

## CHAPTER THREE

### THE STUDY

#### 3.1 Aims of the investigation

The present study had three major objectives. The first one was to find out whether a second language writing course organized according to the principles put forward in section 2.4 would help a group of skilled writers using L2 produce more readable writing products after a short period of instruction. The pedagogy tested specifically called the attention of the writers to the use of a number of L2 discourse conventions their L2 texts seemed to violate, and purposefully did not seek to emphasize the development of writing skills, although it did draw on their existing skills.

The second objective of the study was to investigate whether the pedagogy proposed helped this group of writers learn about parameters with which to evaluate and improve their own prose in the absence of teacher feedback.

The third objective of the study was to develop a method of analysing revision which helped in diagnosing the problems encountered by L2 writers more fully, and in this way come to a deeper understanding of what might help skilled writers using L2 produce more readable texts.

### 3.2 Research design

The EFL writing course which promoted the type of instruction tested took place in Brazil, and was hosted and sponsored by the Department of Immunology of the University of Sao Paulo. The whole experiment comprised two weekly three-hour sessions over a period of nine weeks, amounting to a total of fifty-one hours. Of these, twenty-one hours were dedicated to the collection of pre and post-treatment data, and the thirty hours in between were used for the course on writing which constituted the experimental treatment. In other words, data collection was organized on the lines of a time-series research design (Hatch and Farhady 1982).

### 3.2.1 Hypotheses

Before I introduce the hypotheses tested in the course of the study, the following terms need be recalled and operationally defined:

SL2 writers: SL2 writers are highly literate non-native speakers who have developed writing skill and experience in L1.

Readable: Readable texts are written texts of a particular genre which a given reader who is familiar with the genre in question finds clear and easy to read. Improved readability: The readability of a written text is improved when changes which facilitate the reader's interpretation of the text are made.

Instruction: Instruction is the pedagogical approach proposed in this study made actual in the thirty-hour course on EFL writing which constituted the experimental treatment.

Independent from feedback: A writer is independent from feedback when he is able to see for himself which are the inappropriate or less appropriate parts of his own prose and rewrite them in a more appropriate way without receiving any cues from another person as to what in his text could be improved. Increased feedback-independence:

The feedback-independence of a writer increases when he learns to rewrite in a more-appropriate way (and in the absence of any cues from another person as to what in his text could be improved) parts of his written texts which he was not able improve before.

Having defined the above terms, the hypotheses tested in the present study were the following:

H1

The texts SL2 writers produce after the instruction provided has ceased will be more readable than the texts they produce prior to that instruction

H2

SL2 writers will be able to revise and further improve the readability of pre-instruction final drafts after instruction has ceased

H3

SL2 writers will have become more independent from feedback after instruction has ceased

H4

Improved readability and increased feedback-independence are likely outcomes of the specific instruction provided

### 3.2.2 Participants

The SL2 writers selected to participate in the experiment were eight Brazilian researchers, four male and four female, between 27 and 45 years of age. They all worked at the University of Sao Paulo, two of whom as immunologists (Gustavo and Henrique), two as pharmacologists (Cida and Silvia), one as a pediatrician (Thelma), one as a physicist (Elisa), one as a geologist (Wilson) and one as a

journalist (Dony). Four of the participants were members of staff (Cida, Silvia, Elisa- and Wilson) and four were postgraduate students pursuing Ph.D. degrees (Gustavo, Henrique, Thelma and Dony).

It seemed appropriate to work with Brazilian researchers writing in English given that my interest in L2 writing had originally emerged out of a concern with the limitations of Portuguese scientific and academic discourse with regard to the participation of these researchers in the international scientific community. In addition to this, I did not wish insufficient writing skill to affect the experiment given that the pedagogical approach to be tested had been devised for SL2 writers only. I assumed that by allowing only postgraduate students and university staff members to participate, I would automatically narrow down the sample so as to include only one of the most highly literate sectors of the Brazilian population. This assumption is strengthened by the fact that the University of Sao Paulo is unquestionably one of the most prestigious universities in Brazil. It is but the intellectual elite of the country that gains access to it. Apart from that, all eight participants had previous experience in publishing scientific articles in Brazilian journals.

On average, the participants had had five years of instruction in English of which, according to them, most emphasis had been given to grammar and oral communication skills. It was not possible to control for proficiency on the basis of accredited English proficiency examinations since most of those who applied for the course did not possess any recent results from such examinations, and waiting for such results to arrive in Brazil would have delayed the experiment beyond limit. However, the participants were required to write an approximately two-hundred word summary of their areas of specialization under normal, one-hour test conditions so as to ensure that they did not make major syntax errors, and that their vocabulary in English was not too limited<sup>1</sup>. At least intermediate-level knowledge of English syntax and lexis was thought to be an important criterion in the selection of the participants, for I was primarily interested in tapping data pertaining to higher-level discorsal aspects of L2 writing. As Widdowson (1983) and Daiute (1984) pointed out, a writer's performance at the level of discourse can be greatly affected by insufficient knowledge of syntax and lexis. Similarly, in a pilot phase of the present study, the discourse-oriented pedagogy tested did not seem effective for one of my subjects who had a very limited knowledge of English lexis and syntax.

