

TIME AND SPACE IN READING – THE INTERPLAY  
BETWEEN PLEASURE AND COMPREHENSION IN A  
READING TASK

Vilson J. Leffa

**Abstract**

This paper investigates the correlation between comprehension and pleasure in a reading task. While comprehension is defined here within a spatial dimension, including the reader's ability to relate the text being read to other texts, pleasure is seen as the reader's reaction to the text, in a more temporal perspective. To test the hypotheses that there is a positive correlation between them, 67 students from 5<sup>th</sup> grade to university level were asked to read a text and answer a comprehension/reaction questionnaire. The results showed that there is a positive correlation between comprehension and pleasure. Aspects involving intertextuality, interest and previous knowledge are also discussed. Keywords: Reading comprehension - reading pleasure - reader-response criticism

The purpose of this paper is to investigate the correlation between the ability to understand a text and the pleasure found in the reading of the same text. We will explain, in some detail, what we understand by comprehension and what we understand by pleasure. We will start from the assumption that comprehension is related to the syntagmatic

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dimension of the text, horizontal in nature, where what is said in one place relates to what is said in another place, inside or outside the text. Pleasure, on the other hand, is seen as the reader's reaction to the text, in a temporal dimension, related to what has happened before and to what may still happen in the future, based on the expectations raised by reader's contact with the text.

To test the hypothesis of a positive correlation between comprehension and pleasure, we selected a text which we believed was loaded with both cognitive and affective content and we tried to measure how readers, with different levels of proficiency, constructed meaning in real time, and how they reacted to the author's appeals for affective involvement. Issues such as previous knowledge and reader's interests are also analyzed and correlated.

As far as theory is concerned, we tried to stay in middle ground between eclecticism and commitment to one theory. We use the ideas of discourse communities, as proposed by Swales (1990), aspects of the psycholinguistics of reading (Goodman, 1967; Smith, 1971), and Reader-Response Criticism (Iser, 1974; Fish, 1980) - selecting those aspects which these three theoretical lines have in common in terms of reading, from both a cognitive and affective perspective.

### **Reading as Comprehension**

We understand that reading can be investigated from two different perspectives, defined here as spatial and temporal.

From the spatial perspective, reading can be approached in terms of text segments. These segments, in increasing order of extension, can start with the bound morpheme (e.g. suffixes, prefixes) and reach the complete collection of texts in a discourse community (e.g. the medical literature on tropical diseases or the hundreds of volumes that make up the *Annals of the American Congress*).

The comprehension of a text is not established by itself, without considering the syntagmatic relationship between a given text segment and other segments, either inside the text itself, or outside, with other

possible texts, syntagmatically referred to by the text being read. Shorter segments such as morphemes, words or phrases, have so many possible meanings, when considered in isolation, that they end up by having no meaning at all. Meaning is obtained only when the innumerable possibilities of meaning are constrained by the presence of other segments. Let us consider a small segment such as the prefix "dis", for example. Not only does it lack meaning in isolation as it does not even exist as a free morpheme in English. It will exist, and will have meaning only as a bound morpheme in words such as "disconnect," "disagree," or "disembody." Paradigmatically, it can lead to the creation of words which do not exist in English such as "disinform," "discompact," or "disgroup", but which do not really offer any serious comprehension problem; we can understand the meaning of "disinform" because we understand "inform." That is, we construct a meaning for the morpheme "dis" because we establish syntagmatic and paradigmatic relationship with other segments.

Longer segments are probably less polyssemic, but they also depend on the interaction with other elements to produce meaning. In the discourse community of the American Senate, for example, the irate speech of a senator against a given bill only makes sense when syntagmatically related to other discourses, including the text of the bill itself, previous speeches made by the senator and other senators, the senator's party policy, the replies from the other senators, the campaign speeches, etc. No matter how long, or short, the segment is, meaning can only be constructed when relationships with other texts are established.

