

Proposal project for the restoration of the archive & laboratory of Marubi National photo museum

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Abstract

Photo - Studio "Marubi " is the first photographic studio in Albania founded in 1856 by Italian Pietro Marubbi (1834-1903). Nowadays the National "Marubi" photo-museum remains the only representative institution of art photography in Albania, with a 159 year history in photography. Where the historical, artistic, anthropological and ethnographic significance, constitute a considerable value for this Albanian cultural heritage treasure. The National photo-museum "Marubi" is one of the richest archives in the region, which contains 493,819 negatives.

These negative (photographs) belong to different photographs such as Pietro Marubbi, Mat Kodheli, Kolë Idromeno, Kel Marubi, Gege Marubi, Shan Pici, Dede Jakova, Pjeter Rraboshta, Angjelin Nenshati, Lazer Kodheli, Ali Voci, Hilmi Mustafa, Mehmet Kallfa, Osman Kallfa. Part of this archive are also about 200 photographic studio museum objects and 300 historical documents such as correspondence, notebooks, ledgers and journals of photographer's work, which constitute a rare world collection. The current place lacks the space for preservation, conservation, restoration and digitization; although at the new museum building there is given a special importance and space to these functions. The main reason for this funding on the archives of the National Marubi photo-museum, is to create favorable conditions dedicated to the preservation, restoration, conservation and digitization of photographs.

Keywords: Archive, photograph, preservation, conservation, restoration, digitization, museum, historical, artistic, anthropological and ethnographic, Albania, economy.

Introduction

Photo - Studio "Marubi " is the first photographic studio in Albania founded in 1856 by Italian Pietro Marubbi (1834-1903). After the death of craftsmen Marubbi, the studio was inherited by the adopted Mr. Keli, son of the Kodheli's family from the village of Zadrима,. He was then be called by the people of the city as Kel Marubi, in honour of the great master. Having inherited the studio and the master's surname, in 1907 Kel Marubi renamed the studio calling it "Dritëshkroja Marubbi". After the death of Kel Marubi "Dritëshkroja Marubbi" was run by his son Gegë Marubi, who was graduated in photography in the first school of Film and photography of "Lumiere Brothers" in France. The Marubi photo-museum was created as a sector of the Historical Museum of Shkodra in 1970.

In 2003 the photo-museum "Marubi" lost the dependency from the City Historical Museum passing thereby to the Ministry of Culture with the status of a National Institution. Nowadays the National "Marubi" photo-museum remains the only representative institution of art photography in Albania, with a 159 year history in

photography. Where the historical, artistic, anthropological and ethnographic significance, constitute a considerable value for this Albanian cultural heritage treasure. The foundation date of the photographic studio, the use of all the modern techniques (of the time) and the importance of preserving the original photography materials since 1856 are a very big impact in the history of art in the field of photography.

The creation of the archive

The photographic studio closed its doors in 1970, when the communist regime nationalized the studio collection. Several other Albanian photographers (Shan Pici, Dedë Jakova, Pjetër Rraboshta, Angjelin Nenshati) deposited their funds at that time in the library, which became a division of the Historical Museum of Shkodra. Gegë Marubi became the head of the division, and is striving to archive all the negatives. Since 2003, the library is under the Ministry of Culture as a national institution.

The future of the collection

In 2016 the National Photographic Marubi is integrated by the new premises, located at Kolë Idromeno street, a pedestrian street in the heart of the city, just a few steps from the historic studio Kel Marubi. The project includes a temporary exhibition hall for young Albanian artists, a permanent exhibition on the history of photography through the Marubi studio, reservations tailored to the specific storage of a photographic collection and workspaces for the restoration and digitization of images.

In the preamble to the opening of this new place, a website was launched in September 2016. It allowed the consultation of scanned negatives, plus the ability to search images by size, period, subject, ect To this effect, approximately 100,000 negatives have already been digitized in previous years. In many aspects the Marubi photo-library is exceptional. For Albania and Shkoder city it is a massive source of historical and cultural information. It can also create links in an area where many residents may find the photographs of their parents, grandparents, great-grandparents. Regarding to the photography in general, technically and practically, it is a fascinating set of study. The collection is stored in wooden cabinets dating back to the 70'. It is organized by authors, the main catalogue is that of Marubi's dynasty. The entire collection consists of 159.503 negatives on glass or flat film, and 334.316 negative views on film or the equivalent of 10 to 15.000 films.

