Proceedings of The National Conference On Undergraduate Research (NCUR) 2019 Kennesaw State University Kennesaw, Georgia April 11-13, 2019

# The Catanzaro Photographic Collection: Preserving Puerto Rican Cultural Heritage Through Digitization

Gabriela Rivera Marín Comparative Literature University of Puerto Rico, Rio Piedras Campus San Juan, Puerto Rico 00931 USA

Faculty Advisors: Dr. Nadjah Ríos Villarini & Dr. Mirerza González

#### **Abstract**

Through the digital conservation of cultural materials, we can help the members of a community understand their present socio-political and cultural circumstances by making their history and historical artifacts more accessible to them. The aim of this paper is to describe the research process that took place in order to preserve and digitize the negatives of an original collection of photographs, The Catanzaro Photographic Collection. The paper also discusses the Catanzaro Collection as an example of a Digital Humanities project. The collection provides a unique look at the militarization process of the island of Vieques, a municipality of Puerto Rico, in 1942 and the American occupation of its territory during World War Two. This paper seeks to contribute to the conservation of Puerto Rican cultural heritage and provide an answer to the question of how to document, digitize, preserve and make accessible a photographic collection. The preservation process was divided into three separate stages: stage one comprised an initial assessment of the materials, the creation of a macro-level inventory that could register those materials and the drafting of a general description of the collection. The completion of this stage required research done as a series of meetings and interviews with the representative of the Vieques Historical Archive and a professional archivist. A bibliography was developed which included texts related to the early years of the American presence in Vieques, as well as, the digital humanities and methods of preservation. Stage two was the digitization process, each negative was digitized using a specialized scanner. The last stage consisted of the elaboration of a micro-level inventory for the digitized negatives and the pairing of the negatives with their respective digitized photograph. The final product was a submission to the Digital Library of the Caribbean for the long-term digital preservation of the materials.

Keywords: Digitization, Cultural Heritage, Vieques-Puerto Rico.

#### 1. Introduction

For a society to prosper it needs to know itself. Therefore, it must become intimately familiar with the events, the faces, and ideas of its past in order to make sense of its own identity and move forward into the future. This acquaintanceship comes through cultural heritage, which is a public heirloom and will be what is passed down to subsequent generations<sup>1</sup>. Through the digitization of tangible and/or intangible cultural heritage, we can help the members of a community interpret their present socio-political and cultural circumstances by making their history and historical artifacts more accessible to them. The aim of this paper is to describe the research process that has been taking place in order to preserve and digitize the negatives of an original collection of photographs, The Catanzaro Photographic Collection. This paper seeks to contribute to the conservation of Puerto Rican cultural heritage and provide an answer to the question of how to document, digitize, preserve and make accessible a photographic collection.

The entity spearheading the digitization and cataloguing of the photographic collection is The Caribbean Diaspora Project, an NEH funded Digital Humanities initiative adhered to the College of General Studies at the University of Puerto Rico, Rio Piedras Campus. At the time of writing, the author was employed as a research assistant for the

project's primary researchers. Why entrust the Diaspora Project with this collection? The project aims, amongst other things, to recover, revitalize and make accessible primary and secondary sources, including artifacts, related to human mobility in the Caribbean<sup>2</sup>. Additionally, it also provides aid to grassroots initiatives related to the preservation and digital reproduction of local cultural artifacts. By way of a partnership with the Vieques Historical Archives, the current legal holders of the photographs, The Caribbean Diaspora Project received the negatives of the Catanzaro Collection for their digitization in September 26, 2018.

# 2. Catanzaro Photographic Collection

The Catanzaro Photographic Collection consists of over 700 photographs taken by the members of the Catanzaro family during their stay on the island of Vieques from 1941 to December 1942<sup>3</sup>. Vieques is an island municipality of the Commonwealth of Puerto Rico. The collection includes images that portray the island's socio-political, economic and cultural life during the arrival and stay of the United States Navy on its shores, an event that brought about great change not only to the island of Vieques, but to the Caribbean at large. Most of the photos showcase Vieques, its landscapes and everyday life elements such as: traditional festivities, infrastructure, friends and family, musical groups, high school graduations, religious ceremonies, and other cultural practices. A brief exploration of the pertinent historical background is fundamental to better appreciate the significance of the collection.

