IMPLEMENTING THE SUMMARIZING ABILITY OF ESP STUDENTS

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1- INTRODUCTION

This study emphasizes the need our (ESP) students have to summarize not only in everyday life, but specially in academic life where they are usually required to take notes, present a writer's point of view, describe a series of experiments from different sources, and include a literature review in their works. Summarizing can be a way for them (and for the teacher) to know they have understood a text.

This paper reports on an alternative pedagogic approach to the teaching of reading in English for Academic Purposes. A reading course was specially designed for Brazilian postgraduate students in the fields of psychology and education, having the cognitive model of discourse processing by Van Dijk and Kintsch (1977) as a general framework with the aims of facilitating the learner's task and of satisfying his needs. A communicative approach to language teaching and a cognitive theory of learning were adopted. Reading comprehension was seen as the identification of meaning from a written text, stressing the relevance of the summarizing ability in the process.

2- A DISCOURSE GRAMMAR

Van Dijk and Kintsch (1977) put forth that the different properties of discourse structures determine all aspects of cognitive processing. Indeed, they

postulate that understanding, organization, and retrieval in discourse processing are a function of the structures the individual assigns the text during reading.

Although the above mentioned authors are concerned with narrative discourse, the study here discussed resorted to their work and adapted their ideas to scientific and argumentative academic discourses according to the learner's given situation. Besides this adaptation, some changes were made for practical reasons which will not be discussed here.

The discourse grammar proposed in this work was made up of five components:

- (1) a theory of semantic representations (propositions) for sentences and sequences of sentences, constituting the MICROSTRUCTURES(S);
- (2) a theory of semantic representations for global discourse structures, constituting the MACRO-STRUCTURE(S);
- (3) a theory relating the microstructures to the macrostructures, taking into account a general theory of information reduction;
- (4) a theory of discourse structures including specific theories for different types of discourse (SUPERSTRUCTURES); in this case, a theory of scientific and argumentative discourses; and
- (5) a theory relating the macrostructures to the superstructures.
- 2.1- Microstructures and macrostructures
 From the point of view of meaning we distinguish two levels in discourse: MICROSTRUCTURES and

MACROSTRUCTURES. It is supposed that these structures are the basis for particular meanings within a context, since discourse content varies from text to text. In the first case (microstructures), sequences of propositions are assigned to the sequence of discourse sentences; that is, the microstructures contain meaning at local levels. On the other hand, macrostructures, also represented as propositions, contain meaning at global levels, defining the meaning of parts of the discourse or of the discourse as a whole.

Observing our linguistic behaviour, we realize that we can say that a discourse is ABOUT something. In other words, we are able to produce different discourses expressing what a given previous discourse was about. That is what we do, for instance, when we summarize, give titles, draw conclusions. In fact, all these exemplify an intuitive notion of TOPIC. The notion of TOPIC – as a proposition presupposed from a set of propositions in a sequence (Van Dijk, 1977:136) – can be identified with what we intend to call MACROSTRUCTURE. That is to say, a macrostructure of a sequence of sentences is a semantic representation – a proposition presupposed by a sequence of propositions underlying discourse.

One important cognitive function of macrostructures is the ORGANIZATION of complex semantic information in processing and memory. The reader(or listener) cannot and need not store all the propositional information of a discourse. This information must, therefore, be reduced to macrostructures. For this information reduction to take place in discourse processing, MACRO-RULES are proposed.

Macro-rules have the purpose of relating microstructures to macrostructures, reducing and organizing information. In this case, the microstructural information serves as input for the macrostructural information (output) to be processed²; in this process the macro-rules delete and combine sequences of propositions under specific conditions. Van Dijk and Kintsch (1977:68-9) distinguish four macro-rules: deletion, generalization, selection, and construction³.

2.2- Superstructures

Also important in this process are SUPERSTRUCTURES. Defined by Van Dijk(1981:5) as 'schema-like global structures', superstructures are those components of the discourse schema which define the FORM of discourse. In this sense, they help identify some discourses as being a scientific report, a theatre play, and so on. These schematic categories are of a conventional type and can help organize semantic macrostructures, serving as an abstract schema which will have to be semantically filled in by macropropositions. We should also notice that superstructures are not always explicit in a text; in this case, the reader, resorting to his internalized knowledge, will have to identify the implicit categories. Again, as far as discourse typology is concerned, this study followed Van Dijk and Kintsch(1977), but considered the scientific and argumentative discourses which will be discussed below.

