

PRINCIPLES OF UNITY AND COHERENCE IN PARAGRAPH
STRUCTURE

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RESUMO

Partindo-se do conceito de que um texto não é apenas um grupo de sentenças ou cláusulas independentes, mas é, sim, uma unidade de significado com intenções comunicativas, preparou-se e testou-se em sala de aula uma técnica que facilita a compreensão da unidade, e coerência da estrutura do parágrafo, como um passo para se chegar à percepção da estrutura textual. Usada com alunos pós-graduados de Sociologia, Letras e Ciências Políticas, verificou-se que a técnica ajudou a superar algumas das dificuldades de leitura.

Introduction

What textual features would we isolate in order to teach reading in a short period of time? Since students have to deal with difficult texts which focus on their own areas we have to prepare them for coping with real world texts. Thus, a fundamental process which ought to be implemented is how to detect the logical organization of texts or deviations which appear in badly written ones. However, to achieve such a sensitivity strategy, they have to recognize the devices that link sentences together. Within the several levels of textual structure: words, phrases, sentences and paragraphs, there are some linguistic patterns that contribute to its unity. A text is not just a group of independent sentences or clauses. It is a unity of meaning with communicative intentions. Therefore, in an effort

to help students increase reading comprehension, we designed and classroom-tested a technique which facilitates the learner's understanding of unity and coherence in the paragraph structure for further perception of the textual framework. It was used with postgraduate students of Sociology, Letters and Political Sciences in the fourth week of their course and it covered a period of two classes. We have found that for most students such procedure has helped to overcome some of the most troublesome reading difficulties.

1. Paragraph Structure

In order to understand the paragraph better it is necessary to know its structural pattern. To begin with and enable students to perceive some of its characteristics I present two contrasting examples and ask them to find out, in pairs, the differences between them.

Example A.

- | | |
|---|--|
| a | Seat belts prevent the wearer from being injured by the body of the car in a collision. |
| b | The Road Research Laboratory estimates that the wearing of seat belts would save the lives of 73% of car drivers and passengers. |
| c | When crash helmets were made compulsory the number of motor cyclists killed decreased. |
| d | The wearing of seat belts would be easy to enforce. |
| e | Only if there is legislation will people be persuaded to wear seat belts. |
| f | Cars could be fitted with a device which would prevent the ignition being turned on until the safety belt was attached. |
| g | Introduction of the compulsory wearing of seat belts in Victoria in 1970: |

(Moore 1980:49)

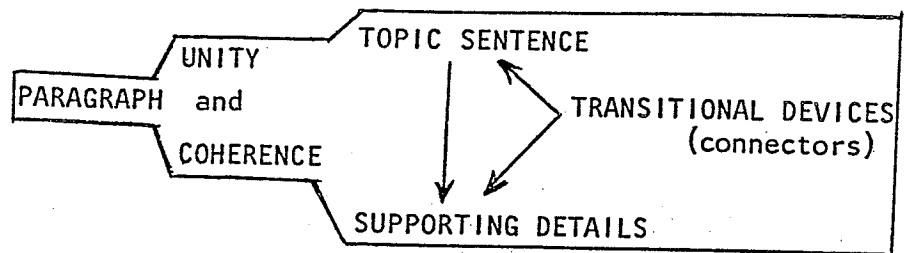
Example B.

<p>There are many factors which contribute to the problem of road safety. Although cars legally must be fitted with seat belts, it is not compulsory to wear them. In spite of a great deal of publicity people still drive after drinking alcohol and the legislation on this is not sufficiently strong. A major factor in road accidents is speed and there are obvious ways of limiting that. Lastly, one of the most serious problems is that the police and the courts are unable to enforce adequately current legislation.</p>
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(Moore 1980:49)

Predictably, students agree that example A is simply a group of sentences about the same topic. They do not form a passage because there are no relations between them. However, learners notice that example B represents a logical paragraph. It contains a main idea which is developed by means of supporting sentences. These are linked to the independent idea by means of transitional devices (connectors) which provide unity and coherence to the paragraph.

The diagram below summarizes the structures of the unit of discourse:



As a next step the students read the paragraph below and I ask them the following questions:

- i) What is wrong with it?
- ii) Do the examples support the main idea?
- iii) What can you say about the final sentence? Does it contain two contrasting ideas?

