Student: Vlasta Radan

Type of internship: Archival

Internship site: Autry National Center

                       Collections Management Department

                       4700 Western Heritage Way, Los Angeles, CA 90027

Internship term: Fall 2007

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                       Project Manager, Electronic Cataloging Program

Internship Final Report

Internship Learning Outcomes

The main goal of my internship was to acquire practical knowledge of the technical and conceptual issues related to a comprehensive digitalization project in a museum environment. My expectations were that the internship would provide me with a broad foundation in the analytical and practical aspects of digitalization, electronic cataloging and presentation of collection on the Internet.

After talking with my site supervisor, we agreed that I will get involved with some of the activities connected with the digitalization project, but that the majority of my internship would be spent on editing records of Native American baskets in preparation for their publishing on the Autry's Collections-On line catalog. Therefore, my internship had two mayor learning outcomes:

1. Inventory and imaging of artifacts selected for digitalization. Specific assignments involved:
    1.1 assistance in inventory and bar-coding of the California Indian basketry collection,
    1.2 assistance in imaging process.
2. Preparing the electronic records for public access on the Internet catalog (Collections On-line). Specific assignments involved:
    2.1 data clean-up and re-cataloging of existing record entries;
    2.2 cataloging images using subject headings;

2.3   thesaurus development and writing of scope notes for vocabulary definitions;

2.4   background research and writing of scope notes about Caroline Boeing Poole and Col. John Hudson Poole, donors of a sizable collection of Native American baskets;

2.5   assisting in uploading completed records to the Internet catalog.

Because I could not change my travel arrangement for the summer, I did my internship in two parts: two weeks in July and then the rest of the internship in September and October. That proved to be very fortunate; because very soon it transpired that my lack of knowledge about baskets can result in some major factual mistakes. In order to complete this internship with a minimum of professional competency, it was necessary to make myself familiar with basic terms and techniques used in basketry.

Choosing the internship site

In my first internship I experienced a traditional archival processing, and for my second internship I wanted to experience modern approaches to the profession and work on a digitalization project. I was not interested as much in the digitalization as a form of archival preservation or surrogate for the original, but the digitalization as way of public access to the archival collections.

As it happened, on March 9 the Los Angeles Times (Muchanic 2008) run an article how the Autry National Center received $340.000 grant from the National Endowment for the Humanities to digitalize and catalog 15,000 California Indian objects and make them available through their Collections On-line catalog. I called the Autry National Center and asked if they offer internship on that project. Rebecca Menendez, project director of the Autry's electronic catalog initiative and co-director of the NEH financed project, told me that they did not plan any internship, but that they were willing to work something out. I send my resume and had an interview with her and Steven Karr, curator and co-director on the project. As long as I was willing to include cataloging as part of my learning outcomes, they were more than happy to allow me to participate in other aspects of the digitalization process.

The Autry National Center

The Autry National Center was established in 2003 as an umbrella company after merging of the Museum of the American West, the Southwest Museum and the Women of the West Museum. The Museum of the American West, formerly known as the Autry Museum of Western Heritage, was established in 1988 by Gene Autry (1907-1998) entertainer and entrepreneur, best known for his movie roles as the "singing cowboy." The focus of the museum collections are predominantly about popular imagery of the West – paintings, movies, cowboy artifacts (guns, clothing and such) as well as other forms of popular culture associated with "the West." The Autry Library with extensive holding supporting research of the museum collections is located inside the museum building in Griffith Park, Los Angeles.

The Southwest Museum was established by Charles Fletcher Lummis (1859-1928) in 1907 and opened for a public in 1914. Lummis is described on the Autry National Center web site as "journalist, photographer, amateur anthropologist and prolific historian of the southwestern United States", but, for a time, he was also – a head librarian of the LA public library. In addition to the extensive collection of Southwestern and California archeological materials, the Southwest Museum included a collection of shells, Asian and European art and the Munk Library of Arizoniana. In the 1920s the museum narrowed the focus of its collections to anthropology of the cultural history and prehistory of the indigenous peoples of the Americas. Today the Southwest Museum has one of the most representative collections about the material culture of Native Americans. Their collection of Native American baskets – 14,000 pieces is, according to the Southwest Museum grant materials, "the largest collection of Native American basketry in the world."