The two other control measures adopted were that the participants selected were required not to attend any other EFL course at the time of the experiment, and had to be able to attend all sessions of the admittedly extended schedule of the experiment<sup>2</sup>.

The motivation for the participants to take part in the experiment was by and large the treatment itself, which had been briefly explained to all applicants. An additional motivational factor might have been that the writing course which contained the experimental treatment was free of charge.

Finally, I had foreseen that it would be impossible to find a control group that matched the participants in a normal EFL classroom setting, for there does not appear to be a single EAP writing course in Sao Paulo for skilled writers only. Under these circumstances, the only possibility of working with a control group would have been to split the eight participants into two groups of four, one of which would receive the experimental treatment while the other one received some placebo treatment. I rejected this alternative for the following two reasons: first, it would be unethical to expect the control group to voluntarily dedicate their time and energy to the experiment when their motivation to take part in it was to a large extent the treatment itself. Second, to draw any sort of conclusions from the differences perceived between two samples of only

four would risk compromising the validity of the study. As shall be seen, the absence of a control group was nevertheless partly compensated for by the conditions under which the data was collected and then analysed.

### 3.2.3 Data collection

The primary source of data upon which the analysis of the effects of the instruction provided was carried out consisted of a series of three pre-treatment and three post-treatment essays in between which instruction took place, plus the post-treatment revision of the final draft of one of the essays produced in the pre-treatment phase. I shall start by describing the conditions under which the three pre-treatment and the three post-treatment essays were produced. Having done that, I will then report on how the post-treatment revision data was collected. Additional intuitional data was collected at the end of the experiment via the retrospective questionnaire in appendix II.

Before each of the three pre-treatment and the three post-treatment sessions, the participants were required to select, read and bring with them to the classroom a published and untranslated text in their areas of specialization written by a native speaker of English (NS texts). The NS texts could be papers, articles or chapters from books, but the participants were encouraged to bring



NS texts on topics about which they wished to write during the test sessions. Later on, during the treatment, the participants were going to be asked to reread these NS texts so as to try to extract from them parameters for rewriting their own pre-treatment essays.

During a maximum of a full three-hour session, the participants then had to write an essay which could be a discussion, an analysis, a summary or a criticism of the NS texts they had read. Alternatively, they could also write about their own ongoing work, provided that it was related to the topics of the NS texts. The choice depended exclusively on how the NS texts the participants had selected related to what they wanted to write about during the test sessions. Of course such freedom of choice traded-off a certain homogeneity in the kind of essay produced for an opportunity for the participants to write meaningfully about what they really wanted to put down on paper. The reason for such a trade-off was that it would be unlikely that a single reading and writing task would mould itself perfectly to the writing interests of the eight participants. On the other hand, having them choose what they wanted to write about would probably keep motivation high as well as capture their specific writing needs and problems more realistically. That is to say, it would be rather delusive to have the participants write an essay which was a general discussion on abortion or euthanasia - to take as examples two favourite EAP writing topics - when

in actual fact their interests lay in overcoming problems they faced when writing articles or papers on very specific subject-matters which had little or nothing to do with issues such as abortion or euthanasia.

The only other constraint imposed was that the length of the essays was restricted to around two A4 pages. The reason for this was to keep the amount of data collected within reasonable proportions. Otherwise, the participants were allowed to make notes, draft and redraft their essays as much as they wished, as well as consult the NS texts, dictionaries or any other reference book. The rationale behind simulating such normal writing circumstances was to allow, within the time and length limits imposed, for as much writing process freedom as possible.

Although there were no major problems with regard to conducting the pre and post-treatment sessions under near identical circumstances, I must draw attention to the fact that it was not possible to have the essays written at regular intervals of time. The irregular time intervals between the three pre-treatment (T1, T2 and T3) and the three post-treatment (T4, T5 and T6) sessions are shown in figure 3.1 below.

Figure 3.1: Time intervals between pre and post-treatment sessions ( - = 2 days)

T1---T2-T3      TREATMENT      T4---T5---T6  
(5 1/2 weeks)

The data upon which the analysis of post-treatment revision was based consisted of the final draft of the third pre-treatment essay (T3) and the post-treatment revision of that same essay (T3\*). The two texts were taken to represent the best product the participants could arrive at after revising their texts on their own at two different points in the experiment, i.e., before and after the treatment. What I mean by "on their own" is that neither before nor after the treatment were the participants given any cues as to what in their texts might have needed rewriting, although they were allowed to consult dictionaries, grammar books or any other references during the activity in the same way as they would do so under normal writing conditions. The participants were not warned beforehand that they would be required to revise their texts so as to prevent them from preparing the revision at home. They were nevertheless allowed as much time as they wished during the sessions for the two revisions. They did not, however, take longer than one and a half hour.