There are in fact innumerable possibilities of segmentation under this spatial perspective, but three segments are analyzed here, broken up not necessarily in a random fashion, but considering traditional borders in comprehension studies above word level. These segments are (1) the sentence, (2) the text itself, and (3) the discourse communities in which the text is consumed.

At the sentence segment, when the segment isolated from text and context, comprehension is restricted to syntactic and semantic

elements, remaining at the proposition level. Let's take the sentence below, for example:

I canceled the whole thing.

Syntactically, we know that it has a subject, first person singular, and a predicate ("canceled") with two arguments, ("I" and "the whole thing"). Semantically, we know that the sentence has an agent with the semantic feature [+HUMAN], an action which inverts and annuls another action that had been planned, and an object that undergoes this canceling action. English language speakers also know that the sentence is linguistically well-formed. All this syntactic and semantic knowledge, at the propositional level, involves an extremely complex mental processing, but, as yet, says nothing about the textual and discourse levels. In fact, we do not know who the agent of the canceling action was and what exactly was canceled.

Now let's imagine this sentence in a small text:

Dear Mary,  
I decided not to go the AILA Congress in Tokyo.  
I canceled the whole thing.  
Bob.

This time we can relate the pronoun "I" and the generic phrase "whole thing" to their referents. We know that "I" refers to Bob and the "whole thing" to the AILA Congress. Now we understand the sentence at the textual level. We relate it to what has come before and to what lies ahead.

Considering that the text is a letter and that we are neither the sender nor the receiver of the letter, we can only see it as text. But for Bob and Mary the letter is more than a piece of text. It is part of their lives. Bob wrote it with a purpose and Mary probably read it with emotion. Maybe Bob was going to AILA not to present a paper but to meet somebody there, so the sentence "I canceled the whole thing"

also refers to not meeting that person. And that decision is special to Mary. As, however, we are neither the sender nor the receiver of the message, we can see only what is happening "from the outside." There are innuendoes we cannot grasp and blanks we are unable to fulfill.

In order to perceive these innuendoes and blanks, we have to go beyond the text and enjoy the position of producers and consumers of a given text. This can only happen if we belong to a given discourse community, where we can enjoy the status of being the readers of a text that was produced for us, as is the case, for example, of a medical doctor reading an article in a medical journal written by a colleague in his specific area of interest - or Mary reading Bob's message. There are many associations between the text and real world experiences in the lives of Bob and the doctor, which belong to them exclusively, as members of the respective discourse communities presupposed by the texts.

This is what is understood as the spatial perspective here. Reading and comprehension are produced horizontally, in a spreading process that develops from sentence to text, from text to intertext, and eventually from intertext to the discourse community - not necessarily in a autonomous and linear way, but with go-backs, revisions and path re-routing, where the different segments provide feedback to each other. It is not only the sentence that contributes to the text, but the text itself may also contribute to the sentence, disambiguating it or relating it to another sentence, which may even occur in another text. It is horizontal propagation, however, topographically displayed, syntagmatically constructed. This is comprehension on its spatial dimension.

### **The Temporal Dimension of Pleasure**

Under the temporal dimension, the emphasis is not on the textual surface, horizontally displayed, but in the sequence of events that occur in the reader's mind during reading. The main theoretical currents along this perspective can be found in the psycholinguistics of reading

(Goodman, 1967; Smith, 1971), including schema theory (Bartlett, 1961; Rumelhart, 1980) and metacognition (Flavell, 1976), on one hand, and in literary criticism, specifically the so-called receptive theory of literature, on the other hand. (Iser, 1974; Fish, 1980; Poulet, 1980) - Reader-Response Criticism from now on.

From the psycholinguistics perspective, we can say that what happens in reading is the making and testing of pre-constructed hypotheses. As we get along in reading a passage, we construct scenarios in our minds, using the data we gather from the text, but using what we already have in our minds in terms of a pre-constructed theory of the world.

