Diagnosis of audiovisual information processing in local television archives. Case study in Cuba

Ikus-entzunezko informazioaren prozesamendua diagnostikatzea tokiko telebisten artxiboetan. Kasu azterketa Kuban

Diagnóstico del procesamiento de la información audiovisual en archivos de televisoras locales. Estudio de caso en Cuba

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ABSTRACT: Audiovisual archives in local television stations favor the processing and preservation of audiovisual information for his retrival. The peculiarities of the processing of audiovisual information on local television stations archives have been little addressed from the scientific production. In the methodological order, there is a shortage of tools and instruments that allow diagnosing the processing of audiovisual information on local television. There are specific techniques and procedures that allow the processing of information, but which are limited to the traditional technical documentary processes: classification, cataloging, indexing and abstracting. Due to its characteristics, local television stations requires specific media and models that allow diagnosing the processing of audiovisual information from the materials they produce.

KEYWORDS: Video library; audiovisual processing; audiovisual information; information processing diagnosis; Centro Norte Televisión; Cuba.

RESUMEN: *Los archivos audiovisuales en televisoras locales favorecen el procesamiento y conservación de la información audiovisual para su posterior recuperación. Las particularidades del procesamiento de la información audiovisual en archivos de televisión local han sido poco abordada desde la producción científica. Existe en el orden metodológico una escasez de herramientas e instrumentos que permitan diagnosticar el procesamiento de la información audiovisual en la televisión local. Existen técnicas y procedimientos específicos que permiten el procesamiento de la información, pero que se limitan a los procesos técnicos documentales tradicionales: clasificación, catalogación, indización y resumen. La televisión local por sus características requiere de medios y modelos específicos que permitan diagnosticar el procesamiento de la información audiovisual de los materiales que producen.*

PALABRAS CLAVE: *Videoteca; procesamiento audiovisual; información audiovisual; diagnóstico del procesamiento de la información; Centro Norte Televisión; Cuba.*

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Introduction

The evolution of television to the digital system meant not only a change in format, but also a transformation in the working techniques of all the elements involved in production, including the television documentation archive. Consequently, it is necessary to define a set of successive operations that generate new informational processes. The objective of the documentary technical processes is to facilitate the documentary search for users either through cataloging, classification, abstracting or indexing. In addition to allowing the retrival of documents.

The existence of standards for the description of documents is an essential factor in the processing. They are able to avoid data redundancy and protect its integrity. In the case of audiovisuals, there are standards for physical and content description. For the traditional description of audiovisuals, the MARC Format, the Anglo–American Cataloging Rules and the ISAD (G) standards are used. The recommendations of the International Federation of Film Archives (FIAF) and the International Federation of Television Archives (FIAT) for the description of their collections are widely used in audiovisual archives (ROCA *et al.*, 2016; AMIEVA, 2021; SALAZAR, 2022).

Among the standards for the physical description of audiovisuals on television are the Anglo–American Cataloging Rules (RCA), although according to the AMERI-CAN LIBRARIAN ASSOCIATION *et al.* (2006) the rules are a disadvantage. This is due to the fact that several experts consider it necessary to have more specialized rules for the bibliographic treatment of audiovisual, sound, image, and cultural objects collections, among others (NAME; DOS SANTOS, 2021). The search for more effective standards has led to the development of more specific documentary standards.

FIAT proposes recommendations for the description of audiovisual materials on television. ROYAN; CREMER (2004) distinguish six main areas in the proposal: 1) title area, 2) area of responsibility (names), 3) editing area, 4) physical description area, 5) content description, 6) number area. Despite the efforts made by FIAT regarding the standardization of audiovisual sources, its recommendations still require elements that provide good processing of audiovisual information.

Other standards used at the discretion of SÁNCHEZ; FIGUEROA (2009) for the physical description of audiovisual materials are:

— The International Association of Sound and Audiovisual Archives (IASA) cataloging rules: a manual for description of sound recordings and related audiovisual media. The IASA prepared these standards for the cataloging of sound documents and related audiovisual media, published, unpublished, broadcast by radio, television or content on the Web.

—Mexican standard for cataloging phonographic documents. Although its scope is national, it is of great relevance. It facilitates the control, organization and documentary description of sound documents belonging to Mexican libraries, archives, museums and other information centers.