T3 was finalized a full week after it had first been written, and, naturally, before the treatment began. It was important to allow for this pre-treatment time-lag so as to minimize the possibility of the analysis capturing changes which had to do with detachment rather than with the treatment itself. Otherwise, the analysis of post-treatment revision could be distorted by changes made simply as a result of the participants rereading their essays with the more detached eyes of the writer who has given a rest to his own text (Chandrasegaran 1986). The idea of returning T3 to the participants a week after it had been written, and of asking them to make sure that they revised it as best they could before the actual treatment began, was therefore to keep this intervening variable under control.

The post-treatment revision of T3, T3\*, was then produced immediately after the treatment had ceased, and before the collection of the post-treatment essays began. It could be argued that I did not allow for the same amount of pre and post-treatment writing practice to take place before the two final revisions were collected. In other words, in a perfectly symmetrical experimental design, T3\* would have been produced at the end of the post-treatment phase in the same way as T3 had been finalized at the end of the pre-treatment phase. Figure 3.2 below illustrates the lack of symmetry in the data collection, and figure 3.3 illustrates what would have been the symmetrical order for collecting the data in question.

Figure 3.2: Assymetrical order in which the data was collected

T1 - T2 - T3 - T3(rev) - TREATMENT - T3\* - T4 - T5 - T6

Figure 3.3: Symmetrical order for collecting the data

T1 - T2 - T3 - T3(rev) - TREATMENT - T4 - T5 - T6 - T3\*

From the above it can be seen that the assymetrical order in which the data was collected does not invalidate the study, but actually strengthens it, inasmuch as it can only interfere with the results in making my predictions more difficult to confirm. After all, had T3\* been produced at the end of the post-treatment phase, the added writing practice this would have entailed would most probably also have enhanced the quality of the post-treatment revisions. In asking the participants to revise T3 a second time immediately after the treatment was over, I have deliberately denied them the opportunity of further writing practice.

A second apparent flaw in the procedure is that the original T3 draft written before its pre-treatment revision was not preserved. Had this been done, I would have been able to compare the two revisions rather than only the pre-treatment final draft with its post-treatment revision. The reason why this was not done is that writing-as-activity is a recursive process, which means that much of the pre-treatment revision of T3 took place during the very

session in which the participants wrote it in the first place, i.e., before it was returned to them a week later. The changes made from the original to the final pre-treatment T3 therefore do not tap the participants' pre-treatment revision in full, but only the changes they decided to introduce after a period of detachment. In view of this, it would be naive to assume that the pre-treatment revision of T3 could be compared with its post-treatment revision in equal terms. Moreover, since the pre-treatment revision of T3 represented the best version of T3 the participants could arrive at before the treatment, the differences between it and the post-treatment revision of T3 should yield sufficient information for it to be possible to analyse which aspects of their texts the participants found it necessary to further revise after the treatment.

The full set of pre and post-treatment essays by Wilson (a participant whose performance was average in relation to the rest of the group) is supplied in appendix III. The pre-treatment final drafts and post-treatment revisions of T3 by all eight participants are transcribed in appendix V<sup>2</sup>.

### 3.2.4 Treatment materials

The materials utilized during the treatment comprised:

- the bibliography of reference books enclosed in appendix IV;
- the NS texts the participants had selected themselves in the pre-treatment phase;
- the first two pre-treatment essays the participants had written;
- and eight course handouts of which copies are also supplied in appendix IV.

The bibliography included a learner's dictionary, the Thesaurus, a pedagogical grammar and a text-book on academic writing. Reference to these books was not compulsory, but a few copies of each were kept in the classroom for the participants to consult at their leisure. The NS texts the participants had selected were utilized as reading materials out of which the participants were encouraged to extract parameters for evaluating their own prose. The first two pre-treatment essays were used for practising revision. Some extracts selected from them were also utilized as examples for contextualizing the use different discourse conventions. The eight course handouts

were used as a means of helping the participants understand a few of the most pervasive problems visible in their pre-treatment essays.

A few words need be said about how the course handouts were prepared. I began by allowing my reading of the pre-treatment texts to be oriented by the acknowledged domains of discourse incompatibility between English and the Romance languages mentioned in chapter two, and by paying special attention to problems of discourse which were common to the essays by three or more different participants. Having done this, I was able to identify eight major problems of discourse which the participants generally seemed to need help in overcoming. These problems did not cover all that was markedly inappropriate in the pre-treatment essays, but only what appeared to be the most pervasive factors of non-compliance with the discourse conventions of English expository prose. Each of these problems gave origin to a different handout, all of which sought to provide the participants with:

- A didactic explanation of the problem in question. Care was taken to make sure these explanations were "decentred".
- Guidelines on how to overcome the problem based on how native speakers of English normally organize discourse.



More specifically, the eight course handouts covered the following:

a. Priming

One of the major factors of non-compliance with the conventions of English expository prose that surfaced in the pre-treatment essays was the absence of linguistic elements to signpost or prime the reader for what could come up in the text. Many of the ideas contained in the pre-treatment essays were introduced in what appeared to be an overly abrupt manner. For example, at a very macro-level, apart from essay titles, there were very few advance organizers - as the ones Clyne (1984) noted in the texts by English-speaking scholars - to inform the reader what the essays would be about. Of the 24 pre-treatment essays collected, only two contained advance organizers of this sort, both of which were by the same participant:

"The purpose of this report is the preparation of mesophases composed by disks and rods using aromatic detergent at or near mole fraction = 1 in the micelle."