After the merger into the Autry National Center, it was decided that the Southwest Museum will move to a new museum facilities that will be built in the Griffith Park, near the existing building of the Museum of American West. The new facilities are expected to open sometimes in 2011. In the meantime, the Southwest Museum methodically catalogs, digitalizes, conserves and stores their collections in deep storage. Until the new building opens for the public it will be practically impossible to access individual items in the collections. The on-line catalog is seen as the way to

solve that problem and facilitate the research and public access during that time. Although the Southwest Museum collections will move out of the Arroyo campus, the building there is declared a "landmark of significant historic value" in the National Register of Historic Places and will be restored and retrofitted for earthquakes thanks to FEMA and California Cultural Historic Endowment grants. The Autry National Center plans to develop the site as cultural and educational center run for and with Native American community in LA. In the meantime, the Arroyo campus is opened only on weekends for limited number of family activities, and galleries are converted to temporary storage facilities.

All activities associated with my internship, except for the object handling workshop, were performed in the Southwest Museum.

Learning Outcome I

1. **Inventory and imaging of artifacts selected for digitalization**

1.1 **Assistance in inventory and bar-coding of the California Indian basketry collection**

Before photographing, every museum item is checked against existing catalog – most of the objects already have their ID numbers written on them with permanent ink when first registered into the museum collection – and then the barcode is scanned into an electronic registry with laser scanners. The barcodes are computer generated, and like a library "call numbers" combine position of the item on the shelf with the artifact's ID. Although the barcode is printed on a self-adhesive label, it is not attached to the object and is usually placed inside the object's storage box (which itself is bar-coded). In the case of baskets, label is placed inside the basket itself. The process of inventory and bar-coding usually involves two persons – one is calling cataloging numbers of objects from a list generated from cataloging records, and another person that finds the object, place barcode with the object and scans current shelving position. The shelving position consists of the combined information of the shelving unit number and individual shelf number.

In this process my particular task was to find an individual basket, compare its number to one on the list and than use hand-held bar-coding reader to scan information into the

device. After finishing the process in the storage room, I downloaded the information from bar-code reader into the database.

Keeping the updated inventory information is quite a challenge, especially because the Southwest Museum is in the process of packing its collections. Although various tasks are coordinated in the way to minimize handling, objects are still moved around quite often – for preservation prior to packaging, photographing or freezing – what involves a number of people and sometimes new (or temporary) locations are not scanned in the database. The most common problem is that when a number of objects are placed in the same box (which is than frozen, sealed and placed in storage) the box code is not scanned with other shelving information. At this moment, because boxes are hermetically sealed and current storage is not permanent, confusions are noted in the catalog, but left to be resolved after the final move.

1.2   Assistance in imaging process. Specific tasks involved:

1.2.1   Assisting during photographing. In order to assist during photographing or do any work with the artifact, one must to go through "object handling" workshop. The completion of the workshop is required for every employee, intern or volunteer working in the Autry National Center. The workshop is quite an interesting exercise in common sense and forethought: before doing anything – think what you will do. Imaging, i.e., creating digital images is coordinated with cataloging and the housing of the objects, so that the handling of the object is minimized. Objects that are to be photographed are pulled out by the curator and marked with notes for specific details that should be photographed.

As most of the work with artifacts, photographing involves two persons – photographer and handler. Handler, wearing rubber gloves, carries objects from the shelves and places them on the photographing stage and positions them by the photographer's request. I was a handler during two of the photographing sessions. Process of photographing is quite fast because large amount of the artifacts (15,000

for this particular project) need to be processed without too much fuss and the object views needed to be standardized as much as possible.

1.2.2   **Processing of the images.** Each object record may have two types of images: documentary and web-quality. Documentary images are used for identification purposes or for documenting specific conditions or conservation activities. The web-quality digital images are procured either from scanning existing slides or taking digital images of the artifacts.

Images taken by the photographer are in compressed JPEG format. They are uploaded in Photoshop, cropped and adjusted for color, and than saved in TIFF format. Those images are then saved on the central Autry server, where they are accessible to the local staff. Files are also backed up on a separate off-site server and, in addition to that, saved on (magnetic) tapes.

Processed TIFF images are the base for the creation of two derivative images – thumbnail (150px on a long side) and a "full" (640 px on a long side). The derivative images are optimized for use on the Internet and use Adobe RGB (1998) color space. The pictures are processed in batches (approximately 1000 images in a batch) and saved in a standard set of folders. Derivative images are stored on three different servers (1) the Autry internal network server; (2) a server that supports (holds files) Collection On-line and (3) off-site back-up storage server.