—The FIAF cataloging rules for film archives. The FIAF developed these rules with the purpose of creating detailed bibliographic records of films, as an indispensable activity for the documentary organization, preservation and dissemination of cinematographic works.

—Cataloging cultural objects: a guide to describing cultural works and their images. The rules are exhaustive and represent a conceptual and bibliographic advance in the treatment of audiovisual cultural expressions that until recently could not be adequately represented documentary.

LOCAL TELEVISIÓN STATION ARCHIVES: THE CUBAN CASE

The television archives are centers oriented to the custody and treatment of the audiovisual documentation generated in the television stations channels. The videothecarian (also know as video librarian or video archivist) is in charge of the conservation and retrival of the material recorded on television. The role is focused on carry out and register the inventory and the safeguard in various formats of the videos and television programs. It also performs the functions of meeting all the demands of users and cataloging the fund. Other functions of this professional are:

1. Safeguard and nomenclaturize each video
2. Save the daily Schedule
3. Facilitate the presence of a commercial upon request
4. Transfer and update the historical heritage to new formats

Local television stations is a means of communication that generates programs organized in a regular schedule with limited hours. The content generated corresponds to the informational, educational and entertainment needs of consumers. Likewise, they are based on geographically particular cultural, economic, political and social traits. It constitutes a way for the population to feel identified, mobilize and transform the problems of their context. Local television stations is more associated with expressions that support a practice in consonance with a geographical or culturally represented space. State decentralization processes are key factors in the genesis of these television modes, protected by laws that have favored their emergence.

Local television stations are not only an instrument to provide the daily events of a community. It is a way to improve the scientific and transformative capacity of a country. The documentary treatment and the preservation of the audiovisual heritage of a community is one of the most difficult activity. It is necessary to have spe-

cialists who face the transformation of traditional tasks and assume the development faced by the processing of audiovisual information.

The Cuban Institute of Radio and Television (ICRT) governs the media in the country, from a television programming full of political, ideological, social, ethical and aesthetic values, at the service of culture, recreation and the defense of the interests of the government (ICRT, 2021). To this end, it is assisted by an organized infrastructure in the Information System of Cuban Television and distributed in four analog signals-terrestrial (Cubavisión, Tele Rebelde, Canal Educativo, Canal Educativo 2), eight digital signals (Canal Caribe, Cubavisión Plus, Multivisión, Clave, Cubavisión Internacional, Mi TV, Canal HD3 and Canal HD4), 16 provincial television stations, 15 local television stations and TV Serrana, a producer of community videos in the Sierra Maestra. In Cuba there is a structure of television stations that corresponds to the provincial or local demarcation. In the case of local television stations, there is a television system subordinated to the provincial and national instances of the Information System of Cuban Television.

In the methodological order, there is a lack of tools and instruments that allow diagnosing the processing of audiovisual information on local television stations. There are specific techniques and procedures that allow the processing of information, but which are limited to the traditional technical documentary processes: classification, cataloging, indexing and abstracting. Local television stations, due to its characteristics, requires specific media and models that allow diagnosing the processing of audiovisual information in the materials they produce.

Objectives and importance

The objectives of the study were: 1) to design an instrument to diagnose the processing of audiovisual information on local television and 2) to validate the instrument designed through a case study on the local television station Centro Norte Televisión (CNTV) in Caibarién, Cuba.

The proposed instrument for diagnosing the processing of audiovisual information in local television stations in Latin America presents as a novelty the use of a new dimension of analysis: formal technical aspects present in the processing of audiovisual information that reflect local content. It became two variables:

— Reflection of the technical–formal aspects of the audiovisual in the processing
— Reflection of the adequacy of the audiovisual to the context in the processing

Correspondingly, the instrument constitutes an overcoming of traditional paradigms that privilege the generality of the document without particularizing the el-

ements of its genesis and that influences potential users. The relevant information in the local context changes in comparison to other television stations with greater reach, with the content being the determining factor insofar as the significance constitutes the center for potential users.

1. **Methodology**

The study presented here is classified as descriptive research with a methodological contribution. The characteristics of the television medium and the resources that enable the processing of audiovisual information are analyzed. Similarly, an instrument is established to diagnose the processing of audiovisual documents. To obtain results, methods and techniques were used at the theoretical and empirical levels for the collection of information. At the theoretical level, the logical historical, synthetic analytical, inductive deductive and structural system were applied. At the empirical level, observation, survey and classic documentary analysis were used from the consultation of sources and specialized databases on the subject. The techniques used that facilitated the collection of information were the interview and the review of documents.