"Criticism to this [Deuterium Nuclear Magnetic Resonance... technique] approach is developed below."

Given the almost total absence of advance organizers at the above macro-level, I decided it would also be worth reinforcing linguistic resources that could be used in order to prime the reader for other levels of text. At the level of the paragraph, the handout on priming called the participants' attention the need for introductory topic sentences to inform the reader what the paragraph would be about. The greater proportion of topic sentences in the texts by native-speakers of English had already been noted by Scarcella (1984). At the level of the sentence, the participants were advised that it helped processing a text if they fronted the topic of the sentence. The handout then showed how a subordinate clause starting with "although", "whereas", or "while" could sometimes be fronted in order to warn the reader that a within-sentence contrast would come up. In the case of long compound sentences, the handout explained that certain key function words or phrases - such as "both", "either", or "not only" - could warn the reader that an additional "and", "or", or "but also" clause would come up in the sequence of the text<sup>4</sup>.

b. The given-new principle

Another major factor of non-compliance with the discourse of English expository prose perceived was the relative lack of linear organization in the presentation of the ideas contained in the pre-treatment essays. The convention that

linearity is important and necessary in English expository prose was noted by Clyne (1984) and others. The examples below, taken from the pre-treatment essays by four different participants, briefly illustrate how the order of information in their texts tended to meander back and forth in a non-linear way.

"Lung diseases are responsible for a considerable part of the morbidity and mortality of man [...] In developed countries the environmental contaminants and exposure to toxic volatile solvents are ranked top of the list of leading respiratory diseases and injuries."

"Synthetic membranes have been used as models to study certain properties of life membrane [...] Deuterium Nuclear Magnetic Resonance is the used technique."

" Although this early Earth was relatively cool, at least three mechanisms started to heat up it: [a)...b)...c)....]

"Taking into account the bulk of the planet and the time of development of these processes, the most important of those mechanisms was the radioactive one..."

"[...] a genetic monitoring program needs to be established beginning with basic cares of the colony. " The correct nomenclature of the strain asked by the users is a beginning of some guarantee for the quality of the animal received."

As can be seen, many linguistic elements which would normally come together in text were separated by a non-conventional ordering of clauses and sentences. To help the participants reorder the elements in their texts in a more linear fashion, the given-new principle handout was prepared. This handout explained the semantic status of

"given" and of "new", and advised the participants to organize their sentences and paragraphs by starting with what they assumed the reader would know, or with what had already been mentioned in the text (given), and by finishing them with information which was being introduced to the reader (new). Although this piece of advice might sound prescriptive, it is a well-documented fact in the literature that English discourse is normally organized in this way (Danes 1974, Clark and Haviland 1977, Quirk et al. 1986 - to cite only a few sources). The handout then provided the participants with examples of some of the less obvious linguistic resources they could use to this end, namely, the inversion of main/subordinate clause strings and the use of cleft-sentence constructions. The obvious connection of the given-new principle with the handout on priming was also pointed out to the participants.

### c. Sentence-complexity

The next handout was about sentence-complexity. The pragmatic distinction between the use of simple and complex sentences - in which simple sentences are normally used as topic sentences to introduce new ideas or emphasize a point, and complex sentences are used to convey relationships between ideas (Huckin 1983, Hamp-lyons and Heasley 1987) - did not always surface in the pre-treatment essays. In fact, what emerged was a pervasive use of overly

complex syntax, which not only rendered the essays rather dense and opaque, but also failed to signpost the reader towards distinguishing between its central and ancillary points. This clearly flattened out the hierarchy of the important points and the supporting details of the essays; the "levels effect", which according to research in cognitive psychology facilitates recall<sup>25</sup>, therefore did not emerge in any obvious way (Huckin 1983). The examples below, again taken from some of the pretest essays, illustrate this.

"The fact that treatment with fungicidal drugs can revert this picture repairing the cellular immunity of the patients is in agreement with the idea that those immunodepression is not inherit by the host but caused by circulating fungal elements, possibly by inducing alterations in the immunological system of the host."

" In short, ABO incompatibility represents a spectrum of hemolytic disease extending from those in which there is little laboratory evidence of erythrocyte sensitization, but evidence of hemolysis, to severe hemolytic disease in which erythrocyte sensitization is usually demonstrable."

"For combat the expression 'post-industrial society' Jameson will use the marxist economist Ernest Mandel, who says that late capitalism, far from representing a 'post-industrial society', thus appears as the period in which all branches of the economy are fully industrialized for the first time."

