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# **Digitizing collections - A reflection on negative archive collections, prioritizing procedures and what is lost**

**Catarina Cortes Pereira, Laura Castro, Carolina Barata, and Margarita San Andrés**

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## **ABSTRACT**

A common practice today, for photograph collections, is to create images databases available (or not) on-line. Usually, this is regarded as an added value to the collection, especially for making it available outside its community.

This paper focuses on the values that define and prioritize the digitizing process of negative photograph archive collections. A reflection is made on the effects of mass digitization, how are the negatives being represented in their digitized versions and what does this mean for future generations. In this digital age, when the knowledge about historical photographic processes has become the knowledge of experts, the need for complete and comprehensive records is paramount to ensure the passing on of knowledge and, consequently, the preservation of the negative collections.

## **1. INTRODUCTION**

When researching the conservation of negative collections today, we face the fact that digitization is already established as a standard procedure. And it is even considered to be a form of preservation.

The problem is “What is their value?”. How are these collections being valued? How does this reflect on the digitization process and how the digitized version represents the object and its values? In this paper, it will be argued that values are being lost in the process, with direct impact on the preservation, interpretation, and understanding of both the collections and their individual objects.

## **2. STARTING WITH A FEW CONCEPTS**

Conservation is not, and for some time now, a subject that follows an accepted text or one expert’s view. In contemporary times, what dictate conservation are different variables and amalgamations of past and present, collective and individual perspectives, as part of a participatory model.

It is a fluid concept and it will, for sure, be criticized in the future. But, for now, it helps us to understand conservation today and to fill the gaps of the previous theories.

When considering what the contemporary theory of conservation is, concerning photography heritage, it is essential to state a few definitions, even if this might represent a repetitive task. Truthfully to its nature, in contemporary theory, the stating of definitions helps the readers to understand the text in front of them. More than permanent and immutable definitions, the acceptations are made to fit the text even if other authors would argue different or broader meanings.

Photography collections are, by the UNESCO categories, included in the tangible cultural heritage and, therefore, objects in the scope of conservation. But not all photography is considered a conservation object, so it is important to revisit what is. Conservation objects are those that, at some point, or by someone, were considered to be worthy of conservation treatment, as opposed to maintenance, repair, or care.

This worthiness refers to the value that we today consider them to have, and that ensures their preservation. These values can be artistic, historical, remembrance, identity, or others. As defined by authors such as Riegl (1999, original edition 1903), Muñoz Viñas (2011) or Avrami, Randall, and de la Torre (2000), to mention a few, and although not directly referring to the field of photography, these values are recognizable in Photography, and a photographic object may hold one or several of them. Finally, the group of values attached to an object helps to define its meaning or cultural significance.

Here, it is not intended to discuss the reason behind these concepts of value, culture, or heritage but to acknowledge their existence and that they dictate the conservator's work.

### 3. VALUES IN PHOTOGRAPHY

Photography sets a group apart from other conservation objects, as different values can be assigned to the physical object and its corresponding image.

As mentioned, the image may be considered to have documental, historical, artistic, identity, visual culture values, among others. However, this raises the question: what values can be associated with the physical object?

In this digital age, and even if the artists still choose the physical support for their work, the object itself loses importance as everyone can consider having a digital copy that can be accessed anywhere, even on a mobile phone, in a virtual ownership.

But, at what cost?

Walter Benjamin notices this, in a different scope, when he wrote: “the work of art in the age of mechanical reproduction” (2007, original edition 1935). In this digital age, one would call it the age of digital dissemination. More than the value of art, the concern is how we value these photographic objects.

Everywhere digitizing campaigns are making collections available to the world and frequently are defined as “copy to preserve” or “digital preservation”. The result is exceedingly focused on the image alone. Searching online image databases, it is evident the lack of a relationship between the original object and the image in its digital version. Also, in some of these campaigns, after the digitization, the object is destroyed, reinforcing the idea that the object has lost value and has become completely obsolete.

Is there still a need to preserve the physical object? How can the photographic object be preserved if lacks or it is devoid of assigned values?

Nonetheless, the fact is that all around the world, most collections are being kept, aside from being already digitized. So, what then are the values associated with these objects, that ensures or justifies their preservation?

### 3.1. The value of the photographic object

Art collections and art photography express an artistic value. The value of an original object produced in a specific time that differentiates it from copies or reproductions.

A particular and specific case in photography that can be called the Daguerre value relates to daguerreotypes. These are appreciated, bought and preserved for the simple fact that they are daguerreotypes, regardless of the date of production, author, subject of the image and, to some extent, even its conservation condition.