1.1. Instrument to diagnose the processing of audiovisual information in local televisión stations

The information processing starts from the documentary technical processes: cataloging, classification, indexing and abstracting. Audiovisual information requires a higher degree of specificity, which is why it is essential to have methods and models to diagnose its processing. Given the lack of an instrument of this type, one aimed at audiovisual information produced on television is proposed. In the designed instrument, two dimensions were raised: 1) processing of audiovisual information and 2) formal technical aspects present in the processing of audiovisual information that reflect local content. This last dimension is oriented to television production on local television stations. The dimensions, indicators and the measurement criteria can be seen below. The Likert scale was used where five is equivalent to optimal, four to good, three to fair, two to poor and one to bad. In the case of the audiovisual information processing dimension, the following indicators and their corresponding measurement criteria were set:

Performing the cataloging

— Five points: if norms, rules, methodologies and formats are properly used for the description of audiovisual documents. (The RDA rules, the FRBR, MARC format, the methodologies of LÓPEZ DE QUINTANA (2014) or CALDERA (2014). In addition, access points are generated for the retrieval of information

— Four points: if norms, rules, methodologies or formats are properly used for the description of audiovisual documents (Anglo–American Cataloging Rules, ISAD (G) standards, FIAT recommendations)
— Three points: if there is a standard, rules, methodologies or formats for the processing of audiovisual information, but they are not applied properly, errors are detected in more than 50% of the documents analyzed
— Two points: if norms, rules, methodologies or formats are used for the processing of audiovisual information, but the documents are spontaneously described in their essential parts (type of document, title, author, collection, among other data) in files or catalog records
— One point: if the cataloging process is not evident

Performing the classification

— Five points: if they use the Melvil Dewey decimal classification system correctly
— Four points: if they use the Melvil Dewey decimal classification system
— Three points: if they use other tools for classification
— Two points: if they perform the classification spontaneously (Classification by content type, format, edition)
— One point: if they do not perform the classification

Performing indexing

— Five points: correct use of standards for human and / or automatic indexing and evidence of social indexing by users
— Four points: correct use of standards for at least one form of indexing
— Three points: if they use a standard for automatic or human indexing, but it is not applied properly, errors are detected in more than 50% of the documents analyzed
— Two points: evidence of the minimum descriptors for indexing (thematic, topographic and name days)
— One point: the indexing process is not evident

Performing the abstract

— Five points: suitability of the type of abstract depending on the type of program. Presence of the formal and content elements of the program, which can be a substitute for the original, which allows the retrieval of information
— Four points: the abstract has most of the aspects required by type of program, but the language used is not easily decoded by users.
— Three points: the abstract is not written correctly, although it offers information regarding the content of the program
— Two points: the abstract lacks elements that allow the retrieval of information
— One point: the abstract process is not evident

Taking into account the formal technical aspects present in the processing of audiovisual information that reflect the local content, the following indicators and their corresponding measurement criteria are proposed:

Reflection of the technical – formal aspects of audiovisual processing

— Five points: if they identify the title, genre, duration, shots, angles, transitions, camera movements, soundtrack and sound effects by using the Minute Shot / Sequence technique of all audiovisual scenes
— Four points: if they identify the title, genre, duration, shots, angles, transitions, camera movements and sound effects of some audiovisual scenes
— Three points: if they identify the planes, angulations, transitions, camera movements of some scenes in the audiovisual
— Two points: if they give a general description of the audiovisual photography
— One point: if they do not describe any formal technical aspects as part of the processing

Reflection of the adaptation of the audiovisual to the context in the processing

— Five points: if all the descriptors of form and content are identified such as: title, subject, topographic, name day, referential, non-referential data that reflect the local identity of the television that produces the visual texts
— Four points: if some content descriptors are identified such as: title, topographic, name day, referential, non-referential data that reflect the local identity of the television that produces the visual texts
— Three points: if it is identified that the title and theme reflect the local identity of the television that produces the visual texts
— Two points: if it is identified that the theme reflects the local identity of the television that produces the visual texts
— One point: if the audiovisual does not correspond to the local identity of the television that produces the visual texts

1.2. POPULATION AND SAMPLE

The study population is made up of all the documents generated from the processing of audiovisual information from the television archive. Consequently, catalog files, free descriptions, lists or epigraphs, metadata collected in digital or printed format are obtained. The selection was determined by the existence of the documents generated in the processing and the television program to be able to make comparisons on the effectiveness of the processing. The sample classifies as intentional probabilistic and responds to the case study carried out to validate the instrument.

