A SELF-CORRECTING APPROACH
TO READING IN A FOREIGN LANGUAGE

ABSTRACT:

This work presents a reading methodology which has proved successful in the teaching of ESP to Portuguese speaking students. The work relies heavily on the development of reading strategies which tax cognitive capacities (inferential thinking, problem solving) and which provide a self-monitoring, self-correcting component which both motivates and builds confidence. The method involves three parts and goes from the general to the specific back to the general. First the student forms an overall view of the text through the maximum use of text cues and his previous knowledge of the subject matter, fostering his development of perception and segmentation strategies. Then he analyses the text in order to develop inferential strategies and skills for extracting detailed information. Finally he synthesizes the scattered information to get a more accurate view of the text than in the initial stages. Advantages of the method are explored.
1. Introduction

The increasing demands of adult students for foreign language courses which satisfy specific professional or educational needs has led to the development of special purpose courses. Development of such courses involves a series of methodological decisions in the absence of coherent theoretical principles which might allow the easy interface of theory and practice. In this paper, we present an integrated approach to the teaching of reading in English developed for Portugueses-speaking freshmen university students. The underlying principles of the method come from developmental theory of learning (Vygotzky, 1978) schematheoretical approaches to reading (Adams & Collins, 1979), and a functional perspective to discourse analysis.

The main characteristics of the approach are use of real texts, deemphasis of linguistic skills, and flexibility, which we discuss in Secs. 1.1-1.3.

1.1. The first characteristic of the approach is its reliance on original texts, which results in two important advantages. First, from a practical point of view, the elaboration of reading materials for the course is relatively easy (an important consideration in teaching situations like ours where we teach up to three different levels to over 400 students, coming from 10 different areas every semester). It does not depend on native informant availability (English speakers outside English-speaking countries are often rather rare).

Second, from a pedagogical point of view, the use of original materials has two distinct advantages: it permits us to easily adapt material to students’ specific interests and, most important, it permits us to establish a truly communicative situation in which the participant roles of writer and reader are not adulterated. We deal, to borrow a phrase from Widdowson, not with “language put on display” but with true discourse (1978:53). The use and maintenance of the text as it was originally intended by its author places the students in a situation which does not differ, in any significant way, from that of the native speaker reading the same text: the object, purpose and function of the activity are the same. The linguistic limitations of the reader are not considered crucial in our approach, as will be seen below.

1.2. The second important characteristic of the approach is that the linguistic difficulties which the student encounter, be they structural or cohesive, are minimized. The approach emphasizes the development of reading strategies; therefore, it relies heavily on the cognitive capacities which the students have, which they can learn to use to their fullest in the activity of reading. In this way, the students’ self-reliance
is developed, since their performance does not depend mostly on a language in which they are not proficient, but, rather, on resources which can be quickly tapped so as to build initial confidence. We have found that students' evaluations of the course emphasize the degree of independence in reading the foreign language they quickly acquire.

There is no grading of the texts according to language difficulty; instead of structural or cohesive device control, we rely on teacher guidance for overcoming text-specific linguistic problems. As the students' confidence in their reading strategies increases, this guidance is gradually diminished.

Text selection in this method, therefore, does not depend upon models of text analysis, with their attendant shortcomings (i.e., see 2.3 below for our principles of text selection). The example below, a concluding paragraph in a real text, underlines shortcomings of descriptions in terms of, for example, "typical cohesive devices to signal conclusion":

"But whether your concluding paragraph is elaborate or simple, it occupies one of the two naturally emphatic positions in the composition. Moreover, it constitutes your last chance at your reader. Failure at this point may well mean failure for the whole piece of writing. You must avoid two things: (1) merely trailing off or (2) taking refuge in vague generalities and repetitious summaries. The conclusion must really "conclude" the discussion. Put your finger on your main point, on what you want to bring to focus. Then write your conclusion on that point".