Historical photography collections refer to the recognized historical values, that is the passing of time regarding the age of the object or the time of its production. “historical collection” is also a term that relates to collections of photography produced by historical processes; this is, recognizing a timeline of successive events, of photographic processes in use before the photographic film.

The most recognized value in photography is the documental value. A photograph is a document as it holds the record of a time and place in its image. This value is also recognized in the object, more relevantly, in negatives as these are the objects that were present in the same place and produced at the same time of the captured image and in that sense, they are unique, they are the original document.

More than historical or documental value, some photographic objects hold archeological value. Maybe it is not easy to understand why archeological but, let us consider for a moment a Roman amphora. The amphora has archeological value, as it is an object in itself and a fragment of its context; it represents its time, the development of a technology, an industry, commerce, the people who used it, a way of living, even with none or little artistic qualities, even if only a part of it has survived.

Let us now consider Niepce’s view from the window at Las Gras (fig.1). Maybe not a work of art, the image is almost gone, but it is definitely a mark in history. If not the first, it is considered to be the oldest surviving example of camera photography. Thus, what is at stake it is not what it depicts;

it is the object that has importance and value. A value that one might say transcends itself as an object also becoming the representation of its time, as a product of the Industrial Age, the culmination of a need or will that could only be possible in its time.

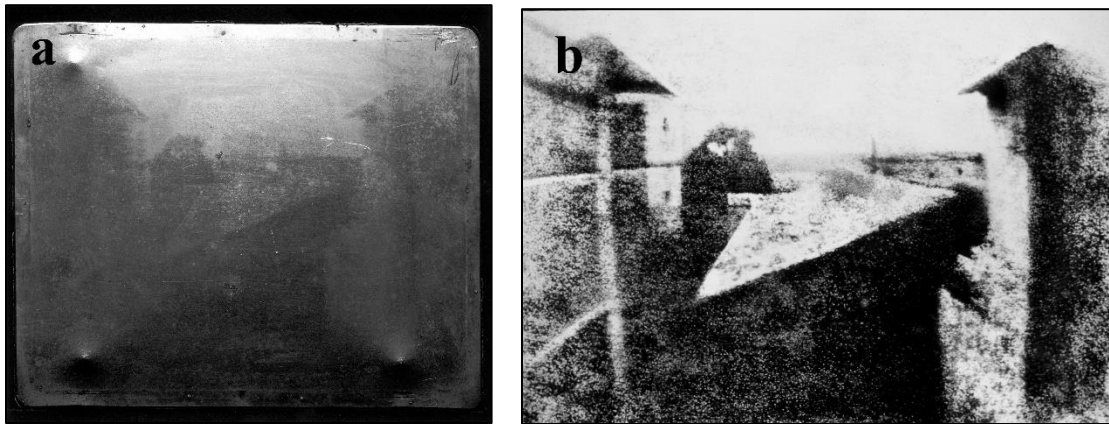


Fig. 1. a) heliographic plate, b) enhanced image. View from the Window at Le Gras by Nicéphore Niépce, 1826/27. Harry Ransom Center's Gernsheim collection, The University of Texas at Austin, US. Images source: Wikipedia.

### 3.2. The negative the/an archeological object

The archeological value further applies to negatives, as they are not the final object, even though they show a version of the original image.

Let us consider that photographers made different choices to obtain their images, type of print, size, cropping, use of secondary support, among other choices. None of these are present or reflected in the negative. When a collection holds different stages of the photographic process the difference from the negative to the final print becomes evident. In the following examples (fig. 2, 3), some of these choices can be identified.



Fig. 2. Half of stereoscopic photographs: a) dry plate negative; b) digitally converted positive; c) original test print; d) original print with vignette effect on secondary support. Actor Augusto de Mello by Aurélio da Paz dos Reis, ca. 1910, Centro Português de Fotografia, Portugal (PT/CPF/APR/001-001/007113).



**Fig. 3.** Half of stereoscopic photographs: a) digitally converted positive of a portrait from a dry plate negative; b) original test print with vignette effect; c) digitally converted positive of garland from a dry plate negative; d) original test photomontage obtained by double exposure of the portrait and the garland negatives. Actress Cecília Machado, by Aurélio da Paz dos Reis, ca. 1910, Centro Português de Fotografia, Portugal (PT/CPF/APR/001-001/007195 & 2237).