The handout on sentence-complexity began by pointing out that simple and complex sentences serve different purposes in a text, and that their use is more or less predictable

in English expository prose. The handout then advised the participants to compare their texts with those by their native speaker counterparts, and to pay special attention to sentences that contained too much subordination if they thought their sentences were overly complex. The participants were also warned that it would not be enough to try and keep all their sentences short and simple, for this could not only make their texts sound boring to the reader, but also make it difficult to express certain ideas. The participants were therefore advised to use simple sentences whenever they wished to introduce a topic, highlight a conclusion or emphasize a point. They were also told that they could "split" overly complex sentences by separating them into equivalent semantic units and rewriting these units in a syntactically parallel way. The importance of symmetry and structural repetition in English discourse was noted by Clyne (1984); these factors are also considered to be cohesive devices by Halliday and Hasan (1976).

#### d. Connectives

A fourth significant difficulty I perceived while reading the pre-treatment essays had to do with the use of adverbials as links between sentences and paragraphs, which often seemed to be lacking. When they were not lacking,

their frequently inappropriate use put me on the wrong frame of mind for was coming up in the texts and, in certain cases, even jeopardized coherence. The examples below illustrate this.

"Those infants whose red cells had the greatest evidence of sensitization had the highest bilirubin and lowest hemoglobin levels.

"On the contrary, it is possible to find mild degree of hemolysis even though there is no 'in vitro' evidence of sensitization..."

"The non-polar trail of the molecules are maintained inside the aggregate as the polar heads faces the water. These aggregates form clusters that possess liquid crystalline properties. Nevertheless, the more common liquid crystal is the so called..."

Because the use of adverbials as sentence and paragraph connectives is so complex that it could constitute a course in itself, the handout I prepared only dealt with the issue in a very brief way. It explained, following Regent (1985), that in English expository prose very little room was usually left for the reader to infer the relationship between sentences and paragraphs in the text. Guillemín-Flescher (1981) noted that in English translations of French texts many conjunctions are actually added to text. Clyne (1984) too drew attention to the fact that in English expository texts it is the writer who must ensure the reader will gain access to text. Clearly, this access is facilitated when the relationship between clauses, sentences and paragraphs is made explicit. The handout therefore explained that sentence adverbials could be used

as links between sentences and paragraphs in two different ways: first, by conveying the relationship between ideas (conjuncts), and second, by conveying the author's comment on the content of his own text (disjuncts). Next, the handout provided the participants with a list of sentence and paragraph connectives grouped according to those which had similar meanings. The participants were then advised to consult the COBUILD<sup>e</sup> in order to find examples of different contexts for the connectives in the list, and to learn about their usage.

e. The use of commas

Another marked feature of the pre-treatment essays was the inappropriate use of commas. Although the use of commas is not normally seen as belonging to the domain of discourse, the fact that it "provides considerable opportunity for [...] implying fine degrees of cohesion and separation" (Quirk et al. 1985:1611), makes its importance to discourse obvious. Some representative examples of the inappropriate use of commas taken from the pre-treatment essays are provided below:

"It seems that Ts cell require another distinct cells to be induced, which lack the lyt-antigen and resemble Th lymphocytes but have Qa-1 and I-J antigens in its surface."



"For example, the chief symptom of respiratory failure, dysphoea cannot be applied to animals, since this concept is based on subjective feeling of discomfort or difficulty in breathing."

"This conversion is triggered by Ca++ whose levels are increased in cells submitted to anoxia."

"Because of the better conductivity of the rocks within the outside shell (the crust) the Earth started rapidly to cool and after that became a typical zoned stable planet."

The handout on the use of commas called the participants' attention to the most persistent inadequacies concerning commas in their essays, and provided them with some general guidelines on the conventional use of commas in English prose. The major problems the handout highlighted were: first, many short independent clauses in the pretest essays were paratactically linked together with a comma rather than with a conjunction. In Portuguese, this is acceptable and even literary (Cunha and Cintra 1985). Second, very few commas were used in sentences with clauses linked by coordination - the participants frequently used either commas or additive conjunctions to link long independent clauses, but very rarely used the two together, as is normal in English expository prose. Third, commas were wrongly used to set-off long adverbials which occurred in their normal, non-emphatic end-position, which is normal in Portuguese (Cunha and Cintra 1985) but not in English. And fourth, commas were often ungrammatically employed to set off defining relative clauses, or were lacking in the case

of non-defining relative clauses. Although the same rule applies to Portuguese (Cunha and Cintra 1985), the participants did not seem at ease with it in English.

f. Certainty and commitment

A sixth notable problem in the pre-treatment essays was the absence of language resources to vary the degree of commitment and certainty with regard to the different assertions in texts. Based on Grice's (1975, 1978) Maxim of Quality, I take it that strong assertions should be backed by evidence in their support or by the author's full and explicit commitment, and whenever this is not possible, the strength of assertions should be downgraded. The problems concerning commitment noted in the pre-treatment essays were especially marked in cases which, due to both a probable avoidance of modals or modal expressions and a failure to cite references, the texts tended to sound unjustifiably authoritative. The examples below illustrate this:

"... the temperature reached about 1500 - 2000 C, which caused the so-called 'Iron Catastrophe'" (no reference)

"For type II phase optical evidences strongly suggest that this mesophase is rod-like nematic. More precise experiments observing type II phase in the microscope were not achieved because the alignment was rapidly randomized." (strongly suggest?)