It is well known that cats are more intelligent than dogs. For example, three out of every four motorists die of heart disease before they are fifty. Another example is the commonly observed ability of dolphins to understand human speech. In conclusion I should like to emphasize that whereas girls learn mathematics quickly, boys learn mathematics equally quickly.

(Moore 1980:5)

They observe that the main idea does not relate to the other sentences to form a coherent sequence. There is syntactic cohesion but it lacks semantic coherence and this illogical sequence of ideas makes it impossible to understand the writer's message. Thus, I explain that the paragraph is not just a group of isolated sentences. It is a unity of meaning with communicative intentions and in order to be better understood the writer must decide on a topic and then develop it by means of supporting material. He must limit his focus of attention and not digress into irrelevant ideas. These, in fact, may frustrate the reader's understanding either because of lexical or syntactic complexity. On the other hand, a coherent sequence of ideas enables the reader to decode information, predict what is coming next and comprehend what the writer has intended to communicate.

The students are then given several paragraphs. They work in pairs in order to identify:

- A - Topic sentence
- B - Supporting details.

The Hawaiian Islands are in the Central Pacific Ocean. The major city is Honolulu which is also the state capital. It is a paradise for surfers, as well as a tourist resort with many interesting sights such as the famous Waikiki Beach, and the Coral Gardens with rides in glass bottomed boats over colorful coral formations. It is famous for its good climate and for the warmth of its personal relationships as symbolized by the word "aloha", meaning love or affection and used as a greeting or farewell.

(Speeden 1981:22)

Plastics are of two main types: hard and soft. Plastics of the first type (hard) aren't easy to melt and therefore are useful for radios and different kinds of electrical articles. This type of plastic is often breakable. Plastics of the second type (soft) aren't breakable and we can bend them. They are useful for pipes and children's cups but these types of plastic are easy to melt.

(Speeden 1981:3)

There are several factors affecting climate. One factor is the amount of sunlight received. Altitude, or the height above sea level, also determines climate. The oceans have an effect on the climate of adjacent land. In addition, climate is influenced by the general circulation of the atmosphere.

(Moore 1980:19)

Besides identifying A and B above the students need to know the devices that make a text cohesive: how sentences are connected and how this connection is developed. They already know that there is a common theme running through the sentences and that there is a logical order to the information that is being given. However they need to be made aware that in addition to the thematic link, there are also important lexical and grammatical links. So in order to help them recognize some cohesive ties I present a table with examples of lexical cohesion.

2. Lexical Cohesion

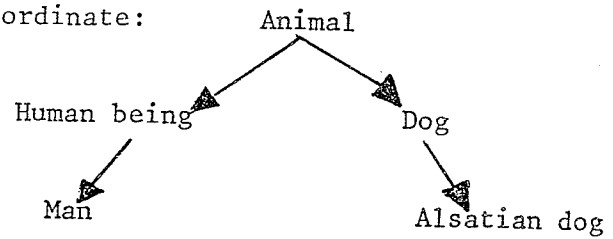
Categories	Examples
1. Cooccurrence	"Sounds can be described in terms of their <u>frequency</u> , <u>intensity</u> and <u>length</u> ".
2. Reiteration 2.1. Synonym	"I turned to the <u>ascent</u> of the peak. The <u>climb</u> is perfectly easy!"
2.2. Repetition	"Some deserts have a surface of <u>sand</u> . The <u>sand</u> often forms dunes."
2.3. Superordinate	"The <u>mass media</u> are often badly used. <u>Newspapers</u> only give sensational news. <u>Radio</u> programmes are usually superficial. <u>Television</u> has bad effects on people."

To further enhance the above categories, I give them the following paragraph with elements of lexical cohesion extracted from it.

Many animals have an excellent sense of smell, which they use in hunting. On the other hand, their eyesight may be poor. Dogs, for example, have poor eyesight and no color vision. They see only shades of gray. But a dog's sense of smell is extraordinary. The breed of dog known as Alsatian has 220 million olfactory cells. Man has five million. Scientists believe that the Alsatian is one million times better than man in detecting odors. The human sense of smell, however, is really quite good. The average human being can distinguish more than 10,000 different odors.

