3.1; teachers' diaries in 7.3.2; and teachers' final evaluation reports in 7.3.3.

7.3.1 Pupils' questionnaires

The findings of Part I of the pupils' questionnaires (Personal Information), which have to do with items which describe the population of subjects, have been discussed in 7.2.1.3 above. In this section therefore I want to deal with Part II (the attitude and belief scales in 7.3.1.1 below) and Part III (open-ended questions in 7.3.1.2 below). These two parts are mainly concerned with how the reading course and the materials were perceived by the subjects. In this sense, they focus on a type of evaluation related to the affective domain[10] in opposition to the findings discussed in 7.2 above which centre on objective and product-oriented data related to the subjects' achievement on reading comprehension tests. Despite the subjective character of the data involved in Parts II and III of the questionnaires, they were also analysed statistically.

7.3.1.1 The attitude and belief scales (Part II of the questionnaires)

As indicated in 6.3.2.1, this part of the questionnaire consisted of four attitude scales and one belief scale (cf Appendix H). The attitude scales aimed at measuring the 4 groups' attitudes towards the reading course (scale A), the materials (scale B), learning to read in English (scale C), and learning English in general (scale E). The belief scale (scale D) had the objective of investigating the subjects' belief about what is involved in the reading act.

Due to the fact that the pilot study of these scales undertaken here was only for comprehension (cf 6.3.2.1.2 above), it was not possible to check the reliability and construct validity of these scales before they were utilised in the major study. As pointed out in 6.3.2.1.2 above, this procedure was not ideal, but it was inevitable in the circumstances in which this empirical work was carried out. Although I was aware that the instrument could prove to be unreliable and not valid, I still decided to use it and check the reliability and construct validity of the scales post-hoc.

The Cronbach α formula was used to investigate the reliability coefficient of the scales. Scale A proved to have a reliability coefficient of .45, scale B of .64, scale C of .28, scale D of -0.02 and scale E of .77. Considering that scale A consisted of only four items, it is likely that its reliability coefficient was affected by the length of the scale. In this regard, it should be remarked that if one uses the Spearman-Brown prophecy formula to check the reliability coefficient of a twenty item test, this coefficient should be above .75. Therefore, there seem to be grounds for considering this reliability coefficient of .45 for a four item scale adequate enough for research purposes. Scales B and E have acceptable reliability coefficients and scales C and D have very low reliability coefficients. Therefore, I discarded scales C (an attitude scale) and D (the belief scale), since they do not seem to be reliable instruments of measurement, and restricted this study to scales A, B and E. However, I still had to examine their construct validity.

In 6.3.2.1.2 I discussed the face and content validity of the scales, yet their construct validity could not be checked. Construct validity involves the empirical test of the hypothesis underlying the psychological construct of the scales, which may account for test performance and which in this empirical work can only be considered post hoc. The psychological construct here was that the experimental group subjects would have attitudes towards the reading materials, course etc. which would be on the favourable end of the 5 point Likert-type scale, in opposition to the control group subjects.

Nevertheless, the ANOVAs of the three attitude scales, ie, A, B and E, (cf Appendix O), whose reliability coefficents were considered acceptable, indicated that the existing variability in the attitudes of the groups is not statistically significant.[11] Also, the four groups' attitudes tended to be on the favourable end of the scales. That is, the hypothesis that only the experimental group subjects' attitudes would be on the favourable end of the scales, ie, the construct which is supposed to underlie test performance, was not confirmed. In this sense, the construct validity of these scales have been questioned.

It could well be that these results are valid, ie, they in fact reflect the subjects' attitudes. However, because the construct validity of these scales could not be investigated in a pilot study, these findings cannot be trusted. In hindsight, I believe that I should not have used attitude scales in this research, for the conditions under which this field work was undertaken made it impossible to utilise in the major study an attitude scale measurement instrument which had shown to be accurate enough in pilot study administrations. Although the rationale behind the design of the instrument is defensible (cf 6.3.2.1.1 above), it could well be that the construct(s) underlying the scales are not measuring the same thing or that it is perhaps impossible or very difficult to have constructs in the areas tapped in this instrument.

I would also like to consider the possibility that the instrument may have been inappropriate to the context where it was used. While traditionally in experimental studies the control materials/treatment are normally the ones in use in the school context so that the experimental treatment/materials can be contrasted with them, in this particular experiment, for the reason given in Appendix B (where the rationale for the control treatment is discussed), the control treatment materials were also specifically designed for this experiment. Therefore, it could be argued that the lack of statistically significant differences in the subjects' attitudes towards the materials and reading course was not surprising, for both types of materials represented a new learning experience for all the four groups,[12] which could have caused an a priori favourable attitude on their part.

One could therefore argue that more time in the use of these materials than involved in this experiment would have been necessary for the novelty effect to wear off so that differences in attitudes could appear. Had the instrument proved to have construct validity in a pilot study, it could at least be said that the variability in the group's behaviour on the achievement post-tests (cf 7.2.4.1 above) was not determined by the groups' attitudes, ie, the affective domain, since their attitude could be considered the same. In the present circumstances however all that can be said is that maybe the instrument was inadequate to the type of research design utilised here, for it could be claimed that all the four groups were likely to have positive attitudes.

There is still another factor which may have caused this equally positive attitude on the part of the pupils: a reactive effect of the questionnaires. Although there were enough instructions on the questionnaires asking pupils to be as frank as possible in their answers, it could well be that the presence of the teacher in the classroom, while the questionnaires were being completed, was a threat to the pupils and made them choose favourable answers. Also, other factors related to the administration of the questionnaires (for example, the fact that the questionnaires were administered on the last day of classes) may have contributed to these results. I can look for evidence on these issues in the teachers' diaries and final evaluation reports (cf 7.3.2).

In brief, the findings of Part II of the questionnaires cannot be used in this thesis. However, the difficulties found with the utilisation of these scales are aspects to be taken into account in future research (cf 8.2.2 below).

This research design nevertheless also puts forward other kinds of data of a qualitative nature which provide for pupils' evaluation of the reading course from an affective perspective, namely, open-ended questions in Part III of the questionnaires (cf 7.3.1.2 below) and information about pupils' attitudes supplied by teachers' diaries and final evaluation reports (cf 7.3.2 below).[13] These other kinds of qualitative data may also be used to check whether the four groups equally had favourable attitudes to the reading course or not, as indicated in the questionable results of the attitude scales.

7.3.1.2 Open-ended questions (Part III of the questionnaires)

This section of the questionnaires consists of three questions in which the subjects were asked to indicate what they liked best about the materials and reading course (cf Table 7.14 below), what they liked least (cf Table 7.15 below) and if there was anything else they would like to add (cf Table 7.16 below). The data here are also of a subjective nature but involved open-ended answers, yet I coded the answers and did a frequency count of their distribution across the experimental and control groups.

Note nevertheless that for the purpose of the analysis of these items I collapsed both experimental groups into one and did the same with the two control groups. I considered the distinction in terms of expectation on the teacher's part as regards each type of group of little use in the interpretation of these open-ended items since the existing differences between the two groups of each treatment type did not appear relevant.

With the analysis of these items I will try to check if there were any differences in the experimental and control group subjects' affective perception of the materials and reading course. The fact that these questions are open-ended provides access to the subjects' view of the materials and reading course through their own categories.

Each table below summarises the answers given to each question. The first column presents the coded answers, the second the experimental groups' data and the third the control groups' data. The first number in each cell indicates the number of subjects who provided the answer at issue, the second the row percentage, and the third the column percentage. My comments are however restricted to the answers I have considered insightful in comparing experimental and control groups.

Table 7.14 below displays information on what the subjects seemed to prefer the most about the materials and reading course. On the part of the experimental subjects, the aspect which seemed to have been most favoured was the exercises (cf 28.5% of the experimental group subjects) while as regards the control groups the reading texts have been singled out (cf 50.0% of the control group subjects). While 18 experimental group subjects have preferred the exercises, only 2 subjects of the control groups have pointed out this item. That is, out of the total number of subjects who preferred the exercises, 90% belong to the experimental groups and 10.0% to the control groups.

This finding may be interpreted as preference for the methodology as reflected in the exercises, on the part of the experimental subjects.

On the other hand, the control group subjects, as mentioned above, have preferred the reading texts. Note that while 33 control group pupils indicated their preference for the texts, only 17 did so in the experimental groups. In other words, 66% of the total number of subjects who favoured the reading texts are control group subjects in opposition to 34% of the experimental groups. This finding may be interpreted as a reflection of the emphasis put on the reading text in the control treatment methodology due to the decoding view of reading which underlies the control group approach, ie, the view that meaning is in the printed text. This view contrasts with the procedural view of meaning which underlies the experimental approach. In the experimental approach the text itself may be said to become less important, so to speak, since emphasis is put on the procedures utilised in text interpretation which make meaning possible.

Another item which seems to indicate some difference between the experimental and control groups' view of the materials has to do with the control groups' preference for vocabulary. Nine control group subjects liked most the vocabulary of the texts in opposition to only three experimental group subjects. This finding also coincides with the fact that in the control approach every vocabulary item of the text has to be understood.

The last point I want to raise as regards this table is that more experimental than control subjects indicated that they liked everything about the materials (cf 15 experimental group subjects versus 10 subjects in the control groups). In other words, 23.8% of the total number of experimental group subjects seemed to have liked everything in the materials while only 15.15% of the control subjects seemed to have felt so.

Table 7.15 below contains information on aspects the subjects liked least about the materials. The most striking item in the table, I think, is the fact that more subjects in the control groups indicated that they did not find anything in their materials they did not like (cf 40 subjects in the control groups versus 32 subjects in the experimental groups). In other words, out of the total number of subjects who seemed to think that there was not anything in the materials they did not enjoy, 44.4% were experimental subjects whereas 55.6% were control subjects. Note however that more experimental subjects did not answer this question, which in fact could be taken as an indication that there was not anything they did not like or at least that they were indifferent to the question.

I feel the general picture one gets from this table is that there were few things the subjects in both kinds of groups did not like about the materials and the reading course. The few aspects mentioned seem to be either typical of each type of approach and therefore cannot be cross compared or present no striking difference.

Table 7.14 Item 52 What did you enjoy most about the reading course and materials?

CODED ANSWER	EXPERIMENTAL GRs (1,2)	CONTROL GRs (3,4)	Row total
NO ANSWER	8 53.4 12.7	7 46.6 10.6	15 11.6
VOCABULARY	3 25.0 4.7	9 75.0 13.6	12 9.3
TEXTS	17 34.0 26.9	33 66.0 50.0	50 38.7
TEACHERS' EXPLANATIONS	0 0.0 0.0	4 100.0 6.06	4 3.1
EXPLANATIONS IN THE MATERIALS	0 0.0 0.0	1 100.0 1.5	1 0.8
EXERCISES	18 90.0 28.5	2 10.0 3.03	20 15.5
ILLUSTRATIONS	2 100.0 3.18	0 0.0 0.0	2 1.6
EVERYTHING	15 60.0 23.8	10 40.0 15.15	25 19.4
COLUMN TOTAL	63 48.9	66 51.1	129 100.0

TABLE 7.15 Item 53 What did you enjoy the least about the reading course and materials ?

CODED ANSWER	EXPERIMENTAL GRs (1,2)	CONTROL GRs (3,4)	Row total
	22	10	
NO ANSWER	68.8	31.2	32
	34.9	15.15	24.8
	32	40	
NOTHING	44.4	55.6	72
	50.7	60.6	55.8
	0	6	
GRAMMAR	0.0	100.0	6
	0.0	9.1	4.7
	2	3	
ILLUSTRATIONS	40.0	60.0	5
	3.1	4.5	3.9
	2	0	
READING THE TEXT A SECOND TIME	100.0	0.0	2
	3.1	0.0	1.6
	0	1	
TRANSLATION	0.0	100.0	1
	0.0	1.5	0.8
	2	2	
WRITING	50.0	50.0	4
	3.1	3.0	3.1
	0	1	
READING ALOUD	0.0	100.0	1
	0.0	1.5	0.8
	2	1	
SOME EXERCISES	66.6	44.4	3
	3.1	1.5	2.3
	1	2	
SOME QUESTIONS	44.4	66.6	3
	1.5	3.0	2.3
COLUMN TOTAL	63	66	129
	48.9	51.1	100.0

Table 7.16 below displays information on an item which provided the subjects with some room for them to point out whatever issues they deemed relevant as regards the reading lessons and materials. 10.1% of the total number of pupils did not provide any answer and 52.7% simply added they had nothing else to say. This attitude is quite understandable particularly in view of the facts that this was the last item of the questionnaire and that, as noted by the teachers in their diaries (cf 7.3.2.1.3 and 7.3.2.1.4 below),

Table 7.16 Item 54 Is there anything else you would like to say about the reading lessons and materials?

CODED ANSWERS	EXPERIMENTAL GRs (1,2)	CONTROL GRs (3,4)	Row total
NO ANSWER	7 53.8 11.1	6 46.2 9.0	13 10.1
NOTHING	33 48.5 52.3	35 51.5 53.0	68 52.7
THEY WERE GOOD BUT QUICK	0 0.0 0.0	1 100.0 1.5	1 0.8
NOT ENOUGH EXERCISES	0 0.0 0.0	7 100.0 10.6	7 5.4
I WOULD LIKE SOMETHING GAYER	1 50.0 1.5	1 50.0 1.5	2 1.6
I REALLY ENJOYED EVERYTHING	17 62.9 26.9	10 37.1 15.1	27 20.9
I WOULD LIKE TO GO ON USING THE MATERIALS	3 42.8 4.7	4 57.2 6.0	7 5.4
NOT ENOUGH ILLUSTRATIONS	1 100.0 1.5	0 0.0 0.0	1 0.8
NOT ENOUGH LESSONS	1 33.3 1.5	2 66.7 3.0	3 2.3
COLUMN TOTAL	63 48.9	66 51.1	129 100.0

the pupils seemed to have found the questionnaires quite tiring. However, some subjects added a few comments.