As we move to Reader-Response Criticism, we can say that reading is "an event, something that happens to, and with the participation of the reader" (Fish, 1980, p. 72). Approaching a text in terms of the events that occur in the reader's mind as he or she advances in the reading of the text, leads to a temporal perspective where three moments have to be considered: before, during and after; during being the most important.

Before we read a text we make predictions about it. We try to guess what the text is about, by activating different schemata in our minds, until we find the one that fits the text in front of us. It usually happens with the first glance through the text when the title is read and some illustrations or subtitles are processed. Reading proficiency depends on this ability to make predictions.

What occurs during reading can be described by the reactions that the text arouses in the reader (from the Reader-Response Criticism perspective) or as the moment when we test the predictions we have made (from the psycholinguistic perspective). We may either confirm them, if we feel that the predictions were right - or we may revise and change them, if we feel that they were wrong. Reading proficiency also depends on this ability to correct predictions when they are wrong.

After reading the text, we usually make an evaluation of our reading. We want to know to what extent the purposes we had in mind when we started reading the text was achieved. We may also mentally

enjoy what we have read, go back in the text and revive some of its parts, or we may ignore it altogether.

### **Objectives and Hypothesis**

The purpose of this study is to analyze these two perspectives - spatial and temporal - by using one text and readers with different levels of proficiency. Considering that the temporal perspective involves how the reader reacts to the text, in terms of the affective domain, we will try to measure how much pleasure is involved in each reading, and how it relates to comprehension. We hypothesize that there is a close relationship between pleasure and comprehension, and intend to verify how high is the correlation between them.

We understand by comprehension the ability of the reader to relate the data from the text with the data from his or her previous experience. The reader will understand a text on automobiles, for example, as far as he is able to activate the knowledge stored in his memory about Formula 1 pilots, races, car makers etc. Comprehension relates to the cognitive domain.

Pleasure is a little more complicated, but we would like to define it as the ability to experience intimacy with the writer of the text. The reader feels that he or she is re-experiencing, in reading, the same pleasure the writer had in producing the text. In other words, enjoyment involves creativity and the ability to detect creativity.

Our working hypothesis is that there is a positive correlation between understanding and pleasure when reading a text. Although at first sight this correlation seems to be obvious, it may be argued that it is not always so. Much of what we read daily, including reports, business letters, handbooks, has to be understood, without being necessarily associated with pleasure. On the other hand, we may read a poem and enjoy it intensely without being sure that we understood it. It is probable, however, that pleasure and comprehension interact; the more we comprehend a text, the more we enjoy it - and the more we enjoy it, the better we understand it.

## Methods

Our purpose here is to investigate how different readers, from four different levels of proficiency, react to the same text. We hope to detect the difference between reading a text at the textual level and the discourse level. We also hope to uncover the relationship between the cognitive and affective domains.

### *Subjects*

Sixty seven Brazilian students from different levels of scholastic aptitude took part in this study. They were classified in the following way: Two groups from elementary schools (5<sup>th</sup> and 8<sup>th</sup> grades, one group from a secondary school (11<sup>th</sup> grade), and one group of university students (5<sup>th</sup> semester). We assume there is a positive correlation between level of scholarship and reading proficiency, expecting, for example, that 8<sup>th</sup> grade students are better readers than 5<sup>th</sup> graders; and university students better than secondary and elementary students.

### *Instruments*

The instruments we used were an article published in a Brazilian newspaper some years ago and a questionnaire. The topic of the article was the first anniversary of Ayrton Senna's death, a famous Brazilian race pilot, and the questionnaire tried to assess not only the previous knowledge the subjects had of the topic but also how they constructed cognitive and affective representations of the text, through questions inserted in the reading task.

### *Procedures*

The passage and the questionnaire for getting the data were read and answered in a regular class. We believe the use of class time, along with the careful graphical presentation of the texts and our oral introduction to the testing session, helped to increase students' collaboration and commitment. The complete questionnaire contained 7 pages, beginning with an evaluation of the student's previous



knowledge. This knowledge was assessed by asking the students to write a list of all the car makes, pilots and circuits that they could remember. Our assumption is that, all other things being equal, the longer the list, the more they knew about the subject.