Because I already have extensive knowledge about processing digital images, I did not actually do any of the file processing. However, I was very much interested how the Autry decided to use particular imaging standards or imaging equipment and Carmel France, digital media coordinator, was more than happy to discuss "shop" with me. The two main documents on which the Autry National Center bases its standards are *Digital Preservation for Museums: Recommendations* commissioned by the Canadian Heritage Information Network and *OCLC Digital Archive*

Preservation Policy and Supporting Documentation. However, as usual in real life, practice is somewhere in-between industry best standards and available resources.

1.2.3   **Linking of the image files to object records.** Linking of the right images to records is achieved by rigorously following the naming standards. Image files are named with corresponding record number and additional images are marked as "detail1", "detail2" etc. appended to that number. The images are processed in batches in Adobe Photoshop and Exstensis Portfolio image managing software.

But as it happens when dealing with large number of images – mistakes have been made ... On one particular occasion one "full" image was attached to the number of different thumbnails. Because the problems was really only in incorrect links and not physical location of files (thanks to the naming procedure and folder structure the same files are always stored is the folders with the same name and structure) what needed to be corrected was only the path names in record. This was done creating appropriate MS Excel file and than using Mimsy utility software which mapped that information to the records. I connected manually, by typing in the url, some of the links in the records that were wrong in some way. In one case there was a double set of the same images, and I erased the unnecessary links. In another case the wrong "full" was linked to the thumbnail image and I typed the new information.

Of all pieces in digitalization puzzle, images are probably the weakest link. While all other information is stored inside the database (Mimsy) as an inseparable unit, in images displayed in records are actually only links (url) to images that are physically somewhere else. Most of the mistakes in image links are resolved on case by case basis, depending on what kind of mistake was made.

Outcome II

2.   **Preparing the electronic records for public access on the Internet catalog**

2.1   **Data clean-up and re-cataloging of existing record entries**

The Pomo Indian baskets, whose catalog records I was editing, were processed during another grant which provided for imaging, preservation, and packaging. Cataloging was only partially completed, but most of records had some sort of object description and images. As a way to familiarize myself with the subject of the baskets and the Autry's Mimsy database, I was given 200 or so of Pomo basket records to read and edit for grammatical and typing errors. I was also introduced to a basket curator Bryn Potter who showed me the basket collection and explained the basics of the Native American basketry techniques and materials.

After returning from vacation, I was given 300 records that needed more substantial editing and, on occasion, the writing of completely new text in the fields displayed in the on-line catalog. Through the conversion of the Argus database records into the Mimsy most of the catalog records had original inventory information, but they were more often than not just a string of data which needed to be put into meaningful sentences. The records had none or very minimal indexing and, because the on-line catalog had an ability of keyword search, it was important to standardize object descriptions and subject terms.

My first attempts to edit the Pomo basket records ended quite miserably – I mixed term sedge (Carex) with sage (Salvia); entered the information "black bracken fern root" in the number of the records before realizing that somewhere in the line the word "design" was lost, and that the correct sentence is "... black design in bracken fern root ...". After working on the records for a while, one of the mayor insights was that it is very difficult to find a mistake if you do not know what is the right information. Only after some substantial readings about basketry techniques I was able to string together a decent sentence that had meaningful (and accurate) information.

Although the Mimsy enables a wildcard search and the grouping of objects, there are limitations of the batch editing. There is no "find-and-replace" option and the editing of the individual records for particular set of mistakes ("black bracken fern root" into "design in bracken fern root") needed to be typed or pasted by hand in each record.

At the end of my internship, edited records were uploaded to the Autry's Collections On-line. Almost all basketry records, currently available in the on-line catalog, are processed by me during the internship. A link to the selection of 50 of these records is available at the end of this report.

2.2   Developing subject heading for basket designs and cataloging images using subject headings

One of questions that come up in conversations on the subject "what I should be thinking while cataloging for the Internet" was the possibility to relate and group objects by various patterns and designs. Naming design is very tricky issue, and in existing records there is no consistency of calling similar designs by the same name. Research of the Native American basketry literature made it clear only that most of the authorities agree on the fact that there is no religious significance in patterns, but they widely disagreed in names for specific designs. Also, at the first glance, in one particular tribe designs look fairly similar, but they tend to have significant variations and exhibit influence from other cultures or surrounding tribes. My suggestion was to index patterns using only very limited and simple geometric terms (square, triangle, horizontal band, human figure etc.) without any attempt to be descriptive (butterfly design, cactus design etc.).

All 500 records of the Pomo Indian baskets, that I edited, were indexed using this system. Also, I updated records for other subject terms that appear in on-line records. The advantage of "linked terms" feature (subject headings) is that the change of the term (from singular to a plural, for example) is changed through the thesaurus and change reflects in all records automatically.