17 experimental group subjects and 10 control group subjects indicated that they really liked everything. In other words, out of the total number of subjects who used this item to express a very positive attitude towards the materials 62.9% were experimental group subjects whereas 37.1% were control group subjects. Also, while only 3 experimental group subjects pointed out aspects which could be considered negative (ie, something gayer, not enough illustrations and not enough lessons), 10 control group subjects indicated negative aspects (ie, good but quick, not enough exercises, not enough lessons). In general terms therefore it seems that more experimental subjects used this last item to add something positive about the reading course and materials. This finding coincides with a point made above in my discussion of Table 7.14, namely, while 23.8% of the total number of experimental group subjects seemed to have liked everything about the materials and reading course, only 15.15% of the control group subjects expressed that.

My interpretation of these three open-ended items is that the groups' attitudes towards the materials tended to be very much the same, ie, equally favourable, although the experimental group subjects seemed to be slightly more positive. The evidence here therefore in general terms confirms the questionable findings of the attitude scales above (cf 7.3.1.1).

The focus of attention of this chapter will now move to the subjective and process-oriented data provided by the teachers' Diaries and teachers' Final Evaluation Reports.

7.3.2 Teachers' Diaries and Final Evaluation Reports

The kind of data put forward by the teachers' diaries and final evaluation reports are of a different nature from the sorts of data discussed so far. They share with the attitude scales and open-ended items of the questionnaires above (cf 7.3.1) the property of being qualitative in that they centre on how the reading course (syllabus and materials) was affectively perceived by the participants in the research, ie, both teachers and pupils. However, they differ from that sort of data in the sense that they are not quantifiable. In other words, the questionnaire data, albeit of a qualitative nature, are quantifiable whereas the qualitative data provided in the diaries and by the final evaluation reports are not. Further, these two instruments are different in the sense that they also contain information on the actual language teaching/learning process. The procedures I will use in the analysis of this non-quantifiable type of data will therefore have to be different.

In the same way that the quantitative data of the experimental part of this research, albeit objective, can only acquire meaning on the basis of the researcher's interpretation (cf 7.2.5.1), the data found in the teacher's diaries and final evaluation reports are also, and in fact solely,dependent on the researcher's interpretation. They are subjective in that they reflect the teachers' views of what went on in the classroom, which the researcher uses as the basis for interpreting what occurred in the "learning milieu". That is, as anthropologists carrying out their participant-observation, the teachers made notes and wrote their histories in the diaries and reports, which I now want to read and interpret.

My research tactics here then resemble the procedures utilised by a reader in the act of making sense of a text. In other words, as a reader (cf the ISTR model in 3.3 above) I will relate my schematic knowledge to the teachers' by following the clues that they, as writers, have included in their texts. In this sense, a different reader of these histories by virtue of his particular structures of expectations may interpret them in another way. The evaluation here therefore becomes more phenomenological and the mode of inquiry hermeneutic. The research approach then becomes closer to the procedures used by a literary critic, whom we read because of his sensitivity to the literary text. That is how I believe this part of the evaluation should be read, ie, with the purpose of identifying how perceptive this researcher's account of what went on in the classroom is. To analyse these subjective findings, one should bear in mind the sorts of biases with which this researcher/ reader approaches the teachers' texts.

This position towards this part of the empirical research is not in fact essentially different from my claim that experimental data should be considered in view of the researcher's biases, research procedures and factors not properly controlled for in the experiment. That is, both types of inquiry (experimental and non-experimental) are to be considered under the same sort of critical attitude towards research advanced in 6.2 above: the research act is unavoidably subjective. As indicated in 6.3.2.3 and 6.3.2.4, I rely on the teachers' diaries and final evaluation reports as instruments which will provide access to:

a) the teachers' opinion of the syllabus, as reflected in the materials;
b) the teacher's view of the pupils' attitudes to the materials;
c) the teacher's interpretation of the materials, ie, the extent to which the experimental and control treatments were actually followed;
d) whether the teacher's expectations towards their groups were successfully manipulated, as defined in the experimental part of this evaluation (cf 7.2.5).

In other words, the type of data centered on here may also be used as a way of extending the external validity of the experiment and of further checking its internal validity. Nevertheless, in this section I am solely concerned with the discussion and interpretation of data presented in the diaries and final evaluation reports. That is, issues which have to do with the use of process-oriented data to illuminate outcome-oriented data are discussed in 7.4 below.

In the hermeneutic type of inquiry to be carried out here, rather than looking for the cause of an event as in the experimental part of this evaluation, I will try to understand what happened by imputing purpose to the event (cf Ochsner, 1979:68). That is, I will interpret the data provided by teachers by assuming the teachers' purpose in using a particular set of materials in the classroom. Or, as Ochsner (1979:69) puts it, "By noting the teleological end, a hermeneutic researcher can interpret an event". My task therefore will be to check if the attributed teleological purpose holds.

The assigned purposes here have been indicated in my description of the factorial design in the experimental part of this evaluation (cf 6.3.1.5), which I summarise below:

a) Group 1 teacher uses experimental materials and is supposed to have experimental treatment expectations;
b) Group 2 teacher uses experimental materials and is supposed to have control treatment expectations;
c) Group 3 teacher uses control materials and is supposed to have control treatment expectations;
d) Group 4 teacher uses control materials and is supposed to have experimental treatment expectations.

As pointed out in 6.3.2.2 and 6.2.2.3 above, both the diaries and the reports were written in Portuguese so that teachers would not feel threatened by having to write in English. This decision however has posed a problem in terms of the usability of these instruments in this thesis. To overcome this difficulty, I translated both the diaries and the reports into English and checked my translations with the teachers themselves in order to ensure that my translations had been faithful to their texts. Appendices L and M contain the actual diaries and reports written by the teachers in Portuguese and appendices J and K the translations I will actually refer to in my analysis below. It should also be noted that the diaries express the teacher's and pupil's reactions to specific parts of the materials while using them whereas the reports put forward a more global view of the materials and of the whole language teaching/learning process.

In the discussion to follow I will first address the teachers' diaries in 7.3.2.1, then move into the teachers' final evaluation reports in 7.3.2.2, and summarise these findings in 7.3.2.3.

7.3.2.1 Teachers' Diaries and Final Evaluation Reports

7.3.2.1.1 Group 1 teachers' diaries

This teacher used the experimental materials and was supposed to have experimental group expectations since I told her that her group was an experimental group. She taught 18 classes.

Under the sort of expectation she was supposed to be working, I had expected her to be more full of praise towards the experimental materials. Yet, she does indicate that the pupils liked or were interested in the materials. For example: "They seemed interested in the class" (cf 4/10 - II); "The pupils discussed item e ... a lot" (cf 11/10 - II) etc. It should be noted nevertheless that she does not seem to find anything much wrong with the materials either. The few problems she has mentioned have to do with the possible difficulty level of particular tasks, for example, "Some pupils took longer to understand how to do exercise 13" (cf 18/10 - II); "The pupils spent a lot of time doing exercise 20" (cf 19/20 - II).

She seems to have considered that, because her materials were experimental, her role in using the diaries was basically to record factual information, although my instructions also asked for teachers' and pupils' attitudes and problems. In other words, it is almost as if she had previously assumed that the materials were good and deemed it unnecessary to discuss the existing difficulties and reactions to the materials. I can further check on my appraisal of her positive attitude when I discuss her final evaluation report below (cf 7.3.2.2.1).

It appears that she grasped the rationale behind the materials and followed the instructions on how to use them adequately: "Two pupils asked some extra questions of the author ..." (4/10 - II) - which is evidence of her interpretation of the procedural view of discourse comprehension incorporated into the syllabus: "I took advantage of this fact to show that there was no need for them to know the meaning of this word in order to understand the text" (4/10 - II) - which indicates her interpretation of the view that meaning in reading comprehension is not solely dependent on text-presented knowledge.

The only two indications that she may have modified the given instructions in the use of the materials do not seem, to my mind, to have affected the prescribed treatment: "I explained the genitive case using the name of that snack-bar called Bob's, pupil's names and classroom objects before doing activity 1 (cf 1/11 - IV); "I asked the pupils to translate the verbs in the box and in the sentences before they started activity 9" (1/11 - IV). These two activities are perfectly adequate to the experimental treatment and in fact within the rationale of the methodology (cf 4.3.2.2 and note 16 in 5.2.5 above) there is room for the teacher's creativity in trying to respond to particular classroom needs. It should be noticed that she does not seem to present these modifications as ways of solving existing problems with the materials. I believe she offers them as descriptive information on what she did in the classroom. Also, note that, as I suggested, the homework exercise[14] was given to the pupils after unit III (cf 8/11 - II).

In short, on the basis of the experimental group 1 teacher's diaries, it could be said that the teacher appeared to have had experimental group expectations and seemed to have followed the instructions for the use of the experimental treatment adequately. Her opinion is that the pupils' attitudes are positive.

7.3.2.1.2 Group 2 teacher's diaries

This teacher also used the experimental materials; however, I told her that her group was a control group, ie, she was expected to have control group expectations. She taught 21 classes.

Contrary to group 1 teacher, group 2 teacher made extensive use of the diaries to record not only positive but also negative aspects related to the materials. She seems to think that the pupils' attitudes towards the materials are quite positive, for example: "In general, the pupils seemed to have enjoyed the activities" (cf 5/10 - II); "The participation of the pupils was very good" (cf 18/10 - II); etc. However, she has also recorded some evidence of negative attitudes on the pupils' part: "There was very little interest in the post-reading phase today" (cf 1/11 - IV); "Some pupils complained that at the end of the activity 1 the lines were so close to each other that it was hard to read the text" (cf 9/11 - class 16); "This sort of disruptive behaviour was probably due to the fact that they thought that it would be difficult to understand such a long text" (cf 9/11 - III - class 16); etc.

She has also identified several problems with particular tasks due either to difficulties caused by instructions or to the cognitive level of the task itself. These are however negative aspects which are related to performance and not attitude, for example: "Some pupils found the instructions for exercise 8 difficult to understand" (cf 5/10 - II); "The pupils found it difficult to do activity 6" (cf 25/10 - II); etc.

She has however also recorded information on the appropriateness of the difficulty level involved in the tasks: "The pupils seemed to have had no difficulty in doing the exercises" (cf 5/10 - II); "The pupils answered the superficial reading questions with ease" (cf 25/10 - II); etc.

There is also some evidence that her own attitude towards specific parts of the materials seems to be positive, for example: "The discussion motivated by this phase was excellent (cf 5/10 - III); "The second reading phase was very good" (cf 26/10 - III); etc.

Her interpretation of the syllabus as reflected in the materials seems to be adequate: "I realised that the pupils ... had never been alerted to what happens when one reads a text" (cf 05/10 - IV) - which demonstrates her grasp of the notions that emphasis on meta-cognition helps learning how to read; "The pupils were surprised at the existence of cognates between English and Portuguese and it pleased them that they already knew so many words in English" (cf 19/10 - II) - which indicates her understanding of the relevance of the use of cognates in teaching how to read through these materials; ... "it was clear that they understood the rhetorical organisation of the text" (cf 19/10 - III) - which shows her comprehension of the notion that focus on the formal schematic structure of the text helps teaching how to read; ... "to read a text it is not necessary to know all the words in the text. What really matters is to be able to talk to the writer and to find out what the writer wants to say" (cf 19/10 - IV) - which provides evidence of her interpretation of the procedural view of discourse comprehension incorporated into the syllabus; "In the post-reading phase the pupils talked about their daily lives and created different routines for Bia and Italo for when they come back from school" (cf 26/10 - IV) - which indicates her understanding of the role of the post-reading phase in connecting the reading text with the world around the learners.

Contrary to group 1 teacher, group 2 teacher has modified several activities. However, I do not think the changes she has made may be said to have altered the experimental treatment of her materials. Her alterations nevertheless appear to represent an attempt on her part to overcome existing difficulties with the materials she thought were control materials: "The pupils found it difficult to do activity 6 because there was only one cognate in it: "coffee". I had to translate a few words (cf 25/10 - II); "The pupils found it a bit difficult to answer the two last questions in the second paragraph. I had to reread the penultimate question emphasising the sequence "a blue shoe and a red shoe" and I had to change the last question: "why is she wearing different colour shoes?" (cf 1/11 - III); "There was very little interest in the post-reading phase today ... I decided then to ask a few pupils to retell the story" (cf 1/11 - IV); "I had to give further examples using the possessive case marker because the examples provided were not enough for the pupils to understand that ... of ... = 's" (cf 5/11 - II); "At first some pupils thought they could not do activity 14 (comprehension testing). I copied the summary with the blanks on the blackboard and asked the class to complete it through consultation with the text" (cf 9/11 - III - class 15); etc. She has also offered a suggestion to improve one particular activity: "Perhaps sentence K would have been enough to introduce it as a subject pronoun because it is less complex and it as an object pronoun could perhaps be introduced in a simpler example" (cf 8/11 - II).

An interesting problem she has pointed out as regards the emphasis put on the use of cognates in the syllabus to ease the learner-reader's task in processing the text in a bottom-up direction is the fact that learner-readers may face difficulties in dealing with false cognates.