(Curry 1984:7)

1. Cooccurrence: sense of smell, odor, olfactory cells
2. Reiteration.
 - 2.1. Synonym: sense of smell/odor
human being/man
eyesight/vision
 - 2.2. Repetition: sense of smell/sense of smell
poor/poor
million/million
odors/odors
 - 2.3. Superordinate:



I ask them to read the paragraphs below and work in pairs to identify examples of lexical cohesion. Then they discuss their choices and try to achieve the same results.

Cooccurrence

Now reporters can phone or telegram in from all quarters of the globe, and have their stories recorded with next to no delay to the message in transit. And the newspapers themselves can be simultaneously printed in several centres and distributed within hours by the modern transport system.

(Moore 1980:89)

Synonym

The coffee plant, an evergreen shrub or small tree of African origin, begins to produce fruit 3 or 4 years after being planted. The fruit is hand-gathered when it is fully ripe and a reddish purple in colour. The ripened fruits of the coffee shrubs are processed where they are produced to separate the coffee seeds from their covering and from the pulp.¹ Two different techniques are in use: a wet process and a dry process.

(Moore 1980:39)

Repetition

An insect goes through several stages of life. The number of stages depends on the type of insect. Butterflies go through four stages - egg, larva, pupa and adult. The transformation from egg to adult in four stages is called complete metamorphosis.

(Moore 1980:7)

Superordinate

The chordates are a large and highly diverse animal group which comprises vertebrates or animals with backbones (often referred to as the higher chordates) as well as a group of animals which lack vertebrae but which resemble vertebrates in other important respects. These are referred to as protochordates, or lower chordates. The vertebrates are divided into five classes: fishes, amphibians, reptiles, birds and mammals. Each of these five classes can be further subdivided into smaller groups: for example, mammals can be classified into 18 groups, known as orders. Examples of orders are marsupials (such as kangaroos), primates (including man and the monkeys), and carnivores (including dogs and cats). The class of reptiles consists of five orders: examples of these are crocodylians (including crocodiles and alligators) and squamata, examples of which are snakes and lizards.

From: *Larousse Encyclopedia of Animal Life*
(Hamlyn)

(Moore 1980:73)

3. Grammatical Cohesion

Since grammatical cohesion involves reference, substitution, ellipsis and connecting words, it needs to be explained by means of different tables with examples and activities that follow each.

- 3.1. Reference. This is a relation between meanings (semantic level)
- 3.1.1. Exophoric (situational) e.g. "Who is that? This is John". (When introducing him)
- 3.1.2. Endophoric (textual)
- a) anaphoric (pointing-back word) e.g. "Some deserts have a surface of sand. The sand often forms dunes. These are created by the wind."
- b) cataphoric (pointing-forward word) e.g. "This is what worries me: I can't get any reliable information!"

Endorhoric Reference

Types	Linguistic items	Examples
Personal (person)	I, me, mine, they, them, their, theirs, etc	There was a brief note from Susan. <u>She</u> just said, " <u>I</u> am not coming home this weekend."
Demonstrative (location on a scale of proximity)	this, these, that, those, here, there	I like the lions and I like the polar bears. <u>These</u> are my favourites.
Comparative (identity similarity or difference)	such, so, likewise, equally, same, other, differently, otherwise, etc.	Gerald Middletown was a man of mildly but persistently depressive temperament. <u>Such</u> men are not at their best at breakfast.

I ask my students to read the following paragraph with some cohesive ties underlined. Then they draw a line to connect the highlighted words to the ones they refer to.

Everyone accepts that the microprocessor will eventually permeate into every kind of equipment and be used by all industries. But even these powerful calculating devices depend on other components. Behind every microprocessor must be a store to hold the results of its calculations and the instructions which control them. The most versatile way of doing this is to hold them in a programmable read-only-memory or PROM. This differs from the random access memory or RAM, by providing long term, instead of short term data storage.

By 1971 semiconductor makers were ready to exploit a very old principle for the memory technology business—the use of miniature fuses which could be selectively blown to change conductor patterns. This is the origin of the modern programmable read-only-memory, or PROM.

