

REVIEW

INDEXATION AND ABSTRACT OF DIGITAL DOCUMENTS AND MULTIMEDIA: TECHNIQUES AND PROCEDURES

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PINTO MOLINA, M.; GARCÍA MARCO, F. Y.; AGUSTÍN LACRUZ, M. C. Indización y resumen de documentos digitales y multimedia: técnicas y procedimientos. Gijón: Trea, 2002. 350p. (Biblioteconomía y Administración Cultural, 62)

The production of digital documents and multimedia remodeled the abilities and attitudes of the producers, transmitters and users of information imposing the need of integrated approach between theory and practice of the processes of the content analysis, representation and recuperation of digital documents and multimedia. From this presupposed, the current work, distributed in 11 chapters, details the changes - structural and of input – in the production of documents which lead to the re-structuration of the documental organization. At this point, for an adequate processing of the multimedia systems it is necessary to integrate the iconic, literal and auditory languages, being that this integration propitiates features of interactivity, ramification, transparency and navigation (interactividad, ramification, transparency y navigation), that are related directly to the system user.

In the first chapter it is developed the articulation between information society and digitalized society, not only to evaluate multimedia, but also to characterize it as one of the central elements of the contemporary culture.

On the sequence are presented the features of the multimedia systems, emphasizing on them the primacy of the content.



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The second chapter deals with the discussion about the presence and the function of the new documents at the current information services and documentation. It is developed the idea that arouse of the new documents made the concept of document overcome the sense of a verbal written text, encompassing the other languages of human communication. Linked to this new sense, the expression "Informational Resources" replace the term "document" which is no more restricted to the transmission of scientific and educational knowledge. Currently, the document incorporates values related to emotional, sensorial and motion experiences, as well as it become a means of entertainment.

The third chapter, named Del Análisis Textual al Análisis Digital, discusses the need of a broader analytic- documental competence to be ahead the demanding of the digital culture. In fact, the procedures accomplished for the analysis of textual documents and of image documents changed according to the physical typology of the document and of the code collected on it (text, image or sound), once the support limited the content shape. However, with the digitalization it was possible to match in the same document the linguistic, iconic, and musical codes, originating the multimedia. Along with that, it becomes necessary a different analysis from that applied to the textual documents. The iconic documents provide certain characteristics different from the textual documents, they are: the transparency, the flexibility and the meaning diversity, depending on the base of knowledge of each receptor. The iconic documents may be classified in five types: fixed image, movable image, text-image, from movies and television, always having in mind that the images may represent and store a great quantity of information. They may be seen as simple or compound documents - simple when present visual contents (image or written text) or sound (spoken text or sound) and compound when they have audiovisual characteristics (written or spoken text, image and sound).

The first stage for the analysis of images is to understand the analysis of fixed image, made in 4 operations: visualization (identification of technical elements: size, plan number, etc), denotation (study of the meaning on the image in the context of the social and cultural codes), connotation (study of the symbolization of the image with base on the receptor knowledge) and representation (textual synthesis of the information transmitted through the image). Understanding the analysis of the fixed



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image (picture or photography) it is possible to understand the analysis of other images.

Before getting inwards the analysis mentioned, the basic components of the interactive multimedia are analyzed. This way it is also assured the study of basic components of any other means of communication: image, sound, verbal messages and interaction instruments. The study is centralized, over all, in the non-linguistic aspects of the multimedia messages, they are: the image, the gestures, the sound and the interactivity, First of all we consider the system aspects of the communicative process which are essential for the analysis of digital material and multimedia, approaching analytically each one of the communication instruments. The information led on this part has both an interdisciplinary and transdisciplinary character. Its starting point is the theory of communication and of information.