Current status of the collection

The entire catalogue is currently stored in the premises of the National Photographic Marubi. The storage is on the first floor of the building, in a room of about 30m², with two large windows exposed northwest. Air conditioning was installed there about ten years ago but it is only operating during the work days. The local climate tends to be cool and damp in winter (about 5 ° C, 75% RH) and hot and relatively

dry in summer (about 30 ° C, 50% RH). As mentioned above the collection is stored in wooden cabinets dating back to the '70. It is organized by author, the main funds is that of Marubi's dynasty. The entire collection consists of 159.503 negatives on glass or flat film, and 334.316 negative views on film, or the equivalent of 10 to 15.000 films. The negatives are packaged in old containers or commercial boxes in poor quality cardboard. Negatives have been placed in these boxes by the photographers themselves. The boxes include various types of negatives (collodion, gelatine silver bromide), different formats and different substrates (glass plate and flexible support). A complete inventory was done by the team of the library. The number plate format is available and a first approach to typologies. Damaged glass plates (broken or cracked) have been identified during the inventory (available in appendix).

a) The impact of this project in the preservation of documents, photos and museum objects

Laboratory- digitalization room

- The digitalization process which is being carried out in the framework of the Project "Marubi Virtual Museum" will continue up to the complete digitalization of the Marubi National Photo-museum, at the least over the four coming years.

- The laboratory- digitalization room has been dimensioned according to the existing equipment (7 computer desktops, 3 A3 scanners, 5 A4 scanners, and 2 professional scanners: 1 FlexscanA2 and a Microfilm Scanner and reader), which is going to be used for the digitalization process in the new building.

- In the future it is expected that the number of the staff dedicated to digitalization will decrease and only two employees will be in charge for the digitalization process in the museum, giving space for a laboratory activity focused on the restoration and preservation of negatives, wooden boxes, old microfilms, cameras, photo register books etc.

Archive

- The existing negative plates of the Marubi national photo-museum are going to be archived using a KLUG archiving system increasing the needed space for storage. The future archive is dimensioned not only to preserve the current collection, but also future acquisitions from other collections. Therefore the future capacity of the photo archive has been fixed on around 100 lineal meters of shelves.

-The photo archive will have a maximum temperature of 18 degrees Celsius and humidity 30-40%.

- A table for transferring of 4.1 m² has been integrated in the middle of the room following the advice of the specialist in the preservation of the Marubi photo archive, Federica Peccol.

- Shelves with a depth of 30 cm and a corridor of 90 cm. between shelves have been used for dimensioning the archive space. Federica Peccol has suggested using some shelves with a bigger depth to archive large glass plates of large format 30x40 cm. For that purpose 17 lineal meters of shelves with a depth of 50 cm have been reserved.

- These requirements produce an archive of large dimensions. Due to the limitations of space in the building, the archive has been optimized, by using a compact storage

system based on removable shelves (half of the shelves) saving 25% of the space and reaching a total of 102 lineal meters of shelves, 34 lineal meters with fixed shelves of 30 cm, 17 lineal meters with fixed shelves 50 cm and 51 lineal meters with movable shelves 30 cm (compact storage).

- The dimensions of the archive have been optimized in relation to the information received. If a bigger capacity is required or a compact system with removable shelves is not recommended because of the preservation requirements, the archive could be extended over the terrace 1.7 meters to reach the same capacity without compact archive, or it could be extended even more, extending the archive until to the end of the plot if that is allowed by the urban rules that fix the maximum volume to build in the plot.

Method of Approach

The study was first carried out on plates by the team of the photo-museum and it was identified as problematic (including glass plates cracked or broken, detachments of the emulsion, a significant alteration of flexible media,). They have selected among these 57 boxes representing different eras of the workshop. Each box was studied piece by piece .