When compared to the print, the negative is just a step in the photographer's process, so it should lack values such as remembrance or visual culture, as they are associated with the image. And the photographer's intended image exists only in the final original print. However, that is not the case. The uncropped image of the negative often show more than the print, and it has extra information that adds value to the object (and its image).

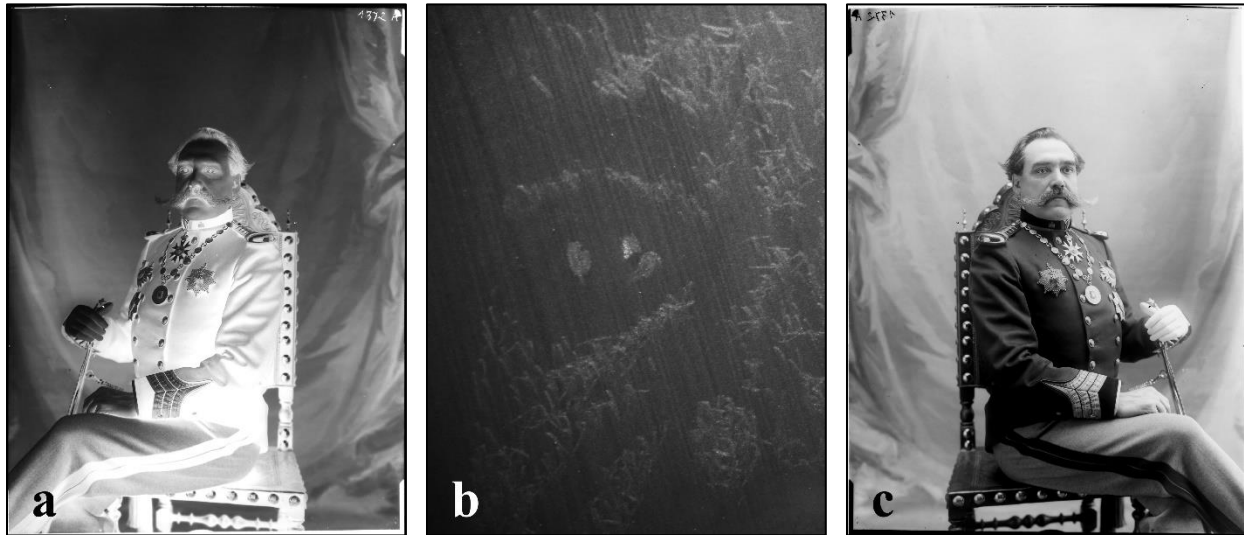
Photographers frequently leave personal notes on the negative, such as dates, locations, or identification of the events depicted. It is also common to find notes on the negatives, indicating intended size and type of print (fig.4), information written for the person that would process the negative that, in many photographic studios, would not be the photographer. All this information will not appear in the final image but adds insight into the photographer's intention and technique.



**Fig. 4.** a) Mounted print in the promenade format, 10x19 cm (4x7,5 in), private collection; b) dry plate negative, 18x24 cm (7x9,45 in); c) detail of the margin with writings "Promenade", a note indicating the desired print format; d) digitally converted positive; Judge Artur Lopes Cardoso, later Minister of Justice, by Alvão, 1903, Centro Português de Fotografia, Portugal (PT/CPF/ALV – 141-2527").

Another choice, for example, was to retouch the negatives (fig.5). A "good retouching" was not to be discernible on the final print, but it is visible on the negative, as it was often done by hand and using different media, such as varnishes, colorants or pencil. Retouching a photograph had other

purposes beyond overcoming technical difficulties. Today they are a testimony of the retouching practice and the aesthetics of their time.



**Fig. 5. a) Dry plate negative, 18x24cm (7x9,45 in); b) macro detail showing retouching work on the emulsion surface with pencil and retouching knife; c) digitally converted positive. Colonel Joaquim José Machado; unknown photographer, Municipal Photography Archive of Lisbon (PT/AMLSB/NEG000335).**

In sum, the negatives tell more than what they depict. They are not the final product of the photographer. And yet, as objects, they hold information that is important to preserve. They show a version of the image; they give evidence of their time, and thus hold, among possible others, remembrance, visual culture, historical, and archeological values.

#### 4. KNOWLEDGE AND PRESERVATION

Values alone do not guarantee the preservation of conservation objects. Also, it is not enough that experts consider that any of these values are attached to a specific object to guarantee its preservation. It is not hard to recall an object or monument that was considered valuable and is now lost to neglect.