There are other consequences to the de-emphasizing of the linguistic difficulties in the reading task. The students abandon the pernicious belief, usually, developed in high school English classes, that their reading difficulties will be overcome once they learn the meaning of the words and the grammar of the sentence. In our particular teaching situation, the majority of our students are false beginners. Although some students recognize the form "he" as belonging to the paradigm of personal pronouns, after five years of high school English, there are others who do not. Obviously the latter will not learn to recognize the item no matter how carefully we control linguistic structure, or how many cohesive exercises we devise, whereas there is hope for their learning to recognize it through actual encounter, in text after text, with the specific functions determined by the discourse.
1.3. The third characteristic of the approach we would like to mention is its flexibility. As will be seen in Sec. 3 below, it is not a method but a series of methodological options, dictated by the particular discourse unit selected, aiming at the development of adequate strategies for reading in the foreign language. In its three years of application, the method has been successful, as measured by reading tests, in developing those strategies, thus guaranteeing the basic objective of the course, which is to enable the student to read independently in the foreign language.

2. Principles Underlying the Approach

Our approach draws from Vygotsky’s theory of developmental learning, and from schema-theoretical approaches to reading. By applying some of those theories’ basic findings, we developed an approach which tries to show the students, through constant example, that they can infer linguistic forms and functions in the foreign language through the interaction of cognitive processes and previous knowledge. Because of the importance of the theoretical background we will present next (Secs. 2.1 and 2.2) the principles that underly our pedagogical decisions. In Sec. 2.3, we describe the approach to discourse analyses which underlies our pedagogical decisions, as well as the principles for selection of material.

2.1. Interaction Between Learning and Development

Vygotsky (1978) addresses himself to the issue of the relationship between learning and development. He establishes the nature of this relationship by positing, for the school age child, a level of actual development, and a level of potential development. The “distance” between the two is what he calls the zone of proximal development, that is, the “distance” between functions already matured, as measured by independent problem solving, and functions which are in the process of being developed, as measured by problem solving under adult guidance.

Extrapolating these pedagogical principles to adult learning, foreign language learning is a paradigm case for applying the concept of the zone of proximal development. The students are competent in their mother tongue as well as being cognitively mature; their creativity in the foreign language is determined by the demands which are made upon their native linguistic competence and cognitive skills. The primary function of teaching, then, is that of creating situations which permit potential capabilities to flourish by building up from the developed linguistic and cognitive capacities through the guidance of a teacher. In our course we gradually increase the demands on processes of
inferencing, with regard to both the amount of guidance and the specific nature of the tasks to be solved. Throughout this process, we keep ungraded the structure and cohesion of the linguistic material while grading the types of discourse organization in the texts.

2.2. The Power of Expectation in Schema-theory

Investigators working with schema-theoretic approaches to reading (Adams and Collins 1979; Tannen, 1979) have postulated the existence of highly abstract and organized structures or networks of concepts which predetermine our perceptions and interpretations of events and objects in the world: "... people approach the world not as naïve blank-slate receptacles who take in stimuli as they exist in some independent and objective way, but rather as experienced and sophisticated veterans of perception who have stored their prior experiences as "an organized mass", and who see events and objects in the world in relation to each other and in relation to their prior experience." (Tannen, 1979: 144).

Although the specific nature of such structure varies for different authors, (for some being a dynamic process constantly changing because of new perceptions, while for others being a static structure), the functions of these constructs remain the same, and one of these functions is directly relevant to the reading process: certain elements are treated as given once the relevant schema has been activated. It is this hierarchy of organized, abstract knowledge which permits the inferencing of the implicit from the explicit. As Adams and Collins (1979) put it.

"A fundamental assumption of schema-theoretic approaches to language comprehension is that spoken or written text does not in itself carry meaning. Rather, a text only provides directions for listeners or readers as to how they should retrieve or construct the intended meaning from their own, previously acquired knowledge. The words of a text evoke in the reader associated concepts, their past inter-relationships and their potential interrelationships. The organization of the text helps the reader to select among these conceptual complexes. The goal of schema-theory is to specify the interface between the reader and the text — to specify how the reader's knowledge interacts with and shapes the information on the page and to specify how that knowledge must be organized to support the interaction." (1979: 3)
Although we believe that, through reading, an individual also re-structures his previous knowledge and beliefs, we start our reading classes by helping the students build, from their previously acquired knowledge a series of expectations about what they are about to encounter on the text. It is often first necessary to make the students aware of the role that this previous knowledge has in the elaboration of expectations and of the power of a set of expectations as a help to reading. This is particularly necessary for students who are poor readers in their own mother tongue.