Information collected

During the study, there has been collected information of two kinds of interest:

- Historic interest: within the history of the catalogue (names of manufacturer's negatives) and the practice of photographers (manufacturing marks, alterations, treatments). This information is important for the future enhancement of the collection.
- Conservatory interest: being relevant in the perspective of optimizing the conservation of the collection (processes, formats, types of weathering, alteration levels).

To improve readability of the state catalogue, there has been applied to each box a medium level of deterioration , according to the various alterations encountered in the box :

- 1 : light dust, to be processed by the staff of the library
- 2: gap, crack, stabilized by the staff of the library after specific trainings
- 3: presence of more complex alterations to be treated by a specialist restorer

The result of the study

Typologies presented in the catalogue

Collodion glass plate

The negative shooting process on collodion glass plate was used primarily by Pietro Marubbi and also by Kel Marubi during his years of apprenticeship. Presumably the

lessons taken by Kel Marubi in the mid-1880s would have allowed him to become familiar with the negative gelatine glass plate, which came to compete and replace the collodion this period. During the study, we did not get an exact data of the number of collodion's plates, but we estimate around 2000 units, and in various formats (we observed the collodion 9x12 cm size to 13x18 cm format).

Gelatine glass plate

The negative gelatine glass plate has been massively used since the late 19th century. Its use continued till the 20th century, before being gradually replaced by the negatives on flexible support. In the workshops of photography, its use continued quite late, due to the inherent finesse glass processes. The Marubi collection, counts about 106,000 units. Sixteen different formats coexist, 3x4 cm to 30x40 cm. They are witness of the evolution of photography, which is towards shooting formats smaller and smaller, and therefore more convenient to use. These formats also testify shop practices: many negatives have been cut several times. In this way, multiple shots could be made on the same plate, by savings material and time. In the materials found at the museum, we could see a camera capable of taking 15 frames on a plate 13x18 cm, ideal for the realization of the photo ID.

Large alteration's groups of glass negatives

Physical alterations

- Caused by intensive use, handling or poor conditions: dust; abrasions; scratch; cracks or breakage of the support; deposit (tape, glue); water damage;
- Caused by the intrinsic material degradation: raising / separation of the emulsion; cross-linking of collodion.

Chemical alterations

- Caused by the intrinsic degradation of materials: collodion yellowing; silver mirror; sulphidation of the silver;
- Caused by the abuse during development: Chemical tasks.

Negative flexible support

From the inventory data within the collection, we could identify that 385.756 negatives are on a flexible support. Among them, 334.439 are 24x36 mm negative strip of 35 mm. 45677 are in a format approaching 6x9 cm, 4,845 approaching 9x12 cm, 782 cm and 13 format 13x18 18x24 cm.

Nitrate or acetate brackets

Cellulose nitrate, also called celluloid emulsion appears as a support for the negatives since 1889 and is used in the manufacture of these materials until the early 1950s.

The cellulose nitrate inevitably degrades, releasing in the air nitric acid, a highly dangerous gas. Moreover, it is a very inflammable substance, especially when the degradation is initiated. In a photographic archive, it is a serious problem, which we must pay a careful attention.

By the beginning of 1920, films of cellulose's acetate were gradually replaced by the nitrate support. If this material's danger, for humans and the collection, is smaller than the nitrate, the degradation is equally rapid and inevitable. Experts have not been able to systematically distinguish nitrates media from the acetate ones, because of their relatively good condition. Our field of study revealed no alarming situation (except in the case of the cabinet 21, see corresponding section p.10). It is important to draw the attention to the fact that the photographers represented by the Marubi photo-museum used the negative nitrate-based relatively late (until late 1950). (They have not observed filmstrip nitrate or cellulose acetate).

Triacetate Support

The tri-acetate material will be used as a support film from the late 1940s much more stable than the nitrate and acetate materials, it does not have currently strong conservation issues. Within the library, they found it in 35mm film support, and more rarely in the film plane of support.

There was basically detected degradation conditions 1 and 2.