Beyond the recognition of value, it is information that ensures the preservation, the most information possible about an object, but also the largest number of people that are aware of that information and value, whether experts or non-experts, enough information to engage communities, raise awareness and move public, political and social opinion.

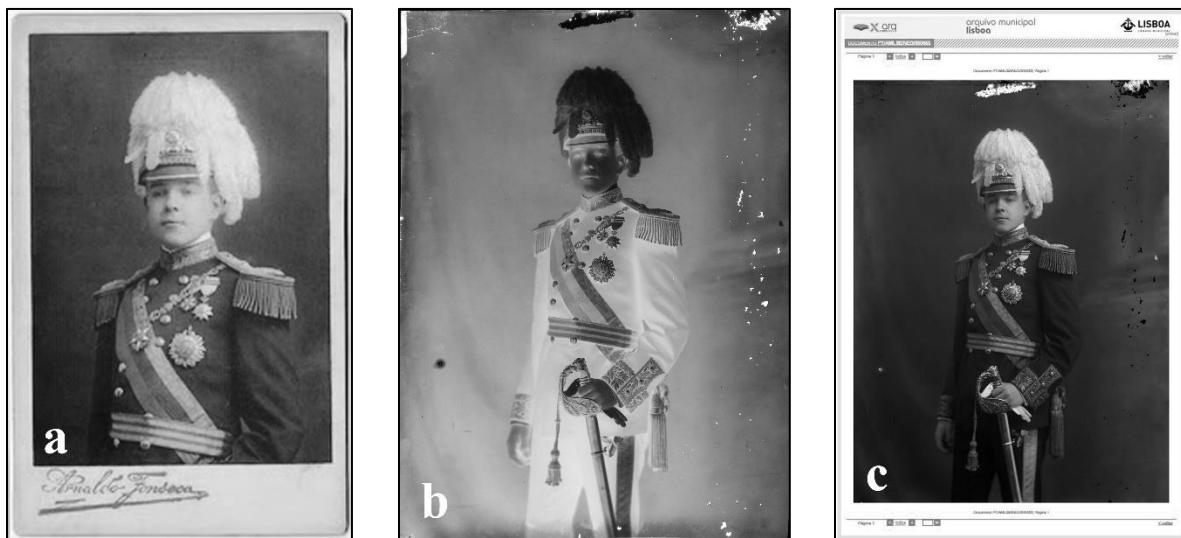
Custodians of photographic collections, such as museums and archives, gather the most information and documentation as possible about an object; this information is included in catalogs and inventories. Conservators develop research on conservation conditions and specific characteristics of each object (material, history, production and artistic technique or others) in order to better understand the object and to justify the decision-making process, even before starting conservation procedures. This is also recognized in conservation by professional guidelines, ethical codes, and laws, in the form of preliminary, condition and intervention reports.

Universities and research centers, including both human and exact sciences, do in-depth research on general or individual objects, their history, uses, materials, deterioration processes, and more. The information recovered or uncovered by these institutions and professionals helps to understand the value of our cultural heritage, and reaches the general public through publications, interpretation centers, and educational services.

In this digital age, a great resource for publication and dissemination is definitely the internet. A digitized archive or collection can reach outside its community in a way that no other type of publication can.

## 5. DIGITIZED COLLECTIONS - WHAT IS LOST

Digitizing conservation objects is not limited to photography. The same is happening in other areas of conservation, including 3D imaging such as photogrammetry and 3D reconstructions. In these cases, the purpose of the digital image is to help interpretation and allow a better understanding of the value of the original object, but it does not replace the original object. However, this is not true for digitized photographs and more so in the case of negatives, as people quickly take the digital image as a copy of the original object.



**Fig. 6.** a) Carte-cabinet, private collection; b) dry plate negative, 18x24cm (7x9,45 in.); c) print screen of the negative's online record; Dom Manuel II of Portugal, by Arnaldo Fonseca, Municipal Photography Archive of Lisbon ((PT/AMLSB/NEG000655), <http://arquivomunicipal2.cm-lisboa.pt/sala/online/ui/SearchBasic.aspx>).

The dissociation between object and image is evident in online databases of photograph collections. Without color scales, additional images and, in the case of the negative, frequently converted to a grayscale positive, the online digital image is accepted as a true copy (fig.6). The value is given only to the image disregarding the nature of the object. All negatives look alike, regardless if they are glass plate or film negatives. The daguerreotype loses its natural characteristics, becoming similar to an ambrotype. The sharpness of the daguerreotype loses relevance, and a salted paper print might seem just blurred or unfocused as they become made of



pixels. The material knowledge of the physical object and all associated information about its production is missing in its single-image digital representation.