"ADP is accepted to responsible for the first pathway of platelet aggregation." (no references)

The handout on certainty and commitment began by pointing out that the author's reasoning and commitment to ideas presented in text were very important features of English expository prose, and that texts which focus on facts and neglect opinions tend to sound inconclusive in the eyes of native English readers (Regent 1985). The handout then provided the participants with a list of modals and modal expressions that could be used when presenting non-controversial evidence, irrefutable evidence, and strong and partial evidence. Then, the handout explained that it was common practice in English expository prose to start a text by making general, impersonal statements and relying on non-controversial evidence; the handout also pointed out the importance of presenting specific evidence from the work by other authors and of concluding with a personal account of one's own interpretation of facts, the strength of which depended on the evidence presented (Regent 1985).

g. Synonyms and reference

The seventh markedly inappropriate feature noted in the pre-treatment essays pertains to synonyms and text-internal referring expressions. The participants often made use of synonyms to avoid the repetition of previously defined terms, with the misleading effect of inducing the reader to think such synonyms were being used to refer to somewhat different entities. Also, the problem of NP ambiguity was even further aggravated by the (sometimes faulty) use of pronominals in places far too distant from where full reference to an entity had last been made. The examples below illustrate such problems<sup>7</sup>:

"In developed countries, the environmental contaminants and occupational exposure to toxic volatile solvents are ranked at the top of a list of leading respiratory injuries (table 1).  
"Another widely diffuse agent is cigarette smoking...."  
(injury/agent?)

"Lyotard was considered as a philosopher with a strong influence of Nietzsche and his "active nihilism" on trying to accelerate the decadence of the idea of 'truth'...  
"On his book, he discusses the question of...."  
(Lyotard or Nietzsche?)

The objective of handout on synonyms and reference was to draw attention to problems of the above type. It began by warning the participants that synonyms of certain terms could be ambiguous if these terms were being employed in very specific senses, and that word-repetition was not

stylistically inappropriate in such cases. The handout then provided the participants with a list of pro-forms that could be used to avoid repeating noun phrases and clauses in the same or in neighbouring sentences. Finally, the handout pointed out that the use of pro-forms varied according to their distance from the last time their corresponding full-form recurred in the text. It is important to note that in Portuguese reference by means of pronouns can often be stretched without risk of ambiguity since, unlike English, common nouns and their respective pronouns are marked by gender.

#### h. Word-order and adverbs

The last of the course handouts was about the position of adverbs in the sentence, which - though normally seen as part of grammar - is seen here as part of discourse given its unquestionable prosodic importance. It appeared to me that in the pre-treatment essays many descriptive adverbs were placed either before or after the verb, with no regard to their type, length or emphasis. I believe this could be a consequence of transfer from Portuguese, where the position of adverbials in the sentence is relatively free (Cunha and Cintra 1985). The examples below illustrate this:

"... the Earth started rapidly to cool..."

"...specific plaque forming cells can be macroscopically visualized..."

"These branches, certainly, will frutify over and over."

"... animals that are not able to respond to a particular antigen normally."

The purpose of the handout on word-order and adverbs was to provide the participants with some general guidelines with regard to the position of descriptive adverbs (mostly adjuncts and subjuncts) in the sentence. The handout began by explaining that word-order in English was relatively rigid, and that unless the author wanted to give special emphasis to an idea or, in certain cases, invert the order of the elements of a sentence so as to adhere to the given-new principle, the canonical SVO order prevailed. The handout then drew attention to the position of adverbs which were peripheral and intrinsic to the sentence structure, and, in the case of the latter, provided the participants with a simplified reference table to help them decide between medial and end positions.

The above handouts were thought sufficient for the thirty-hour treatment planned, which I presumed would allow me to assess how the writing performance of the participants would be affected by it. Although this limit was by and

large a practical one, it also reinforces the fact that I did not claim to know, let alone presume to teach, everything about the discourse of English expository prose. The pedagogical approach adopted during the treatment will be described next.

### 3.2.5 Treatment procedure

In this section I shall describe the procedure adopted during the experimental treatment. Before I begin, however, I must draw attention to the fact that contrary to one of the principles of pedagogy proposed in section 2.4, at the time of the experimental treatment the participants did not practise all stages<sup>of</sup> writing. They practised rereading and revising but not planning and writing first drafts. Though in a normal writing course this would have been pedagogically desirable, further writing practice at the time of the treatment would have interfered with the most important compensatory control measure in the experimental design. That is to say, the absence of a control group made it absolutely essential that the participants should begin the post-treatment phase with no added writing practice in exactly the same way as they began the pre-treatment phase without practising writing beforehand. For writing practice per se to interfere with the results as little as possible.

post-treatment writing should begin exactly at the same point where pre-treatment writing left off. Apart from this one limitation, the experimental conditions allowed me to be faithful to all other principles of the pedagogy for teaching writing to skilled writers using L2 proposed in 2.4.