The inclusion criteria for choosing the sample were: 1) documents generated in the processing of audiovisual information and 2) audiovisuals that correspond to the previous documents. In the selection, the most representative audiovisual genres, the most relevant programs of the channel and the presence of those programs in the last six years were taken into account. The exclusion criterion was that there was evidence of the processing of audiovisual information, but that the document did not exist. The aforementioned exclusion criterion was taken because it was essential to corroborate that the processing was correctly carried out. The number of programs selected by year is shown in Table 1.

TABLE 1

Sample of programs selected to diagnose the processing of audiovisual information in CNTV

Sample of programs		Years					
Program	Gender	2015	2016	2017	2018	2019	2020
Noticias Centro Norte (News North Center)	Informative	5	5	5	5	5	5
Así como te lo cuento (Just as I tell you)	Historical	5	5	5	5	5	5
Café con filo (Edged coffee)	Social facilitation	5	5	5	5	5	5
Detectivericuetos	Children	5	5	5	5	5	5
Destellos de mi ciudad (Glimpses of my city)	Cultural	5	5	5	5	5	5
Trabajos de prensa (Press work)	Informative	5	5	5	5	5	5
Total: 6 programs	**5 genres**	**180 broadcasts**					

Source: own elaboration.

2. Preliminary description of information processing in the video library of the local television station Centro Norte Televisión (Caibarién, Cuba)

Within the selected sample, the historical television program "Así como te lo cuento" was only recorded in the course of 2009-2010, currently it is no longer broadcast, although it was broadcast until 2017. The above fact has repercussions on the results of the present study because historical programs cannot be analyzed. This sample is due to the existing storage problems in the television.

During the preliminary analysis of audiovisual information processing, a high degree of technological backwardness and poor storage practices were identified. A

large quantity of audiovisuals stored on supports with digital recordings by means of optical technology were identified, these constituting the documents of greatest importance for the institution. Regarding the basic characteristics of this documentary typology, it can be said that they show more sensitive protective layers, prone to damage, sensitive sudden changes in temperature, extreme humidity and temperature indices, incidence of light and heat and the changes of support and evolution of the technologies.

In CNTV, a large part of the documentation from 2014 was lost among several copies that contained files from 2012 and 2013. Currently, they have a lot of information on computers without protection or backup. The previous aspect is given by problems of storage capacity and lack of equipment. The director of CNTV alleges that removable discs are expected to gain in quality and quantity of what is stored. What is being stored on media with digital recordings through optical technology have to limit the quality due to a storage problem. The audiovisual format is changed to a low-quality one in order to store more documents. In general, what is saved are the annual summaries and journalistic news. The programs that the channel currently transmits are shown in Table 2.

TABLE 2

Programs currently broadcasting on CNTV

Program name	Genre	Duration
Cartelera TV (Billboard TV)	Promotion and dissemination	00:03:00
Notas de la Memoria (Memory Notes)	Informational	00:03:00
Tarde en Familia (Family Afternoon)	Social Facilitation	00:42:00
Vamos todos a cantar (Let's all sing)	Children	00:12:00
Café con Filo (Edged coffee)	Social Facilitation	00:27:00
Desde mi tierra (Fromm y land)	Informational	00:27:00
Enlaces (Links)	Informational	00:12:00
Detectivericuetos	Children	00:12:00
Rueda video (Video Wheel)	Cinematographic	00:27:00
Destellos de mi ciudad (Glimpses of my city)	Educational	00:27:00
Piquete joven (Youth Picket)	Educativo	00:27:00
Noticias centro Norte (News North Center)	Informational	00:27:00

Source: own elaboration.

Among the types of media they present are media with digital recordings by means of optical technology (CD-ROM, CD-R, CD-RW, DVD-ROM, DVD-R, CD-RW), Video Casset Recorder (VCR) and digitally. There are 700 sources that are stored on digital media, 263 on media with digital recordings through optical technology and 50 on VCR. Graphic 1 shows the percentage of the media on which audiovisual information is stored.