With the physical object, it is also lost knowledge about the photographic process. There are already generations that never used a film camera and do not realize what a negate-positive process is, information that already falls in the category of the archeological value. When representing a negative in images databases it is common to show its digitally converted positive image. Despite a caption mentioning that it is a negative, the person viewing its digital record might not know or realize what it actually means and how the original physical object looks like (fig.7).



**Fig. 7. a) dry plate negative in original box, retouched on the glass surface with red ink over hands and faces, 13x18 cm (5x7 in); b) same negative viewed with transmitted light; c) digitally converted positive. The ballroom music group “Caravana”, by Foto-Carvalho, ca. 1950, Estremoz, Portugal, Private Collection.**

The photographer’s intention is also lost. Interpreting the digital image as a copy of the original object eliminates all the photographer’s creative decisions when choosing the type of print, and all its variables, with direct impact on the perceived image and its meaning and value. This is even more problematic in the case of negatives. Already common is the use of the digital images of negative collections to study a photographer’s technique, and for museum and archives to show a photographer’s life work. Although, as mentioned above, the negatives have relevant values to be preserved, studying a photographer by analyzing exclusively digitally processed images of negative collections implies the loss of information and value. It is not uncommon to find photograph exhibitions reviews criticizing the lack of original prints on display. Which is understandable if the collection is comprised only of negatives. For example, during the exhibition that happened in 1999, about the work of Aurélio da Paz dos Reis (1862-1931), an important Portuguese photographer, a critic noted: *“In short, we expect a refocus on the research of the history of photography on original prints and resist the temptation to regard the author’s negatives from decades ago as materials that can freely be manipulated according to today’s taste and techniques.”* (Alexandre Pomar, [https://alexandrepomar.typepad.com/alexandre\\_pomar/](https://alexandrepomar.typepad.com/alexandre_pomar/), 1999, translated by the author)

The awareness expressed by this critic’s comment, that what had been shown did not truthfully reflect the photographer’s intention and the original work, might not be recognized in future generations if the transmitted information in databases is always incomplete.

When collections hold both the print and its corresponding negative, it is not uncommon to find that only the negative has been digitized and that the negative’s digital image now represents both objects in the online database. For all that has been said, this represents a devaluation of each object with repercussions in the interpretation of their respective meaning or cultural significance.

Negative collections are an essential part of our heritage; they show us the proverbial window to our past. For that alone, making them available online is an important endeavor. Though in today's digital initiatives the true representation of each object seems to be the main goal, when looking closely, the concern is frequently focused on the consistency and quality of the final product, the filetypes, and metadata. The priority is to achieve the best quality images in the shortest amount of time. Of course, information can be added later on. However, considering the size of collections and the number of resources available, do we really go back to add information? And how much of it is lost in the meantime?

## 6. PRESERVING VALUES – WHAT TO LOOK FOR

The preservation of the photographic object in museums and archives is dependent on the acknowledgment of its values. And it is important to verify if these attached values are truthfully and clearly being transmitted to the next generation; this is, preserving as much as possible its cultural significance throughout time.

For future generations and today's non-experts, information about the nature of the photographic objects, of the photographic techniques, and even about their conservation conditions, especially for negatives, is information that already has archeological value. This represents knowledge that enriches the object, its image and its relevance in the historical context.

Although experts today still recognize the value of negative collections, these suffer the most significant loss due to incomplete representation in online databases, also putting at risk their preservation. It is, therefore, necessary to reflect on the purpose of the digitization process: whether it is to create an image database alone or to really contribute to the preservation of the collections.

## ACKNOWLEDGMENTS

Because this research is focused on dry plate negatives, the examples show mostly these kinds of objects, notwithstanding, the author believes that the same reasoning can be applied to collodion, film, or paper negatives.

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## REFERENCES

Avrami, Erica; Randall Mason, and Marta de la Torre. 2000. *Values and heritage conservation: Research report*. Los Angeles, CA: Getty Conservation Institute.

Benjamin, Walter. 2007. *Illuminations*. New York: Schocken Books.

Muñoz Viñas, Salvador. 2011. *Contemporary theory of conservation*. London: Routledge, Taylor & Francis Group.

Riegl, Alöis. 1999. *El culto moderno a los monumentos: Caracteres y origen*. 2nd ed. Madrid: La Balsa de la Medusa.

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