2.3. A Functional Perspective to Discourse Analysis

A functional perspective to discourse analysis does not imply either a model for examining discourse, or a new level of analysis, but, as the name implies, a different starting point for the examination of language. In this perspective, the discourse is taken to be the meaningful unit for the analysis. Discourse is considered to be a result from the purposeful interplay of morphological, syntactic, and lexical forms. It is this interplay which is examined in the reading lesson. By examining the function of diverse elements in the text within the whole discourse unit, it is possible to arrive at an analysis which is coherent both in its specifics and its generalities, thus becoming independent of specific text and discourse models, which are, at the moment, in a state of flux. It is equally possible, in this perspective, to make the student realize that language permits much richer interactions than a one-to-one relationship between form and function would ever allow; as in Bates and McWhinney's view, language permits the peaceful coexistence of competing forms; it is up to the writer to decide which forms will best serve his purpose.

This perspective has specific consequences for the selection of reading materials for the course. At the beginning, we select short texts so that the students may grasp the whole; long texts, which must necessarily be subdivided, contribute to the students' losing perspective of the bigger unit of which they are a part. We have adapted Grimes' (1975) framework for the description of rhetorical predicates to characterize the texts we select. We look for "paratactic" organization, that is, texts which are clearly divided into equal weight units from the viewpoint of development: for example, the characterization of a problem (which may be through exemplification, description of causes, contrast with other settings), and its projected outcome (which may be a suggested solution, consequences for the future, description of counter-measures in effect). Such texts permit the easy identification of subunits for class discussion and analysis.
We find that the type of discourse most adapted for our purposes is expository writing. Argumentation, which involves the biased confrontation of several issues is generally much more taxing to the beginner. In a later stage, the student has more confidence in his linguistic abilities to identify boundary marks in the development of the argumentation, as well as in his ability to make the inferences necessary to evaluate premises, data, and evidence; that is, to criticize the logical nature of the arguments.

There is one more characteristic we look for in the texts used at the initial stages, and that is salience of the important information. Features which contribute to make the information salient include specific signals announcing that a series of arguments will be presented, clear subtitles, and the appearance of topic sentences at the beginning of the paragraphs. The presence of such signals is not sufficient to determine the selection of a text, but, at the beginning stages, it is helpful to bring the student to an awareness, of what he must always identify.

Subject specificity is not an important criterion for texts used in the course, although we do sometimes use subject specific texts, especially in later stages. There are two reasons for this: although in the first two years of implementation of the course we grouped students strictly according to their area of specialization (i.e., Computer Science, Electrical Engineering, Statistics) we are now grouping the students along much broader lines (Exact Sciences, Medical Sciences, Humanities and Social Sciences). There is, therefore, no common specialization for all students in a class. The broad division merely helps to select texts which might be more interesting to the student given his expressed interest in following a particular course of studies. In the second place, and this is a direct consequence of our approach to discourse and reading, we do not believe that there is anything to be gained by concentrating on specific subjects: these the students will study in their area courses; it is up to us to give them the skills to read even in a foreign tongue. Such skills they can acquire through familiarity with any discourse, for, as Mackey and Mountford have said in discussing conventional structural approaches on restricted samples of language,

"The emphasis of the word "special" then, in English for Special Purposes should be firmly placed upon the purpose of the learner for learning the language, not on the language he is learning. What constitutes language variation is the use to which language is put in particular circumstances by particular users." (1978: 5-6)
3. Description of the Approach

The approach we developed integrates the three theoretical lines discussed in Sec. 2 into an approach which has three main divisions, comprising in all seven methodological steps. Each step has a specific objective, which can be achieved through a variety of techniques. The method starts from the general, continuing through the specific to go back to the general, to enable the students to form, first, an overall idea about the text through the maximum use of his previous knowledge, fostering the development of strategies for the perception and segmentation of the text; next, we analyze the text with the students, using syntactic, textual, and discourse analysis in order to develop skills for extracting the objective information. Finally, we return to the general, synthesizing all of the scattered information to give the students a more accurate overall view of the unit.