Supports

5%

26%

69%

Digitally

Media with digital recordings through optical technology

Video Cassete Recorder
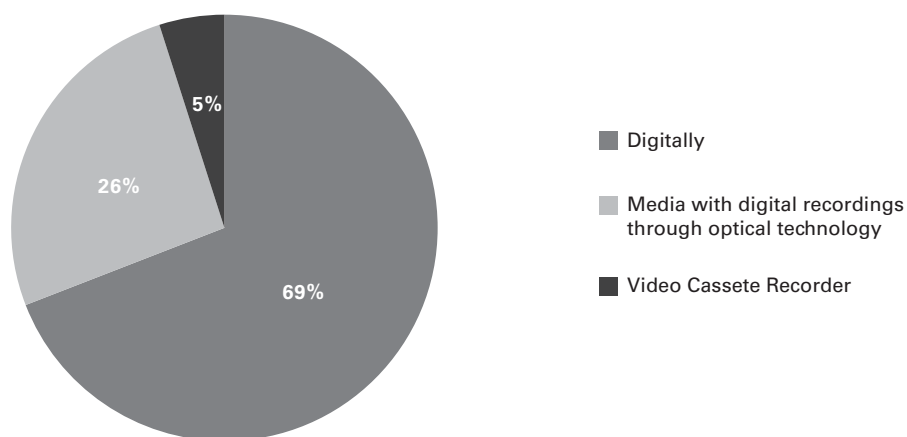
Source: own elaboration.

GRAPHIC 1

Media in which the audiovisual material is stored

The documentary technical processes for the processing of audiovisual information on local Cuban televisions stations are governed by the document: General procedures for the organization of work in the archives of special documents, video libraries, and sound libraries of the Cuban Institute of Radio and Television. The aforementioned document establishes that cataloging sheets must be prepared, but the way to do so is not established, so it is assumed that international standards must be used. Similar occurs with the classification process.

In the particular case of indexing and the abstract, they are not contemplated in the document generated by the ICRT. The video librarians who work on local television stations have characteristics that identify them as the processing of information appropriate to the context based on local issues. On the local television station CNTV in Caibarién, Cuba; the scripts do not constitute support elements for the processing of visual images. The aforementioned factor would be a very important element because it reflects planes, camera movement and certain formal technical aspects that are collected for editing. The person in charge of processing the images

does not have these audiovisual scripts and could ignore important elements that would later be in the processing of the images. Currently, work is being done to improve the searches for the visual resources available to the local television station.

The cataloging process is not done in depth. There are no cataloging sheets (neither physical nor virtual). The documents are organized from a chronological catalog based on the creation date, however, this is recorded in a file that contains only the name of the program and in some cases the themes. The metadata used for the catalog description are: extension, size, date, time, location, media name, disk, description. They are part of the software used to search and retrieve information on the channel.

The cataloging process is scored with two points because they have a standard, but it is not operational because it does not establish the way to do this process. In practice it is evident that the cataloging is carried out according to the standards of the software used for search and retrieval. Therefore, it is not evident that norms, rules, methodologies or formats are used for the processing of audiovisual information.

Documents are spontaneously described in their essential parts in files or catalog records. The cataloging on the channel is considered to be deficient. The cataloging process in CNTV assumes the technical changes required by its own evolution and by electronic resources. The correct performance of the aforementioned process would bring as benefits a more efficient search and the retrieval of relevant documents. It would avoid handling and constant and direct contact with the material, minimizing its early deterioration and destruction. In addition, it serves for the management and organization of the knowledge that circulates through said center, as well as a control of its resources. Its main objective is to represent the funds of the institution and facilitate access to them.

It is necessary to make topographic files o description. Topographic files are made to complete a set of titles and descriptiors in the phiscial and content order. It contains all the data of the document and additionally includes particular characteristics of a place. The systematic files organize the sources from their date of entry. The chronological cards mark a certain period of time.

The subject sheet is based on thematic criteria. The title sheet is organized through that metadata. The author's file, in the case of audiovisuals, contains the data of the filmmakers or program directors. Internal files such as desiderata show the absence of documents and unresolved requests for information, such as not having images in the video library that are requested by filmmakers. The inventory files are a way to keep track of all the documentation and in case of deterioration or loss, to know what the missing material was.

