

POWERPOINT IN ACADEMIC COMMUNICATION

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Abstract

The multimedia presentation is considered a system built up from the structure of the text describing the subject of scientific knowledge thus displaying its meaning and content in cognitive schemas. The text acquires new linguistic characteristics and becomes part of semiotic mechanisms uniting different categories which combine cognitive with sociocultural dimensions.

Key words: *presentation, text structures, language characteristics, sign systems, rhetoric.*

Introduction

Academic communication in the broadest sense can be considered as a process of delivering a message and eliciting its meaning in order to achieve change. In searching meaning in the sense of new knowledge one overcomes categories of different nature, significance and meaning; information and interpretation; analysis and synthesis; language and text; content and composition; speaking and impact. The model Rower Point integrates these different categories under the control of the scientific, institutional, technological, linguistic, and socio-cultural context.

This syncretic unity creates broad opportunities and imposes strict limitations raising questions, whose answers add various contents that are often non-unidirectional, but in many cases contradictory:

- compression and relevance of the text;
- coherence and eclecticism in the relations between sign systems;
- accents and descriptions in the content;
- science and connotations;
- convention and improvisation;
- language and rhetoric;
- attention and impression.

Different viewpoints on how to present information are largely due to the peculiarities of the technological regime in structuring the multimedia presentation; semiotic and semantic criteria in the combination of conventional information with individual choices of its presentation; specific interactions between language and speech and between language and reality.

Text

The disciplines of the text coexist in the same empirical field, but differ both in their academic status and the objectives, methods and procedures for acceptability, as well as the very notion of text, from which they depart and which they produce (Rastie, 2003). The text in a multimedia presentation remains the main but not the only means of expression, which, however, by virtue of its capabilities gives solid semantic support for interpretation and analysis of the information presented. The text is organized into a system of text structures. Since the concepts of system and structure incorporate different contents, here they are understood as: a number of units (elements) with certain relationships between them, forming a whole (unity) and: internal structure

of the system organization, which represents the unity of stable and regular relationships of its elements (Kasabov, 2008).

According to the sense of this theoretical understanding the multimedia presentation can be viewed as a system built by the structures of the text that describe the object of scientific knowledge, unfolding its meaning and content in text structures (cognitive schemes).

Text structures

In the competition between means of expression of different semiotic systems, the scientific descriptive text is compressed to cognitive schemes in a multimedia presentation - a traditional form of transmission of information. Segmentation of the text is necessary both because of limited space in the slides and for greater clarity of presentation. The descriptive strategy complies with the requirement "less means more." Text components are determined schematically which changes linguistic characteristics. The meaning and content of the thematic units (terms) is composed in cognitive schemes:

- Meaning of terms
- Definition

According to the theory of terminology definitive sentences represent the linguistic description of the concept based on part of the characteristics, expressing its meaning. Features, included in the definition, should be necessary and sufficient to identify the named object and its linguistic expression in one sentence. The meaning of the term expressed by identifying characteristics in the definition is distinguished from the content of the term, which includes the whole range of knowledge of terminology units in science. The content includes both concrete and specific signs and relationships between terms and the results of these relations (Popova, 1990).

• Contents:

- classification according to a concrete feature;
- characteristic according to a specific feature;
- relationship (regularity, dependence, function, process, reaction) between terminological units;
- result (consequence) of relationships.

Language characteristics in describing the content of the terms:

- Replacement of traditional syntactic structures with rubrics.

Examples:

Photoisomerization

- Thematic elements - rhodopsin, retinol.
- Relationships:
 - a photochemical reaction transforms the visual pigment rhodopsin in retinol;
 - retinol passes from cis- to transform;
 - polarity of the cell membrane reverses.
 - Consequence - ability to see - the information reaches the brain through the action potential.

Maintaining the blood sugar level

- Thematic elements (biologically active substances) - glucose, insulin.

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- Relationships: upon increase of the glucose concentration in the blood serum (norm $2,8 \div 6,1$ mmol / l) insulin secretion is stimulated.
- Consequence:
 - Physiological - high serum glucose level returns to normal;
 - Pathological - diabetes.
- Syntax structures of mathematical type: If X, then Y; When X ... Y ... becomes; As much ... X, so Y ...

If the electron in a basic state receives energy, it occupies a higher energy level (absorption of photons).

The more solid the X-ray radiation, the deeper it penetrates the patient's body (Quality of radiation).