The comprehension test itself, had 6 pages, and was handed out one by one, as the students finished each step of the testing session. Our intention was not only to assess comprehension as it was constructed, but also the expectations the students had after completing each step.

## **Results and Analysis**

The collected data are analyzed here after each step, from a temporal perspective, so that we could perceive more clearly the forward and backward movements of the readers in the process of constructing and reconstructing the meaning of the text, sometimes mediated by the need to totally demolish what had been constructed. But we will also look at the spatial perspective, trying to detect the horizontal relations that these readers tried to establish with other texts and the ideas underlying it.

The responses from the 67 subjects were typed and divided into four different files, one file for each level, producing a total of 14,945 words ( $m = 223$ ). The students who produced more were those in the 11<sup>th</sup> grade ( $m = 255$  words); the ones who produced less were those in the 5<sup>th</sup> grade ( $m = 148$ ). The data analyzed here are taken from the corpus of answers produced by the students, with an emphasis on the aspects related to the questions we are trying to answer: how subjects from different proficiency levels constructed meaning from text and how the cognitive aspects interacted with the affective domain.

### *Path re-routing*

The first data to be analyzed is the path re-routing that some readers demonstrated in their reading. This change can occur on the textual and intertextual levels.

One example on the intertextual level occurred when some subjects started their reading of the text, considering the movement from the first moment, when they saw the illustration that introduced the text, to the second moment, when they read the first paragraph. In the first moment, the subjects read the title of the article with picture and caption (Figure 1) and were asked to express their expectations as to the content of the text. All the subjects, without any exception, stated that the author would talk about Senna and his death.



Figure 1. Title of the article, illustration and caption (*Zero Hora*, March 21, 1995, layout adapted)

The first expectation (that the author would talk about Senna) is then tested with the reading of the first sentence in the first paragraph (all segments translated from Portuguese):

Segment 1 They were more than 20 years of intimacy with the podium - an intimacy so promiscuous, enchantingly promiscuous, that allowed our country to celebrate, eight

times, the conquering of the Formula 1 world championship.

The question that was asked after reading this first sentence was:

Task 1            Who will the author probably talk about in this first paragraph?

Table 1 shows the results from this first task. Notice that in the 5<sup>th</sup> grade all the students answered that the author would talk about Senna; in the 8<sup>th</sup> grade the percentage went down to 72%; reaching 37% at the university level.

TABLE 1. Answers to the question “Who will the author probably talk about in this first paragraph?”

5 <sup>th</sup> Grade	8 <sup>th</sup> Grade	11th Grade	University
Senna: 100%	Senna 72%	Senna 62%	Senna 37%

$r(\text{scholarship and correct prediction}) = -.98$

Although all the subjects had initially predicted (from title and illustration) that the text would be about Senna, we notice now that some students changed their predictions. This change in their expectation becomes interesting when we notice that it is possible to claim that in the initial sentence there is no information or any other clue indicating that the author will not talk about Senna - unless of course the reader, as a member of the discourse community of car races fans, has knowledge of other texts. This knowledge makes him look for something that is not said in the text, but somewhere else, leading him to reject the initial expectation that the text would be about Senna.

Although the clues to this horizontal search are not detected by the reader who does not have the previous knowledge assumed by the author, they can be found by those who do bring with them that kind of knowledge when they come to the text. We are supposed to know that it was not only Senna who allowed Brazilians to celebrate the conquering of the championship for eight times, but other pilots as well. Comprehension, which is not limited to the bounds of the text, demands this contribution from the reader.

The high correlation index between grade level and correction of prediction ( $r = -.98$ ) suggests that intertextuality is constructed step by step, developing from the first grades to university level.

Another important finding, considering university students, on one hand, and elementary and secondary students, on the other, is that only on the university level the majority of the subjects (more than 50%) went beyond the information provided by the text. In all other levels, the majority of the subjects, when doing the prediction task, remained within the limits of the text, not daring or not having the competence to go beyond.