3. **Diagnosis of audiovisual information processing in the video library of the local television station Centro Norte Televisión (Caibarién, Cuba)**

The classification process is carried out spontaneously. Previously, there were two large categories for classification: informational and programming. Currently there are other categories that are used in the organization of funds. The collections where the audiovisuals are located are:

— CNTV: contains the documentation related to the channel such as festivals, interviews, first transmissions, sources of the workers, historical images of the cannel
— Documentaries: both from Caibarién and from national television. Previously on the channel foreign audiovisuals were projected, but currently only local production is broadcast
— Music: both local, national and international
— Press: all journalistic works, reports are saved
— Programming: there are the programs and photographs

The classification process is fairly efficient, which is why it is evaluated with three points. It saves work both for producers and filmmakers who need to search for photos and documents to carry out their programs. As there are few workers, the director makes the script and direction based on this process. The classification process is evaluated as three because they use other tools for classification such as (ICRT, 2004). This process is focused on the *Where is it?* software. used for search and retrieval. In the video library department the main task is to preserve and organize audiovisual and other documents. In the case of CNTV, other collections must be organized or formed, such as:

— Photographic collection: photographs, portraits and infographics would be stored
— Sound backgrounds: everything related to national and international mp3 music, voice audios from interviews and sound effects must be located
— Electronic editions: where electronic software, databases and newspapers would be stored
— Radio and television: it would contain what is related to the programs, spots, documentaries that in one way or another are projected on CNTV
— Multimedia: this collection would store movies, series and animated
— Local history: all the issues related to the community would be kept, interviews with illustrious personalities in Caibarién and reports to centers of great value for the people of Caibarien
— Personalities: it will contain images, interviews, press works and programs carried out or where appear personalities of the town or the country.

A correct classification would bring the benefit of rapid search using keywords and the control of the search vocabulary that produces greater precision. This process would assign codes that would allow the control of the documents, as well as a synthesis between the information systems. It would bring with it a greater organization of funds and sufficient information to guide searches with greater success, exclusivity and without ambiguities of any kind. The classification turns the set of documents into a true information retrieval system whose main objective would be the grouping of subjects in order to be able to store and later retrieve the information.

The indexing process is classified as basic and poor. The indexing used is free and mainly thematic. Free indexing is the process in which the words proposed by the person who carries out the process are raised with key terms of a document or are taken directly from the document. Free indexing also makes it possible to establish criteria based on natural language for the retrieval of relevant documents. On the other hand, thematic indexing allows to establish hierarchies regarding the subject or topic that is addressed in the audiovisual.

Indexing in CNTV evaluates to two points because it is evidenced by the minimum descriptors for indexing, mainly thematic. At the discretion of the interviewed specialist, the indexing process is planned to be carried out this year. Indexing allows you to quickly know what subject is covered in the analyzed document. The end product of this process is generally a bibliographic index, an automated database or an alphabetical catalog of subjects, necessary to ensure access to and consultation of the information. This product can be used by users to get or know the information they need.

This process is aimed at issuing an efficient search for information contained in a documentary collection. Indexing is a requirement not only for proper storage but also for timely information retrieval. The minutes model is one of the main techniques for indexing audiovisual information. The minutes model at the discretion of DEL VALLE (2014), describes and measures precisely what happens in the document, translating the temporal dimension of the content into sentences, indicating the duration and content of each scene. The proposal to register audiovisual material from the documentary perspective was proposed by PINTO *et al.* (2002), establishing formal parameters for the development of the detailed model. The process has two fundamental steps: the abstract of the audiovisual and the description by planes/sequences of the document.

At the discretion of DEL VALLE (2014): the documentary analysis of audiovisual materials gives rise to three different products:

— The summary of the document, of an indicative nature, which defines in a few sentences what it is about

— The minutes model, which accurately describes and measures what happens in the document, translating the temporal dimension of the content into sentences, indicating the duration and content of each scene
— Descriptors, the result of indexing, that express the content in a controlled language

That the specialists of the video library rely on the minutes model for information retrieval is essential. This would allow identifying the information in its time segment, that avoiding wasted time by not having to view the complete program. For correct information retrieval, the types of indexing that must be carried out are thematic, onomastic and topographic.

