

INCREASING ACCESSIBILITY AT THE VALENE L. SMITH MUSEUM OF
ANTHROPOLOGY: AN ONLINE DATABASE FEATURING THE
NORTH AMERICAN BASKETRY COLLECTION

A Thesis

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California State University, Chico

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Master of Arts

in

Anthropology

Museum Studies Option

by

Heather C. Martin

Fall 2017

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ABSTRACT

THE VALENE L. SMITH MUSEUM OF ANTHROPOLOGY COLLECTION
OF NORTH AMERICAN BASKETRY: DOCUMENTATION

AND PUBLICATION

by

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The Valene L. Smith Museum of Anthropology at California State University, Chico, has a permanent collection that comprises over 2,000 ethnographic objects from around the world. The museum's limited space results in the majority of the permanent collection remaining off-exhibit and inaccessible to the public. The growing momentum of the new museum theory has encouraged museums to address issues of accessibility in their museums. Facing criticism of collections growing stagnant in storage rooms, unavailable to the public and researchers alike, there is a growing trend in creating online databases to increase access to collections. The purpose of this thesis is to demonstrate that new museum theory can be a framework that supports the effort to engage with the community through the production of an online database. This thesis details the process

of creating an online database of the North American basketry collection at the Valene L. Smith Museum of Anthropology. New museum theory was applied through collaboration with the local Native American community to create a database that makes the museum's collections more accessible to the public. The project contributes to the field of anthropology and museum studies by facilitating anthropological research, using extant museum collections, and serves as an example for other small museums that are interested in making the best use of their collections.

CHAPTER I

INTRODUCTION

This thesis addresses issues that apply to all museums, large and small, in the modern age. Like any field, museums have changed significantly since their beginnings in the late eighteenth century. However, institutions with such deeply rooted histories often struggle to let go of traditional practices and embrace new ones. This thesis will focus on the Valene L. Smith Museum of Anthropology, part of the Department of Anthropology, at California State University, Chico, and its attempt to overcome issues of public access to its collections.

The Valene L. Smith Museum of Anthropology has a permanent collection that comprises over 2,000 ethnographic objects from around the world. The Museum Studies Program was established by former faculty member Keith Johnson in 1970 and the museum is unique in that it serves as a laboratory for Museum Studies graduate and undergraduate students in general collections management and exhibit design.

The museum features two exhibits each year: one is created by the students enrolled in Anthropology 467, *Museum Exhibit Research, Design, and Installation*, while the other is curated exclusively by Museum Studies graduate students. The museum offers free admission as well as tours and other educational programs for local K-12 schools. A new additional gallery, the North Galley, now allows for the museum to have exhibitions open year round. Although the museum sometimes features objects from its own

collection, it also takes every opportunity to display objects loaned by community members as a way of civic engagement. As with most museums, access to the collection is limited in the interest of security and protection of the collection. For the Valene L. Smith Museum of Anthropology, access to the collection is further limited by virtue of constrained space for collections storage and a small staff; the museum's Collections Management Policy requires permission to research or work with objects from the collection.

To ameliorate this often typical situation, more museums are finding innovative ways to make their collections more available to the public. The growing momentum of the new museum theory has encouraged museums to address issues of accessibility to their collections. Facing criticism of collections growing stagnant in storage rooms, unavailable to the public and researchers alike, there is a growing trend in creating online databases to increase access to collections. Developments in collections database technology have made creating online databases relatively easy and affordable for most museums. This thesis details the process of creating an online database of the North American basketry collection at the Valene L. Smith Museum of Anthropology to be used as an example for other small museums that are interested in the result, but are uncertain of how to initiate the process, especially when faced with limited resources. The project began in during the summer of 2015 and was completed during the fall of 2017.

As society becomes more integrated with the internet, museums must find new ways to interact with the public via the World-Wide-Web to remain relevant while serving the community. As museums move into the age of more transparency and accountability, they must find creative ways to connect with their constituencies. This thesis has worked to collaborate with community members while increasing access to collections for public education and research.

The concepts of new museum theory dates to the late nineteenth and early twentieth centuries with prominent thinkers such as George Brown Goode and John Cotton Dana, who each proclaimed that museums were neglecting their role as institutions of public education (Goode 1895; Dana 2008). Towards the end of the twentieth century, new museum theory, also known as Critical Museum Theory, matured and museums theorists began to question the assumption that museums are authoritative and neutral sources of information (Kirshenblatt-Gimblett 1991; Shelton 2006). New museum theory calls for museums to acknowledge the power imbalance that exists, shift control to the appropriate communities, and bring transparency to museum practices.