The English word PARENTS, for example, has a false cognate in Portuguese, ie, PARENTES, which means relatives: "and to the third question they promptly answered PARENTES which I immdediately translated" (cf 29/10 - II); "Some pupils insisted on answering that Bia and Italo went to Maracanã with their PARENTES" (cf 1/11 - III). While I acknolwedge that this kind of difficulty is unavoidable within the ISTR syllabus approach due to its emphasis on cognates, it is peculair that this teacher was the only one to point it out. This seems to be evidence of her interest in showing the problems with the materials.

It seems to me therefore that there is evidence in group 2 teacher's diaries that she has control group expectations. In particular if one compares group 2 diaries with group 1 diaries, it appears that group 2 teacher was much more engaged with finding faults with the materials and was much more critical. Also, it should be noted that she has modified several tasks of the materials in an attempt, I think, to get around the difficulties posed by them. It is almost as if she made a big effort to improve them. Conversely, the only two changes that group 1 teacher made do not appear to be an attempt on her part to minimise the existing problems with the materials.

It should be observed however that group 2 teacher still seems to think that the materials work. She has recorded not only negative attitudes but also positive attitudes on the pupils' part. And I feel that she likes the materials despite the fact that they are control materials. I can further check on her general attitude when her final evaluation report is analysed in 7.3.2.2.2. It also appears that she has interpreted the syllabus, as represented by the materials, adequately.

7.3.2.1.3 Group 3 teacher's diaries

This teacher used control materials and he was supposed to have control group expectations since I told him that his group was a control group. He used 20 classes.

Throughout the diaries there is evidence of this teacher's control group expectations. He is extremely critical of the materials, for example: "It was hard to introduce all these sounds together and make pupils practice them in just one class. Tiring class"(cf 5/10 - III); "There were no problems with the class although it was monotonous" (cf 22/10 - III); "The teacher was a bit jaded during the class" (cf 5/11 - III). On his part he does not seem to have found anything positive with the materials. There are also negative aspects associated with the pupils' performance while using the materials,for example: "Although they knew the grammar, there was some difficulty as regards the pronouns (cf 19/10 - III); "The pupils had some difficulty with the vocabulary items and with the exercise on pronouns" (cf 26/10 - II); etc.

However, he does acknowledge that the pupils' attitudes were positive although he also qualifies them as passive. He justifies their positive reactions on the grounds that pupils like to learn vocabulary,for example: "The unit was welcome, albeit passively. But the pupils were positively impressed"(cf 8/10 - II); "This unit was well received by the pupils, who simply love to learn vocabulary" (cf 19/10 - II); etc.

There is also some evidence of the pupils' successful performance, for example: "The text was understood without any problems (cf 19/10 - III); "After the first reading, one or two pupils could tell that the dialogue was about going back to school because of the words they could identify" (cf 22/10 - II); etc.

There is no evidence that he changed any of the activities or the instructions he was supposed to follow in order to use the materials. In fact, even the homework task (cf Appendix N), as suggested, was given out after unit III (cf 5/11 - IV). He seems however to have rushed through some parts of the units to cover the materials within the pace he set for himself: "I rushed a bit to finish this unit" (cf 19/10 - III); "I went more quickly now not to have to rush through at the end (cf 29/10 - II); "The end of the class was a bit quick" (cf 14/11 - III). Therefore, one should consider the possibility that these changes in the rhythm of the class may have actually been harmful to the pupils' learning task.

On the other hand, he seems to have interpreted the instructions on how to use the materials adequately although he does not appear to agree with them: "The pupils found it difficult to produce so many different sounds in the same lesson" (cf 5/10 - II) - which indicates his understanding of the role of the introductory unit in exposing learners to the sound structure of English; "Even if one demands only recognition knowledge of the grammar ..." (cf 9/11 - II) - which demonstrates his comprehension of the view that the grammatical knowledge required from the pupils in his materials involves only recognition of grammatical meaning; "I don't believe the pupils will learn all the vocabulary items they are memorising" (cf 12/11 - III) - which indicates his awareness of the heavy emphasis put on vocabulary learning in the materials; "Despite all the explanations given, some pupils found it difficult to understand the question which contains a map. I believe this difficulty is partially due to the fact that this test is different from the rigid scheme of the classes given" (cf 17/11 - II)-which reveals his awareness of the fact that the constructs underlying the experimental group post test are different from the theoretical principles which underlie his control materials. There is however one piece of evidence that he may have misunderstood the instructions about how to use the vocabulary exercises. At least in unit 1, it appears that he expected that the pupils should already know the vocabulary of the units-"I had to provide 60% of the meaning of the words in this exercise" (cf 8/10 - I) - when in fact the teacher was supposed to introduce it. Yet, this misinterpretation of how to use the activity does not seem to have affected the way he handled it since he after all presented the vocabulary items, as he was supposed to.

He has also made some comments on the administration of the questionnaires which may illuminate the problems discussed above with the results provided by this instrument (cf 7.3.1). He points out that the pupils "did not seem to be very confident in answering the questions" and that "the administration of the questionnaire was very onerous owing to the instructions that had to be given" (cf 19/11 - II). Although his observations can only be taken as true of his group, they do seem to show that something definitely went wrong with this instrument. His remarks seem to indicate on the one hand that the pupils' answers are not reliable and on the other that the instrument itself was not appropriate to the pupils. It is not surprising therefore that the questionnaires have proved to be problematic in this research.

On the basis of my discussion of this teacher's diaries, it appears that he definitely had control group expectations and that although he has indicated that there was some evidence of positive attitudes towards the materials on the part of the pupils, he himself has been very negative about them. It is interesting to compare this teacher's diaries with group 2 teacher's because both of them had control group expectations. However, group 2 teacher, despite her many criticisms, has been fairly positive and has in fact widely recorded positive attitudes on the pupils' part (cf 7.3.2.1.2 above).

It seems to me that the innovative character of the experimental treatment prompted the teacher to react more positively. In other words, while group 3 teacher had two disadvantages in the teaching task, ie, the control materials and control group expectations, group 2 teacher had but one: her control group expectations. And perhaps one could claim that the experimental treatment of her group resisted her control group expectations.

7.3.2.1.4 Group 4 teacher's diaries

This teacher also used control materials, but was supposed to have experimental group expectations since I told her that her group was an experimental group. She also taught 20 classes. Therefore, contrary to group 3 teacher, who used the same control materials but had control group expectations and a negative attitude, group 4 teacher was quite enthusiastic about her materials. She described the pupils' attitude towards the materials as quite positive, for example: "This phase was very well accepted by the class which participated actively (and with a lot of interest)" (cf 9/10 - I), "The pupils commented that it is interesting to learn English through texts about our own things ... (cf 8/11 - II); etc.

There is also plenty of evidence of the pupils' successful performance while using the materials: ..."they did this activity without any difficulty ..." (cf 11/10 - II); "Most pupils are reading and understanding quite well" (cf 20/11 - I); etc.

However, she has also recorded some information related to problems that the pupils faced in using the materials: "They did well as far as number 10; from 11 to 15 they found it harder to write the answers" (cf 18/10 - IV); "They needed a lot of help to do activities 6 and 7" (cf 19/11 - II).

Her interpretation of the instructions on how to use the materials seems to be appropriate: "When I told them, they were going to start learning how to read in English ..." (cf 4/10 - III) - which provides evidence that the materials were introduced to the class just like any other learning activity as I had asked the teachers to; "One of the pupils wanted to know why the letter K in the word know is not pronounced" (cf 4/10 - III) - which indicates her awareness of one of the principles underlying the methodology used in the materials, namely, the need to associate orthorgraphy with the phonological interpretation of words for their meanings to be accessed; "Some pupils understood the mechanism for the possessive case transformation and what it means ..." (cf 8/11 - IV) - which seems to show her interpretation of the principle that only a recognition level of grammatical knowledge is required. However, the only suggestion she makes for improvement seems to demonstrate that she may have misconstrued the purpose of the introductory unit, which was simply a way of exposing the learner to the phonological structure of English. She seems to imply that the pupils actually had to be able to produce the phonemes correctly: "I believe the contents of today's class should be repeated in another class: not only to check on what they have actually learned, but also because the last "pairs" were done more quickly because of lack of time" (cf 4/10 - IV).

She has used specific ways of doing some activities which, to my mind, have not altered the control treatment she was supposed to follow,for example: "In activity 4 ... They used the previous exercises as sources for finding the answers" (cf 8/10 - III); "I skipped activities 8 and 9 because we had already done similar activities today. I will come back to them in the next class so that the pupils can check what they have learned" (cf 8/10 - IV); "As there were 15 minutes left at the end, I did an oral review of the material with the class" (cf 20/11 - IV). It should also be noted that her modifications are not offered as a way of correcting something wrong with the materials, as group 2 teacher's changes seem to imply, but rather as a description of what happened in the classroom. In this connection, it should be remarked that group 1 teacher who also had experimental group expectations, appeared to have the same intention when recording the changes she made (cf 7.3.2.1.1). Yet, group 2 teacher (experimental materials and control group expectations) seems to have altered certain activities as a way of coping with difficulties presented by the materials (cf 7.3.2.1.2). Also, note that while group 3 teacher (control materials and control group expectations) complained about the lack of time to use the materials, group 4 teacher (control materials and experimental group expectations) used exactly the same number of classes (ie, 20 classes) that group 3 teacher did, but found 15 minutes at the end of the course for a review. This fact, I believe, seems to be further evidence of her experimental group expectations.

There is also evidence in her diaries that the reading classes were taught like any other class. This fact can be identified in the pupils' reactions to the classes. They themselves asked for homework as they would in their normal classes ("The pupils are asking for homework"; cf 23/10 - IV) and seemed to show their ususal concern with the test they have to do at the end of the term ("The pupils .... want to know how they will do the test if they do not take the materials home with them"; cf 18/10 - IV).

Another interesting aspect of this teacher's diaries is her realisation that the materials exploited the use of cognates, for example: "This activity was quite easy for them because several words were similar to Portuguese words" (25/10-I-Unit 3). Although there was no concern with the use of cognates in the methodology of the control materials, this teacher perceived that there were cognates in the materials. This fact is an effect of my decision to use the same kind of systemic knowledge in both experimental and control materials (cf the rationale for the control materials in Appendix B).

There is also evidence in her diaries of the pupils' perception of the control materials as an innovation. This fact may have caused an a priori positive attitude to the materials on the part of the control group pupils, for example: "The pupils were amazed at the fact that the exercise was written in Portuguese. They said that it was the first time that that happened in an English class" (cf 11/10 - III). In other words, the materials seem to have been taken as an innovation by both control and experimental groups.

The same negative reaction towards the questionnaires identified by group 3 teacher is also pointed out by this teacher: "It was a bit long and a bit tiring for the pupils" (cf 22/11 - II)". This attitude seems to support the point already made that there was something wrong with the questionnaires.

On the basis of the evidence discussed above, it is clear that although group 4 teacher used control group materials, she had experimental group expectations. While group 3 teacher (control materials and control group expectations) was very negative about the materials, this teacher was quite positive and whatever changes she made in the materials do not appear to be presented in her diaries as ways to get around the faults she found with them.

In the next section I want to look into the teachers' final evaluation reports, which present a more global view of what went on in the classroom. The main objective of my analysis of these reports is to check whether my interpretation of the diaries are confirmed. In this sense, I will further check if the teleological purposes I have attributed to the teaching events in the 4 groups are upheld.

7.3.2.2 Teachers' Final Evaluation Reports

7.3.2.2.1 Group 1 teacher's report

This teacher's final evaluation report seems to support my interpretation of her attitude towards the materials as positive (cf my analysis of the diaries in 7.3.2.1.1 above). Nowhere in this report does she mention any fault with the materials.

She discusses the inadequacy of the syllabuses used in Brazilian secondary schools particularly "in view of the kind of pupil and group the teacher will have to deal with" and argues for "the need to reformulate the ELT objectives and the existing materials and methodology".[15] She criticises the emphasis on oral skills typical of the syllabus she was using before and points out that a reading syllabus seems to be the right alternative because,among other reasons, it will help to "widen the pupils' cultural horizons and critical capacity" and it will be a useful resource for learning other subjects. She feels that teaching reading in a FL can be of particular use in helping learners to learn how to read in the native language, in particular because "the Brazilian pupil is not used to reading and has no systematic guidance on how and why he needs to develop his reading skills" (cf 1.3 above).

She also argues that by teaching how to read, one can also teach the skills of listening and writing. She seems to imply therefore that the materials she used also teach listening and writing skills. I believe that, due to the short exposure she had to the materials, she has misconstrued the role of the appeal made to listening and writing skills in the materials. As put in the rationale for ISTR syllabus model (cf 5.2.5.3), these two skills are used simply as process/ methodological devices to help learning how to read. Nevertheless, other examples of how she has interpreted the methodology used in the materials seem to be adequate. Contrary to the diaries, which contain little information on how she interpreted the materials, her final report contains a lot of evidence of that. She also expresses her positive attitudes to the experimental treatment methodology throughout the report whereas she used the diaries virtually in order to record factual information (cf 7.3.2.1.1).