- Sentences starting with phrases: function of, in interaction; according to; as a result of; as a consequence of; an effect after ...
- Inclusion of text content in the form of graphs, tables, figures.
- Use of artificial signs replacing language ($h\nu$, e^- , n^0 , p^+ , γ , m , π -bond, cis (Z) isomer, the trans (E) isomer).
- Use of graphic terminology abbreviations:
 - initial (letter abbreviations: PH - pulmonary hypertension CHM - congenital heart malformations and sound abbreviations: PAC - persistent arterial channel;
 - complex abbreviated words: AV - aortic valve, ECC - extracorporeal circulation.

Sign systems

At present, the rise of multimedia encourages the development of semiotics. Global semiotics undoubtedly owes its character to its philosophical nature, while research semiotics has private objects, languages, images, music (Rastie, 2003). Understanding of meaning as specific meanings of the object or phenomenon of reality triggers semiotic mechanisms as conceptual-semantic content is understood by relating it to the actual subject-phenomenon to which one refers what is perceived, presented or thought. Semiotics separates the the vast variety of characters mainly in three categories (Bankov, 2001):

- an icon - demonstrates the same quality or the same configuration of properties as the nominated object, for example. image, picture, diagram, model;
- a symbol - determined conventionally with no direct connection with the dynamic object, but refers to it with the force of law, for example: words in language, social, medical, religious symbols;
- an index - determined by a causal connection with the object, for example. disease symptom, human footprints, arrows for direction.

The multimedia presentation type combines means of expression of different sign systems based on semantic criteria towards specific meanings.

In the process of this type of communication systematic relations between sign systems fix ideas about concepts or unload from the information tension.

Multimedia literacy

Interactive rich media creates the concept of media literacy, which includes understanding of both the broader concept of educational imperatives and the exit of digital transformation of writing

and reading far beyond the technological competence. In this respect multimedia literacy is seen as a perspective for the application of a wide variety of activities in a wide range of socio-cultural spectrum.

The media is analyzed as a communication form and communication technology whose configuration consists of four components: a symbolic system, technology, content and situation. The symbolic system and technologies for its presentation are interrelated because they define certain cognitive requirements to elicit information and are relevant to the skills needed for successful use of the media. The content and the situation are distinguished as socially defined correlates (Todorov, Dushkov).

Analyzes of technological capabilities and limitations of the multimedia presentation recommend: one idea - one slide; more vision - less text; 6 lines of text - 6 words per line (rule 6x6); identification of the appropriate places in the slides for signs of semantic burden; new technical possibilities of combinations and effects are created. Despite the multidirectional guidelines, for multimedia perspective information sources remain a major requirement, which are units of the same semantic level, seeking intersections of specific meanings.

Language and rhetoric

Localization of "places" for improvisation in presenting and the pursuit of information in academic multimedia presentation seem a daunting task. In the description and reasoning of information data, however, there are specific interactions between both language and speech and between language and reality. These create grounds for penetration of intermediate contexts (socio-cultural, associative, rhetorical). In these language can exit its secondary role of mediator to acquire its own vitality and to put special emphasis on elements of the presented topics (Fadel, 2002).

Connotations in the intermediate contexts allow the speaker not only to monitor but also to manage the impression of the audience because they act as filters in terms of perception of information.

Presentation and presenting

The contemporary tendency to shift the culture of expression to a culture of images, previously characteristic of art, covers areas in science. Knowledge in most of the subjects is based on the system of multimedia presentation. Moreover a number of textbooks are published in the form of multimedia lectures (Milieva, 2007; Sarafyan, 2012). With this approach the pages of the book represent a computer screen on which a scientific descriptive text yielded its place to schematic structures, i.e. means of expression are minimized and text links are absent.

As Philip Roth says : *The book cannot compete with the screen. It could not compete even with the cinema screen. It could not compete with a TV screen, now it cannot compete with the computer. Now we have all these screens, and a book cannot stand against them... In the near future those who will read books, will be no more than those who know Latin.*

In academic communication not only lectures but also home assignments are more often based on the system of multimedia presentation. Power point provides a comprehensive, interactive and open process to scientific thinking, requiring precise selection, structuring and expressing information in a logical sequence of text structures describing the meaning and content of terminological units. On the other hand, this communication system offers a different method, but in principle the idea of a method suggests privileged vocabulary and language proficiency (Rorty, 1997).

Conclusion

The language belongs to everybody and hampers everybody in all formats of academic communication, because together with the strict conventions there are language fields of crucial identity that dominate multimedia presentations. In this regard through their opportunities and constrains the Power point model provides modern mode of transmission of scientific knowledge as an open task under the supervision of professional competence and linguistic identity.

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