(Moore 1980:9)

I also give students a text with some referential terms deleted:

The human behaviour _____ social scientists study is learned behaviour. The behaviour of the human body as a living organism is studied by the biologist, the bio-chemist, or the physician. _____ is inherited through the genetic development of _____ species (*homo sapiens*). For example, all physically normal and healthy humans learn to walk as _____ bodies grow and develop. Social scientists concern _____ with the behaviour that man must learn so that _____ can take _____ place in a social group. In order to be a functioning member of a group, each member must learn to behave in a way acceptable to other members of _____. The kind of behaviour _____ must be learned differs according to the differences among societies.

(Stevenson 1981:5)

In groups, they try to fill in the blanks from their knowledge of English. Later, they are given a list with the writer's actual choices included:

- i) which
- ii) This behaviour of man's physical body
- iii) his
- iv) their
- v) themselves
- vi) he
- vii) his
- viii) that group
- ix) which

3.2. Substitution . Replacement of one item by another.
This is a grammatical relation.

Types	Linguistic items	Examples
Nominal	one/s, the same	1. "I'll have potatoes and meat". "I'll have <u>the same</u> !" 2. "Are there lions in those hills?". "Yes, we saw <u>one</u> on the way over".
Verbal	do, does, did, done, doing.	"Does Peter sing?" "No, but Mary <u>does</u> !"
Clausal	so, not.	"They've failed, then?" "I regret <u>so</u> " "Has everyone gone home?" "I hope <u>not</u> ."

I ask students to read the paragraph below and identify the items that are being replaced.

Climate affects the culture of a country. Men must learn to live within the limitations of their environment, and climate is an important part of the physical environment. Life in a tropical country is less strenuous and more casual than it is in a temperate one. Men work shorter hours and less vigorously in a hot climate. They cannot play hard either. They tire easily. They can relax by reading, by sipping cool drinks, or by listening to soothing music. They must try to conserve their energy. The wisest ones learn to respect the demands of Nature. (Friend 1971:43)

3.3. Ellipsis . Omission of one item in order to avoid unnecessary repetition.

Types	Examples
Nominal	"They haven't got my usual morning paper. Can I borrow <u>yours</u> ?"
Verbal	1. "Have you been swimming?" "Yes, I <u>have</u> !" 2. "Is John going to come?" "He <u>might</u> "
Clausal	"I kept quiet because Mary gets very embarrassed if anyone mentions John's name. I don't know <u>why</u> ."

Students read the paragraph below. Then, in groups, they try to find out the items that are being omitted.

Most airline pilots require a knowledge of English. Although few need English to deal with emergencies, a knowledge of English for these situations is a wise safety measure. Some have to deal with English-speaking colleagues.

(Moore 1980:26)

3.4. Connecting words. Words and phrases used to add an idea (such as: also, furthermore, more, so) to indicate sequence, to indicate result, to introduce an example and so on.

Functions	Connecting Words	Examples
addition	and furthermore also besides moreover in addition again	She is very poor. In addition, she doesn't like to work
contrast	but however nevertheless unlike on the other hand yet on the contrary instead	At first John didn't want to go to the meeting. Later, however, he decided to go.
comparison	likewise similarly correspondingly in the same way in like manner	"Some have little power to do good, and have likewise little strength to resist evil." (Samuel Johnson)
emphasis	in fact certainly actually indeed as a matter of fact	I think everybody likes him. In fact, I am quite sure
concession	even though though although despite this	Though they are so poor, they are always neatly dressed.
example	for example that is in particular for instance in other words	Many great men have risen from poverty - Lincoln and Edison, for example
reason	thus as a result consequently accordingly so therefore then hence for this reason because of this	It was raining; therefore we decided to stay at home.
conclusion	in summary finally to sum up in conclusion in short	The techniques discussed are valuable. Each chapter is supported by a well-selected bibliography. In short, this is an interesting and clearly written textbook for geography teachers.
sequence	first second next	First, I must finish this work. Second I must go to school and meet my husband there

Students read the following text and select the most appropriate link-words from the list given below:

A colour consultant from Toronto explained to the Inter-Society Colour Council meeting in New York an ingenious scheme which a client company had conceived for increasing the sale of potato peelers. He began by pointing out a puzzling fact. 1 potato peelers 'never wear out', enough are sold in two years in his country to put one in every home. What happens to them? He gave this answer. 'Investigation reveals that they get thrown away with the potato peelings.' One of his colleagues, he added, had then come up with a dazzling plan for helping along this throw-away process. He proposed that their company paint their peelers 'as much like a potato peeling as possible.'