There is evidence that she seems to have interpreted adequately the emphasis that the methodological component puts on: a) certain elements of the surface structure of discourse (ie, discourse markers) which help the learner interpret text (cf "Sometimes the pupil learns by himself to identify what is important in the text or what the teacher makes him identify as important"; b) the global formal schematic structure of the text (cf "why the text is divided into paragraphs"); c) the use of the problem-solving activities in teaching systemic knowledge (cf "solving a problem, the pupil internalises grammar more easily"); d) the realisation of systemic level elements at the language use level (cf "grammar is taught as a supplementary communicative resource"); e) an interactive view of discourse interpretation (cf "leading the pupil into a dialogue with the writer"); f) the learner's cognitive skills (cf "Here the pupil copies to solve a problem, to fill a blank, to complete a diagram, a graph"); g) other kinds of visual information present in the text which are non-linguistic (cf "the use of maps, figures, graphs, diagrams undoubtedly helps the learner understand the meaning of the text"; h) silent reading (cf "In real life, we normally read silently"; i) the contribution of the learner to the learning task (cf "the teaching/learning task becomes much more pleasant when the pupil realises that what he is going to learn is something easy, simple, and a development of what he already knows"; j) metacognitive skills (cf "The introductory unit is useful since it makes the pupil aware of the fact that he uses the same resources to read in English and in Portuguese"); k) critical reading (cf "the importance of the post-reading phase of the unit which leads the pupil into critical reading". She also seems to have grasped that there is room in the methodology for the teacher's personal view of how to use the activities: "Some of the activities of this course can be done in groups or in pairs..."

In her evaluation she compares the reading syllabus and materials with the syllabuses and materials traditionally used in Brazilian secondary schools and explicitly states her preference for the former. In her view the reading syllabus methodology demands more from the pupils and promotes class participation (cf "pupils have a lot of interest in doing the tasks, in checking the answers and in exchanging ideas with classmates") whereas "In the traditional structural approach[16] used before, the pupil is treated as an automaton".

To illustrate her positive evaluation of the materials, she reports on a particular pupil who at first refused to participate in the reading class but who "from the second unit onwards ... started to participate actively" ... owing to the interest she developed in learning how to read through the experimental materials.

7.3.2.2.2 Group 2 teacher's report

As my appraisal of this teacher's diaries has shown (cf 7.3.2.1.2), despite having used the experimental materials, she did seem to have had control group expectations, as manipulated by the researcher. Her final evaluation report seems to add further support to that interpretation. Whereas group 1 teacher (experimental materials and experimental group expectations) mentioned no problems with the materials at all in her final evaluation report, group 2 teacher indicates that ... "the materials I used had problems" and actually suggests that some units had too many grammatical aspects and should be altered; "Unit 5, for example, could perhaps be transformed into 2 units".[17] This position on her part coincides with her criticism of the materials in the diaries and with her several attempts to improve the faults she found with them. Except for group 3 teacher (control materials and control group expectations), who is extremely negative about the materials, her view of the materials is the most critical and in fact she is the only teacher who tries to get around the difficulties posed by the materials. As mentioned in 7.3.2.1.2 above, I think that the innovative character of the materials and the pupils' positive attitude to them (cf "The pupils were very happy to see that the materials dealt with their own reality," ... "they thought it was very interesting to learn the language in a pleasant and involving way"; etc. have made her take the view that "despite the fact that the materials that I used had problems, I think they are in general efficient".

Another aspect which has to be considered, I think, is the fact that these materials seem to embody the sort of objective she believes ELT should have in Brazilian schools. In fact, in her introduction to the report she is very critical of the emphasis put on oral language in these schools. She clearly points out that the inefficiency of ELT in that context is due to the inadequacy of the methods and materials to the existing teaching conditions and an unrealistic view of the kind of FL skills that pupils need in Brazil. She argues that pupils need a reading knowledge of English. Therefore, it appears that the fact that these materials centre on reading skills may be taken as one of the motives for her positive attitude although she acknowledges the existing problems with the materials.

She compares the kind of syllabus she was using before the reading course, ie, a structural syllabus, with the reading syllabus and expresses her preference for the latter: "I could notice that in the reading classes the pupils learnt more than what they had learnt before". There is however an aspect in her description of the syllabus she used before the reading syllabus which seems to deserve special attention. She argues that she "centered the course on the four language skills, but she did not emphasise oral language". It could be therefore that her pupils were more used to written language than the other 3 groups' pupils.

7.3.2.2.3 Group 3 teacher's report

This teacher's final evaluation report appears to support my analysis of his diaries since he is negative about the materials here as well. This fact is consistent with his control group expectations towards a group which used control materials.

His main criticism, I think, has to do with the fact that the materials and the methodology they imply are very mechanical and therefore seem to present no challenge to the learner. That is, the materials make little appeal to cognitive aspects of learning: "The initial dialogue was a minor challenge to them"; "the text did not present any challenge to the pupils, who had already learnt all the vocabulary mechanically"; etc. However, he believes that the fact that these materials centre on the reading skills is a positive aspect (cf "One of the positive points of using these materials was to see the pupils study with a more restricted objective, which is, I believe, more adequate to the type of pupil and school at issue." He has actually been very critical of the audio-oral method with emphasis on the 4 language skills he used before the reading course.

It should be noted nevertheless that the fact that these materials centre on one skill, which he seems to approve of, has not affected his negative opinion of the materials. This point seems to back up my interpretation of group 2 teacher's positive reaction towards the materials (despite her control group expectations) as a possible effect of the experimental treatment of her group. In other words, since both teachers believe that teaching how to read should be the objective of ELT in Brazil and had control group expectations but differed as regards the experimental or control treatment of their respective groups, it is plausible to suggest that the type of approach used in their groups may have determined their different attitudes.

He identifies the pupils' attitudes towards the materials as positive and receptive (cf "The introductory unit was very well received by the pupils" ...; etc.); however, as he pointed out in his diaries (cf 7.3.2.1.3 above), he seems to think that this attitude was either caused by the novelty of the course or by the fact that pupils enjoy learning vocabulary (cf "perhaps because these materials coincide with what they consider more relevant in language learning: the command of lexis").

His interpretation of the materials seems to show that he adequately followed the recommended treatment: ... "after doing so many vocabulary exercises, the pupils were familiar with all the vocabulary of the text before reading it" - which reveals his awareness of the view of reading underlying the methodology of the control group materials, ie, reading involves the meaning of every word in the text; "I do not believe that reading aloud facilitated comprehension in any way ..." which indicates that he followed the steps of the reading phase, although he did not approve of them. There are however two points in his view of the materials which are contradictory. The first is that while he complains that the grammar presentation was very concise and did little to help the comprehension of the text, he paradoxically also points out that "most of the times, it was not necessary to recognise any grammatical item to comprehend the text". The second is that although on the one hand he seems to think that reading aloud does not help reading comprehension, on the other he appears to argue that teaching reading comprehension could profit from the reading aloud activity if pupils could read aloud well: "I do not believe that reading aloud facilitated comprehension in any way, for this reading was always deficient in the sense that the pupils did not have full command of the pronunciation of words" ...

7.3.2.2.4 Group 4 teacher's report

Group 4 teacher's final evaluation report is also consistent with the view of the materials she puts forward in her diaries (cf 7.3.2.1.4 above), ie, she seems to have liked the materials (cf "The materials ... have reached the objectives they aim at and have also made the performance expected from pupils more realistic") and so have her pupils (cf "The attitude of the pupils towards the new materials was highly positive"). Her position again contrasts with group 3 teacher's, who used the same control materials but had control group expectations. In other words, it is likely that her positive attitude is due to her experimental group expectations. It is noteworthy that while group 3 teacher portrayed his pupils' attitudes as receptive but passive, group 4 teacher actually quoted her pupils to exemplify their positive attitudes: "I used to think that English was very difficult, but learning it this way is so easy"; "Now we can already read some things in English"; etc.

She has also argued in favour of the reading syllabus and against the mixture of grammar-translation and audio-lingual methodology she used in classes before the reading course (cf "Undoubtedly, the materials developed as a realisation of this syllabus in comparison with the ones I was using before are at a superior methodological and academic[18] levels" or "I also think that this methodology for the teaching of reading will also be beneficial to the development of reading skills in the native language". She has also criticised the existing objectives of ELT in the city of Rio de Janeiro.

Her interpretation of the principles underlying the materials seems to be adequate: "I also think that the several parts of the units and mainly the pre-reading phase are facilitative elements which lead the pupil to the comprehension of the text" - which indicates her awareness of the sequencing of the different phases of each unit; "the attempt to relate the texts to be read in English with the contents of other school subjects will have a clear motivating effect on FL learning" - which shows her awareness of the fact that the content of the reading texts reflect subjects pupils are familiar with. Although this last aspect was not emphasised through the methodology used in the control materials, it has become apparent to the teacher. In this connection, it is interesting that in her diaries there is evidence that she also noticed the use of cognates in the texts (cf 7.3.2.1.4), which is not exploited in the control approach either. These two aspects are emphasised in the experimental methodology; however, because I chose to keep exactly the same systemic and schematic level units in both types of materials (cf Appendix B), this teacher managed to notice them in her control materials. Her perception of these two points may be interpreted as a consequence of the fact that she was determined to find the positive features in the materials because of her experimental group expectations. Group 3 teacher, who used the same materials but had control group expectations, did not seem to have perceived them.

The issue involved here may imply that there were features of the experimental methodology which may have been included in the control group 4 approach.

This teacher, despite her positive attitude, does mention a problem with the materials, which in fact is the aspect mainly criticised by group 3 teacher, namely, a methodological aspect: "it is necessary to make the part of the unit related to vocabulary acquisition more dynamic".

7.3.2.3 Summary of the data provided by teachers' diaries and final evaluation reports

Besides using the teachers' diaries and reports as sources for a qualitative evaluation of the materials, the hermeneutic mode of inquiry here had the objective of investigating whether the telelogical purposes I attributed to the teaching/learning event in each of the four groups were supported (cf 7.3.2). As my discussion in 7.3.2.1 and 7.3.2.2 has shown, there seems to be evidence that the imputed telelogical ends have been upheld. While I acknowledge the subjectivity of this kind of data - which is in fact its strength - and of my interpretation (cf 7.3.2 above), I want to emphasise that the evidence found in the diaries seems to be confirmed by the final reports

Group 1 teachers' diaries and report (experimental treatment and experimental group expectations) demonstrate that she seems to have interpreted the experimental materials adequately and made few modifications in the activities, which do not seem to have altered the experimental treatment and which appear to have been offered in the diaries as factual information on what went on in the classroom. Her attitude and her view of the pupils' attitudes towards the materials and reading lessons are positive. She also indicates her preference for the reading materials and syllabus in comparison with the existing syllabuses and with the syllabuses she used before the reading course (ie, a structural syllabus with emphasis on oral skills). She taught 18 classes.

Group 2 teachers' diaries and report (experimental treatment and control group expectations) are critical of several parts of the materials and she has actually tried to overcome the faults she found with them by improving several activities. It could be said that she made a big effort to better the materials, which she thought were control materials. I do not think however that these changes have essentially altered the approach she had to follow.

In fact, her interpretation of the approach as perceived in these two research instruments seems to have been adequate. Despite her criticism she thinks that the materials work and also that pupils like them. It seems to me that although she appears to have had control group expectations, the innovative character of the experimental treatment and the pupils' positive attitudes have led her to think that the materials were efficient. Also, while group 3 teacher, who used the control materials, had control group expectations and approved of the objective of his materials, was negative towards them, group 2 teacher, who could be characterised in the same way, except for her experimental materials, reacted positively. That is, as already pointed out in 7.3.2.2.3 above, it seems plausible to suggest that her attitude towards the materials is due to the effects of the experimental treatment. She also prefers the reading syllabus to the syllabuses she has used before. She has indicated however that although she used a structural syllabus and centered on the four language skills before the reading syllabus, she did not emphasise oral skills. She taught 21 classes.

Group 3 teacher (control treatment and control group expectations) is extremely negative about the materials and sees as the only positive aspect the fact that these materials centre on a more restricted objective, in comparison with the four language skill structural syllabus he used before the reading course. This fact however did not alter his view of the materials. Yet, he indicates that the pupils had positive attitudes towards the materials although he also classifies them as passive. There is no evidence in his diaries and report that he changed any of the activities although he points out that he had to rush through some parts of the materials. He seems to have adequately interpreted the materials. He also comments on difficulties he had in administering the questionnaires and that the pupils did not seem confident while completing them. He taught 20 classes.

Group 4 teachers' diaries and report (control treatment and experimental expectations) are very enthusiastic about the materials and clearly contrast with group 3 teachers' attitude since they used the same kind of materials. She modified a few activities but that does not seem to have altered the control treatment. Her changes however do not appear to have been made to correct something that in her view was wrong with the materials but to better suit particular teaching circumstances. Her interpretation of the materials also appears adequate. She also presents evidence that the materials were perceived by the pupils as an innovation although there is evidence that they faced the classes and tests as normal procedures of their school life. She compares the reading syllabus with the existing syllabuses in Brazil and seems to prefer the former. Contrary to group 3 teacher, she has perceived the use of two devices in the materials (cognates and the cultural proximity of the schematic content area of the text) which are not exploited in the control materials methodology. This fact seems to indicate an attempt on her part to find the positive aspects of the materials. Like group 3 teacher, she has noticed a negative reaction towards the questionnaires on the part of the pupils. She also taught 20 classes.

In conclusion, I would like to point out that the qualitative and process-oriented data discussed in this section have shown that all the four teachers seem to agree on the adequacy of a reading syllabus for Brazilian secondary schools although there have been differences in their attitudes to the two approaches utilised. The experimental treatment, which reflects the ISTR syllabus model advanced in this thesis, appears to have resisted the teacher's expectations from an affective perspective since group 2 teacher (experimental group), despite her control group expectations (as indicated in her diaries and report), still thinks positively of her materials. Conversely, group 3 teacher, who had control materials and control group expectations, is quite negative about his. All the four teachers have indicated a positive attitude towards the materials on the pupils' part.

