

FOLKMEDIA: A MODERN APPROACH ON PRESERVATION OF ROMANIAN FOLKLORE ARCHIVE

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Abstract

The present paper presents the results of a national project – Folkmedia - focused on a new form of a modern archive according to a strict risk assessment plan, in order to assure the collection's viability and increase its visibility. Significant part of the archive recordings has been successfully assessed and the digitization process is running at full speed. The digitized collection are subjected to decontamination using anoxia before their relocation to the dedicated storage facility, following a one-way route. Two multifaceted databases have been elaborated in order to serve the needs of the archive researchers and also to grant access via the internet to various categories of users. The data bases contain, besides the basic archive information, complex documentation obtained using advanced photonic techniques.

Keywords: Anoxia; Folklore archive; Wax cylinders; Digitization; Multispectral imaging

Introduction

The *Folklore Archive* participates in institutionalizing cultural awareness in an active process, following the progress of society as it is reflected in this type of culture. The archive contains high value manuscripts, written by Constantin Brăilou, Harry Brauner, Alexandru Voevidca, Constantin Rădulescu-Codin, Gheorghe Fira, Nicolae Lighezan, Henry H. Stahl, George Cucu, Tiberiu Brediceanu etc. The UNESCO Committee of Experts, among other responsibilities, has the role to initiate programs and activities in order to protect and to valorize a large segment of the humanity's cultural heritage, which is the folklore. It designates the Intangible Cultural Heritage, in which creations of groups and individuals are incorporated, based on tradition, as assumed and recognized expressions for social and cultural identities of various representative groups: ethnics, age, gen, occupational, religious etc.

As the communication systems diversify their means of transmission, (by) operating with technologies that are more and more sophisticated, the cultures based on traditional information are exposed to fundamental changes, producing modifications of the human behavior, in the attitude of the individual and groups against "other" fellows, regarding the nature, the environment, and even the cosmos. The large quantity of information, which is not

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always rigorously selected and assimilated, makes the landmarks of value to be less visible and the individual options more difficult to be determined.

In the proximity of that phenomenon, named with another occasion „informational bombing”, milestone points are absolutely required. They are the result of the synthesis which results from the processing of a large volume of traditional information which was identified, formalized through the specificity of an oral culture which was transmitted and assimilated, over a large time interval. The results of these processes were taken over, verified and accepted by the communities that recognized their stability, value and role in identifying and ensuring the security of the individual and the group, making the communication through their mediation accessible and credible.

The traditional cultural system is placed in such a category, with the majority of languages and forms that can be expressed. It is the "intangible heritage" of humanity, to which all communities, countries and governments have the responsibility to identify record, preserve, protect and valorize it, using the knowledge and skills specific to trained specialists. Among the structures established and universally accepted which ensure the preservation and the proper valuation of its material and immaterial heritage, several reference institutions can be identified such as: unconventional multimedia archives, museums, protected areas. In the present situation we are interested especially in the folklore archives which, in Romania, rejoiced in a particular attention and a special protection for almost a century.

At the time being, which is marked by profound changes of the cultural patterns, we are witnessing a shift in the passive fund for most of components of the traditional culture and, in a few cases, as a result of a selection that was made more or less at random, the conversion of some of them into consumer products used for events with various degrees of processing, standardization and adaptation to specific reasons. For the restitution of the basic and genuine components of traditional culture, in any time interval and circumstance, the materials placed in folklore archives are documents of major importance. We refer to the advised institutions that manage the collections, research, studies, and overall scientific activity, according to the methods and systems as defined, stated and accepted by the academic communities of specialists, which are national or provincial archives that do not ignore or deny the value of local or personal information.

Having as main task the identification of the folklore facts specific for the communities that bear traditional Romanian culture and protection, preservation and scientific appraisal of all types of records, the folklore archive of the National Institute of Ethnography and Folklore is one of the most rich and complex institutions of this type from Southeastern Europe.

Those over a hundred years that passed since the setting up of the first documents kept in this archive and the addition of millions of items that entered its heritage through the efforts of the specialists that worked throughout the twentieth century and the first decade of the third millennium, determine the emergence of a very complex situation regarding the mandatory processes which lie within its attributions (especially storage, preservation, conservation and - if it is the case - the restoration of the different types of support on which the phenomena are recorded on).

All these activities imply high costs, mainly for the planning of appropriate areas for the storage of this kind of heritage, but also for the training of a specialized personnel, devoted to a task that is not easy and that has no spectacular features. Such a program, dedicated to specific issues that imply ethnography and folklore multimedia archives, is named Folkmedia.

Anoxia decontamination

A preservation protocol was developed which focuses on the conservation of a "healthy" collection, taking into account the type of material(s) specific to each archival collection (wax, paper, magnetic tapes etc.). Considering the fact that over time the collections were placed in various inappropriate conditions, nowadays - when a new facility is shaped up according to the European Standards - the first step was the decontamination of the collections.

The chosen method of decontamination was *anoxia* – a simple method used by most international archives and museums which consists in placing the objects in oxygen impermeable plastic envelopes – which are easily created in congruence with the shape, size and weight of the items. The procedure can be applied in situ, it is non-invasive and, even more, it actually provides a safe storing option, besides keeping the dust and/or other particles away.