Evaluation of degradation of nitrates and acetate's level

	Acetate	Nitrate
Level 1	Not visible degradation	
Level 2	Browning film; silver mirror	
Level 3	Support's deformation/image degradation/smell of acetic acid	Support's deformation/image degradation
Level 4	Cross-linking deformation, strong acidity around	support and image are largely altered, sticky movie in degraded areas
Level 5		negative unusable because of unreadable image or media completely decomposed, negatives glued together, nitric acid odour.

Study of the cabinet 21

During the study, experts realized that the content of the cabinet 21 was a large number of negatives on flexible support with suspected presence of cellulose nitrate support in a state of degradation 2, 3, 4 and 5. This cabinet contains the catalogue of Dedë Jakova's negatives, who joined the archive upon its creation in 1970. Dedë Jakova was an active Albanian photographer from the late 1920s until his death in 1973. Given its activity period, and considering our suspicion of the presence of nitrates, they decided to conduct this survey's specific part of the archives.

It consists of 1673 negatives on glass plates and 24514 negatives on flexible media as well as negatives roll contained in about 350 boxes in old conditions. They chose to examine a box of ten, then study two boxes in ten of old Agfa red boxes, which seemed to contain the negatives in advanced state of deterioration. It turns out that within Agfa boxes containing flexible support 6x9 cm (approximately 130 boxes), 20% have a degradation level of 3, 20% a degradation level of 4, the remainder being has a degradation level of 2. From the remaining boxes in this cabinet (220 boxes), 17% have a degradation of level 3, the remaining has a degradation level 2.

Information of historical interest

Packaging box

The entire collection is packed in original packaging plates boxes. A large number of manufacturer is present such as Lumière, French manufacturer, Ferrania, Italian manufacturer, Agfa, a German manufacturer, Gevaert, Perut, Courtrai, Austria Krago Plate.

They are a good source of information on the workshop's Supply habits, and on the evolution of the production during the 19th and 20th century. During the inventory conducted by Gege Marubi, information about the content have been attached to the boxes. It is remarkable that the inventory was made by the same members of the workshop.

Brand Manufacturing

Some elements on the plates are the kind of negative manufacturing processes. These elements help to provide information on the techniques used, on the boxes that have been used for shooting and on the practice of photographers.

Plates Strength

Plates Strength improves the rendering of a negative underdeveloped posed by slightly increasing the contrast. Several treatments were possible (mercuric iodide, chlorochromique) according to the desired effects. Commercial solutions could be used (Quinochrome, Light of establishments). Many of the Marubi's catalogue plates have undergone such a treatment.

Retouching

Experts saw that very many negatives on plates and flexible substrates were retouched, common practice in photography. Different techniques have been used by photographers present in the catalogue:

- Elements of Silhouettage;
- Details Editing graphite pencil;
- Lack of Repique in the emulsion;
- Application of Vaseline to improve grip graphite pencil.

These practices reflect the working habits of the photographers and their evolution during the time. It is interesting that continues the practice of retouching throughout the life of the studio, either on glasses media or flexible media. The type of retouching practice is very well described in the literature of photography, for example in *Light Diaries*.

Repackaging materials

For reconditioning catalogues, it is recommend the use of covers and boxes made of conservation materials. That is to say, neutral materials for the pieces which do not generate pollutant and have a long lasting life. For packaging photographic materials, it is recommended to use covers and paper and cardboard boxes having passed the Photographic Activity Test (PAT, see standard in the annexes). This test ensures that the contact of a material is not harmful to the silver present in the photographs. Paper and paperboard are made shelf-based high content of alpha cellulose pulp. They are unbuffered.

For commercial boxes

The boxes in which are currently stored the negatives are not suitable for the preservation of the photographs.

Nevertheless, they are of great historical interest. The library will need to decide if they should be stored (completely or partially). It is in any case necessary to document carefully because they contain information (labels, handwritten notes ect) .