It is essential to ensure access and consultation of information. It will allow technically ordering the documentary materials that an information system has, in order to make them recoverable, in addition to the use of local, national or international standards, policies and observation tools, with manual and/or automated resources and the possibilities of new technologies, according to the institution in which you operate. For CNTV the use of descriptors would bring great benefits.

Referential descriptors show implicit objects and images in audiovisuals. Non-referential descriptors establish the semantic content and intention of the images. The use of these metadata on television would be of vital importance, bearing in mind that documents could be retrieved from the meanings. The use of the referential data in the same way would allow obtaining varied archive images that could be used in the realization of programs.

The making abstract process is not carried out so it has a value of one point. At the discretion of the videothecarian, the summary is not relevant. When cataloging in CNTV, the name of the organization, the subject of the news and the date are located. It is from this metadata that they perform the retrival, however, the completion of the abstract would be of vital importance for the retrival of relevant documents. In the same way, the interview expresses that due to time availability and the large number of sources, it is not operational to carry out this process.

At the discretion of the specialist in charge of the production at CNTV, when it comes to processing the images, a synthesis of the images is almost never performed. A synthesis is not made by the filmmakers, that is, there is a script and from this the entire project, the program and the entire journalistic genre are worked on. In the case of journalistic genres, the images are not processed. A synthesis of the work is not made, unless it can be done by the video librarian himself when filing and processing the secuences. Works syntheses are only made in the case of technical sheets for programs in competition at the national television festival or when programs of journalistic genres are sent to the provincial channel or information sys-

tem of Cuban television. In the previous case, if the aforementioned processes are carried out, but at the time of processing the images in the channel's video libraries, these syntheses of the works are not carried out by the filmmakers.

The abstract allows you to isolate and write the main ideas of each paragraph of a text, in an orderly way and with a simpler and easier to understand language. It consists of the reduction to brief and concise terms of the essence of a matter. The ability to summarize is combined with the ability to understand precisely what is considered essential. The summaries can be used as substitutes when the user does not want to read the original text or view the audiovisual in full. It can function as a preview of what the original document will be about, where you can assess whether or not reading the original text will be worth it.

For a correct information retrieval, different types of abstract must be made, among them are the professional or documentary abstract, it is created by a person who specializes in the writing of topics that will be published or will be used as services, it stands out for the quality of the contents treated and the structure used. Another of the abstract to use is the author's summary is created by the same person who wrote the original document, it is clear in terms of content. You should also use the specialist summary in the field is made by a person who specializes specifically in the subject to be covered in the original material.

The reflection of the technical–formal aspects of the audiovisual in the processing of audiovisual information is classified as three points because the planes, transitions, angulations, camera movements of some audiovisual scenes are identified. As part of the processing of audiovisual information that is carried out in CNTV, some of the procedures or formal technical aspects are contemplated when archiving all the images and works that are carried out. In the *Where is it?* software, some aspects related to the edition, elements of the musicalization and the direction are generally noted (the latter is always done because the director of the space and the journalist who performs it must be included).

Despite the aforementioned, the interviewed filmmaker thinks that the previous processes are not carried out in depth. This makes it difficult to find and retrieve images and programs. Aspects related to editing, photography and direction are fundamentally considered. Other aspects that are taken into account are the theme and gender. The interviewee thinks that it is relevant for the channel that formal technical aspects are contemplated within the work process with the visual image. The foregoing has not been possible for the specialists who have worked in the channel to carry out adequate processing. At the discretion of the interviewee, the software with which one works contains the elements of audiovisual processing: elements to index the documents to work on everything that has to do with processing in the video library.

The program gathers all the characteristics to describe all the images that are being saved and processed. Contradictorily, an adequate processing is not done and then at the time of the search there are elements that are ignored: planes, camera movements, elements related to colors, own photograph of the images that are being saved. Therefore, if there is no prior knowledge of the videotecar or of the person looking for a certain image in a certain audiovisual document, the search for images becomes difficult. Also, after you do the job, better images may appear for completion.

The reflection of the local theme in the processing of audiovisual information in CNTV is evaluated from three points because it is identified that the theme reflects the local identity of the television that produces the visual texts. In an interview with one of the channel's directors, it was determined that the above aspect is very important for the television station, it is one of his objectives. Local content is promoted as a first priority, as well as in the processing of audiovisuals. Due to the storage problem in the video library, the sources with local content are stored first and also by content by hierarchy of information; that is to say, first the historical, political contents, of mass organizations and thus the least important thing is discarded.