It is identified at this moment the space that fills the content analysis of all kinds of documents inside the documentary process, as well as it analyses the tools, rules and modern tendencies which stipulates it. The planning followed shows the interaction between the analysis of content and the different structures and processes of the documentary chain. The content analysis is contextualized as an auxiliary operation of the named behaviors of information search. The text also explains the meaning of the two basic operations of the content analysis – the indexation and the review - through its relations with the concepts of *theo* and *rem*, that are found in the roots of information search behavior and in general of the index role and its components – the access points, the documentary languages – as instruments to increase the predictability of the access points and the consistence of its destination to the documents and it clarifies the role each time higher of the automatic indexation tools.

The visual channel allows the transportation of images beyond time; while the sound channel makes it possible the sound communication that opposite the images, are linear and depend on this factor. This way at least three kinds of different documents are recognized: the document "simple image", the audiovisual document and the digital document. This distinction is determined by essential differences that reflect significantly on the model of applied review. These three kinds of documents



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are defined and characterized with the purpose to speculate the elaboration of reviews for each kind of material concerning its strategic production. There is also a discussion about the conceptual maps as complementary alternative to the natural language in the knowledge communication, being that for the representation processes and information organization these maps are converted in a meaningful learning technique, an active process, constructive and cumulative of new knowledge understanding and of its inclusion in a base of pre-existent knowledge.

The chapter 4,5, and 6 deals with the content analysis, indexation, review and recuperation of the resources of multimedia information. They aim, globally, to elaborate an operating model of the content analysis that may be an introduction and methodological guide to application in the latter chapters of highly practical character, that, for this order, were hold particularly on the fixed image, on the audiovisual documents and the electronic resources.

After chapter 7, that synthesizes the 3 previous ones, are approached practical cases of analysis and of representation, not excluding, however the terminological and conceptual questions that permeate the mentioned documents in each chapter.

Chapter 8 cares about the content analysis of the graphic documents, images, photographs and iconic documents, different terms that are used to make reference to the documentary realities quite similar, when not completely identical. First of all, terminological and conceptual questions about these terms are approached, being that before a typology of different iconic genres was proposed, through perspective guided pragmatically according to its different uses. Finally, different practical cases of content analysis are established: two examples of photoperiodistic documents, an artistic image, and advertising image, a documentary photograph and at last two photographs of scientific-technical character, inside the ethnology and the archeology scope, respectively.

The analysis of audiovisual documents is a complex task due to the diversity of the informative nature of such documents, the multiplicity of transmitter channels and the scarce normalization of analysis procedures, these questions are developed in chapter 9.



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The audiovisual information is composed by many elements, among them, the voice, the environment sounds, the music and the images. Therefore the audiovisual information is integrated to the elements that belong to the image scope and to the sound scope, being necessary an approach in double dimension: considering each one the levels separately and considering both levels conjointly. Like that, in audiovisual documents there are three interaction segments between themselves which should be analyzed: the sound segment, the image segment, and the rhetoric syntax segment derived from the interaction between the previous segments: the assembly and the edition. As examples of audiovisual documents analysis we have: a news analysis, a newspaper report, and advertising commercial (which usually, show two messages: one commercial and a fictional one) and the one of a retransmission of a sport event.

Chapter 10 deals with the indexation and the review of audiovisual documents, videos and from movies, which are also audiovisual documents, however, with specific interest in scientific, cultural, sociological, anthropological and ecological themes. Then are presented examples of analysis in fiction videos, documentaries, cartoons and movies.

The last chapter of the book, the chapter 11 encompasses the documental analysis of electronic resources, caring about the content analysis of the files, the digital resources or digital documents that are different terms applied along the evolution of these materials to refer to about the same reality. Along with the examples of documental analysis the electronic resources in CD-ROM and in environment WEB, including a virtual exposure of the painter Francisco Goya in an ebook format, the book is closed. This work brings on its pages a source of complete reference to the ones who intend to begin or improve the documental analysis on images and in digital documents and multimedia.

Along with the work, bibliography with the references from each chapter separately, and an analytical index. The work approaches in an integrated manner the theory and the practice of content analysis, representation and recuperation of digital documents directing themselves to the information and communication researchers, information professionals who deal with these types of documents, Information Science students and other related areas.



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