2.3   Background research about individual basket donors and their collections – Caroline Boeing Poole and John Hudson Poole

One of the biggest donations to the Southwest Museum basket collection was from Col. John Hudson Poole who donated almost 2,500 baskets collected by his late wife Caroline. Colonel Poole and his son also financed building of the new wing to the museum which provided space for the exhibition and storage of the museum's basketry collection. The wing was named for Caroline Boeing Poole and opened to the public in 1942. Beside baskets, Col. Poole also donated a number of other native artifacts.

The idea behind the research was to provide some background about the collectors, how they acquired the individual objects, and maybe to find some interesting story related to the collection or individual baskets. In museums today more and more emphasis is given to the context of the object in an overall fabric of the culture, rather than to an individual object itself. It is not enough anymore to understand only how objects are made and for what they are used, but also stories about their makers.

However, the research in the Poole family was quite disappointing. The Southwest Museum registry has documents related to the history of acquisition and the shipping of the collection, but there was nothing about the collectors or individual baskets. The library archives had only a file with newspaper obituaries about Col. John Hudson Poole and one of two books written by him. The museum has no documents related to Caroline Poole because all exchange between Col. Poole and the museum occurred after her death.

Eventually after intensive search through digital databases provided by SJSU King Library – the Braun Library is not subscribed to any on-line database – I found references to Col. Poole's bibliography in *The National Cyclopedia of American Biography* volume XLII. In Pasadena Public Library, where the Pooles lived, I found obituary for Ms. Poole. In *Online Archives of California* I found two collections with reference to the Pooles, notably Bernard M. Rosenthal, Inc. (antiquarian bookshop) records in Bancroft Library, Berkeley,

San Francisco. Unfortunately I was not able to find much of the story beyond mere bibliographies of Caroline and John Hudson Poole.

Scope notes for Caroline Boeing Poole and John Hudson Poole is submitted in Appendix I and II of this report. As far as I know the notes are not yet available on-line.

2.4   Thesaurus development and writing of scope notes for vocabulary definitions.

The current Autry catalog is the result of merging of catalogs of two museums. After the merger of the Museum of the American West and the Southwest Museum, data in catalogs, including thesaurus, were imported into Mimsy through a data conversion process which included the mapping and manipulation of the data. In the case of the thesaurus that resulted with term duplications and in general unclean data. It could take another internship just to make a start on this problem. At the end, I simply run out of the time to address this issue in any depth.

2.5.   Assisting in uploading completed records to the data management.

The Autry National Center use Mimsy XG, database specially designed for use in museums. It consists of various modules (objects, people, events etc.) that enable comprehensive recordkeeping and management of every object in the museum. For difference of archives, museums catalog on an item level and in that way are very similar to libraries. But at the same time, all cataloging is original and there is very little standardization how and which information is entered. The Southwest Museum originally developed ARGUS museum database, but after merger into the Autry National Center, it was decided to migrate data to a new system and integrate the catalogs of two museums into one union database.

After all data records and images are marked for "web release" they are uploaded from Mimsy database to Mweb on-line catalog interface using MS Access as mapping software. The online catalog provides different levels of access to the information. The general public can view general cataloging information and images of artifacts. Researchers can

ask for permission to access the information in the records which does not quite satisfy the quality for general web release – like original registrar comments and notes. The representatives of the tribes that work with the museum staff can access records that are considered culturally sensitive and are not accessible to the public in any form.

Mimsy and MWeb are two independent programs that maintain two separate sets of data. The Internet user does not access data in the Mimsy catalog, but data is copied into a database powered by the MWeb. That also means that collapse or loss of the data in one system does not affect the other. In addition, the Autry archives its data and TIFF images on a separate off-site server.

The uploading process is a very sensitive process and ECI developed a handbook describing the steps in the procedure. The process is highly individualized and, at this moment, requires lot of manual work. Probably it would be possible to program a small software that would reduce the process to simply clicking a few buttons (what would reduce the possibility of mistakes), but that would require somebody with substantional knowledge in programming, which the Autry does not have. It could contract somebody from the outside to do the programming, but that apparently costs a lot of money. The problem with completely automated systems, maintained by the outside contractors is lack of ability to customize data input and display. Manual mapping and upload enables high control over which records will be uploaded, but it increases the possibility of mistakes.