In the remainder of this chapter I want to make use of the kind of data put forward in the non-experimental part of the research (cf 7.3 above) to illuminate the experimental findings (cf 7.2 above).

7.4 Relating experimental and non-experimental findings

This section is basically founded on the idea that due to the fact that experimental and non-experimental data are of a different nature and have their own inherent limitations, only by making use of a research design which tries to tap both kinds of data can one make the research as a whole more thorough (cf 6.2. above).

In the present design the central paradigm is experimental and use is made of non-experimental data as a secondary kind of data, which makes the evaluation more qualitative and process-oriented.

In other words, there are aspects related to how the subjects affectively perceived the materials and to the actual language teaching process which are not captured in experimental data and which may clarify or in fact question the experimental findings. With this intention, this chapter now deals with data found in the teachers' dairies and reports which may have affected the internal and external validity of the experiment (cf 7.4.1 below), which may back up the claim that the experimental treatment withstands teacher's expectations (cf 7.4.2 below), and which may illuminate the difficulties found in the use of the questionnaires (cf 7.4.3 below).

7.4.1 External and internal validity of the experiment

In agreement with my analysis of the experimental results (cf 7.2.5.2 above), there is evidence in the teacher's diaries and reports which extend the external validity of the experiment. Teachers' expectations seem to have been manipulated and no reactive effects towards the tests and experimental arrangement on the part of the pupils have been noted (cf 7.3.2 above). My interpretation of teachers' diaries and final evaluation reports (cf 7.3.2.3 above) seems to show that group 1 and group 4 teachers had experimental group expectations whereas group 2 and 3 had control group expectations, as manipulated in the experiment.

As regards the Hawthorne effect, there is evidence in the diaries that pupils took the course and tests as normal procedures of their school life (cf group 4 teacher's diaries in particular, in 7.3.2.1.4 above). Nevertheless, it should be remarked that it seems that all the 4 groups equally seemed to perceive the innovation involved in learning EFL through these materials. It would in fact have been impossible for them not to since the materials centre on only one language skill (differently from the materials they were used to) and make use of methodological devices with which the pupils were not familiar. It is interesting to observe that even the control group subjects perceived their materials as innovative (cf 7.3.2.1.3 and 7.3.2.1.4 above), which in fact they were for them. This fact may have caused the positive attitude towards the materials and course on the part of the pupils, mentioned by all the four teachers. I will come back to the pupils' attitude issue in 7.4.3 below.

As regards the internal validity of the experiment, there are a few points to be considered. There is evidence in the diaries and reports that both the experimental and control materials have been adequately interpreted by the teachers and that they appear to have followed the instructions to use each type of approach appropriately (cf 7.3.2 above). To my mind, the changes made in the use of some activities have not essentially altered the respective approaches and seem to be in fact quite typical of modifications teachers normally make when using materials in the classroom. That is, they were therefore quite expected in an experiment carried out in a natural context.

There are however 3 aspects related to the internal validity of the experiment which I would like to consider: a) the rhythm of instruction; b) control group 4 teacher's perception of features of the experimental methodology; and c) the lack of homogeneity between the groups in terms of previous EFL training.

a) The rhythm of instruction

I want to tackle two issues here. The first has to do with the rhythm of the classes. While I did not give any teacher strict time restrictions to cover the materials. I did suggest that three classes per unit would seem to be adequate.[19] I added however that was a matter for them to check in the classroom on the basis of the groups' capacity to cope with the materials. As the diaries (cf 7.3.2.1 above) indicate, my suggestion seemed to have been found appropriate: the average number of classes used per unit was 3. However, there is some evidence that my proposal of 3 classes may have been interpreted by group 3 teacher (control treatment and control group expectations) as a requirement for the use of the materials since in his diaries he notes that more time would have been needed. He in fact indicates that he had to rush through the end of some activities (cf 7.3.2.1.3 above). It is noteworthy however that group 4 teacher (control materials and experimental group expectations) made no complaint about lack of time and actually found 15 minutes to review the material in her last class despite using the same 20 classes that group 3 teacher did (cf 7.3.2.1.4). This issue seems to suggest that control group 3 may not have been adequately taught because its teacher misinterpreted my proposal of 3 classes. However, one could also ask whether group 3 subjects' general learning abilities are different from the other 3 groups subjects. The information I had from teachers when I selected these 4 groups was that they were average groups as regards their general learning abilities (cf 6.3.1.2 above). In fact, group 3 teacher in his final evaluation report does refer to his pupils as average achievers: "The materials were used in an average class in achievement terms, reasoning speed, interest etc." (cf Appendix K). Therefore, I am left with the possibility that control group 3 may not have been appropriately taught owing to the teachers' misinterpretation of my suggestion of three classes per unit or that perhaps his complaints about lack of time could simply be a reflection of his control group expectations. This fact however does seem to pose some threat to the internal validity of the experiment, for group 3 subjects may have not been adequately exposed to the control treatment.

The second issue related to the rhythm of instruction has to do with the number of classes taught by each teacher. Group 1 teacher (experimental materials and experimental group expectations) used 18 classes and in her report (cf Appendix K) she actually acknowledges that the pace of her class modified from unit 3 onwards, which coincides with the change of number of classes she used for each unit,as shown in her diaries (cf Appendix J): ... "at first the pupils found the activities strange and did them more slowly. When we started the third unit, some pupils did the task more quickly ..." (cf Appendix K). This aspect could be seen in the light of the fact that she had the experimental materials and experimental group expectations, which could have made her classes go in a more rapid rhythm. Note in this connection that group 4 teacher, who used the same number of classes (ie, 20 classes) and the same materials of group 3 teacher (ie, control materials) but differed in terms of their respective expectations (ie, group 4 had experimental group expectations) found time to review the material. That is, her classes seemed to have had a quicker pace than the classes of group 3 teacher, who had control group expectations. This fact also seems to be confirmed by group 2 teacher's diaries. She had control group expectations and used 21 classes. That is, the groups whose teachers had control group expectations appeared to have needed more time. However, the fact that group 2 pupils received longer instruction causes some concern since that may have affected the experimental results. Further, this group's teacher's several attempts to overcome the difficulties she found with the materials (cf 7.3.2.1.2) may have not only required more teaching time but also influenced the results. In this way, there seems to be evidence in the qualitative/process-oriented data of this research which may explain the reason why group 2 achieved statistically significant higher mean scores than group 1 on the CONPT (cf 7.2.4.1.2) despite the fact that they used the same experimental materials and group 2 teacher had control group expectations. In other words, it is likely that group 2's longer time of instruction and the teacher's efforts to go around the problems she found with the materials in conjunction with the experimental treatment effects may explain the higher achievement of her group. These facts may nevertheless present threat to the internal validity of the experiment.

b) Control group 4 teacher's perception of features of the experimental methodology

There is evidence in group 4 teacher's diaries and report (control materials and experimental group expectations) that she perceived the use of two devices which facilitate reading comprehension (ie, cognates and cultural proximity of the content schematic area of the text) in her materials and which are exploited in the experimental treatment methodology. Although the methodology of the control group materials does not make use of these two devices, group 4 teacher and her pupils (cf 7.3.2.1.4) perceived them. It is true that these two points are minor in relation to the existing differences between the experimental and control approaches and are not systematically exploited in the control materials methodology. However, one cannot ignore the fact that group 4 control treatment may have been closer to the experimental treatment than group 3 control treatment. This aspect may then further explain the reason why group 4 achieved higher mean scores than group 3. That is, in addition to group 4 teacher's experimental group expectations she may have also dealt with features which are typical of the experimental group methodology, which represents some threat to the internal validity of the experiment.

c) The lack of homogeneity between the groups in terms of previous EFL training

While I tried to use groups which were as similar as possible in terms of their previous knowledge of EFL and training in EFL (cf 6.3.1.2 above) and actually checked their similarity in terms of EFL competence through the use of a pre-test (cf 7.2.2 above), there is some indication in group 2 teacher's report (cf 7.3.2.2.2 above) that although, like the other three teachers, she centered on the four language skills, she may have not emphasised oral skills, differently from the other three teachers. Despite the fact that there is no evidence in her report that she concentrated on written language in her classes prior to the reading course, the fact that she points out that she did not centre on oral skills may indicate that her pupils were perhaps more used to written language. Although I had checked with the teachers as regards their four language skill syllabuses when selecting the groups (cf 6.3.1.2 above), I was not aware that group 2 teacher, contrary to the other three teachers, did not focus on oral skills. This issue may further explain the reason why group 2 achieved higher mean scores and consequently also questions the internal validity of the experiment.

7.4.2 The experimental treatment and group 2 teacher's expectations

As discussed in 7.2.5.2 above, a possible interpretation of the experimental findings was that the experimental treatment could be said to withstand teacher's expectations since experimental group 2, whose teacher had control group expectations, did significantly better than group 1 on the CONPT. There is evidence in the non-experimental part of the research (cf 7.3.2.3 above) which backs up this interpretation, for the experimental group 2 teacher thinks positively of her materials despite the fact that she seems to have had control expectations. That is, the non-experimental data indicate that the experimental treatment resists the teacher's expectations in affective terms whereas control group 3 teacher, who also had control group expectations but used control materials, has a negative attitude towards his materials. Nevertheless, the fact that group 2 teacher used the experimental treatment and had control group expectations seems to have prompted her to try to improve the materials and actually to spend more time with instruction (cf 7.4.1 above). That is, it could again be argued that the experimental treatment was not alone in determining group 2's better performance.

7.4.3 The attitude scales and open-ended items of the questionnaires

As discussed in 7.3.1.1 above, there were problems with the use of the attitude and belief scales in this research. They had been piloted for comprehension and the reliability coefficient of some of the scales checked post hoc proved to be unacceptable. Also, the construct validity of the only three attitude scales whose reliability coefficients were considered acceptable was also questionable since the ANOVAs showed that the existing variability of the pupils' attitudes in these three scales was not statistically significant. The subjects, independently of the type of group they belonged to, tended to have attitudes towards the materials, reading course etc. which were equally on the favourable end of the scale. That is, the construct which was supposed to be underlying these scales does not account for the pupils' performance. Had the construct validity of these scales been checked in the pilot study, the scales could be considered a good enough research instrument for the results of the ANOVAs to be acceptable. Yet, my interpretation of the subjects' answers to the open-ended questions in general terms confirms that all the 4 groups had positive reactions to the materials (cf 7.3.1.2). And, what is more, there is evidence in the 4 teachers' diaries and final evaluation reports (cf 7.3.2 above) that, as perceived by the teachers, the pupils in all the 4 groups had positive attitudes, which may have been in fact caused by the 4 groups' perception of the materials as an innovation (cf 7.4.1 above). That is, perhaps the scales may have in reality reflected how the subjects affectively perceived the materials etc. More exposure to the materials would have seemed necessary for the novelty effect to disappear so that differences in attitude could emerge.

On the other hand, both control group teachers have indicated in their diaries (cf 7.3.2.1.3 and 7.3.2.1.4 above) that there were problems with the administration of the questionnaires. Both of them have pointed out that completing the questionnaires was a tiring activity for the pupils and in fact group 3 teacher added that the pupils did not seem to answer the questions in a convincing manner. These two facts seem therefore to be in agreement with two of the possible explanations for the difficulties found with this instrument, discussed in 7.3.1.1 above,namely, the instrument was inadequate to the groups or there could have been a reactive effect of the instrument on the pupils who may have answered positively, despite being unconvincing, because of the presence of the teachers in the classroom, the school environment etc.

Therefore, although there is evidence in the teacher' diaries and reports that the 4 groups equally had a positive attitude to their respective materials, which confirms the findings of the attitude scales and open-ended questions, there is also evidence in the diaries which questions the validity of these findings of the questionnaires. Thus, the only reliable source of evidence for the pupils' attitudes in this thesis is represented by the data found in the teachers' diaries and reports.

7.5 Conclusion

The research paradigm employed in this evaluation by relating experimental data to non-experimental data has shown that: a) experimental findings - which would have been considered definitive had this research been solely experimental - have been further clarified or become questionable; b) the non-experimental evaluation of the materials and reading course has helped in the interpretation of the experimental findings since, without the use of non-experimental data, my interpretation of the experimental findings would have been simply speculative; and c) the non-experimental data may be useful in projecting the findings of this thesis into future research.

The non-experimental data have been particularly insightful in calling attention to factors which may be said to have affected the internal validity of the experiment, gone some way to explaining why group 2 did significantly better than group 1 on the CONPT, revealed that the experimental treatment seems to have resisted teacher's expectations in affective terms, illuminated the problems found with the use of the questionnaires, and showed that all the four groups,as perceived by the teachers, had equally positive attitudes to the reading course.

In the context of the experimental part of this evaluation, the limitations of the experimental data had been virtually reduced to a variable which was offered as a shortcoming of the experiment: the experimental groups seemed to be more used to reading in Portuguese than the control groups (cf 7.2.3 above), ie, a factor which affects the internal validity of the experiment. Therefore, the factors brought to light in the non-experimental part of this evaluation (cf 7.4 above) would not have been captured had this research been restricted to experimental data. In other words, by making the research process-oriented and qualitative, factors which may question the internal validity of the experiment have been more clearly exposed.[20] In this way, one becomes more aware of the scope of the claims of the experimental findings, which makes them less trivial.