Having made this one point clear, I should like to remind the reader that the objective of the treatment was to promote among the participants an awareness of certain English expository prose discourse conventions, and to encourage them to use this awareness in order to evaluate and improve their L2 texts on their own. In remaining parts of this section I shall therefore explain how the materials described in the previous section were used in an attempt to achieve such an end. As I do so, I will comment on how the participants reacted to and behaved during the treatment.

The first eight sessions of the treatment were dedicated to the presentation of the eight course handouts, one in each session. Since the procedure for presenting the handouts was more or less the same, I shall describe how the first eight sessions were organized by using the session on the "Given-New Principle" as an example. The handout on the "Given-New Principle" was introduced in a lecture which lasted approximately the first hour of the three-hour session. Like all other lectures, this lecture was very



informal since the participants were allowed and encouraged to make questions and interrupt me as we went over the handout. The most purist defenders of the claim that language is **acquired** rather than **learned** might argue that the metalanguage utilized in the lecture (e.g. "semantic status", "given", "new" and so on) must have hindered the participants' comprehension of it. This did not, however, appear to be the case. The participants were actually quite comfortable with my use of such terms and began using them themselves when asking questions about the lecture. English was the language that prevailed in the classroom, although some of the more elaborate questions were asked in Portuguese and then answered in English. The blackboard and an overhead projector were often used to clarify certain points in a more visual way.

The exercises that followed the presentation of the handout drew on the participants' first pre-treatment essays (T1) to illustrate the points covered in the lecture. In the next half-hour, as a group, the participants were requested to analyse a few representative extracts I had selected from T1 which illustrated the violation of the given-new principle. Based on what they had learned from the lecture, the participants were asked to identify how such selected extracts violated the given-new principle, and to try and rewrite them in a less discrepant form. Again, I noticed that the participants used the metalanguage of the handout when discussing among themselves how to rewrite the

extracts. In addition to this, they seemed surprised and highly motivated to see extracts from their own texts being used as exercises. Although some participants were quicker than others to see how the extracts given to them could be rewritten, all of them ended up grasping what they were meant to do. Occasionally, however, the participants could see and even verbalize how the extracts violated the given-new principle, but were unable rewrite them. When this occurred, I reminded them of the linguistic resources that could be used to that end; for example, by changing sentences or paragraphs around, switching from active to passive voice, fronting subordinate clauses, or by means of cleft-sentence constructions. Exercises on the use of these resources were then quickly drafted on the blackboard so as to provide the participants with further practice.

Having dealt with these initial illustrative extracts, in the next twenty minutes of the session the participants were required to go back to the NS texts they had read and skim through them while paying particular attention to the given-new principle. Here, the intention was to train them in engaging themselves not only in the content of what they read, but also in the language resources used by their NS counterparts to apply the given-new principle. This reading stage was then followed by an approximately twenty-minute plenary session, during which the participants were asked to put forward their doubts and discuss their ideas on the NS texts from the perspective of the given-new principle.

They seemed very impressed when they realized that the NS texts actually obeyed the given-new principle. Another important point raised in the plenary session was that the participants said that they were more used to reading NS texts by paying attention to meaning rather than form, and that they found the latter very helpful.

During the remaining fifty minutes of the session, working in pairs, the participants were requested to scan through their own and their partners' T1, and rewrite whichever parts violated the given-new principle. Although priority was given to the given-new principle, the participants were not dissuaded from revising other parts of text they felt necessary, which many of them did. At this point I stepped back and encouraged them to seek whatever external assistance they needed from the course handout, the bibliography of references or the NS texts, although I provided them with decentred feedback when called for. At first the participants seemed a bit discouraged, but became quite contented when it was explained that the reason for this was to train them to identify and sort out the given-new discrepancies in their texts by themselves, and thus prepare them to revise their texts in the absence of teacher feedback (Jacobs 1989). During this particular session I noticed the participants consulted almost only the course handout. In the other sessions, however, I saw that they began looking for answers to their problems by consulting the course bibliography and the NS texts as

well. They particularly liked the learners' dictionary (COBUILD), Hamp-Lyons and Heasley's (1987) "Study Writing" and the Thesaurus.

Although I had initially feared that the fact that the participants were working with partners who had written texts in areas completely different from theirs would render the task of revising more difficult, I was told that it was in fact easier to perceive discrepancies in texts other than their own, for in such cases it was easier to separate language from content. This seems to confirm Bartlett's (1982) suggestion that language learners are less able to spot their own errors than errors by peers. And indeed, the participants worked in very close cooperation with each other and seemed very engaged in the activity. Once the participants thought they had rewritten all that violated the given-new principle, I went over their texts and called their attention to the occasional points they had missed without actually telling them how to rewrite. Most of the time they were immediately able to see what needed be done, and very little was left for me to hint.

As said before, the sessions for presenting the other seven handouts were more or less the same as the one which was dedicated to the given-new principle handout. A diagrammatic summary of the all stages of this first part of the

treatment process is nevertheless provided in table 3.1 below.