This theory seeks to bring change to the way museums design exhibits and execute museum education, but it also applies to off-exhibit collections. Many museum objects come from contexts in which a power imbalance occurred at the time the object was collected, via artifact looting, coercion via colonial authority, or by other means. The power imbalance continues once the object arrives at the museum, where it is stored in an environment in which only museum staff have access, prohibiting members of the

community from interacting with collections, or even knowing that they exist in the first place. While only a small step towards increasing accessibility, creating an online database is one way that museums can make their collections known to the community and allow members of the public to interact with the objects that are ordinarily unavailable.

Despite the benefits of an online database, many museums have had a difficult time embracing technology into their everyday practices. Many of these museums are understaffed and are not able to devote a position to technological development. As well, many museum professionals are not traditionally trained in the technological field, and some museums simply do not have the funds to pay for web designers. This thesis demonstrates that creating an online database of collections can be accomplished with minimal technological experience and cost.

Like most small museums, the Valene L. Smith Museum of Anthropology does not have a large budget to facilitate elaborate online features. However, the software that the museum already uses to manage its collections, PastPerfect, offers a web-publishing add-on, PastPerfect Online, which allows users to easily publish selected information online. This software is perfect for the small museum because the website is designed with the help of a PastPerfect Online representative and only requires a few clicks in the PastPerfect catalog to transform a private catalog entry into an online record that can be viewed by anyone. There is no web design or programming knowledge required.

Because it is unrealistic to attempt to publish the entire Valene L. Smith Museum of Anthropology collection online, it was decided to focus only on the Native American basketry collection at the museum.

For thousands of years, basketry has served a functional purpose for people around the world. Baskets are used for gathering and processing plant foods, holding water, storing personal objects, and countless other utilitarian tasks. They can also be important elements in religious ceremonies, gifts at weddings, or products for sale.

Basketry research can inform anthropological research in many ways, including contributions towards subsistence strategies through time, how people adapt to new environments through adjustments in material culture, and how cultural values are expressed symbolically through craft. The great research potential that Native American basketry has to offer makes it a perfect choice to be the first part of the collection to be published online.

This thesis does more than simply publish a list of objects. Prior to this thesis project, the records for the Valene L. Smith Museum of Anthropology basketry collection were minimal and of limited use to anyone viewing the collection online. Thus, the first step in this endeavor was to better document the collection in order to facilitate learning by online viewers.

During this process, an opportunity presented itself to encourage community participation by inviting members of the local Native American community to participate in the documentation process. Documentation from an academic perspective consisted of

a detailed analysis of the technical features of each basket, along with a cultural attribution based on the combination of those features. Members of the community who decided to participate in the project were given time to view a sample of baskets and then describe the basket however they saw fit. They were encouraged to share anything about the basket that they felt was important for the public to know.

The detailed descriptions of the basketry from multiple perspectives was a very important aspect of this thesis because it brought meaning to the online records. Viewers who may be searching for baskets of a particular cultural origin or that contain a certain technical feature are now able to efficiently find objects that meet their interests. The narratives provided by the Native collaborators provided cultural context and interpretation to the objects, bringing life and human connection back these objects that continue to play such a pivotal role in Native lives. Finally, members of the Native community were able to reconnect with objects, facilitating a sense of community and shared stewardship with the museum.

The purpose of this thesis is to demonstrate that new museum theory can be a framework that supports the effort of museums to engage with the community through the production of an online database. Projects such as this can be designed in a way that involves the community in the recordation stage, but also benefits the community once the database is complete. An online database is a tool that can bring museums one step closer to the theoretical new museum; a tool that is accessible for most museums on limited budgets with limited staff expertise in computer technology. By taking advantage

of the ubiquity of the internet in today's society, museums can better facilitate collaboration with local and world-wide communities, independent researchers, academic institutions, and other museums to create museums that are truly open educators of the public.

The remainder of this thesis addresses this project from various perspectives. Chapter II provides the background for this thesis and describes the development of the topic, the current state of the use of technology in museums, and introduces the museum and the collection to be used in the study. Chapter III presents a thorough review of relevant published literature and a description of the theoretical framework, discussing the relevant history of museums and collections and the development of new museum theory. It also discusses Native American basketry, including the history of basketry collections and what basketry research can reveal about human behavior. Chapter IV details the methods of the project, explaining the regime for basketry analysis that was utilized. The chapter also includes the process for updating the PastPerfect database with the new information, using PastPerfect Online to create the online database, and linking the database to the museum's existing website. Chapter V discusses the information that was gathered during this project, evaluating the benefits of the project and the collaboration with the local community, as well as the trends in the collection that lend themselves to future research. Chapter VI concludes the thesis by reinforcing the importance for museums to utilize information technology and provides a discussion of the future the Valene L. Smith Museum of Anthropology collections.