# 2.1 Historical Context

The following historical background was developed as a result of the literature review and interviews conducted for this project. As previously mentioned, Vieques is an island municipality of Puerto Rico, a non-sovereign unincorporated territory of the United States. Its citizens, like all other Puerto Ricans, possess U.S. citizenship. The island is located around 6 miles southeast of the Puerto Rican mainland. During the 1920s and early 1930s it had an economy mostly dependent on the sugar cane industry. In 1926, the United States Navy publicly recognized its interest in building naval bases on the island of Vieques, due to the military advantages provided by its geographic location<sup>4</sup>. World War II broke out in 1939 and, contrary to popular belief, Vieques was not unaffected. As Germany battled against the British and the French in the Atlantic, the United States prepared themselves for their possible involvement.

In 1941 the U.S approved a budget of an initial \$35,000,000 to build a naval base in the island to provide logistical aid to its Atlantic Fleet<sup>5</sup>. The project would start with the development of a breakwater structure and a naval shipyard. This is where the Catanzaro family makes their entrance into the footnotes of Vieques' history, as the family came to the island to work in the construction of the breakwaters. From 1941 to 1947, the United States expropriated more than 25,360 acres of land of the 33,000 acres that made up the island, which corresponds to 76% of the territory<sup>6</sup>. This heavily impacted Vieques' economy ending what was left of the sugar cane industry and making its population essentially dependent on the U.S Navy for work. Hundreds of people were left without a place to call their own, as the island that previously belonged to them was now being used as a massive military training ground. This time period also brought a wave of migration from the U.S. to the island, as many came to work for the military<sup>7</sup>. The Catanzaros were part of that wave.

The Catanzaro family was composed of Mr. Joseph Catanzaro, his wife, Blanche, and his sons, Joseph Jr., and August "Gus" Catanzaro. They used to live in the city of Baltimore, Maryland before they moved to the island of Vieques in the year 1941. The move was motivated by professional interests as Mr. Catanzaro accepted to be the supervisor of the warehouse where the construction materials for the military buildings were being stored. Joseph Catanzaro Sr. and his sons began working on the construction of the breakwater structure. During the year of 1942, the Catanzaro family, mainly August and Joseph, who were teenagers at the time, took pictures of everyday life on the island. In December of that same year, after the construction stopped, the Catanzaro's left Vieques and returned to their home in Baltimore taking their photographs with them. In the year 1990, August, the last surviving member of the family, donated the pictures to the Vieques Historical Archive.

It is important to note that the Catanzaro's were foreigners staying on an island that no longer belonged to its own people. The photographs of this collection were taken on a place that was undergoing unmeasurable amounts of stress. Its people were losing their land, entire families were being left with nothing, soldiers were getting ready to fight for their lives, and the world around them was rife with violence and death. Yet, the pictures depict a community that still had time for laughter, for dances, for high school graduations and other festivities. They had time to form meaningful human connections. The Catanzaro Collection captures the briefs moments of hope in a rather turbulent time period where loss was a common denominator. All of this is added value to the collection.

## 3. Digitization: Reasons and Strategies

# 3.1 Reasons for Digitization

Why is the Diaspora Project interested in the collection? The Caribbean Diaspora Project considers the digitization of The Catanzaro Collection to be of great relevance not only for the community in Vieques or for the Puerto Rican people, but for the Caribbean as a whole because it offers a unique look into the militarization process endured by the people of Vieques during the early 1940s when half of the island's territory was being expatriated by the United States Navy and hundreds of people were being left with nothing. Likewise, the information presented in this collection opens the door for a better understanding of the role played by the island of Vieques, and the Caribbean at large, in the geopolitics of the World War II.

Why digitize? In more developed countries with large economies and advanced technological infrastructure, access to cultural materials is not necessarily a pressing concern. People generally have computers more readily available and expect to be able to find and retrieve their desired information online <sup>10</sup>. These countries tend to have many museums, public libraries, and national archives whose main purpose is to make information and historical collections widely accessible to the public. However, not all countries and territories have this advantage. Places like the islands of Vieques, Culebra, Saba, and other small islands of the Caribbean, do not necessarily have museums, public libraries or historical archives with enough funds to perform record keeping and dissemination duties. Digitization helps:

- 1. To make cultural materials available to a broad range of possible public, apart from the academia.
- 2. It reduces the handling of the original analog artifacts
- 3. It provides the members of the local community the chance to know their history and interact with it in new ways<sup>11</sup>, <sup>12</sup>.