This path re-routing, which the most proficient readers did with the knowledge they had of other texts, can also be done by using further data from the text itself, something which many readers will find out as they proceed in their reading. This can be demonstrated by finishing the first paragraph:

Segment 2      The splendid saga of the flying Brazilians began with Emerson Fittipaldi, the champion for the 1972 and 1974 seasons. What looked as an exception became the rule with Nelson Piquet, winner in 1981, 1983, 1987. And the rule seemed to have become eternal when Brazil believed that the genius of Ayrton Senna, champion in 1988, 1990 and 1991 had reduced all the bends and straights of the world into inoffensive toy circuits. Until the legend collided with that wall on the Tamburello

bend, no other country in the world had been so frequently happy on Sunday mornings.

What we want to find out now - as it is becoming clear, on the textual level, that the author will talk not only about Senna but also of the other Formula 1 pilots as well - is whether the readers, who have not yet revised their predictions, will revert their initial hypotheses now. Notice that the information now is in the text itself, so that for the task presented (Task 2), it is not necessary to resort to other texts.

Task 2 Do you confirm what you said on the previous page?

Table 2 shows the results for Task 2. The first thing to notice is that the students in the 5<sup>th</sup> grade, in spite of the initial incorrect prediction, did not revise their original hypotheses. In the 8<sup>th</sup> grade, however, the results improved drastically: only 4% of the subjects kept their initial wrong predictions. In the 11<sup>th</sup> grade and university level, there is still a percentage of 2%, which is not significant and can be attributed to random factors (lack of attention, etc.).

TABLE 2. Do you confirm what you said on the previous page?  
(Considering only those who made wrong predictions)

5 <sup>th</sup> Grade	8 <sup>th</sup> Grade	11 <sup>th</sup> Grade	University
100%	4%	2%	2%

$r(\text{scholarship and wrong prediction}) = -.69$

Contrary to what was involved in Question 1, where the ability to predict depended on what was said in other texts, here, correcting the previous erroneous prediction, can be made with the data from the text itself. As expected, considering the subjects involved in the study, correction of initial prediction occurred at an earlier stage of scholarship, somewhere between 5<sup>th</sup> and 8<sup>th</sup> grades - well below university level.

*Anaphora resolution*

Path re-routing, as was analyzed here, is based on the ability of the reader to connect one segment of text with another, a segment which may be present in the same text or in another text. This ability for making connections is also observed in the process of anaphora resolution, which, in strict terms, is the ability of the reader to find the antecedent for a word.

This is what happens when the author uses the word “legend” in the sentence “Until the legend collided with that wall on the Tamburello bend, no other country in the world had been so frequently happy on Sunday mornings” - which refers to the NP Ayrton Senna, mentioned in the same paragraph. The subjects were asked to locate the antecedent for the word “legend” (Task 3).

Task 3 Who does the word “legend” refer to?

Here, too, as shown on Table 3, the dividing line occurs between 5<sup>th</sup> and 8<sup>th</sup> grades. Although we used the word “who” in the question, not “what”, 50% of the students in the 5<sup>th</sup> grade answered that the word *legend* referred to an ancient tale.

TABLE 3.- Locating the co-referent for the word “legend”

5 <sup>th</sup> Grade	8 <sup>th</sup> Grade	11 <sup>th</sup> Grade	University
Senna: 33% A.T.: 50%	Senna: 89%	Senna: 95%	Senna: 96%

A.T. = Ancient Tale  $r$  (scholarship and antecedent recovery) = .74

The ability to make connections inside the text, be it for resolving anaphora, be it for confirming or rejecting previously-made hypotheses, develops before the ability to make connections intertextually. This should be obvious, considering that the more proficient reader, with more years of formal schooling, must have read more texts, and hence have acquired the ability to make more connections with other texts. What is surprising is the difficulty in making connections inside the

text itself, where the subjects were asked to simply link one segment with another, both explicitly mentioned. It is possible that an unknown variable has interfered with the study. The subjects, for example, may not have understood the instructions for the task. Unless something like that has occurred, the results indicate that the vast majority of the 5<sup>th</sup> grade students did not understand the text, even in terms of some basic skills such as the ability to connect one segment of text with another.