3.1. An Overall View

Exploration

The first step, “Exploration”, orients the students to use all available graphic devices, title, and subtitles, their knowledge of the source and author of the text, and their knowledge about the subject matter to make a hypothesis about what aspects of that subject will be developed by the author. The hypotheses the students are expected to make are very general: for example, given a text entitled “Professors: Ideas but no initiative”, the students will have to anticipate whether the text will discuss school teachers or university professors, (the term “professor” being a false cognate in Portuguese), whether the nature of the problem will be illustrated through specific examples and which these would be, whether causes and/or consequences are discussed. The student is guided along by the teacher’s questions. All hypotheses formulated by the students are considered and written on the board; none is singled out because it happened to follow closely the actual topic development in the text. The students’ first independent task, the second step in the method, consists in verifying whether any of their or their classmates’ suggested topics was in fact developed by the author. It is not the objective of the exploration activity to anticipate what the main ideas of the text are, only what the discourse topics might be.

In the beginning of the course we bring the students to an awareness of the importance of the title to set up expectations by presenting texts in their native language which either can be ambiguously interpreted, each interpretation being determined by the title (see Anderson et al. (1976) for experiments about expectation and recall) or, alternatively, are unintelligible once the frame of reference for the interpretation has been removed (e.g., untitled procedural descriptions of the sort “how to...”, Bransford & Johnson, 1973).
The students' awareness of the importance of a set of expectations previous to reading for the comprehension of the reading matter is necessary both for motivation and for subsequent self-monitoring and rating of their progress, since by the second semester they are encouraged to carry on this activity with their peers or by themselves.

The important place this step has in the approach determines that, other things being equal, we select the text with the most informative title on the most topical subject.

Hypothesis Testing

The aim of the second step. "Hypothesis Testing" is to allow the students to determine whether any of the expected topics were actually developed: they are to confirm or refute their previous hypotheses through two fast readings of the text. The students must be timed in the initial stages so as to force them to scan the text just with that objective in mind, thus helping them to avoid word by word reading or reading with the aid of bilingual dictionaries, as has generally been their habit.

We prepare them for this task by showing them that they constantly infer the meaning of unknown words in their native language through their context, and that they use their knowledge of the world to interpret words which acquire their specificity only through the context in which they function (i.e., evaluatives and the so-called "contextuals", Aronoff, 1980). The use of dictionaries is encouraged only after the students have become aware of their inferencing capabilities.

The vocabulary in the original texts cannot be controlled. Adequate vocabulary inference strategies are taught in the analytic steps of the method. In this step, however, we are not interested in the particular techniques to develop such strategies, but only in removing the vocabulary as the stumbling block for the task. So, in addition to using, whenever possible, the same words that appear in the text when we write the students' anticipated topics on the board, we provide the students, before the reading, with a glossary with a few crucial words.

Feedback

"Feedback" aims at determining whether the students were able to identify the topics through their fast readings. The students usually do not have the habit of criticizing their comprehension. This activity establishes the grounds for the habit, initially with the teacher going through the list of expected topics and asking whether they were treated or not in the text. At the end of this step the students have a
clear idea of what the text is about, though they have not yet reached an understanding of the discourse as a network of relations to establish a meaning.

Topic Reading

Any combination of circumstances can lead even the non-beginner to miss the point, to mistake subject completely: highly topical subjects and memorable first hand experiences bias students in this manner.

When the students’ answers to the feedback questions reveal that many of them were unable to evaluate the reading hypotheses, we include a fourth activity, "Topic reading", in which the student is directed to the specific paragraphs that develop the topic about which they are uncertain.

The second semester students have a program of extended reading as well as classroom reading, and they are expected to carry out these activities on their own. So as to decrease the possibilities of misinterpretation, specific questions which direct the student to the objective information are given.