# 3.2 Digitization Strategies

The digitization process was divided into three separate stages. These stages were partially inspired by the model presented in Bülow and Ahmon's book "Preparing Collections for Digitization". The model that they utilized divided the digitization process into four phases: Stage One (proposal and project planning), Stage Two (imaging and structural metadata), Stage Three (creation of database, marketing, and user evaluation), and Stage Four (long-term sustainability)<sup>13</sup>. After studying that model, a new model was adapted that could accomplish the objectives of the Caribbean Diaspora Project, considering the project's resources and its limitations. This model divided the digitization process as follows: Pre-digitization (assessment and project planning), Digitization (imaging), Post-digitization (metadata, file management and delivery). In contrast with Bülow and Ahmon's reference model, this model added the creation of a macro-level dataset in Stage One and did not include a proposal, it separated the imaging and metadata creation into two individual stages instead of consolidating both them in a single stage, and it did not include a Stage Four. Unlike Bülow and Ahmon's reference model, Stage Three consisted mostly of the metadata creation and the delivery of the final materials to the Digital Library of the Caribbean (dLOC). It did not include considerations of marketing and user evaluation, since those were outside of the scope of this digitization project.

### 3.2.1 stage one: pre-digitization phase

The pre-digitization phase comprised of:

- a) An initial assessment of the materials.
- b) The creation of a macro-level inventory that could register those materials.
- c) The drafting of a general description of the collection.

The completion of this stage required research done as a series of meetings and interviews with the representative of the Vieques Historical Archive, Robert Rabin and Mila Aponte, a library science expert with ample experience on digital archiving and knowledge management. The first step was meeting with the digital archiving expert to discuss an outline of the digitization process as well as to assess any possible concerns, factors, or limitations that could impair said process. Initial meetings also included the collection manager and other collaborators for project planning. Stage One required an initial evaluation of the condition of collection, the resource requirements and the selection of the negatives to be digitized. Here are some questions that were brought up during the meeting with Mrs. Aponte:

- 1. How many negatives are going to be digitized? Some of them or all of them?
- 2. Do we have the available time and workforce to digitize the entire collection or not?
- 3. Are there enough funds to cover the potential expenses that might arise?
- 4. Where are the digital objects going to be stored for their long-term preservation?
- 5. How are we going to give people access to them?<sup>14</sup>

The project decided to digitize most of the negatives, except for the ones that were irrevocably damaged or too faded to be useful. It also had the necessary time and workforce to perform the digitization task. As for long term preservation, the project chose to outsource the long-term digital preservation of the materials to the Digital Library of the Caribbean (dLOC). dLOC is an international digital library that functions through the cooperation of contributing partners and specializes in resources from and about the Caribbean. It is currently administered by Florida International University (FIU) in partnership with the University of the Virgin Islands (UVI) and the University of Florida (UF)<sup>15</sup>. Why outsource to them? dLOC has the necessary technical infrastructure and personnel to safeguard the collection for long-term usage. They also have a set of manuals and guidelines that were included in the research bibliography and provided a helpful introduction to the process of digitizing physical photographic materials.

Regarding the availability of resources, there were no accessible scanners on-campus that could perform the digitization task, which meant that the project had to direct some its funds to acquiring the necessary hardware. A meeting took place with the current copyright holder of the collection Robert Rabin, head of the Vieques Historical Archive, to learn about the Catanzaro family and the collection in its analog form. He was interviewed to acquire as much information as possible about the negatives in order to supplement Stage Three of the digitization process, the micro-level dataset. Some of the questions asked included: "How did the Vieques Historical Archives came to be in possession of the negatives?", "What information do you have about the Catanzaro family?", "Who holds the copyrights to the negatives?", "Have they been digitized before by other independent parties?", and, "Have they been presented as a collection before?" Regarding the copyrights concerns, the project redacted a document that would grant it the right to digitize, distribute, and archive the materials for nonprofit, educational purposes. Mr. Rabin signed this document and any copyrights concerns were alleviated.

The cataloging process began with a macro-level dataset. The Google Spreadsheets tool was used for this purpose. The inventory included cataloguing everything that was handed in, detailing the exact condition that it had when it was received for processing. Regarding the metadata, since the collection was ultimately going to be stored with dLOC, we complied with dLOC's metadata standard and used Dublin Core guidelines to record the data. The macro dataset was meant to provide a general overview of the materials that were handed in. It was not meant for it to be too specific. Some of the headings of the dataset included: Title, Resource Type, Handle, Description, Analog or Digital, and the number of negatives and CDs per holding package. To finalize Stage One, a bibliography was developed which included texts related to the early years of the United States' presence in Vieques, as well as, the digital humanities and methods of preservation. All the information allowed for the drafting of a general description that could include data regarding the historical context, the Catanzaro family, and the origin of the collection.