*Processing figures of speech*

Reading involves not only cognitive but also affective aspects, connected to the esthetic pleasure that the text may awaken in the reader. We tried to assess the affective domain through different kinds of questions, including direct and indirect questions, open and closed questions. Examples of these questions are “Did the text offer more or less than you expected?”, “What score would you give the text?” The results however were totally random and unreliable, due mainly to the tendency of young readers to exaggerate what they said about the text, thus inflating the data. Better results were obtained considering the figures of speech used by the author.

Two figures, embedded into each other and thus difficult to separate, should be highlighted here: gradation and comparison. The embedding can be observed in Segment 3, through the use of the words “princedom”, “kingdom”, and “imperial era”. As these words create a gradation of increasing order of importance, the pilots are also compared:

Segment 3      These magnificent circuit tamers taught to Brazilian smiling crowds that there are different ways to fly. The princedom of Emerson Fittipaldi set up the triumph of relentless patience, the dominance of brains over instinct. The kingdom of Nelson Piquet was the celebration of self-confidence, bordering on insolence, mother of all rebellious maneuvers. The imperial era

of Ayrton Senna produced the fusion of all the skills of the former conquerors of the throne, amplifying and blending their virtues into what made a young Brazilian pilot the greatest of all times.

Task 4 was used to evaluate reader's ability to perceive this gradation:

Task 4 Which words did the writer choose to describe the winning period of each champion?

Table 4 shows the results. What should draw our attention is the high correlation index between proficiency and the ability to perceive gradation ( $r = .97$ ), which indicates a gradual and continuous development from elementary school to university level. The percentage with university students (65%) shows that, even at the university level, the competence is not universally developed.

TABLE 4. % who answered "princedom, kingdom, and imperial era"

5th grade	8th grade	11th grade	University
15%	33%	50%	65%

$r(\text{scholarship and gradation}) = .97$

Perceiving this gradation can be regarded as difficult because it involves varied and complex reading processes, which must be activated by the reader in at least three moments. First, the reader must create a linking mechanism between the three sentences, keeping the read data in the operational memory, so that they can be recovered later: the word "kingdom", when met, must be connected with "princedom", and later, the NP "imperial era" must be connected with the two previous nouns. Again, this is the principle of horizontal spreading that propagates through the text. Second, it is not enough to



make these connections; it is also necessary to detect what type of relationship exists between these NPs. The reader must perceive that there is gradation of increasing order of importance between them; that is, "kingdom" is more important than "princedom" and "imperial era" is more important than both of them. Third, the reader must be able to identify the comparison process that is being constructed by the author, in a scale of ascending values that starts with the champion Emerson Fittipaldi. Senna is not only "the greatest of all times"; he is the greatest among the great. We then start to understand why, to talk about Senna, the author had to talk about the other champions: only by comparing Senna to the others, could he give an idea of the right dimension of Senna's greatness.

The comparison mechanism is kept on the next paragraph (Segment 4), where it reaches epic proportions. The distance between the "dead hero" and his competitors became even greater, inside and outside the circuits. In the circuits we have extras and supporting actors; outside, we have the abyss between reality and dream, between current sadness and past joy. We can notice the use of gradations spread all over the paragraph, from the first sentence, with the cameras "ever more alert, more agile, more creative", to the last sentence with the adverbial phrases beginning with the word "without": "Without Senna's tunes, without the champagne bath, without the smile that eventually expanded the boy's face."