Fig. 1. Decontamination of the paper recordings handwritten by Harry Brauner

The Wax Cylinders Collection was the first set of items that underwent the conservation protocol, starting with decontamination. In 2013, during a two weeks campaign at the premises of Folklore Institute, two clusters were introduced in the anoxia environment *the wax cylinders* (13.700 items) and *the magnetic tapes*. Meanwhile, the housings dedicated to their storage were perfected and equipped with special fireproof cabinets.

The decontamination of paper items has started in 2014 and it will probably last longer, because all the documents have to be digitized before the decontamination process and stored afterwards in their new allocated spaces. So far, 200 packages, containing written information corresponding to magnetic tapes and auxiliary files collections, have been introduced in anoxia environment.

Modern criteria data base framework

A well-organized information management is vital to any working structure. Information can be seen as built from data blocks that, function on their quality and the delivering speed, are key elements in a good and important decision making. Good decisions are also the key to the organizational functioning and even survival. Today most information and their consisting data are stored on digital support. Efforts are being made for information stored on other media

(paper, tapes, wood, stone, and wax) to be passed on digital media where they can benefit of faster and more efficient storing, organizing, processing and accessing.

Today the most common way of managing digital information is the database. A database is a collection of organized information so that a computer program can quickly collect the desired information. In order to access the information in a database it is required a database management system (DBMS). Databases and DBMS are classified according to the database model they support. The most popular model is the relational model that was created by a researcher at IBM, EF Codd in 1970. Relational databases are using *tables* for information storing. The *fields* and *recordings* are represented by *columns* and *rows*. Each table contains columns that can be important for other tables from which they can extract information, hence the term ‘relational’.

The aim of the *Folkmedia* project is to set up a computerized tool for storing, managing and easy accessing of digitized items (manuscripts, tapes, wax cylinders, photos) from the archives of the Institute of Ethnography and Folklore. Due to the large number of inter-related items (about 500.000) the best approach was to create a database that can be accessed within an internal network.

The chosen database management system was *Microsoft Access*. The information is stored in the database while the digitized files (photo scans, digital audio recordings) are stored on disk, the database keeping only the links to them.

The database structure is based on the items content and function, each items class being represented by a table with attributes (columns) as observed in *Table 1*.

Table 1. *Entities’* structure

Entity	Number of attributes
Audio fund	69
Photography fund	24
Information fund	49
Informers	37
Collectors	1
Campaigns	9
Operators	1
Technicians	1
Keywords	1

Entities Audio, Photography and Information are representing the main sheets for some manuscript or recording. The rest of the entities represents lists that are related to the main entities.

When a main entity is created some attributes are limited to take values only from certain lists (tables). Thus, a sheet may contain up to five *informers* that are selected from the *Informers* table. Each of them has its own sheet that can be viewed. Similarly the Technician, Campaign, Collector, Operator and Keywords attributes are extracting values from their own tables. There are many types of relationships between tables. For example a main sheet can have one (it is mandatory) or more *informers*, while each informer may be found on one or more main sheets. A main sheet can only have one *operator*, but the same operator can be found on many other sheets.

Complex Digitization

In the actual context of conserving material cultural heritage, digitization contributes decisively to the limitation of damages by reducing the direct manipulation of the original artifacts. Archive digitization is even more significant, because the intrinsic materials (various types of paper and pigments used for writing) are more fragile and more exposed to the complex degradation process than any other type of heritage. In the case of “Constantin Brăiloiu” Institute of Ethnography and Folklore Archive (Romanian Academy, Bucharest) the digitization was imposed particularly due to the fact that their research activity implies a direct and frequent contact with the recordings. As part of a complex project [1], which aimed at the organization and implementation of a new form of modern archive, based on valorization and long-term preservation of the archival fund [2], the digitization assumed not only the basic activity, but also an exploitation of information through a customized database.

The database design took into consideration the stringent needs of the curators and of the archivists, namely the effective administration and management of the „patient’s medical record” (in this case the files corresponding to each transcription). In accordance with the main ideas of the project, this electronic instrument facilitates not only fast and coherent access to the archive fund, but it also allows the user to visualize the results of a nondestructive technique – multispectral imaging analysis - used for documentation-investigation-diagnosis.

The novelty of using multispectral images in a database lies in the ability to provide additional information and also in the establishment of a link between the imagistic techniques which are a characteristic of the documentation stage, and the analytic ones - that produce specialized information related to the nature and behavior of materials. The compatibility with other techniques that are available in the INOE-CERTO [3-5] implies a complex overlay of information, which leads to a more complete study on the object (from data regarding its history and performance – to active processes of degradation or the monitoring of long term conditions of preservation). Multispectral imaging [6] designates a portable, noninvasive and nondestructive technique, used in the field of cultural heritage, for documentation and investigation. This type of analysis enables more ways of recording.