2.2.1- The scientific discourse

The scientific discourse here considered is the research report. Deyes(1982) identifies six categories. The author hypothesizes that:

'A text that serves the purpose of science will normally describe and discuss events analysed by the scientific method. This will be reflected in the structure of the text either explicitly or implicitly by sections corresponding to such stages of the process as INTRODUCTION, PROBLEM, METHODS, RESULTS, DISCUSSION, CONCLUSION.'

(DEYES, 1982:9)

The components listed by Deyes have been included in this study as SUPERSTRUCTURES of research report texts. In pedagogic situation, however, I would explicitly add another category: PURPOSE(of the research) which is, in fact, related to Deyes' PROBLEM.

Thus, seven components have been considered in this study as supertructures of research reports:
INTRODUCTION, PROBLEM, PURPOSE, METHODS, RESULTS,
DISCUSSION, CONCLUSION. The examples below illustrate class activities emphasizing the identification of super-structures and construction of macrostructures:

1. PRE-READING/

GROUP WORK: Discuss the role of 'abstracts' in scientific texts.

2. MAIN POINTS COMPREHENSION

INDIVIDUAL/GROUP WORK: Read the text and divide it into sections according to the scientific method.

3. MAIN POINTS COMPREHENSION

INDIVIDUAL/PAIR WORK: You should notice that every paragraph of the text is indicated by a letter. The sentences below summarize the main topic of each paragraph.

Match the sentences with the paragraphs.

- () Recent data are presented as to the limitations of previous studies.
- . () The three objectives of the paper are specified.
 - () The authors explain their hypothesis.
 - () The writers discuss the reasons why they decided to investigate the adolescence period.
- 4. MAIN POINTS COMPREHENSION

INDIVIDUAL/PAIR WORK: Provide the information below (in Portuguese), considering the text content:

EXPERIMENT 1	EXPERIMENT 2
1. purpose:	1. purpose:
2. subjects:	subjects:
3. method:	3. method:
4. result:	4. result:
5. conclusion:	5. conclusion:
Final conclusion:	

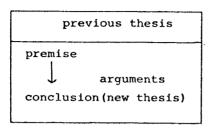
5. MAIN POINTS COMPREHENSION

INDIVIDUAL/GROUP WORK: After being sure you have understood the main points of the text, write an ABSTRACT(in Portuguese) which includes its main sections.

2.2.2- The argumentative discourse

As to the argumentative discourse, this study resorted to Sprenger-Charolles(1980). The main purpose of an argumentative discourse is to get the adherence of an audience to a given idea or point of view. The argumentative discourse is usually related to another discourse(previous thesis) in two ways: (1) an opposite relation when it intends to modify convictions or (2) in a support relation when it simply wants the adherence

to the new thesis. Argumentative superstructures can be as follows:



Adapted from Sprenger-Charolles, 1980:77

Although the schema above was accepted as a theoretical basis to establish the superstructures of argumentative discourse, in classroom situation the course designer/teacher decided to apply a terminology familiar to the students. This terminology came up as the result of a class discussion on "What is an argumentative text?", and "Which parts can be identified in an argumentative text?". Argumentative superstructures were then determined as follows:

- INTRODUCTION which may include a 'problem presentation' in which the writer situates the reader and stresses the issue(s) he is concerned with, and 'a review of previous situation'.
- ARGUMENTS the idea(s) the author uses to convince the audience.
- $\,$ CONCLUSION the author concludes by reiterating his point of view, and/or summarizing the discussion.

The following class activities have been specially designed to focus on superstructures and macrostructures

of argumentative discourse.

- 1. GLOBAL COMPREHENSION GROUP WORK: What is the global topic of the text?
- 2. MAIN POINTS COMPREHENSION

INDIVIDUAL/PAIR WORK: Note-taking: Summarize the

main contributions of the scholars mentioned in the text and discuss the differences and similarities of their

opinions.

MCNIGHT	SARTRE	PITTENDRIGH
1		

3. MAIN POINTS COMPREHENSION INDIVIDUAL/PAIR WORK: The author is concerned with three causes of conflict/

aggressiveness. Provide the information below.