The four steps in the global overview of the text rely heavily on the students’ ability to build up expectations on the basis of their knowledge of the world. In order to understand a text, the students may not treat each new text as if it were a unique entity, separate and unconnected to what they have learnt before. Whereas the initial overview emphasizes the commonality to other experiences, the analytic part of the method in the next two steps deals with its uniqueness as a creative effort.

3.2. An In-depth Examination of Form and Function Analysis

The activities for the analysis of the text are the most diversified in the method, because the specific activity will depend both on the text and the level of the students. Three aspects of this step will be discussed below: the differences introduced in the task as the students progress towards independent reading, the nature of the specific tasks and exercises, and the place of the analysis in the sequence of activities.

1. The analysis of the text is carried out at all levels of language, and progressively moves towards focusing on the discourse as the analytic unit. For a beginner, there is more emphasis on the development of strategies for vocabulary inferencing, segmentation, recuperation of
anaphoric information and recognition of cohesive forms and their functions, always ending up with an examination of their function in the whole discourse. Once the students have developed such strategies, and unless they find a baffling linguistic problem, the analysis can proceed immediately to an examination of the functional load of the linguistic forms in the discourse.

Throughout the progression, the students must rely on their inferential process: rather than depending on the pedagogical rule of mirror image order for the analysis of a complex nominal, for example, he must decide which of the possible meanings of the form makes sense in the context and in terms of the discourse topic. The linguistic awareness the students gain in the process helps them all along the course: for example, once they have become aware of the relationship between word order and function in one aspect of syntax, it is easier to arrive at the relationships between word order and information, e.g., the functions of canonicity, topicalization.

2. The variety of exercises that can be devised to carry out the analysis is large; it must be remembered, however, that the exercises are not important in themselves, but only as building steps for the students' subsequent independence in reading. In this sense, they are both intermediate and preparatory in nature. Let us consider a few examples to illustrate this point.

Among the heuristic techniques we focus on with beginning students are segmentation strategies that permit the students to make use of the structural information: they are parsing techniques which native speakers intuitively develop as an aid to reading by their fourth year of schooling (see, for example, Gibson & Levin (1975) on eye-voice span studies). Students are often surprised at the complexity of propositional content in such structures as (1) below, since their previous experience with English has been limited to simpler sentences:

(1) "Laboratory-grown skin / based on a patient’s own skin cells / is soon to be tested / by Eugenie Bell, / professor of Biology, / on patients / at Bell Israel Hospital, / Boston." (Your Skin in a Test Tube, Technology Review, Oct. 1980).

Students are led to the reconstruction of the propositions in full in order to decide next which of the statements is the most informative, or the most important, in relation to the topic or subtopic.

Although we are not interested either in sentence grammar or in production, there are structural and cohesive aspects which require an almost systematic treatment. Therefore, for example, we ask the students to specify a relation in the text by providing the implicit conjunction, as in (2) below
"Last week the I.L.O. submitted its findings to a united Nations working group on slavery. Its report was chilling. It said that more than 55 million children under 15 are currently being exploited as workers". (Child Slavery, TIME Magazine, September 10, 1979);

we also ask them to figure out the meaning of sentences such as (3)

(3) "... information is a commodity no less intangible than energy...";

we may also give more advanced students a modified cloze task so as to illustrate the various functions of structural units.

In order to prepare the students for rather demanding discourse analysis (e.g. evaluating the effectiveness of the lexicon used for making a point or setting a mood) we may require either that the students identify structures interspersed in the text which do not belong to the original, or that they select the words used by the author to establish a contrast, or that they infer the meaning of a word which is not contextually transparent on the basis of the point that is being made.

Since exercises like the above are viewed as steps to building adequate reading strategies they are quickly abandoned in favor of straight identification of the functional load of the several components of the text.

3. The sequence of activities places analysis right after the students' identification of the subtopics, or conceptual units. In this manner, we can analyse a given unit as much as necessary, without the student losing sight of the fact that it is a unit, not just a series of linguistic problems. After all the conceptual units have been analysed, the unity and coherence of the text, lost because of the nature of the tasks required, must be restored by focussing on those elements whose function may be examined only in terms of the whole discourse.