In CNTV, the previously mentioned hierarchy is taken into account for decisions to keep or discard a document. Regarding the processing based on local content, the thematic data is first analyzed and finally the people involved in the realization of the document. Within the journalistic genres, certain news values are established that give importance and a hierarchy to the works. In the case of audiovisual processing, the value of the audiovisual is taken into account for both conservation and processing. Press work is fundamentally privileged.

In CNTV, all journalistic works are kept due to the large number of images and sources that are used within the channel's archive. This is not the case with certain programs, especially those that are recorded in the studio (broadcast live) because they hardly have images and shots in the exteriors. A typical program is left to know the production process in case it is not on the television schedule, thus it becomes part of the channel's heritage or the channel's programming. CNTV does not save all programs, only historical, technical scientific or programs that have been produced entirely outdoors. Other criteria that influence the decision to preserve the programs are: that a large number of people intervene and that there are images of the town (materials that can later be used again).

The shape descriptors affect the conservation and processing of the audiovisual documents produced by CNTV. Press jobs are saved and processed in their entirety. In the case of programs based on criteria of time that is equivalent to physical storage space. One of the characteristics of CNTV is that more than 50% of the pro-

grams are produced live, these are not saved mainly due to storage problems. Only those audiovisual materials that, due to their relevance, deserve to be kept from the live programming are conserved (they are complementary within the programs, for example: press comments, views of viewers, sections of images that are outdoors where the population intervenes). Other audiovisual materials that are preserved and processed are important events that are mentioned in the municipality, visits by personalities to the territory who participate in channel programs.

Some of the interviewed filmmakers established that it is relevant to consider the local issue within the processing. The main criterion that is taken into account is the local theme, not only for CNTV but for all television stations. The fundamental factor is the immediate audience, its most direct objective working in the physical space in which the channel is framed. In general, the processing of regular audiovisual information is evaluated.

The results show that none of the documentary processes were evaluated with the highest measurement criteria (good and optimal). Three of the processes (adaptation to the context, formal technical aspects and classification) were evaluated in the medium, so this criterion constitutes the mode. Regularly, the indexing and cataloging processes are evaluated. The sabstract is badly evaluated because it is not done. The results show bad practices and technical ignorance regarding the processing of audiovisual information in CNTV.

4. **Conclusions**

The processing of audiovisual information is the set of techniques and tools that allow the analysis and understanding of images and sounds to favor the retrival of documents. The processing of audiovisual materials on local television stations shows particular characteristics that distinguish it from the processing of other television stations, such as the detailed use of onomastic, topographic, chronological and thematic metadata. There are various authors who address audiovisual processing. The physical description and the content description is the main aspect addressed.

In the present study, an instrument is built to diagnose the processing of audiovisual information in the CNTV channel of Caibarién, Cuba. The instrument takes into account the processes of cataloging, classification, indexing, summary, technical-formal aspects of the audiovisual in the processing and the reflection of the adaptation of the audiovisual to the context in the processing. The CNTV video library is an information system that has deficiencies in the processing of audiovisual information due to lack of storage, non-application of standards, methodologies, and technical ignorance. In the diagnosis made, none of the applied indicators is evaluated in an optimal way.

Audiovisual archives in local Latin American television stations preserve a relevant heritage in images, insofar as they are able of capturing the time, the context, the place, the personality, the event, thanks to digital formats and optical technologies. Therefore, it is not enough to maintain a traditional approach in the treatment of this information, given that the volatility of the funds (mostly digital) can have repercussions on the irremediable loss of the history of a locality. So it is not about reproducing ways of doing things or successful practices, but about updating the procedure according to the particular needs of the institution. In this way, the diagnostic stage becomes the guarantee of the procedure, even with greater repercussion than the processing or conservation activity itself. Likewise, said action prevents inconceivable expenses in terms of restoration or the hiring of specialized personnel to safeguard a cultural heritage, a historical memory.

Specific contributions and author's order

Luis Ernesto Paz Enrique designed and developed research instruments, analyzed and wrote the results. Eduardo Hernández Alfonso analyzed the applied instruments, wrote the conclusions and the abstract of the paper. Yusilka Martínez Veitía organized the content of the paper, wrote the theoretical part and revised diagnosis tools. These are the reasons to stablish the author's order.

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