Segment 4      Astounded with the performance of the admirable soloists always documented in detail by TV cameras that were ever more alert, more agile, more creative Brazilians reserved worthy applauses for talented supporting actors such as Jose Carlos Pacce, or a symbolic wave to extras who were doomed to see Ayrton Senna through the rear mirror when the champion was about to overtake them. After the inexcusable manslaughter at Imola, these extras conquered more space and supporting actors are awkwardly trying to replace the dead hero. Without

Senna's tunes, without the champagne bath, without the smile that eventually expanded the boy's face, Brazilian Sundays once again became the gloomy prospect of a working week.

The task asked from the subjects after reading the paragraph involved prediction and is exemplified below:

Task 5            Now we are going to read the last paragraph. But before we do that, write down what you think the author is going to say.

It was an open question and therefore more difficult to be analyzed. We were able, however, to detect, three main trends, in students' answers. The first and most frequent idea was that the author would simply summarize the text, repeating what he had already said in the previous paragraphs, without adding new information:

The author will repeat the idea that Ayrton Senna was undoubtedly the greatest pilot in Formula 1 (11<sup>th</sup> grade).

The second trend was that the figure of Ayrton Senna would remain in the memory of the Brazilians.

Ayrton Senna is not dead; he will always be present in the memory of those who loved him, in the sweet memories of the car races, in the joy of his victories, in the heart of each Brazilian (university student).

The third trend, more interesting considering that it confirmed a recurring style in the text, highlighted the use of comparisons.

The author will compare all the pilots and will say that none was like Ayrton Senna (11<sup>th</sup> grade).

None of these trends, however, could be correlated with the subjects' scholarship. The results were totally random, although some of the answers provided by the students were very close to what the author really said, as can be seen below:

Segment 5      Hardly will we ever see another Emerson Fittipaldi. It is unlikely that another Nelson Piquet will turn up. Definitely there will never be anybody like Ayrton Senna, because no other country which had somebody like him will ever have a second chance on earth.

The author, with the stylistic devices used so far, had in a way committed himself to the reader, raising expectations that he would be able to finish the text in a high tone. In fact, he does not disappoint the reader. He reiterates, both in terms of content and form, what he had said before. In terms of content, he draws one last comparison between Senna and the other pilots, and, in terms of style, he repeats the device of gradation in three sentences with increasing impact, beginning respectively with the phrases "hardly", "unlikely", and "definitely."

A statistical survey of the most frequent words used by the students in their answers showed a predominance of comparison adverbs such as "more," "better," and "greater" - which seems to indicate that the subjects perceived the comparisons used in the text. Once again no correlation was found with scholarship or reading proficiency.

### **Enjoyment in Reading**

We can argue that pleasure in reading depends on two sources. The first is the interest that the reader may have on the topic of the text; all other things being equal, the reader interested in automobile racing will probably have greater pleasure in reading a text on cars. Interest exists a priori, before the reader comes to the text, and, when present, may predispose him or her to read the text. Another source of pleasure

are the reactions that the text may awaken in the reader. These reactions do not exist a priori and are not necessarily based on interest; they are constructed during reading, activated by what the reader gets from the text.

In the present study, interest was measured indirectly through two different instruments. The first was a task in which the students were asked to write down everything they could remember about car makes, circuits, and pilots. We believe it is reasonable to assume that there is a positive correlation between the size of this list and interest on car racing.

The results showed that the students who produced longer lists were those in the 11<sup>th</sup> grade, followed, surprisingly, by those in the 5<sup>th</sup> grade. The correlation between the number of items in the lists and the score the students gave to the text, reflecting appreciation, produced a statistically significant index of  $r = .66$ . These results, therefore, suggest that there is a relation between interest and pleasure in reading. All other things being equal, we enjoy more reading a text about a topic we are interested in.

We were able, therefore, to demonstrate that there is a correlation between interest and enjoyment. What we were not able to show was the correlation between enjoyment and reading proficiency; when the data were analyzed subjectively, by asking the students to grade the text. Both advanced and beginning readers provided the same grade. In principle, it is not only because one understands a text better that one will find more pleasure in reading it; theoretically we can enjoy a text without understanding it, or even understand it erroneously, from the point of view of the discourse community for which the text was written. And we can also fully understand a text without appreciating it, sometimes for the simple reason that we can predict everything the author may say in each paragraph.