I was shown and explained how to use the Access query mode to map the upload. After the upload, I was asked to perform searches and try out various features of the Collections On-line and report if I find any problems. Oddly enough, I did find two problems. The subject term "feathered baskets" appeared twice in every record, although it was entered only once in appropriate field in database records. That problem is apparently related to the thesaurus and ECI is looking for a way to resolve the issue. That particular subject heading apparently have some hidden curse attached to it, because I also discovered that one could not browse through the list of records linked by that subject term using "next" button. Apparently, it was some minor programming glitch that was quickly resolved.

The Electronic Cataloging Imitative (ECI)

The department is part of the Collection Management division of the Autry National Center. It started as the Getty digitalization grant given to the Museum of the American West in 2002. The first Collections On-line catalog was build on the Argus database and went on-line in 2003. By the time of merger and forming of the Autry National Center, most of the collections of the Museum of the American West were digitalized and accessible through on-line catalog. In 2005 it was decided that the Autry National Center will switch from the Argus to Mimsy database and form one union catalog for both museums and libraries. All through this time the electronic cataloging initiative is financed through various grants. Besides project manager and digital media coordinator, there is no a specific number of positions in the department. A number of people involved with the ECI also work part of their time on other projects or for different departments.

What did you discover about the profession's culture and ethics from your internship work?

Most of the people working there love their jobs and the museum environment and there is a definite spirit of the commitment and dedication to the mission of the museum, if not quite to the Autry National Center as the corporate entity.

The ECI project manager, Rebecca Menendez is particularly interested in digitalization projects that would involve other museums and institutions with the Native American collections. Currently there is a wider initiative that looks into way to facilitate the cooperation and possible catalog crossroads between museums that have collections of the Native American cultural objects. The big museums do not feel particularly pressed for it, but smaller museums (often somewhere off the beaten paths) are very, very interested. But everything takes time and money, and nothing happens overnight.

What kinds of technology did your internship site have and how did you use it?

The Autry National Center defined its plan for digitalization in four tiers: (1) cataloging, (2) imaging, (3) on-line access, and (4) preservation of digital assets.

(1) For cataloging, the Autry National Center uses the Mimsy database, which enables very complex data entry as well as automated technical metadata capture. The Mimsy vendor is fairly open about the program's source so that the Autry can customize the database to its needs. The web interface vendor is not as much accommodating, but the Autry can switch the web software without any effect to the database or data storage. I used Mimsy daily for data editing and correction of image links.

(2) **For imaging,** photographers in the Autry National Center use Nikon D70 digital SLR camera, Bogen Manfrotto repro copy stand and professional strobe lights. For scanning they use Microtek ScanMaker 1000XL with TMA6400 transparency adapter with SilverFast Ai software (version 6). For software they use Adobe Photoshop (image editing) and Extensis Portfolio (image files management). On few occasions I was asked to take some documentary images with the Nikon, upload them in Photoshop and edit them.

(3) **For on-line access,** the Autry National Center uses MWeb interface. Most of the non-cataloging staff uses Collections On-line for regular cataloging searches and information gathering. Because images are indexed it is a very popular tool for searching through the photographs and various images.

(4) **The preservation** of digital assets in the form of data migration, software and hardware upgrades is a fourth facet of the digitalization plan and proceeds parallel with the other digitalization process. The system will probably undergo its most important test with the transition from XP to MS Vista operating system.

What were the most difficult aspects of the work experience for you?

The most difficult aspect of the internship was learning about baskets from zero to everything in a few months. I was (and still am) baffled with the amount of confidence and freedom I was given in writing cataloging records, especially counting that I am not native English speaker and that my knowledge about Native Americans is mostly from reading Tony Hillerman's Navajo mysteries. I did have substantional background in history and art

and that proved essential for a quick learning curve on the subject. Beside that, I find the museum community in the Southwest Museum very friendly and easy going.

What issues were of great concern to the staff at your site?

The main source of the anxiety is the Southwest Museum's anticipated move to Griffith Park. Although the 150 building in the Arroyo is one major inconvenience in any possible aspect – from plumbing, air-conditioning to office space – people prefer it over the Gene Autry Museum in most absurd ways.

Which of the courses you have taken at SLIS were of most value during the internship?

Libr 202: Information Retrieval was absolutely essential for this internship. Principles of information retrieval, understanding of database principles and understanding of information seeking behavior discussed in this class made possible independent decision making in application of subject heading and vocabulary of text fields.

Libr 256: Archives and Manuscripts enabled understanding of basic principles of preservation, record organization and archival practices used in museum environment.

Libr 280: History of Books and Library as well as

Libr 287: Seminar in Information Science – Illuminated Manuscripts and Incunabula were essential in development of my research skills.