The basic principle of multispectral imaging analysis is given by the characteristic property of each material to respond differently, on certain wavelengths, to the interaction with electromagnetic radiation. Depending on the type of radiation used as source of excitation for the investigated object, the information revealed is provided from the different structural areas (top layers or under layers). Thus, if the UV acquisition modes (reflectance and fluorescence) address to the superficial layers (the top layers), the recording modes corresponding to NIR domain (NIR 1 and NIR 2) facilitates study of the under layers, meaning an in-depth analysis.

The archive conservation status was directly influenced by a series of factors, whose joint action led to a decrease of the text readability. Starting from intrinsic factors such as the support quality – namely paper and writing substances (such as pencil, ink, ball pen etc.), to certain practices used by researchers in order to consult the archive (excessive handling, repeated wetting of the document reverse side for a better observation of the text, accidentally inducing degradation or staining of the surface), over to the storing conditions (microclimate conditions, lighting, air quality), all of this drawbacks corroborated contribute to a reduction of the transcriptions research activity [7].

The multimedia IEF archive has developed over time by accumulating an impressive number of documents that belong to the national cultural heritage. Established with the intention to register and indirectly preserve folkloric phenomenon, the archive became,

gradually, “a social indispensable tool for the preservation of collective memory” [8]. Unquestionably, the value of the archive is given by the complexity and age of the information.

The selection of archive materials for multispectral analysis took into consideration the following criteria: the degree in loss of readability, the conservation status and the importance of the author that made the transcription (in the same sense the age of the document). Thus, there were selected texts by Ovidiu Bârlea, one of the most representative researchers of Romanian folklore. Another fundamental reason in selecting texts which belonged to this author was the particularity of the use of the writing constituents that turned out to be highly perishable in a short time. Among other selections, which did not belong to O. Bârlea, we can mention cases of: foxing, overwriting, staining and various types of materials superimposed on the original text, or documents characterized by advanced degradation [9-11].

The results obtained by multispectral imagistic analysis represented key aspects of the *multi-task* digitization program. Accessed through a complex database, this type of information provides a specialized data for the archive researchers. For some of the investigated documents, the analyses revealed new data regarding the actual conservation status or the presence of original text, obscured by different superimposed materials.

The results of this noninvasive technique can be exploited in order to document and monitor the conservation status by systematically repeating the acquisitions and integrating them in the dedicated database [12].

Conclusions

Each archive is complex and unique. Therefore, in order to develop a modern archive, we need to understand the particular needs of the collections, the condition and overtone of the materials, the history and intellectual roots of the archive, the physical workspace, as well as the human resource workflow. The folklore archives consist in a procedural phenomenon, irreversible and unrepeatable, having determined the type of creative features and dominant transmission oral folklore need to be studied. They reproduce real phenomenon from a historical perspective (diachronic and synchronic), geographic structures and the forms, style etc.

The present paper presents the results of a national project – *Folkmedia* - focused on a new form of a modern archive according to a strict risk assessment plan, in order to assure the collection’s viability and increase its visibility.

Preservation of the original folk culture works in their specific form is one of the most effective and objective tool for maintaining social collective memory. *Folkmedia* is focused on safeguarding a unique folklore collection by applying innovative approaches for decontamination and preservation, as well as nurturing the research and information-gathering. Besides the fact that proposes a great preservation solution for archive documents, one of the main advantages consists in introducing a great collection into the world cultural heritage list, since it is composed of oral folk recordings on paper, wax cylinders and magnetic tapes.

The archival collections of the *Institute of Ethnography and Folklore “C. Brăiloiu”* were assessed, and based on the value of the items, as well as their preservation status, conservation procedures were developed and their implementation is running at this moment [13-16].

Their digitization is more than plain preservation that reduces wear and tear on the originals for reference and reproduction. It provides researchers real time, online access to records that would be unthinkable in a traditional, physical archive, enhancing users' understanding on authenticity and archival context, as well as introducing in the online

environment the main national Folklore multimedia collection, as part of the multicultural European treasure.

The distinctive customization operated on this modern digital archive consists in the additional information gathered (wherever needed) through advanced photonic methods of investigation, such as multispectral imaging (UV, VIS, NIR) and digital microscopy. The digital data base has a dual nature, one with features of general interest that will be published on-line and one more specialized, designed to inner needs of the folklore researchers, fostering the fieldwork, enlarging accessibility of the folklore archives by using Internet based data storage and retrieval, elaborating optimal criteria of digitization, and systematization of oral folklore materials.

Two databases of folklore have been elaborated: one of them, more common, published in Internet and the second more specialized, designed to inner needs of the institution. Significant part of the stored recordings has been successfully assessed, as well as bigger part of handwritten materials and transcriptions. Thus the question of safeguarding was nearly solved. Accessibility of archival materials has increased significantly including the possibility of integration of the materials into international databases and worldwide access.

Digitization of the folklore archive represents a means of providing online access to all Folklore's Institute employees, from all locations; it has enhanced the preservation of records by reducing wear and tear on the originals for reference and reproduction and bears the access to those materials that can no longer be accessed in their original format.

Due to the all specific information accessible at "one click" it boosts the users' understanding of records' authenticity and archival context (who collected the information, whom was it collected from, from what area, what was the age of the collector/informer etc.) and allows an effective use of resources.

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