## 3.2.2 stage two - digitization phase

Each analog object is captured using a specialized scanner and a digital representation is created. It is extremely important to note that out of the more than 700 items that make up the Catanzaro Collection, this initial digitization process comprised of 482 negatives and 231 digital objects. The digital objects are the result of a previous digitization attempt from an independent party not related to the Caribbean Diaspora Project. No information is available about this previous attempt as it was never finalized. Therefore, the Caribbean Diaspora project, to ensure overall quality and uniformity, chose to redo the digitization of the 231 negatives corresponding to the digital objects. The materials consisted of 482 black and white negatives with measures of 127mm and 120mm. The transparencies were cut, but not framed, therefore, they cannot be considered slides. There were no film strips amongst the materials. After comparing different types of scanners, the Caribbean Diaspora Project selected the one that could ensure the best quality and resolution of the scans but could still be within the desired budget range. The scanner that was chosen to perform the digitization task was the Epson Perfection V800 Photo. This is a flatbed color image scanner with a dual lensed scanning system to accommodate different types of negatives and Digital ICE® Technologies to automatically remove dust and scratches from the negatives 17. For the scanning software, the Diaspora Project decided to utilize the one that already came with the scanner, which is the LaserSoft Imaging Silverfast software.

Since the Caribbean Diaspora Project's ultimate goal was to preserve the collection and make it widely accessible through the Digital Library of the Caribbean, dLOC's quality parameters for photos and master digital files had to be

taken into consideration. dLOC requires a minimum resolution of 600 dpi or dots-per-inch. They have a standard of 8-bit Grayscale for black and white scans and of 24-bit Color for colored images 18. Almost all the negatives were in black and white, except for a couple of them that were in color. dLOC also requires that the master digital files be stored in TIFF format to ensure the greatest amount of detail in the image. The Caribbean Diaspora Project had the preservation of the negatives in a new digital format as its priority, therefore, the Caribbean Diaspora Project's digitization parameters needed to be directed towards ensuring the best possible quality of the scanned negatives. The negatives were to be scanned in their originals target size with no auto adjustments, in 16-bit Grayscale for black and white, and 48-bit Color for the few colored negatives. The resolution chosen was 3200 dpi. Although the maximum resolution of the Epson Perfection V800 is 6400 dpi, that is not necessarily the realistic output of the scanner. It maxes out at around 3200 dpi. Scanning in 3200 dpi also allows us to have a smaller file size. As per dLOC's parameters, the scans were stored in TIFF format. For long-term archival preservation, the digital reproduction should be of the highest possible quality. TIFF is the preferable format for this type of preservation because it does not compress the image, meaning that all the information is preserved, and the image possess a lot more detail. However, because a TIFF image is too large, it cannot be displayed in most browsers. This is not ideal for public access, which is also one of the objectives that the Diaspora Project has with this collection. For access goals, a copy of the scans was stored in JPEG format. A JPEG image is smaller in size, still contains a great amount of information, and can be seen in most browsers and electronic devices. Three copies are made, in TIFF and JPEG of each digital object and the dataset: one for long-term preservation at dLOC, one for the Caribbean Diaspora Project, and one for the Vieques Historical Archives.

# 3.2.3 stage three – post digitization phase / micro level dataset

Each digitized negative is recorded individually using Dublin Core guidelines. Some of the heading for this inventory include: Title, Location, Original Material, Subject, Resource Type, Size, Creation Date, Copyright Information, Creator, Format, Digitization Date, Additional Notes, Creator Role, Description, Digitized by, and Keywords. This dataset is being done using the Google Spreadsheets tool, as it allows the collection manager and fellow researchers to have easy access to the information. The data for this micro-level dataset consisted, in part, of the information collected during the research process (Ex: Interview with Robert Rabin, literary review, etc.) and the information collected during the digitization process (Ex: format, file size, digitization date, etc.). In contrast to the macro-level dataset created in Stage One of the process, this dataset is meant to provide a more detailed view of the materials. It is meant to be as specific and as focused as possible in order to fully conceptualize each individual digital object.

# 4. Conclusion

These types of digital humanities projects are beneficial for the physical collection because they provide exposure. They help increase awareness of the materials, so that the keepers of the collection are more liable to receive additional funding for the preservation of the original analogue items. It is necessary to make this collection and other collections like this one, easily available to the public because it is part of their history. Cultural heritage like the Catanzaro Photographic Collection can represent the collective memory of a group. It can record specific moments in time providing valuable information of a society's past; including their beliefs, their joys, their sufferings, their customs, traditions, and ideas. It can create new understandings and inspire new perspectives. This is not only valuable to academics, not only valuable to the local community, but for everyone. The family who made this collection was a simple family. They were not generals, nor rebels, nor politicians or any of those characters that usually make the pages of history books. They were normal people just like us and they deserve to be remembered for their contribution. Every single one of us is part of the history of the Americas and so were the Catanzaros and their photographic collection.