CAUSES PARAGRAPHS LINGUISTIC CLUES

1st
2nd
3rd

- 4. MAIN POINTS COMPREHENSION INDIVIDUAL WORK: Summarize the text in not more than 50 words.
- 5. MAIN POINTS COMPREHENSION INDIVIDUAL/PAIR WORK: Specify the main idea of each paragraph.
- 6. MAIN POINTS COMPREHENSION INDIVIDUAL/GROUP WORK: Divide the text into as many parts as you find out and give a title to each of them.
- 7. DETAILED COMPREHENSION
 INDIVIDUAL/PAIR WORK: The paragraphs of the text
 are indicated by numbers from
 1 to 8. Read the text
 carefully and answer this
 question: is paragraph 5
 introducing or concluding a
 topic? What is being
 introduced or concluded?

3- CONCLUSION

The reading process is, in fact, a SUMMARIZING process in which the reader has to reduce the text message in a meaningful way. The need for this summarizing ability is due to the limitations of our memory. Thus, the construction of macrostructures is fundamental to comprehension. The activities suggested in this paper have been most useful as a general course framework for the implementation of the

summarizing ability of the learners and the consequent facilitation of reading comprehension. In short, the model created from van Dijk and Kintsch's(1977) postulates has proved to be appropriate as a general guideline to the designing of an ESP reading course.

4- IMPLICATIONS

The relevance given to the summarizing ability in this paper raises some important questions related to ESP courses:

- 1. How aware are teachers and course designers of the involvement of this ability in the activities our students are asked to perform?
- 2. Can we differentiate explicit types of summary involved in ESP class activities?
- 3. Which difficulties do our students face when they read English texts and have to summarize them in Portuguese? To what can we attribute their difficulties?
- 4. Which criteria can we establish to teach and evaluate summaries? How fair is our evaluation of our students' summaries?

Further research on this subject is being developed with the purpose of throwing some light on these questions. Some assumptions and results will be published in LIMA(forthcoming) 'Some Issues Concerning the Summarizing Ability in ESP Courses'.

NOTES

- 1 This course was offered at Pontificia Universidade Católica de São Paulo in 1983. The course was divided into 10 units every unit involved a complete authentic text; the reading program included activities dealing with global, main points, and detailed comprehension. For further details see Lima(1983).
- 2 These statements should not be taken in the sense that discourse processing always occurs in the same direction - from microstructure to macrostructure. I assume that the local meaning of a sequence (microstructure) can also be defined by its global meaning (macrostructure). This point of view is related to the top-down/bottom-up dichotomy in reading comprehension.
- 3 For further details see van Dijk(1977) and van Dijk and Kintsch(1983).

REFERENCES

- DEYES, A. F. 1982. <u>Discourse</u>, <u>Science</u>, <u>and Scientific</u>
 <u>Discourse</u>. São Paulo. PUC/Projeto Nacional Ensino de Inglês Instrumental em Universidades Brasileiras.
 (Working Papers 6)
- van DIJK, T. 1977. <u>Text and Context</u>: <u>explorations in</u> <u>the semantics and pragmatics of discourse</u>. London, <u>Longman</u>.

- 3. van DIJK, T. 1981. Discourse Studies and Education.

 <u>Applied Linguistics</u>, II(1):1-26.
- 4. van DIJK, T. and KINTSCH, W. 1977. Cognitive Psychology and Discourse: recalling and summarizing stories. In: DRESSLER, U. (ed.). <u>Current Trends</u> in <u>Text Linguistics</u>. Berlin, Gruyter. p.61-80.
- 5. van DIJK, T. and KINTSCH, W. 1983. Strategies of

 Discourse Comprehension. London, Academic Press.
- 6. LIMA, M. S. 1983. <u>Uma Abordagem Discursiva no Ensino da Leitura em Inglês Instrumental</u>. Dissertação de Mestrado, Pontifícia Universidade Católica de São Paulo.
- 7. LIMA, M. S. Forthcoming. Some Issues Concerning the Summarizing Ability in ESP Courses.
- 8. SPRENGER-CHAROLLES, L. 1980. Le Résumé de Texte.

 Pratiques, Metz, 26:59-90.