Libr 284: Seminar in Archives and Record Management - Digitalization and Digital Preservation provided me with necessary understanding of digitalization projects, imaging standards and technical issues (and solutions) involved.

What other courses would have helped you with your internship?

I definitely wish I took **Libr 247: Vocabulary Design** instead of Libr 248: Beginning Cataloging and Classification which focused exclusively on library (i.e. book) cataloging. I seriously missed in-depth understanding of indexing and vocabulary related issues. Although we touched upon the subject of thesaurus and vocabulary in Libr 202, I really played by ear through most of my indexing process during the internship. Counting the amount of the digitalization projects currently in progress in the United States, and that

only humans can do meaningful image indexing, I think that not taking Libr 247 was the most serious mistake I made during the program.

Same as vocabulary design, **Libr 244: Online Searching** and deeper understanding of searching of on-line principles would help me in decision making while developing system of image subject headings as well as in any future work involving on-line access to the digitalized collections.

Although the internship lasted only a few months, I am confident that through the activities and projects performed during that time I acquired at least the basic understanding and practical experience with activities and procedures that involve such a project. Although I took Digitalization and digital Preservation seminar (LIBR 284) with Robin Dale, the hands on experience made me to appreciate the amount of coordination and daily decision making required for the smooth and successful completion of the digitalization projects.

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POMO INDIAN BASKETS RECORDS

During the internship I prepared around 500 records for upload to the Collections On-line. Here is the link to selection of 50 of these records:

http://www.autrynationalcenter.org/mwebcgi/mweb.exe?request=favorites;user=vlasta@ellerman.org;title=SelectedPomoBaskets

Col. JOHN HUDSON POOLE III (1878-1940)

John Hudson Poole was born in Detroit, MI, October 6, 1878 to DeWitt Clinton Poole (1828-1917) a US Army officer, and Maria Woodward (Pettes) Poole. John Hudson followed his father's example and enrolled in the US Military Academy at West Point which he graduated in 1901. As a captain in the US Army Corps of Engineers, he served for a short time in Ft. Totten, NY, and then reassigned to Washington, DC. In 1903 he was sent to the Philippines, where he served as assistant to the chief engineer of the Division of the Philippines and also as disbursing officer in Manila. Between 1905 and 1910 he was an aide to Theodore Roosevelt, Jr. (1858-1919) and superintendent of the State, War and Navy Department Building, Washington DC.

Upon retirement from the Army in 1910, Poole returned to Detroit where he becomes part-owner and administrator of a group of iron mines in Mesabi Range, MI. In 1917 Poole went overseas with the engineering regiment and then was assigned to the staff of John J. Pershing (1860-1948), commander in chief of the American Expeditionary Forces. For his services during the First World War, he was made an officer of the French Legion of Honor and received the decoration of l'Etoile Noire. In 1919, he was honorably discharged with the rank of colonel. He returned to Detroit and in 1920 moved, with wife Caroline Marie Boeing Poole (1885-1932) and son John Hudson (1917-2003), to Pasadena, CA.

From the 1920s until end of his life he was president of the Mesabi Mineral Association, Duluth, MI. From 1916, he was a president and owner of the Buena Vista Plantation Co., Zamboanga, Mindanao, Philippines, which operated a coconut plantation of 50,000 trees. After the move to Pasadena, he becomes a partner in the firm of Wilcox Drake & Co., Pasadena, a member of the New York Stock Exchange. For a number of years, he was also a director of the Pasadena branch of the Security-First National Bank of Los Angeles. Besides his business and professional associations, Col. Poole was an active member of a number of charitable and non-profit organizations. He was a regular supporter of the American Red Cross and president of its Pasadena chapter in 1935. For a number of years he was a trustee and treasurer of the California

Institute of Technology. In 1936 he was made a life member of the Southwest Museum, Los Angeles, and in 1939 was elected a trustee and benefactor of the museum. In 1939, among other things, he give to the museum a collection of 2446 Native American baskets, collected by his wife, Caroline Boeing Poole. Later that year he also financed construction of a new wing of the museum to house the collection. The wing was designed by the architect Gordon B. Kaufmann and was opened for the public in October 1942. Col. Poole was married twice: December 24, 1907 in Greenwood, VA, to his first wife Caroline Marie and on May 11, 1933 in Pasadena, to Reeta Mae, daughter of David A. Walker from Pasadena, a farmer and real estate operator.

John Hudson Poole died, age 62, by his own hand in his home in Pasadena on August 31, 1940.