## 5. Acknowledgements

I would like to express my deepest gratitude to Drs. Nadjah Ríos Villarini and Mirerza González for encouraging me to present at NCUR 2019 and for critiquing this paper. I extend my gratitude to Mr. Robert Rabin for entrusting the Caribbean Diaspora Project with the Catanzaro Collection and for talking to us about the history of Vieques and the Catanzaro family. Likewise, I would like to thank Mrs. Mila Aponte for providing insight and expertise that greatly

assisted this paper, and Dr. Karinette Rivera for helping me practice my oral presentation. I am thankful to the College of Humanities and the *Decanato de Estudios Graduados e Investigación* from the University of Puerto Rico for supporting my participation at NCUR 2019. Finally, and most importantly, words cannot express how grateful I am to my parents Lucy Marín and Eddie Rivera for their relentless support in all my academic and personal endeavors.

#### 6. References

1 UNESCO, "What is Intangible Cultural Heritage", Ich.unesco.org, https://ich.unesco.org/doc/src/01851-EN.pdf

- 8 Robert Rabin (representative of the Vieques Historical Archives), interview with the author and Faviola Martínez. October 2018.
- 9 Robert Rabin, "La Colección Fotográfica, Catanzaro: Vieques 1942", University of Florida Digital Collections, UF Libraries, University of Florida, April, 1995, p.2-3, PDF https://ufdcimages.uflib.ufl.edu/AA/00/06/24/90/00001/AA00062490.pdf.
  - 10 Anna Bülow and Jess Ahmon, Preparing Collections for Digitization, (London: Facet, 2011), p.1.
  - 11 Ibid, p.8.
- 12 Allison B. Zhang and Don Gourley, Creating Digital Collections: A Practical Guide, (UK: Chandos Publishing, 2014), p. 3.
  - 13 Anna Bülow and Jess Ahmon, Preparing Collections for Digitization, (London: Facet, 2011), p.10-11.
  - 14Mila Aponte (library science expert and professor at UPRRP), interview with the author, October 16, 2018.
- 15 "dLOC: A Multi-Institutional, International Digital Library", dLOC.com, accessed March 1, 2019. https://dloc.com/dloc1/about.
- 16 Robert Rabin (representative of the Vieques Historical Archives), interview with the author and Faviola Martínez, October 2018.
- 17 "Epson Perfection V800 Photo Color Scanner", Epson, accessed February 8, 2019. <a href="https://epson.com/For-Work/Scanners/Photo-and-Graphics/Epson-Perfection-V800-Photo-Color-Scanner/p/B11B223201">https://epson.com/For-Work/Scanners/Photo-and-Graphics/Epson-Perfection-V800-Photo-Color-Scanner/p/B11B223201</a>.
- 18 Digital Library of the Caribbean, Digitization Training Manual (2017), dloc.com, accessed February 8, 2019. PDF <a href="https://dloc.com/AA00060506/00001">https://dloc.com/AA00060506/00001</a>.

<sup>2</sup> Nadjah Ríos Villarini and Mirerza González, "About", *Caribbean Diaspora Project*, accessed March 26, 2019, <a href="http://caribbeandiasporaproject.org/">http://caribbeandiasporaproject.org/</a>.

<sup>3</sup> Robert Rabin, "La Colección Fotográfica, Catanzaro: Vieques 1942", University of Florida Digital Collections, UF Libraries, University of Florida, April, 1995, p.1, PDF <a href="https://ufdcimages.uflib.ufl.edu/AA/00/06/24/90/00001/AA00062490.pdf">https://ufdcimages.uflib.ufl.edu/AA/00/06/24/90/00001/AA00062490.pdf</a>.

<sup>4</sup> Ana M. Fabián Maldonado, *Vieques en mi memoria: Testimonios de Vida*, ed. José Carvajal (Instituto de Cultural del Caribe, Universidad de Puerto Rico, Ediciones Puerto, 2003), p. 292.

<sup>5</sup> Ibid, p.294.

<sup>6</sup> Bonnet Benítes and Juan Amédée, *Vieques En La Historia De Puerto Rico*. 2nd ed., (Puerto Rico: Ortiz Nieves 1977).

<sup>7</sup> Miguel Ángel Santiago Ríos, *Militarismo y Clases Sociales En Vieques: 1910-1950*, (Puerto Rico: Ediciones Huracán, 2007) p. 87.