Packaging and conservation of negatives catalogue on flexible substrates nitrate and cellulose acetate

Following the study of the catalogue and the findings on dating and level of alteration of nitrate and acetate materials, experts advocate the separation of flexible substrates dated before 1960 from the rest of the collection, as well as the preservation in an adequate environment, allowing slower degradation. They propose to establish a separate subject with a controlled temperature and relative humidity. The acquisition of a climate cabinet can be a temporary solution for the case of altered nitrates. The flexible supports dating from 1960 are considered on triacetate support and can be kept in the same box as the negatives on the glass support. A more extensive study, conducted by a specialist restorer, would decide more accurately on media nitrates, acetates, and triacetate supports dating before the 1960s. It is further proposed to select 10 different flexible substrates state of degradation and monitor biannual basis.

Reconditioning of films on flexible substrates in strips

For packaging negative flexible strips, it was proposed the following method of packaging:

- Packaging tapes in neutral paper conservation pockets with flap
- Vertically package to appropriate conservation boxes.

During the study, experts found that a large number of flexible negatives had not been cut by the photographer and therefore was still in coils. This is a historically interesting element. Indeed, if the coil has not been cut, it is hard to believe that the negatives of this coil were never drawn into positives: from one hand, carrying out a contact sheet would have been impossible but on the other hand the draw by using an enlarger was highly complicated or even impossible.

This provision in coil makes their packaging difficult. Indeed many of these coils are of nitrate or cellulose acetate. The degradation of these materials being autocatalytic, the presence of these materials in the form of coils, in such a high concentration, makes their conservation dangerous for the object itself and the staff of the library. A solution is the strip coils cut of about 26 cm, and packaging under cover individual paper.

Reconditioning good condition plates and flexible substrates

The packaging of negatives on flexible supports (dating from 1960) and the glass plate having no pronounced alteration is made in sleeves of 4 paper flaps not rough conservation. The inventory number shall be entered in graphite pencil in the upper left corner of the cover before inserting the negative. Each pouch is then stored in a cardboard box bearing the conservation information on its content. It can be used five pockets formats, compatible with the format of the boxes:

- For negative 4x4cm 6x9cm formats to the formats included: 4 pocket flap size 6x9cm
- For negative formats up to 10x15cm 9x12cm formats included: pocket flap 4 10x15cm
- For negative formats up to 13x18cm 12x16cm formats included: 4 pocket flap size 13x18cm
- For negative 12,5x20cm formats up to 18x24cm formats included: pocket flap 4 18 * 24cm format
- For negative formats greater than 18x24: 4 flap pocket 30x40cm format with cardboard reinforcement in 30x40cm format, to improve the protection of these large format negative.

For reconditioning canned catalogue from the Marubi photo library, experts made the following proposals:

Reconditioning vertical negative to 18x24cm format; flat reconditioning negatives higher format. To facilitate the repackaging of negative and organization of reserves, we offer five box sizes corresponding to the five pockets formats

Elements to report for further processing by a conservator

The worsening alterations experienced in the catalogues of the Marubi photo library can be slowed or stopped by repackaging and by improving environmental conditions (temperature / humidity). The following alterations may be reported during repackaging for subsequent treatment by a conservator.

- Negative with a pronounced fouling;

- Negative with an uprising emulsion;
- Cracked glass plates;
- Broken glass plates;
- Lacunar glass plates;
- Glass plates glued together;

- Flexible support glued together;
- Flexible support in an advanced state of degradation (level 3, 4).

Conclusions

In many aspects the Marubi photo-library is exceptional. For Albania and Shkoder city it is a massive source of historical and cultural information. It can also create links in an area where many residents may find the photographs of their parents, grandparents, great-grandparents. Regarding to the photography in general, technically and practically, it is a fascinating set of study, it is one of the richest archives in the region for the photo

The proposals presented in this report are to highlight the possibilities with staff and the institution's budget. While it is important to keep in mind that repackaging must be at the heart of the conservation's strategy of the catalogue set up under the relocation of the library in a new place, they must be considered as solutions adaptable to needs and available resources.

Therefore, the main reason for this funding on the archives and the laboratory-digitalization room of the National Marubi photo-museum, is to create favourable conditions to special spaces dedicated to the preservation, restoration, conservation and digitization of photographs

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