On the other hand, the non-experimental findings seem to have enlarged the external validity of the experiment (cf in 7.4 above process-oriented data which appear to confirm the manipulation of the expectancy and Hawthorne effects). Yet, because of constraints related to the size of the sample used here, to the short period of time this experiment involved, and in fact because of issues which affected the internal validity of the experiment, generalisations from this experiment to other EFL teaching situations are to be made with caution.

Nevertheless, while acknowledging the points raised in this evaluation which question the experimental findings in my analysis of the experimental results in 7.2.5.2 above and particularly in view of issues brought about in the non-experimental part of the research in 7.4 above, I would still like to suggest that the experimental results seem to indicate a trend in the expected direction, ie, the practical effectiveness of the ISTR syllabus model - as reflected in the experimental materials - if compared with traditional pedagogies for the teaching of reading. This trend seems to reveal that it is worth pursuing further inquiry through the actual implementation of the ISTR syllabus (cf 8.3 below).

It should be called to mind that this tendency found in the experimental results confirms the existing empirical evidence (cf 3.4 above) of the psycholinguistic reality of several of the constructs included in the reading model, which inspired the design of the ISTR syllabus model (cf 3.4.1.1, 3.4.1.2, 3.4.2.1, 3.4.2.2 and 3.4.2.3 above) and coincides with the existing experimental evidence of the positive effects of teaching each type of schematic knowledge (ie, formal and content schemata) on helping both L_1 and L_2 learners learn how to read in laboratory contexts (cf 3.4.1.3 and 3.4.2.4). However, to the best of my knowledge, the empirical research carried out in this thesis constitutes the first attempt to evaluate, in the classroom, the practical effectiveness of a reading syllabus, which includes the teaching of systemic knowledge and both kinds of schematic knowledge at the same time.

As regards the other aspect I was concerned with in this evaluation (cf 6.1 and 7.3 above), ie, how the ISTR syllabus as represented in the materials, was affectively perceived, in comparison with existing syllabuses in Brazilian schools, there is evidence in the non-experimental part of this evaluation (cf 7.3.2 above) that the experimental group teachers have favoured their materials.

They have based their argument not only on the fact that a reading syllabus seems to be much more adequate to the Brazilian secondary school context in terms of its objective but also on aspects specifically related to the methodological component of the ISTR syllabus model (cf 7.3.2.2.1, 7.3.2.2.2, and 7.3.2.1.2 above).

It should be noticed however that the control group treatment was also favoured by the control group teachers if compared with the existing materials and syllabuses in terms of its limited objective. Actually, control group 3 teacher, who was the most negative about the materials used, sees the fact that his materials centre on the teaching of the reading skills as positive (cf 7.3.2.2.3) and in this sense better than the existing four language skill syllabuses. However, he was extremely critical of the methodology employed (cf 7.3.2.1.3 and 7.3.2.2.3). In this connection, it should be noted that even group 4 teacher,who had a positive attitude towards the control materials,was also critical of methodological aspects (cf 7.3.2.2.4). Therefore, there seems to be evidence that the ISTR syllabus model, as represented in the experimental materials, has been preferred for EFL teaching in Brazilian schools. However, a more comprehensive type of evaluation involving more teachers using the experimental treatment would be necessary to investigate the claims made here as regards teachers' attitudes (cf 8.3 below).

As concerns the issue of how the materials and reading course were affectively perceived by the pupils in the four groups, the data put forward in the teachers' diaries and reports have indicated that the subjects in the four groups appeared to have had the same positive attitude (cf 7.3.1.2 and 7.3.2 above), which seems to have been due to the four groups' perception of the materials as an innovation.

Therefore, although the four groups have differed in terms of the effects of the two different treatments, ie, the experimental groups have performed better, the pupils' affective evaluation of the materials, as perceived by teachers, has been equally positive. Thus, the effects of the experimental treatment in terms of performance do not seem to have been due to a different affective perception of the materials on the part of the experimental group subjects but possibly to the experimental treatment itself.

As I have pointed out in 6.1 above, the findings of this evaluation are preliminary and should be seen as the beginning of an evaluating process which will try to investigate the ISTR syllabus in operation in the Brazilian EFL classroom. These findings however have been useful in indicating the validity of continuing to try out the materials, which actualise the ISTR syllabus, in the classroom.

Furthermore, to the very extent that the non-experimental findings of this research have called the experimental findings into question, they have also indicated variables which can only be accounted for through the actual classroom implementation of the ISTR syllabus. In this sense, they have put forward different factors of importance. Among these are the different rhythm of instruction used by the different teachers, control group 4 teacher's perception of features of the experimental methodology, experimental group 2 teacher's effort to improve the materials, the pupils' positive attitude towards the materials as a reflection of their perception of the materials as an innovation etc. These factors have to be taken up by non-experimental action research in the implementation of the syllabus (cf 8.3 below). It is in this sense that this thesis also has a projective role. Rather than advancing a final evaluation of the syllabus on the basis of a single and limited application of materials, it brings about issues to be further investigated in the classroom.

Also, the set of experimental materials used in this empirical research provides teachers with the necessary conditions for beginning their own inquiry into different ways of implementing these materials. In this way, the non-experimental action research methodology which this thesis drafts (cf 8.3 below) will subsequently develop a teaching methodology which will advance varied and hopefully more adequate ways of teaching these materials. As indicated in 2.1 and in 4.3.2.2 above, the ISTR syllabus is a set of guidelines for the teacher's work and does not imply a definitive approach to ELT in Brazilian schools.

It is also in this sense that I have argued in 2.1 above that even an operational syllabus such as the one at issue here cannot be imposed on the classroom. It requires the mediation of the teacher who will continually evaluate, adjust and improve the syllabus by investigating its operation in the "learning milieu" through action research. In this mediating process the syllabus plays a major role in the education of the teacher since he will be developing a critical attitude towards his work and familiarising himself with the principles behind the innovation so that new cultural and social attitudes about what is involved in FL teaching can be acquired, disseminated and criticised. In this way, progress in the FL teaching profession can occur. I will further refer to these issues in the next chapter, where I present the conclusions of the thesis.

7.6 Summary

This chapter dealt with the description and interpretation of the empirical findings of the evaluation of the ISTR syllabus model. It first looked into the experimental research results and then moved into the non-experimental research data. Next it related non-experimental data to experimental data in an attempt to make the evaluation as a whole more thorough. The non-experimental data have made the claims of the experimental results more limited but at the same less trivial since issues which affect the validity of the results and which would not have been detected in a typical experimental paradigm have been brought to light. However, this researcher still finds grounds for suggesting that the experimental results appear to show a trend in the expected direction, namely, the ISTR syllabus model, as reflected in the materials, seems to embody a more adequate way of teaching reading in EFL than traditional pedagogies. Also, this thesis has advanced some limited evidence that the ISTR syllabus model, as represented by the experimental group materials, has been favoured in comparison with existing syllabuses in Brazilian schools by the teachers who took part in this research. As regards the pupils' affective evaluation of the materials and reading course however there is evidence in the teachers' diaries and reports that the pupils in the 4 groups had equally positive attitude towards the materials. This attitude seems to have been due to their perception of the materials as an innovation. The findings of this thesis are preliminary and useful in projecting future non-experimental action research. In the next chapter I present the conclusions of the thesis and assess issues related to the implementation of the syllabus through action-research.

NOTES

1 Before the experimental materials were actually used in the classroom, I had the first draft of these materials examined and evaluated through a questionnaire completed by ten Brazilian EFL teachers who are familiar with the type of pupils these materials aim at and with the "learning milieu" where they were to be used. I was particularly concerned with the feasibility of using these materials in the classroom. In Appendix C I discuss the design of this questionnaire and the results of this first evaluation. I did not submit the control materials to a first evaluation because they reflect a traditional approach and therefore I did not foresee any difficulty in using them on the teachers' part.

2 The criteria for the choice of these groups and schools were discussed in 6.3.1.2 above.

3 The reasons for absence range from illness to the fact that pupils who already know they are not going to do well stop coming to school before the year is over.

4 The quantitative data of this research were analysed through SPSSx in the Computing Lab of the CNPq (The Brazilian National Research Council), Rio de Janeiro and in the Computing Centre of the University of London Institute of Education.

5 The information on the population of subjects reported here is derived from the analysis of Part I (Personal Information) of the Pupil's Questionnaires (cf Appendix H). The other sections of this questionnaire are discussed in 7.3.1 below.

6 It should be noted that this information results from only one item which therefore does not constitute a reliable instrument to measure the subjects' interest in reading (cf 7.2.5.2 below). This item should be taken here as a means of providing information on the subjects' personal habits.

7 Note that in fact even in experiments in laboratory contexts, let alone in natural contexts, there is no guarantee that all the variables which influence human behaviour have been controlled for.

8 That is not to say however that the new learning task, ie, learning how to read, may not have made them more enthusiastic about the EFL course. In fact, there is evidence in the teachers' diaries (cf 7.3.2.1.4) that the pupils in the 4 groups perceived the materials as innovative. It would have been impossible for them not to.

9 There is evidence in the teachers' diaries (cf 7.3.2.1.4) which demonstrates the pupils faced the reading course and post-tests as activities which were part of their school life.

10 Except of course for scale D which has to do with beliefs.

11 Except for the independent effect of expectation in the ANOVA of scale A which is barely significant (p=0.049) (cf Appendix O).

12 There is evidence in the teachers' diaries (cf 7.3.2.1.4) that the control group subjects faced the control materials as an innovation and were in fact positive about them. Also, see 7.4 for further discussion of this aspect.

13 It is true however that the teachers' diaries and reports present second-hand information on the pupils' attitudes.

14 The homework exercise is found in Appendix N. This activity was actually designed in order to meet the pupils' demand for homework (cf 7.3.2.1.4 below).

15 All the quotations in this section are taken from teachers' final evaluation reports in Appendix K.

16 By "a traditional structural approach" she has in mind, I think, an audio-lingual approach.

17 What is underlying this criticism, I think, is her difficulty in dealing with the ISTR syllabus innovation represented by the presence of more grammatical items in a teaching unit than normally found in structural syllabuses. In the ISTR syllabus grammatical items may be anticipated if they offer less difficulty in contrastive terms with the NL (cf grading criteria in 5.2.2 above).

18 I interpret the word 'academic' here as 'theoretical'.

19 My suggestion was based on information I had collected from teachers in Brazil when the experimental materials were first analysed through a Teachers' First Evaluation Questionnaire (cf Appendix C)

20 Note however that variables other than the ones discussed in connection with the experimental and non-experimental parts of this evaluation may have interfered with the groups. There is no guarantee that only what I indicate as variables which separate the groups is what separates them. In this regard, for example, one should bear in mind that my view of what went on in the classroom is restricted to what teachers have recorded in their diaries.

CHAPTER 8

RETROSPECT AND PROSPECT

8.1 Introduction

The main focus of this concluding chapter is on the further development of this inquiry. That is, where to go from here now that a syllabus for the teaching of EFL in Brazilian schools, ie, the ISTR syllabus model, has been designed and a preliminary investigation of its operation in the classroom has been undertaken. To assess the extension of the present inquiry, I need first to look back into the main points made in the previous chapters so that things can be put into perspective. In this review, I also want to examine critically some issues connected with the empirical part of this work so that some implications for future research of this kind can be drawn.

8.2 Reflecting upon this inquiry

8.2.1 Connections with the classroom: the main points of the thesis

As explained in the introduction, this research had a pedagogic concern in the sense that it set out to investigate a particular problem in Brazilian education: EFL in secondary schools of the public sector.

Due to this pedagogic concern, this inquiry started in the classroom, moved back into theoretical issues in applied linguistics and went back to the classroom in its last phases. It is upon this route from and back to the classroom that I want to reflect in this section.

The need for this inquiry to begin in the classroom, ie, from the analysis of the "learning milieu", stemmed from one of the main contentions of this thesis. Contrary to most practice in FL syllabus design, this thesis takes the view that the applied linguist to FL teaching should start his work from a critical appraisal of the classroom and of the general social context where it is found. Too much of the failure of FL teaching in Brazil, and indeed all over the world, can be traced back to a lack of concern with the conditions of the classroom on the part of the syllabus designer. This was seen to be one of the two main reasons for the chaotic situation of EFL in Brazilian schools. The other was a lack of concern on the part of EFL specialists in Brazil both in the official educational system and in academic circles with the social justification for the inclusion of EFL in the curriculum of schools. It was then necessary to start this inquiry in the classroom so that features of the learning environment and socio-political issues related to the role of English in Brazil could be taken into account as determining conditions on the syllabus. These issues constituted the extrinsic conditions on the design. The other sort of conditions considered, ie, the intrinsic conditions, had to do with theoretical issues in applied linguistics, which defined the internal organisation of the syllabus.

The analysis of the extrinsic conditions indicated two things. The first is that the four language skill syllabus with emphasis on oral skills traditionally advocated for Brazilian schools are unfeasible and the second is that the role of English in Brazil is related to its use as a resource for reading. In this sense, the design of a reading syllabus was argued as being essential to Brazilian schools so that the EFL syllabus can be made operative and socially justifiable.

The course of this inquiry then moved into the study of the intrinsic conditions on the design. Due to the fact that the syllabus designed aimed at the teaching of the reading skills, it was then indispensable that the analysis of the intrinsic conditions started from the elaboration of a reading comprehension model: the interactive schema theoretic reading comprehension model (the ISTR model). This model was informed by schema theories of reading comprehension in terms of their interactive account of information processing and formalisation of background knowledge, and by a view of discourse as the actual process of meaning negotiation between participants in a communicative interaction (ie, the reader and the writer). According to this model, to understand a text, a reader makes use of two different kinds of knowledge (systemic and schematic knowledge), which account for his linguistic and communicative competence respectively, and which are interactively activated in bottom-up/top-down directions through procedures of interpretation in the reader's effort to realise language in use. The reader is then seen as being involved in a process of meaning negotiation with the writer, as it were, by making sense of the directions given by the writer in the text. These procedures characterise the reader's capacity to engage in discourse by operating on the pragmatic level of language.