Directed Reading

Directed Reading, the sixth step in the approach, consists of more complex tasks for the resolution of which the student must both analyze and evaluate globally. The global requirement usually necessitates another reading of the text, and it is for this reason that it is viewed as another step, not just as another type of analysis. In general the students must evaluate, and justify through objective examples, the mood and tone the author tried to establish.
3.3. A View Towards Reconstruction

Synthesis

The last component of the approach has only one step, "Synthesis". Its purpose is to focus the students' attention back to the global features of the text, concentrating on its overall organization. Through the initial class involvement and teamwork in the production of a summary, each student is expected to gradually develop his own way of showing the relationship between content and discourse function as well as showing the hierarchical nature of content, of information, as determined by the discourse function.

4. Conclusion

During the three-year period of implementation, we have kept the basic approach, with this basic tenet, as initially developed, because of several advantages both to the teacher and to the student.

4.1. Advantages to the Teacher

Even though this is a teacher-made course, it does not require the amount of work which conventional material elaboration would require, an important factor for the teacher who would otherwise adopt a commercial textbook rather than develop his own. The advantages of creating one's own materials are many, as all teachers know: students' specific interests and needs are attended to; oversights regarding the students' specific difficulties are easily corrected.

The work involved in the preparation of the course decreases very rapidly with practice. The teacher must select the material, preidentify possible linguistic difficulties relevant to comprehension, analyze the interplay of form and function in the discourse unit, and the content organization so as to determine how to treat them. It is a circular process since both discourse and organization aspects must be taken into account in the process of text selection.

A second advantage to the teacher is that the student is easily motivated, first, because he can participate in the selection of reading materials, and, second, because of the wide range of activities he can engage in. In our experience, students become self-motivated as soon as they begin to notice changes in their reading skills. When using other approaches, we found that motivating the students for a special purpose course was difficult, for, in spite of both their history of failure with General English courses, and the specific needs they have, they still prefer learning to speak rather than to read.

With this approach it is also easy to keep track of the students' rate of progress through class observation of their participation in the
activities. Particular students' limitations are detected at the very beginning and subsequent activities can be planned taking these into consideration. Furthermore, certain types of errors, in addition to alerting the teacher to the students' problems, have a great pedagogical value, since they make the students aware of misinterpretations which preconceptions can produce.

4.2. Advantages to the Students

We have presented a flexible methodology which provides a mechanism for self-correction through feedback and which can be used by the students in other situations.

The course has had good results, as measured by reading tests. In these tests, the students must answer inferential questions and make a structured summary of the information in the text. Knowledge of structure and vocabulary is not tested, except indirectly, through the inferences and synthesis they make.

Students self-motivation, mentioned in 4.1, results from confidence in acquired foreign language reading skills. In course evaluation questionnaires, students frequently report that they feel they have gained the necessary skills to read their course texts, and that they use these skills in their native language reading as well. The transferability of the skills is, to us, the clearest indication that the objective of the course, helping the students develop adequate reading skills by tapping already develop cognitive processes, is being achieved.

* ACKNOWLEDGEMENTS

This is a revised version of a paper presented at the 6th AILA World Congress, in Lund, Sweden on August 12, 1981. We would like to thank Anthony Deyes and Eni Orlandi for their helpful comments and suggestions.

NOTES

1. The classroom situation has been characterized as one of the greatest impediments to achieving authentic language use. We think it is possible to achieve it if the student selects his own reading matter: once the student is interested in a specific type of information, he may either go to the library, or come to the language classroom. The motivating potential of the text hence is not lost.

2. Since, in our view, discourse analysis could never be limited to a purely formal analysis, the word "functional" might seem
redundant. We use it to emphasize the methodological nature of the approach we propose.

3. Orlandi (1981) presents a proposal for discourse analysis in which the unit of analysis is the text, and discusses fully the methodological and analytic implications of such an approach. Here we maintain the more pedagogically useful distinction between text and discourse proposed by Widdowson (1973, 1978), Coulthard (1977). This characterizes the distinction in tasks proposed to the student who works out relations between sentences, before he can proceed to an examination of their function in the discourse, i.e., how they make the text coherent.

REFERENCES


