

# An Experience of Glass Plates Processing

Bogdan-Florin Popovici

The purpose of this paper is to present an archival processing experiment, without attempting to prescribe it as a pattern to follow. The objective was to carry out an archival processing meant to meet the requirements in the current trends of on-line finding aids editing, so that the need of physical and intellectual control over documentary materials can be achieved by information technology.

## 1. Working premises

During the evacuation process of the archival repositories of Braşov County Division of the National Archives, several boxes containing negative glass plates were identified. They had no reference numbers and in many cases their preservation conditions were improper. Certainly, the main issue to deal with was the lack of access to the existing photographic information.

## 2. Methodological dilemmas

The actual standard in effect on archives processing stipulates the aggregation of glass plates in collections where they should be arranged depending on format and described according to a defined pattern.

We regarded all these provisions somewhat reluctantly. First, it is unnatural to deny the possibility of dealing not with a collection, but with an archival group or fonds. In fact, insofar as these glass plates were created by a specific photographer, they should be implicitly considered and treated as *archival fonds* and not as *collection*. Beyond the semantic difference, there are several other technical implications. For example, if one considers a group of glass plates proceeding from the same creator as fonds, then one would not be able to re-arrange them on formats, but would have to cling to the primary organization made by the creator of the fonds (*respect des fonds*). Secondly, I also find it inappropriate to describe these documents according to the limited areas requested by the standard inventory; based on each individual case, one should provide as many details as possible in order to assist the user with accurate descriptions. Finally, I considered it natural that insofar as the master copies of the plates are in a digital format, the description and arrangement of the metadata should be equally processed in the digital environment.

### 3. Case study

The plates were stored in completely inappropriate metal boxes, and were grouped together or placed in wax paper envelopes. The only identification elements of their provenance could have been the other analogous metal boxes. The glass plates of different formats had no reference number, and at a simple glance their sequence did not show a logical classification. There were two options:

- 1) Either the images had no connection with one another and were grouped in boxes by one person with a view of being preserved; in this case the documents should have been re-arranged on formats and integrated within a larger collection of photo plates; or
- 2) They came from the same creator, and although there was no visible order in their arrangement, they shared an organic bond. In this case, the format-based re-arrangement would have damaged the potential link between documents, which otherwise could have been useful for the dating, the identification of the creator, etc.

Analyzing these two possibilities, I concluded that the first option, the one pursuing the rules enacted, could damage irrecoverably the potential connection between the items by not bringing any new elements but a “librarian” order, namely the format grouping. However, the second option would enable the maintenance of a potential origin, and would not cause any damage during the preservation process, in spite of relying on different formats. For this reason, I decided to keep the documents in their original order, while the description was to be made serially, with the reference numbers from 1 to infinite; the metadata would be also based on keywords, which could enable a virtual thematic re-grouping. This approach seemed to comply with the spirit of our profession that the archivist is an agent, an interface between the creator of the documents and the user, limiting as much as possible the intervention over the documentary material.

I considered redundant the customary paper-based description of documents (at item level), and hence I chose from the very beginning the PC-based solution. I also opted to capture the master copy by a built-in transparency adapter, having for result a digital copy of the glass plate negative. At this moment of planning, I had to consider the option of the software in use. Looking for professional solutions, I realized that Adobe Photoshop application recommends the metadata encoding through XMP standard (*Extensible Metadata Platform*). XMP is based on XML – the encoding standard of archival finding aids for on-line display. One advantage of this option is that metadata are embedded within the image, so that the image transfer involves also the metadata transfer; secondly, the conversion into a different format does not alter the metadata (at least, in the conversion from \*.tif to \*.jpeg); moreover, once the metadata encoded, they may be extracted and exported as an XML file, and hence the possibility of multiple conversions so as to use or process them in web

pages, databases, etc. Therefore, through metadata XMP encoding, one could provide both access to information (through the creation of a documents finding aid) and transfer of an image to a user requesting it, containing all data necessary for the understanding of the document context, structure, and contents.