Still trying to define the intrinsic conditions on the design, the thesis proceeded to examine the types of existing FL syllabus models and FL learning theories they imply. The analysis of these models and theories together with the ISTR model determined the internal organisation of the syllabus. Both goal-oriented syllabuses (structural, situational, notional and relational syllabuses), which focus on content unit specifications, and process-oriented syllabuses (the procedural and the negotiable syllabus), which primarily comprise methodological activities, were discussed. The thesis argued in ideological, theoretical and pragmatic terms for a comprehensive view of syllabus design which involves both the content specifications and methodological guidelines. The theoretical basis for this conceptualisation is derived from the view that language use involves not only the types of knowledge normally embodied in the content units of FL syllabuses (ie, systemic and schematic knowledge) but also the procedures through which these two types of knowledge are related to each other in discourse production and interpretation. These procedures can only be taken into consideration through methodological devices. Therefore, it was argued that it is crucial that the methodological component be made central so that meaning negotiation is accounted for in the syllabus itself. In this way, the point was made that syllabus design in this thesis should comprise the specification of content units in a process-oriented framework.

The next step in this research was then the design of the ISTR syllabus model. It basically had to do with finding a balance between the theoretical consistency of the syllabus (as represented in the intrinsic conditions) and its adequacy to the Brazilian EFL classroom (as expressed in the existing extrinsic conditions). The ISTR syllabus model consists of three components. Two components embody the content units of the syllabus, ie, the systemic and schematic components, which account for the syntactic, lexico-semantic and schematic levels of language; and the third component has to do with methodology, which tries to activate the types of procedures which readers use in interpreting language, ie, linguistic phenomena at the pragmatic level. In this sense, this syllabus rather than teaching knowledge as an end in itself (as embodied in the units of the syllabus) provides learners with an ability to activate that knowledge so that they can in fact go on learning to read on their own when the course is over. This syllabus also contains two auxiliary parallel components. One of them brings new cultural information into the syllabus and the other focuses on language awareness.

The units of the syllabus are primarily graded on the basis of the criterion of contrastive difficulty, ie, the extrinsic difficulty of the units of the syllabus in relation to the learner's knowledge of his NL and background knowledge. This principle is supported by cognitive learning theories, which indicate that new learning must take into account learners' existing cognitive structures. The objective of this type of grading is to remove obstacles for learning and therefore to create the conditions which may be helpful to the learning task.

The methodological component in general terms is characterised by placing a problem for the learner to solve in its first phase, ie, understanding the reading text, and by presenting means for solving this problem in the following phases. In this sense, it was indicated that the problem-solving approach embodied in this syllabus has similarities with the methodology of the other school subjects. This, it was argued, has a general educational value which goes beyond the task of learning a FL.

The syllabus was offered as a set of guidelines from which teachers can start operating in the classroom by criticising and improving on it through action-research.

At this stage this inquiry had already gone from the analysis of the classroom to theoretical issues and to the design of the ISTR syllabus model. It moved then into the second part of this thesis, namely, an investigation of the operation of the syllabus in the classroom: the empirical part of this research. That is, the focus of the thesis moved back to the classroom where this inquiry started.

The investigation of the syllabus carried out here involved a limited type of evaluation due to the short period of time within which this empirical work was undertaken and to the small number of groups and teachers who took part in it. Therefore, its findings are to be seen as preparatory for the type of action-research which I will outline in 8.3 below. However, despite acknowledging the limitations of this empirical research, its findings were relevant in the sense that they sharpened the researcher's view of the syllabus and have in fact shown that it is worth submitting it to a more ample scrutiny in the classroom.

This preliminary investigation had two main objectives: a) to find out whether the approach to the teaching of reading embodied in the ISTR syllabus was more effective than traditional methodologies in terms of learners' performance; and b) to investigate pupils' and teachers' attitudes to the innovation. With these aims, I used a quasi-experimental research paradigm, which centered on quantitative/

outcome-oriented data, but which also allowed for non-experimental data, ie, qualitative/process-oriented data.

The need to bring these two types of research perspectives together in the same inquiry is derived from the facts that: a) because each kind of approach centres on data of a different nature, they provide different insights into the innovation and make the inquiry stronger; and b) due to the pedagogic nature of this research, it was essential to have access not only to data related to learners' performance (quantitative/outcome-oriented data) but also to data which are related to broader issues in the classroom (qualitative/process-oriented data).

The experiment involved two experimental groups (which used the ISTR syllabus model approach), two control groups (which followed a traditional approach), four teachers, and 129 pupils in four schools of the public sector of the city of Rio de Janeiro. The non-experimental part of the inquiry comprised the use of three research instruments: pupils' questionnaires, teachers' diaries and teachers' final evaluation reports.

The thesis then focussed on the analysis and interpretation of the results of this investigation. First each type of data was analysed separately and then related to each other. The analysis of the experimental data showed that the experimental groups did statistically significantly better than the control groups on both types of post-test measures used. However, when the experimental results were related to non-experimental findings, several factors which questioned the internal validity of the experiment were brought to light. In this way, the non-experimental data made the scope of the experimental results limited but also less trivial. They have also been insightful in clarifying issues related to the interpretation of the experimental data, and in fact to other aspects of the investigation,which would not have been made clear had this research been restricted to experimental data. Further, the non-experimental data have enlarged the external validity of the experiment. Nevertheless, generalisations from this experiment to other EFL situations have to be made cautiously since there are limitations connected with the size of the sample used, the short period of time within which this empirical work was undertaken, and with factors which have affected the internal validity of the experiment.

However, while acknowledging these limitations, this researcher still found grounds for suggesting that the experimental results seem to indicate a trend in the expected direction, namely, the effectiveness of the ISTR syllabus approach on learners' performance in comparison with traditional methodologies for the teaching of reading. These results in fact coincided with the available evidence of the positive effects of teaching schematic knowledge - an important concern in this syllabus approach - on learners' performance in L_1 and L_2 reading comprehension in laboratory conditions.

In reference to the other aspect with which I was concerned in this empirical research, namely, teachers' and pupils' affective perception of the ISTR syllabus, as represented in the experimental materials, there was evidence in the non-experimental data that: a) the experimental group teachers favoured the approach of their materials whereas the control group teachers were critical of theirs; and b) the pupils in the four groups had the same positive attitude towards their respective materials, possibly due to their perception of their respective materials as innovative. This latter point may indicate that the effects of the experimental treatment in terms of performance were due to the experimental treatment itself and not to the experimental groups' different affective perception of their materials.

Before moving into the discussion of the development of this thesis, I still want to look retrospectively into the empirical research undertaken here so that implications for future research of this kind can be drawn.

8.2.2 The empirical research in hindsight

When I set out to undertake this evaluative investigation of the ISTR syllabus model, it was clear to me that its scope was limited. It would have been contradictory in fact with the dialectical and operational approach to syllabus design adopted in this thesis to suppose that an adequate investigation of the syllabus could be undertaken in such a limited period of time (ie, 10 weeks) and with so few teachers and groups. However, to operationalise this research, I considered that there would still be a point in conducting a provisional investigation into the operation of the syllabus, which could provide me with some basis for suggesting that the approach embodied in the ISTR syllabus model may represent an avenue of research to be followed up by the teachers in the classroom. In this sense, I think that the empirical research here undertaken played its role. What I still want to discuss however is whether the sort of research procedures utilised in this investigation were appropriate.

The focus on experimental data seems to have been adequate to my interest in investigating in the classroom existing experimental evidence obtained in laboratory conditions and to the limited period of time I had to carry out this inquiry, ie, the circumstances in which this research was undertaken would not have allowed me to centre on non-experimental data. The difficulties with doing experimental research in the classroom are however many. On the one hand, they have to do with the impossibility of controlling all the variables in operation in the classroom, which affects the internal validity of the experiment. On the other, if too narrow controls are used, the pedagogic nature of the inquiry is affected, for the classroom loses its characteristics and therefore external validity becomes questionable. In this research then I tried to find a balance between internal and external validity factors, which, I think, seems to be desirable in experimental classroom research. Non-experimental research procedures were useful in fact in counteracting the shortcomings of the experiment by exposing uncontrolled variables and in contextualising the inquiry. This combination of experimental and non-experimental research procedures proved to be helpful when undertaking experimental research in the "learning milieu".

Also, the use of non-experimental data provided this inquiry, which would have otherwise had only a retrospective role, with a prospective concern since by questioning the experimental data, the non-experimental data brought about issues which can only be investigated in the realisation of the syllabus in the classroom. This is a central point in this work since non-experimental data besides helping with the interpretation of experimental data also set the scene for the extension of this research in the classroom.

In addition to the problems found with the experimental part of this study, there were also difficulties related to the non-experimental research procedures. I have already tackled in 7.3.1.1 and 7.4.3 above the difficulties found with the attitude scales and open-ended items of the pupils' questionnaires. In brief, these sections of the questionnaires proved to be inappropriate to this inquiry. In retrospect, I see that I should not have used an instrument which had not been adequately validated in a pilot study. Also, I should have anticipated that due to the fact that the materials were new for the four groups, it was likely that their perception of their materials as an innovation would make them have a priori positive attitudes. A longer period of instruction would have been necessary for the novelty effect to wear off. This point actually questions the inclusion of this research instrument in this short experiment. Further, the circumstances in which this instrument was administered seemed to have been inadequate, ie, the threatening presence of teachers in the classroom, administration on the last day of the school year etc. As a consequence, the data used in this thesis as evidence of pupils' attitudes were derived from teachers' diaries and reports, ie, they were second-hand evidence.

There are still two other problems related to the non-experimental research procedures which I would like to deal with: teachers' use of the research instruments and the interpretation of subjective data. The former problem in fact supports one of my arguments against the use of non-experimental research as the main focus of this empirical work because of lack of time to train teachers adequately in the use of non-experimental research instruments. Although in this research teachers were briefly trained on how to use the diary in their normal classes before they actually started using it in the experiment, they did not manage to use the instrument appropriately in the major study. For example, information on the effects of metacognitive skills is virtually non-existent in the diaries. Also, teachers did not always follow the scheme I suggested for the presentation of information and sometimes certain kinds of information were provided by some and not by others. These two factors often made comparisons across the groups difficult or impossible. Perhaps, the sort of diary used (ie, a cross between open-ended questions and a diary) is too complex and require more training in its use than teachers were given. In hindsight, I think that a genuine diary should have been used instead. That is, I should have asked teachers to record whatever information they liked on the diaries, and I should perhaps have used another instrument (interviews, for example) to examine the particular issues I tried to investigate through the diaries.

The other problem I found with the use of non-experimental research instruments has to do with the difficulties in interpreting some of the information found in both the diaries and final evaluation reports. It was sometimes difficult to understand what teachers really meant. Of course, I could have checked back with teachers if my interpretation of what they had written was adequate or not. And although I did check my translations with them, I was afraid that questioning them about what they meant by particular issues, for example, "a traditional structural approach" (cf note 16 in chapter 7), could have been considered threatening. And I did want to avoid that sort of feeling on their part despite the fact that I was aware that there would be problems in the interpretation of data. I believe the alternative to such a problem in interpreting this kind of data has to do with the development of a different sort of attitude towards research in the classroom in which rather than using teachers as instruments of the researcher, as in this thesis, teachers themselves are researchers and therefore less prone to feel threatened since they will be integrated in the process of investigation on equal terms with the outside-researcher. This is in fact the main criticism I would make of this empirical work. It is an extremely important one because it questions my choice of the kind of experimental design I used, in which teachers' expectations were actually manipulated. However, there were reasons why such a design was chosen, as mentioned above in this section and discussed in 6.3.1.5. Furthermore, including teachers as researchers in an inquiry requires a different sort of attitude to teaching and special skills on the part of teachers which are not found in the context where this research was done. Such attitudes and skills could not be built up within the limits of this work. These issues are dealt with in 8.3 below in respect to the development of this research.

I would like to stress however that the point I am making here is not against the use of experimental evaluative research in the classroom but against the type of research design used in this thesis, in which teachers' perspectives as researchers could not be truly included. As made clear in 6.2 above, I think that the combination of experimental and non-experimental research procedures are useful in evaluative research such as the one undertaken here.

Retrospectively therefore this empirical work can be in the last analysis criticised because it ignores teachers' perspectives as true researchers, but prospectively this criticism leads to a formulation of a new research methodology in which teachers themselves are included as researchers (cf 8.3 below).

The shortcomings and difficulties with this empirical work discussed in this section and in the two previous chapters need to be taken into account when future evaluative research of this kind is undertaken.

Having looked into this thesis in retrospection, I want now to consider in the last section of this work research methodology issues related to the development of this inquiry.

8.3 Investigating the syllabus in the classroom: action-research

This section essentially seeks to consider the future development of the ISTR syllabus. As argued throughout this thesis, the syllabus designed here does not represent a panacea to the problems that the EFL teacher faces. This syllabus consists of a set of informed guidelines from which the teacher can begin his work by investigating them. Consequently, the development of this inquiry does not correspond to the adoption of the ISTR syllabus in the school system as a final product which contains the solutions to the problems of EFL education in the public sector. Although this has normally been the practice in FL syllabus design development, ie, the design of the syllabus is followed by its adoption in classrooms, the perspective of this thesis is rather different.