Biography information:

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The California State Library, Picture Catalog:

Martin, Frederick W., 1878-1949. [Poole residence, San Rafael Ave.], views 1-9 [graphic]. Pasadena, Calif.: F. W. Martin, [ca. 1920] California State Library, Picture Catalog : MARTIN-6544

The Bancroft Library, University of California, Berkeley:

Bernard M. Rosenthal, Inc, Poole, J. H., & Rosenthal, B. M. (1977). Bernard M. Rosenthal, Inc. records. http://content.cdlib.org/ark:/13030/kt609nd4m4/?&query=Caroline%20Poole&brand=oac Contains records concerning the sale of the Poole Library including correspondence between Rosenthal and John Poole, Jr., donations, sales, and accounting records, and book catalogs. Also includes information relating to Caroline Poole and the Poole family.

Robert Andrews Millikan papers, 1821-1953 http://content.cdlib.org/ark:/13030/kt5b69p6zq/?&query=John%20Hudson%20Poole&brand=oac The core of the Robert A. Millikan Collection at the California Institute of Technology consists of the official papers generated by Millikan during the twenty-five years that he was the executive officer at the Institute. The bulk of the papers consist of correspondence, lecture notes, and other materials dealing with scientific and academic matters.

Braun Research Library archives.

> John Hudson Poole Obituaries & Report on a Harveycar Motor Cruise Through the Navajo Country, 1940. Ms. 1238.

> This collection has two distinct parts: One is a collection of newspaper obituaries for John Hudson Poole. ... There is also a letter concerning his service in the military; The second part is a typed detail report on a Harveycar Motor Cruise through the Navajo Country, April-May 1929. There is also a handwritten list of names of the people from the various places listed in the tour report

Environmental Design Archives, University of California, Berkeley:

> The Poole residency, Pasadena, Sketch of front view
> http://dpg.lib.berkeley.edu/webdb/ggva/search?project=&siteid=213&pageno=&id=EDA.1959-1.III37a

Avery Architectural and Fine Arts Library, Columbia University, New York City:

> John H. Poole House (Pasadena, Calif.). Library
> Library, residence for Capt. J.H. Poole / Chittenden & Kotting, Arch'ts. 1915. 9 photomechanical reproductions blueprint on paper 132.4 x 90.9 cm. (52 1/4 x 35 3/4 in.) or smaller
> http://www.columbia.edu/cu/lweb/eresources/archives/avery/greene/html/subs/NYDA89-F753.html

> John H. Poole House (Pasadena, Calif.). Scheme No. 1
> Residence for Major J. H. Poole, Pasadena, California. / Greene & Greene, Architects 1916-1918 90 sheets various media 74.9 x 98.6 cm. (29 1/2 x 38 1/2 in.) or smaller
> http://www.columbia.edu/cu/lweb/eresources/archives/avery/greene/html/subs/NYDA89-F623.html

> John H. Poole House (Pasadena, Calif.). Scheme No. 2
> Residence for Col. J.H. Poole, Pasadena, Calif. / Greene & Greene, Architects. ca. 1919 56 sheets various media 119.9 x 90.8 cm. (47 1/4 x 35 3/4 in.) or smaller
> http://www.columbia.edu/cu/lweb/eresources/archives/avery/greene/html/subs/NYDA89-F777.html

Handwritten note written by Patricia Heidelberger (research volunteer) to Beverly Wayte:

> "Colonel John Hudson Poole married Caroline Boeing in 1907. She was the sister of William Boeing, founder of the Aircraft Company. Their son, John Hudson Poole IV, was born in February 1917. Colonel Poole already had a close connection with the aircraft industry, witness this excerpt from his book written about the life of his father: "A Memoir of the Life and Family of Dewitt Clinton Poole", Pasadena 1939, Ward Ritchie Press." The Southwest Museum Registrar Archives.

<div align="right">**Appendix II**</div>

CAROLINE MARIE BOEING POOLE (1885-1932)

Caroline Marie Boeing was born in 1885 in Detroit to timber magnate William Boeing (1850-1890) and Marie Ortmann Boeing. Her brother was William E. Boeing (1881-1956), founder of the Boeing airplane manufacturing company. In 1907 she married John Hudson Poole (1878-1940) also from Detroit. They had a son John Hudson (1917-2003).