The point we are trying to make here is that there is a great difference between enjoying a text in general terms - without being able, for example, to explain why - and experiencing the esthetic

pleasure of reading. Enjoying is a simple subjective experience, exclusive of the reader, with more or less intensity, but without consideration of the data of the text, or the discourse community parameters where the text is inserted. Esthetic pleasure, on the other hand, can be defined in more objective terms, involving not only the reader's subjective data but also certain characteristics of the text. It can occur, for example, when the reader is mentally beside the author, not necessarily constructing the text with him, but watching him constructing it, observing how he puts the words in the text, choosing carefully, for example, between "princedom," "kingdom," and "imperial era" and putting them in the best order. For that, the reader has to know these stylistic devices and the effects for which they may be used.

The challenge in describing the esthetic pleasure in reading is, therefore, to objectify sensitivity. The results of this investigation show that when we measure appreciation of a text simply by transcribing what the readers say, we do not find any relation between pleasure and proficiency; the correlation is found when we measure appreciation through the conventions which are used by a discourse community to indicate good taste. Only the more proficient readers are able to find - and appreciate - these indicators in the text.

#### *The fallacy of enjoyment*

In terms of reading pleasure, considering only the answers given by the students, we could apparently conclude that there is no correlation between comprehension and pleasure in reading. It is not because one comprehends a text better that one will have more pleasure in reading it.

There is, however, a fallacy in the research methodology normally used to collect the data that leads to this conclusion, including the one in this study - and that was noticed only in the data analysis stage. When we measure comprehension we do not ask the subjects whether they did or did not understand the text. We use an external instrument such as a multiple choice test, a summary task or any other means such as the level of scholarship used here. They are all objective data, including

the summary task, which although produced subjectively is objectively analyzed by the researcher, possibly comparing it with the original text.

When we want to measure enjoyment, however, we have the tendency to just ask the subject whether or not he liked the text. Even if we use a Likert scale, we end up by considering only what the reader said, without establishing any triangulation with any other data.

Therefore, when we relate comprehension with pleasure, we are not only comparing data which are different in nature, which in fact should not offer any problem, but also comparing data which were collected through different methodologies, some objectively others subjectively - which seems to be problematic. This explains, in our view, the lack of correlation between pleasure and proficiency level.

Notice, however, that when we measure this correlation in more objective terms, using reader's ability to detect the figures of speech used by the author, we get a high correlation index, as seen above. Our conclusion then is that the initial hypothesis of a correlation between comprehension and pleasure is confirmed. For that, however, it is necessary that the data be collected objectively, through an instrument that is external to the reader such as scholarship to measure proficiency, or the presence of figures of speech in the text to measure appreciation.

## **Conclusion**

This study was designed to test the hypothesis that there is a positive correlation between comprehension and pleasure in reading. Comprehension was seen on a spatial dimension, where the reader, in order to understand the text, must be able to establish connections between different segments, inside and outside the text. In principle, we started from the assumption that the further the reader goes over the text being read, advances to other texts and circulates in the discourse community, the greater is the proficiency in reading.

Pleasure, on the other hand, was defined as a more temporal phenomenon, connected to the reactions that the readers experiment as the text is processed. For the temporal dimension, we used some of the ideas found in Reader-Response Criticism (Iser, 1974; Fish, 1980; Poulet, 1980), which see reading as a sequence of events that occur in the reader's mind.

As the main research tool, we used a text that clearly resorted to these two dimensions, not only expecting the reader to be familiar with other texts, but also appealing to the affective domain, mainly through the use of many figures of speech.

The initial hypothesis that there is a correlation between comprehension and pleasure in reading was confirmed - as far as objective data are not mixed with subjective ones. Secondarily, we also found a correlation between topic interest and reading enjoyment.

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