The ISTR syllabus is to be seen as a hypothesis about ELT which awaits research to be undertaken by teachers in the act of using the syllabus so that it can be refuted, confirmed or improved. In this sense, this syllabus is not to be conceived as a new bandwagon to be followed by the profession. The ELT profession in Brazil, and in fact in other parts of the world, has gone from one new trend in FLT to another, without real improvement in the profession being generated. What EL teachers need, I think, is to acquire an attitude towards their work which is characterised by investigation into their practice. In this view, the teacher rather than being the consumer/client of research produced by outsiders, ie, the follower of a bandwagon, is a researcher himself. The cult of final solutions to FLT causes stagnation in the profession whereas promoting a criticial attitude on the teachers' part towards their work brings about progress. Therefore, what is essential is that EL teachers take control of their work by constantly probing it through research. And teachers due to their inside perspectives are in a privileged position to carry out educational research, for " they must act, while outside-researchers must only provide recommendations as to how others should act" (McCutcheon, 1981:187).

The development of this inquiry therefore will have consequences which go beyond the investigation of the ISTR syllabus in the classroom since it is also concerned with teacher education. That is, it also aims at equipping teachers with research strategies which will be useful in examining whatever new suggestions are brought to them or are found in the market. As Stenhouse (1975:83) has pointed out, "there can be no educational development without teacher development, and the best means of development is ... by criticising practice". This view of teacher education is also supported by the philosophy of education which informs this thesis (cf Freire's philosophy of education in 1.4 above), in which education is seen as the development of critical consciousness by making the individual the subject rather than the object of the historical process. It is a position of subject instead of object in the educational process and research which this thesis advocates for teachers. To make this position possible in schools, I want to draft a research methodology for teachers' work in the next section.

8.3.1 A research methodology for teacher's work

As seen in 7.4.4. and 8.2.2 above, the empirical research undertaken in this thesis brought about issues that can only be clarified in the implementation of the ISTR syllabus in classrooms through non-experimental research conducted by teachers. This approach to non-experimental classroom research in which teachers assume the role of teacher-researchers is what has been called action-research (cf Elliot and Adelman, 1974; Nixon, 1981, inter alia). Essentially, action-research comprises investigation undertaken by teachers into their own practice in order to improve it and to contribute to the generation of teaching theory. Or, as Elliot and Adelman (1974:1) put it, "Classroom action-research aims both to contribute to an understanding of the practical problems faced by teachers in the classroom situation and to the development of a theory of teaching".

While the empirical research undertaken in this thesis can be characterised solely as evaluation research in that it was essentially concerned with measuring changes in pupils and teachers in terms of performance and attitudes as a result of the innovation, the research approach to be outlined here for the development of this thesis is both evaluative and developmental at the same time since it aims at bringing about improvements in the syllabus and at generating teaching theory. In other words, the inquiry carried out in this work may be equated with summative research, which is in fact typical of an outside researcher's perspective, whereas the research methodology to be drafted here may be called formative research, which is favoured in teacher's classroom research, and whose findings are to get fed back into the research itself for further improvement.

To make classroom action-research possible, it is important then that teachers develop a capacity to study their classroom problems and to probe hypotheses about them but that they also assess the possibility of generalising these problems and hypotheses to other classrooms. Action-research involves then "theorising about practical problems in particular situations and exploring the extent to which these practical theories are generalisable" (Elliot, 1976:4-5).

The implementation of this teacher-as-researcher approach to EFL teaching requires in the Brazilian context, and indeed in most countries, a totally different attitude to the teaching task, which can only be developed through a special in-service project funded by agencies outside the school system. Within the scope of this thesis however I cannot assess the practicalities of the implementation of the ISTR syllabus at project level. The following types of issues will have to be considered: funds, teachers' tight schedules, general time constraints, choice of schools and teachers, ethical concerns, communication between participants, dissemination of findings etc. Nevertheless, what I want to emphasise as crucial in the implementation of this project is the dissemination among teachers of their change from research consumers to research producers. Research consultants - outside researchers - will have to be used to initiate teachers into this new role, aiming at providing them with the necessary research skills for them to work autonomously. What is relevant however is that teachers from the beginning of the project are seen as researchers, although operating from a different perspective from outside researchers. This attitude to teachers' work would help to eliminate the threat teachers' feel in relation to outside researchers, which I referred to in 8.2.2 above, since an atmosphere in which their work is seen as a source of analysis by both teachers themselves and outsiders would be created. This obviously can only be achieved if teachers are willing "to take a research and development stance" (cf Stenhouse, 1975:155).

The type of research methodology normally argued for in the action-research literature is that typical of social anthropology (cf Stenhouse, 1975; Nixon, 1981; Elliot, 1976; inter alia), ie, the participant-observation paradigm. Teachers, like anthropologists, make field notes, write diaries, tape-record their classes, ask pupils to keep diaries, interview pupils, use questionnaires etc. These research methods provide them with data to reflect upon in order to understand what happened in the classroom, to identify problems and to formulate and test hypotheses. The choice of research techniques to be used depends on particular circumstances. In the inquiry this thesis outlines, they are a matter of negotiation between consultants and teachers. They must however, as Walton (1975:4) points out, be compatible with teaching commitment, not demand too much from teacher's time, and must be reliable enough for teachers to develop hypotheses. In regard to this last point, triangulation research methods by using data from teachers, pupils and outsiders, which can be compared with one another, are essential. That is, collaborative research between teachers and outsiders is crucial in this approach.

The importance of the participant-observation approach to teachers' classroom research is related to its use of research methods which focus on self-monitoring, ie, "the process by which a person becomes aware of his situation and his own role as an agent in it" (cf Elliot, 1976:9). By continually observing their work in the classroom through different research techniques and from different perspectives (their own, pupils' and outsiders'), teachers are not only analysing practical problems and developing a shrewder perception of what is going on - ie, getting away from the biases of their teacherly perspectives (cf Nixon, 1981:196), but also accumulating evidence on which theory can be built up (cf Stenhouse, 1975:150). This will as a consequence make syllabus development possible. In this view, the development of the syllabus is a result of classroom research into the syllabus in operation.

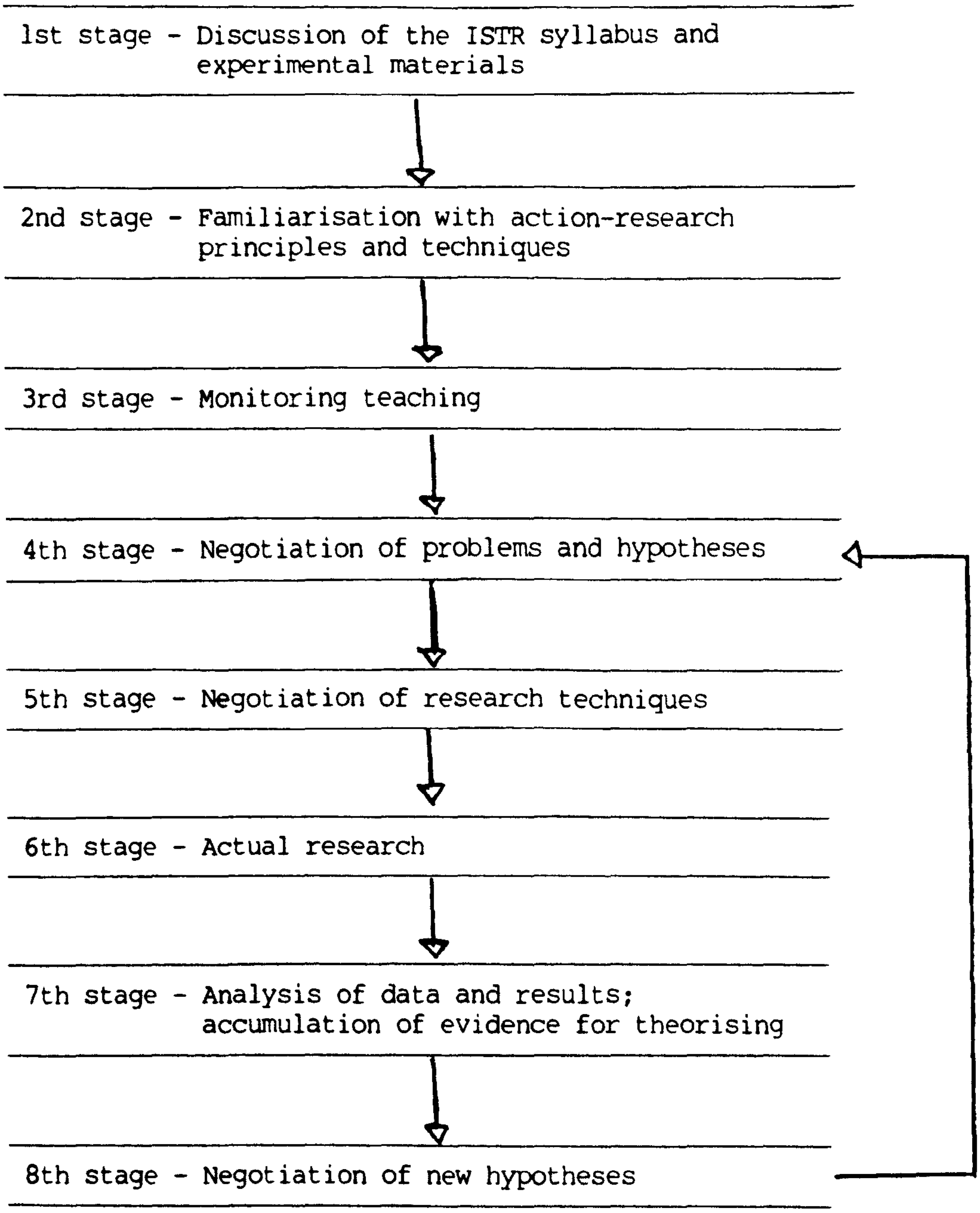
This approach to syllabus development coincides with the way the syllabus design activity is conceived in this thesis: a dialectical procedure between theory and practice (cf 5.1 above). In the operational design of the ISTR syllabus this procedure was undertaken by trying to find a balance between the extrinsic conditions, which were grounded on the analysis of the classroom, and the intrinsic conditions, through a process which Stenhouse (1975:25) calls "educational imagination: the capacity to visualise with verissimilitude imaginary classrooms, and to pre-test ideas in them in one's mind". In the development of the ISTR syllabus however this dialectical procedure is undertaken in practice through classroom action-research.

The research methodology I envisage to implement the ISTR syllabus in a joint cooperation between outside-researchers and teacher-researchers involves the following stages (cf Figure 8.1 below). The first stage comprises the discussion of the principles which inform the syllabus and the materials designed as a possible realisation of this syllabus. The set of experimental materials used in the experimental research in this work therefore provides the data for the beginning of this inquiry in the classroom. The second stage involves the familiarisation of teachers with the objectives of action-research and types of research techniques. The third stage has to do with having teachers and consultants to monitor teaching through field notes, audio-taping etc. so that they have data to reflect upon what happened in the classroom. The fourth stage involves the comparison of teachers' and consultants' notes and the negotiation of problems or hypotheses to be investigated. The fifth stage comprises the negotiation of research techniques to be used. The sixth stage consists of the actual classroom action-research. The seventh stage comprises the analysis of data and results, and the accumulation of evidence for theorising. The eighth and final stage has to do with the formulation of new hypotheses to be investigated. The process then goes back to the fourth stage and the inquiry starts again.

This research methodology therefore implies a continual process of inquiry so that syllabus development can be progressively made. This will mean by implication a source of professional development as well. Note that this methodology is a projection of the way this thesis itself was conceived, ie, from the investigation of a problem - ELT in Brazilian schools - to the elaboration of a hypothesis for ELT - the ISTR syllabus model - which constituted the problem investigated in this work and whose findings brought about other problems to be inquired into through the research methodology drafted in this section. This approach to research is informed by the Popperian formula of continuous development: P_1 -- TS -- EE -- P_2, "where P_1 is the initial problem, TS the trial solution proposed, EE the process of error elimination applied to the trial solution and P_2 the resulting situation, with new problems" (Magee, 1982:65).

In conclusion, it should be observed that implicit in this research methodology for the implentation of the syllabus is a concern with the education of both pupils and teachers, which is in fact related to the pedagogic nature of this inquiry (cf 1.1 above). This research approach, I think, seems to be specially beneficial to EL teachers in the public sector in Brazil since it will foster professionalism in a context where EL teachers are extremely demoralised (cf 1.1 above). Their professional self-image is likely to improve because they will be involved in an enterprise which will progressively better their performance, having consequently positive effects on the quality of learning in the classrooms. Futhermore, this approach will attract the attention of the school community in general and of the academic circles to an area of research and education which has been increasingly disregarded. This will hopefully generate more research

Figure 8. 1 Action-research methodology for the implementation of the ISTR syllabus model


1st stage - Discussion of the ISTR syllabus and experimental materials
2nd stage - Familiarisation with action-research principles and techniques
3rd stage - Monitoring teaching
4th stage - Negotiation of problems and hypotheses
5th stage - Negotiation of research techniques
6th stage - Actual research
7th stage - Analysis of data and results; accumulation of evidence for theorising
8th stage - Negotiation of new hypotheses

into this area and greater concern with it in society in general. In this way, it will create an atmosphere in the schools of the public sector in which FL education will be promoted, helping to make it accessible to the less privileged classes. This thesis represents a starting point in this direction.

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