In 1920, after the retirement of John Hudson as a colonel of the American Army, the family moved from Detroit to Pasadena and quickly became notable member of local society. With expert help and connections provided by Grace Nicholson, Caroline Poole assembled an exceptional collection of Native American baskets and other artifacts, and become a friend and supporter of John Muir (1838-1914), founder of the Sierra Club and noted Californian environmentalist. She also collected fine books and financially supported small press printers such as John Henry Nash (1871–1947), a fellow bibliophile. After her son's enrollment in Los Alamos Ranch School, the focus of her interest shifted to the Southwest where she became involved in the Boy Scout movement of New Mexico and various projects benefiting Navajo Indians in Arizona.

Caroline Poole died on January 11, 1932, while visiting her son in boarding school. She died unexpected after complications of a minor operation performed a few days earlier in Santa Fe. She is buried in Pasadena.

Bibliography:

Muir, J., & Poole, C. B. (1891). *A rival of the Yosemite: the Cañon of the South Fork of King's River, California*.

Muir, J., & Poole, C. B. (1909). *The endangered valley: the Hetch Hetchy Valley in the Yosemite National Park*.

Muir, J., & Poole, C. B. (1897). *The Alaska trip*.

Original holograph manuscript by John Muir, with his signature. Originally published in *The Century Magazine*, August 1897. Binding commissioned in 1917 from Rivière & Son by Mrs. Caroline Boeing Poole. Boxed with two additional Muir manuscripts: *A rival of the Yosemite* (1891) and *The endangered valley* (1909).

Poole, C., & Nash, J. H. (1919). *A modern prairie schooner on the transcontinental trail the story of a motor trip*. San Francisco: J.H. Nash.

Recounts an automobile trip from Los Angeles to Colorado Springs. "Privately printed." "Two hundred and fifty copies of this book were printed by John Henry Nash"-- Colophon.

Bernard M. Rosenthal, Inc, Poole, C., & Swearingen, R. G. (1979). *Robert Louis Stevenson, 1850-1894.* List 41. San Francisco: [s.n.].
Collection originally assembled by Caroline Poole in the 1920's.

Archives Collections with material on Caroline Boeing Poole:

The Bancroft Library, University of California, Berkeley:

Bernard M. Rosenthal, Inc, Poole, J. H., & Rosenthal, B. M. (1977). Bernard M. Rosenthal, Inc. records.
http://content.cdlib.org/ark:/13030/kt609nd4m4/?&query=Caroline%20Poole&brand=oac
Contains records concerning the sale of the Poole Library including correspondence between Rosenthal and John Poole, Jr., donations, sales, and accounting records, and book catalogs. Also includes information relating to Caroline Poole and the Poole family.

John Henry Nash Papers, 1909-1947
http://content.cdlib.org/ark:/13030/tf6h4nb1s9/?&query=Caroline%20Poole&brand=oac

Newspaper obituaries:

"Friends Here Shocked by Passing" *Pasadena Star News*, January 14, 1932. Pasadena Public Library Archives.

"Rites Conducted for Mrs. Poole" *Lost Angeles Times*, January 17, 1932. ProQuest Historical Newspapers Los Angeles Times On-line database.

Books in which Caroline Boeing Poole is mentioned:

Watson, B. (1996). John Muir, 1838-1914. San Francisco: Año Nuevo Island Press.
http://worldcatlibraries.org/oclc/58914642?tab=details
Contains reproduction of a letter, written April 16, 1917, from bookseller George Millard to client Caroline Boeing Poole to inform her that her John Muir manuscripts arrived safely. It was feared that they were on a ship that had sunk. "This keepsake is dedicated

to the memory of William J. Monihan, S.J., 1914-1996"--p. [3]. "Two hundred copies printed in October 1996 for the biennial joint meeting of the Roxburghe-Zamorano Club."--p. [3].

Cohodas, Marvin. (1997) *Basket Weavers for the California Curio Trade*. The University of Arizona Press and The Southwest Museum.
"Caroline Boeing Poole purchased most of her more than 2,400 baskets from Nicholson. Of these, she acquired 1,100 in 1931 but died in January 1931 before they had all been paid for. In 1939, her husband, Colonel John Hudson Poole, deeded the entire collection to the Southwest Museum. Colonel Poole and his son subsequently financed the construction of a museum wing that opened in 1942 to house and display the Poole baskets." (p. 319 – 320)

Cloonan, Michele V. (2006) "Alice Millard and the Gospel of Beauty and Taste" in Danky, J. P., & Wiegand, W. A. (2006). *Women in print essays on the print culture of American women from the nineteenth and twentieth centuries.* Print culture history in modern America. Madison: University of Wisconsin Press. p. 159- 178.
http://parallelpress.library.wisc.edu/books/print-culture/wip/cloonan.pdf
Caroline B. Poole was close friend and client of Alice Millard, rare book dealer.