One professional practice should be given a special attention. It is often considered that an image or the characters in it have to be identified in order to make an appropriate description of the document. In our opinion, this stance is slightly exaggerated. Many times it is almost impossible to identify images, people or moments captured. Whether one can accept it or not, the past is peculiar enough as to offer a variety of particular cases that an archivist could not reveal, regardless of his willingness to be informed; either they are not public cases or they are part of a rather hermetic past that we sometimes find hard to accept. For this reason I opine that the image description should remain an option opened for future completion. It is very likely that one user, well-informed, more experienced and involved in the research of a specific subject could make a more accurate identification and description. In our prospect, this should be assumed and encouraged, while recommendations from other users should never be taken for offences to an archivist's expertise, but the recognition of one's contribution to the disentanglement of a past not as clear as one wished it to be.

Another problem that emerged was related to preservation after processing. The ideal solution would have been an envelope made by a very delicate type of paper, which would have not damaged the suspension. A different possibility, in absence of the previous one, could have been a four-opening envelope, since the classic envelope could have damaged the photo suspension through friction when the plate was inserted or pulled out. Due to time and supplies shortage, this solution was not feasible either. In these conditions, using the paper acid free cardboard for documents, I created a double-opening "folder" for each plate. The simplicity of this solution brought in the – assumed – risk that the plate slid off its protection means on the sides, and I was not able to come up with a more convenient idea. Several such "folders" were grouped in envelopes and kept vertically – which was supposed to prevent the risk of breaking of the glass plates through accidental pressing on their surface.

#### **4. The procedure**

The glass plates were removed one by one from their initial position; they were cleaned of dust and scanned at 600 dpi, the maximum allowed by the scanner in use. They were further inserted in the above mentioned folders, which carried a reference number made of 4 digits (0001, 0002, etc.). Copies were identified by a small letter (0008a, 0008b, etc.). After taking 4 to 6 scanned images, the plates were

inserted in a bigger envelope, which carried the reference numbers contained (0001-0006).

We should add that apart from the plates, at a certain moment I identified the existence of photo film clichés (in fact, one frame each). Obviously, I considered it a professional mistake to take out these clichés and transform them into a photo film collection. The film frames were processed in the same way as the plates, specifying only the name of the medium.

After creating the protective envelope for the document, the next step was the description of the images. The basic result was usable in few cases, the image requesting a minimum digital processing. On the other hand, considering the obtained image as an archival master, I also thought of the situation when a potential user could get a copy of this image, having a superior processing capacity. Thus, I opted for an intervention that should improve the image without affecting it permanently. The solution used was that of applying processing effects on a layer. Whoever obtains a copy of that image will be able to remove the layer and process the image. Our aim was achieved, the image being improved enough to be identified.

The metadata offered by Adobe Photoshop are not destined to the old archival images. I was hereby forced to amount a series of existing fields with others, appropriate to our needs, and during the description processing I had to correct these equivalences. For the description I used the following fields (in alphabetical order):

*Author*

*Color space (for copy)*

*Copyright Notice*

*Copyright Status*

*Date captured (for copy)*

*Date of document*

*Description*

*Description Writer*

*Document title*

*Keywords*

*Original Title*

*Pixel dimension(for copy)*

*Polarity*

*Preservation status*

*Reference number*

*Remarks*

*Resolution (for copy)*

*Support dimensions*

*Technique of capture (for copy)*

After the capture and description of one box by the presented means, I realized that the chosen solution was the optimum one. The plates found in certain positions within one box and sharing several common features suggested they all came from the same creator. At the same time, the dating with a relative accuracy (within a 5 years period) of a photo enabled a relative association of the other images to the specified time period, which was further confirmed.

When the metadata were extracted out of files by a special cataloguing application (*WhereisIt*), the existence of keywords permitted the grouping on subjects. For example, if one user wishes to research “portraits”, one keyword is enough to interrogate and find all reference numbers of the portrait images; same for the “landscapes”, “buildings”, etc. all these without looking for the arrangement on arbitrary criteria of the original documentary material.

From the cataloguing application mentioned the metadata can be exported in XML and from here in databases or as an \*.html page. In both cases, the names of the fields in English are translated into Romanian and re-grouped according to the Romanian description hierarchy. From the \*.tif master copy, two different resolution \*.jpeg copies were generated so as to make them available in digital form. These copies would be eventually integrated within a finding aid that can be printed or posted on the web.

## 5. Conclusions

Our experiment on the processing of the existing photo material has led so far to the achievement of the expected results. When the reading room is provided with a computer terminal or when this finding can be posted on the web, I will be able to appraise more accurately the result of archival processing.