. 2 a potato-coloured peeler wouldn't have much eye-appeal on the sales counter. They decided to solve that by displaying the peeler on a colourful card. Once the housewife got the peeler home and removed the bright card, the chances that she would lose the peeler were excellent. . .

In some cases the consumers have no choice but to be waste makers 3 the way products are sold to them.

Many paste pots come with brushes built into the cover, and the brushes fail by a half-inch to reach the bottom. 4

. millions of 'empty' paste jars are thrown away with a few spoonfuls of paste still in them. 5

., millions of 'used' tubes of lipstick are thrown away with a half-inch of lipstick remaining in the tube.

(From Vance Packard: *The Waste Makers* (Pelican, 1961))

- 1 a) because
b) although
c) for example
d) since

- 4 a) similarly
b) for example
c) however
d) thus (= in this way)

- 2 a) in addition
b) on the contrary
c) in this way
d) however

- 5 a) likewise (= similarly)
b) on the contrary
c) yet
d) for instance

- 3 a) in spite of
b) because of
c) as
d) in addition to

(Grellet 1981:49)

In the next some link-words are in italics. Students read it and classify the connectors according to their function.

Australia became prosperous *because of* the wickedness of England,' someone said. What was meant by this?

Simply that in the beginning Australia was a place to which convicts were sent. It was expensive to keep them in prison *so* the government was anxious to be rid of them. Before 1783 we had shipped convicts to the American colonies. *But* the United States of America after 1783 did not want any more of these unruly immigrants. For a year or two they were kept in disused rotting ships on the Thames, *until* the suggestion was made that Australia, 12,000 miles away, would be an excellent country to harbour them. Captain Cook had sailed round the Coast and discovered a place he called Botany Bay *because* the flowers there were so wonderful, and this was chosen for a convict settlement.

A certain Captain Phillip was given charge of the first group to go there in 1788. *After* five months' sailing they arrived at Botany Bay, *but* Captain Phillip decided it was not suitable and went farther on and landed at what is now called Sydney Harbour. The term Botany Bay was *nevertheless* used for this colony.

The government had shown little imagination in beginning this venture. Captain Phillip begged for more supplies. He needed seeds, farm implements and food. *Instead* he was sent more convicts. *After* four years of unrewarding labour Captain Phillip retired because of ill-health. (Adapted from A. M. Newth: *Britain and the World* (Penguin, 1966))

(Grellet 1981:47)

As a final activity students can be given a short text:

Much research has been carried out in recent years into sleep. We know a great deal about the mechanics of sleep and we are beginning to know about the biochemical changes involved. However, we are still a long way from finding out answers to such questions as how much sleep a person needs. While the physiological bases of sleep remain very much a matter for conjecture we do nevertheless have considerable evidence on how much sleep people do in fact obtain. We still need to know more about the kinds of effects that sleep deprivation causes. In spite of the considerable effort devoted to investigating why we sleep, there is still disagreement in this area. The fact that sleep deprivation causes numerous harmful effects suggests that the body requires sleep to restore itself. However, more research is needed to determine whether this is so or whether sleep is the result of adaptation to the environment. There is also the possibility that these two alternatives may not be incompatible.

(Moore 1980:35)

Then a list of questions such as:

- i) What is the topic sentence?
- ii) Which sentences directly support the main idea?
- iii) Has the writer used any connecting words? Identify them.
- iv) Which of the following did the writer do to support the topic: explain, compare, contrast, give reasons?
- v) How did the writer end the text? What did he do at the end: summarize the topic, ask a question, introduce new ideas, point to future directions?

This kind of activity enables the students to re vise and retain the principles of unity and coherence which were mentioned during the study of paragraph organization.

4. Conclusion

The activities discussed above proved to be successful in providing students with the means for recognizing the most common cohesive devices found in real world texts and thus reach a better understanding of textual information. Further pedagogical "action research" is needed to validate the effectiveness of such technique with different groups of learners.

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