Table 3.1: Summary of part I of the experimental treatment (recycled eight times, once for each handout)

<u>DURATION</u>	<u>ACTIVITY</u>	<u>OBJECTIVE</u>
1 hour	lecture	help participants understand discourse conventions in the handout
30 min.	group revision of selected extracts	help participants see flaws in their texts and apply linguistic resources learned to improve texts
20 min.	skim through NS texts looking for conventions	practise paying attention to form and discourse of NSs
20 min.	plenary session	discuss NS texts, put forward questions
50 min.	revise T1 in pairs (especially the conventions seen)	practise independent revision of different conventions

After having scanned T1 eight times, i.e., once after each handout was introduced, the participants were asked to reread the NS texts related to T2 at home, by paying attention not only to the conventions highlighted in class, but also to other conventional ways in which their NS counterparts had organized discourse. In the last two sessions of the treatment the participants were then required to reread and revise their second pretest essays (T2). They did this in pairs, and were encouraged to bear the globality of the course content in mind during the activity. This exercise was meant to encourage the participants to revise their texts as a whole. Although the

order in which the eight handouts had been introduced to the participants followed a-roughly top-down hierarchy<sup>s</sup>, the presentation of the handouts in this particular order was not intended as model of which parts of text needed to be revised first. In fact, the participants were given complete freedom to revise their texts in any way they wished given that, being SL2 writers, they were taken to have already developed their own effective, albeit possibly idiosyncratic, writing process strategies. Most participants preferred revising a paragraph at a time, but a few of them felt it was more practical to go over the whole text several times, each time looking for different flaws. To respect how the participants wished to revise different aspects of their texts was thought more constructive than to insist that they use process strategies based on canonical models of how skilled writers normally revise their texts. Once more I deliberately stepped back and told them to try and solve their doubts as best they could by referring to the course handouts, the NS texts and the course bibliography. Feedback on the changes introduced by the participants and on the parts of text that they should have changed but did not was provided only after they had finished revising, unless they specifically requested my assistance during the activity. Once more, the rationale behind this was to encourage the participants to evaluate and revise their own prose in the absence of teacher feedback.

In short, the experimental treatment attempted to promote both feedback-independence and an improvement in the readability of the participants' writing products by encouraging them to:

a. become aware of some standard English expository prose discourse conventions their L2 texts tended to violate.

b. learn to distinguish between the parts of their texts which stood in competition to the ways NSs organized discourse and the parts of their texts which conformed with L2 conventions.

c. draw upon their existing writing (and reading) skills when rereading and rewriting their own texts.

### 3.2.6 The different phases of analysis and interpretation of results

The data collected was for convenience processed, analysed and interpreted in more than one phase. Chapter four is dedicated to the first of these phases. The three pre-treatment and the three post-treatment essays were assigned readability scores based on holistic evaluations by a group

of native-speaker readers conversant with the discourse of English expository prose. The scores were then used to test H1, i.e., that the readability of the writing products by the participants improved after instruction had ceased.

The groundwork for the second phase of analysis is developed in chapter five, which explains the system devised for analysing the post-treatment revisions. The actual analysis of the revisions is left to the first part of chapter six. The next two parts of chapter six then focus on the interpretation of the revisions from the viewpoints of readability and feedback-independence. More specifically, I attempt to find out whether the participants were able to further improve the readability of pre-instruction final drafts (H2), and whether the revisions by the participants hold evidence to an increase in feedback-independence (H3). The interpretation of the revisions from the perspective of feedback-independence was then utilized as a source of information which permitted me to come to a deeper understanding of the kind of reading process and writing product support which might help the group of writers in question improve their written production.

In chapter seven the post-treatment revisions were initially submitted to a third stage of analysis, after which, drawing on the results presented in chapter six, it



was possible to interpret the effects of the instruction provided upon readability and feedback-independence. The objective was of course to test H4, i.e., that improved readability and increased feedback-independence are likely outcomes of the specific instruction provided.

### Notes to chapter three

1. There were fifteen original applicants, seven of whom were eliminated from the sample because the summaries they produced contained more than two errors of subject-verb agreement and more than one non-L2 form.
2. See appendix I for the information file given to the participants prior to the commencement of the course.
3. The procedure and notation adopted for transcribing the final pre-treatment draft and post-treatment revision of T3 is explained in chapter five. For the present, the capital letters, numbers and other signals marked on the transcriptions should be ignored.
4. Whenever possible, the examples utilized to illustrate the topics addressed in this and the following handouts were taken or adapted from the first two pretest essays. The examples which were in accordance with the discourse conventions being discussed were intended to be what was referred to in section 2.4 as "positive feedback". That is to say, they were meant to encourage the participants to make further use of similar constructions. Conversely, the examples which illustrated the violation of a convention mentioned in class were intended to be what was referred to as "negative feedback".
5. Walker and Meyer (1980) have verified this empirically. They showed that syntactically prominent elements, i.e., those which are higher up in text-hierarchies, tend to be easier to recall.
6. Learner's dictionary included in the course bibliography (c.f. appendix IV).
7. There are many other examples of this type. I chose not to present them here because most of such examples require the transcription of too large a stretch of text for the reader to be able to follow where exactly the problems relative to reference occurred.
8. The order in which they were referred to earlier in this section.