CHAPTER II

BACKGROUND

Development of the Topic

During my time as an undergraduate student at the University of California at Davis, I serendipitously began an internship at the Anthropology Museum that offered me the opportunity to work closely with Ralph Shanks, a scholar in Native California basketry, in his analysis of the C. Hart Merriam basketry collection. Working with Ralph opened my eyes to the wealth of information that could be gleaned from analyzing the minute details of each basket's manufacture. When I began working on my graduate degree, I knew that I wanted to continue my research with basketry and was excited to find that the Valene L. Smith Museum of Anthropology had a collection of basketry from all over the world.

Initial inquiries into the Valene L. Smith Museum of Anthropology basketry collection revealed immediate potential for improvement. The majority of the baskets in the collection had minimal information in the museum's database. Some baskets had been identified as originating from a particular cultural group or location, but many of the object descriptions were blank or consisted of general descriptions that were of little research value. This is in stark contrast with what I was used to when working with the C. Hart Merriam collection, which is renowned as being possibly the most well-documented collection of Native California baskets in the world. I viewed the Valene L. Smith Museum of Anthropology collection as offering a clean slate for me to test my analysis

and identification skills while improving the documentation and researchability of the collection. I decided to narrow down the scope of my work to include only woven basketry from North America.

My next challenge was to apply my graduate-level education in museum theory to the basketry collection. How can this basketry collection contribute to the current discussion about the purpose of museums?

For a graduate seminar in archaeology, I wrote a paper about the ethics of private basketry collections and concluded that private collections could be ethical as long as baskets were properly cared for and made available for research to inform the academic community about the lifeways of the basket's weaver. I came to realize that many museums, including the Valene L. Smith Museum of Anthropology, much like private collections, were not easily accessible to the public.

During a museum studies seminar, my class discussed the emerging new museum theory that rejects traditional insular practices and calls for museums to serve the public. My thoughts again returned to the museum's basketry collections and how little opportunity there was for the public to view the objects in the museum's permanent collection. With the changing nature and variety of museum exhibition topics, there is little opportunity for the public to frequently engage with the basketry in the collection, unless the exhibit focuses on basketry, which has been the case in the recent past. Potential researchers also have limited access due to the limited nature of the basketry database. The lack of information in the database prevents the museum's staff from

performing efficient queries on the collection at a researcher's request. This lack of information has not been intentional; constraints on time, funding, and staff availability has prevented further research and development of the existing basketry collections

The underlying premise of my research therefore tackles the ongoing challenge of how museums can make the best use of their collection. How museum collections are utilized varies from museum to museum. This is especially relevant in view of the fact that many museums face limited funding, staff, and space to adequately address the use of their collections in addition to the everyday concerns of collections care. A solution to this issue can apply across many institutions. My intention is that the solution to issues of access at the Valene L. Smith Museum of Anthropology may also serve as an encouraging guide for smaller institutions that have more limited resources. For the purpose of my research, a museum makes the best use of a collection by adhering to new museum theory and making the collection accessible to any interested community, while at the same time, still protecting a collection's integrity and security.

A possible solution to the problem came to my attention during a discussion of online exhibits in the museum studies graduate seminar. The internet offers numerous benefits to the modern museum, including addressing the issue of accessibility. Through the internet, anyone with a computer, smartphone, or tablet can access any museum anywhere in the world for free. In addition, there are many programs available to help those with low incomes to obtain these devices as well as internet service for free or for a discounted price, reducing or eliminating financial and mobility issues. While online

museums may not be able to replace the experience of going to a museum in person, the internet provides new ways for the public to interact with museums locally and worldwide.

Technology and the Museum

Many museums have had a difficult time incorporating technology into their everyday practices. Museums are often understaffed and not able to devote a position to technological development, and museum professionals are not traditionally trained in the technological field. The Valene L. Smith Museum of Anthropology is no exception; therefore, I was faced with finding an easy and affordable solution to publish the museum's North American basketry collection online. A solution was presented to me simply by researching the software that the museum already uses to manage its collection, PastPerfect.

PastPerfect is the world's most popular software for managing museum collections, being used by over 10,000 institutions, likely due to its affordability and ease of use (PastPerfect 2017). PastPerfect offers a web-publishing add-on, PastPerfect Online, which easily allows users to publish selected information online. This software is ideal for the small museum, because the website is designed with the help of a PastPerfect Online representative and, once the website is up and running, it only requires a few clicks in the PastPerfect catalog to transform a private catalog entry to an online record that can be viewed by anyone. There is no web design or programming knowledge required. Additionally, the website is mobile-friendly, allowing visitors to interact with

the online database on their mobile device while they view exhibits that feature objects from the museum's collection. The only drawback in terms of cost is that online support for the PastPerfect software will need to be purchased and included as part of the overall budget to create an online catalog through PastPerfect Online.

PastPerfect Online will allow me to publish the basketry on the web for public viewing, but the benefits to the software extend beyond my MA thesis. The software is capable of hosting up to 10,000 records and their related multimedia, including images and sound files. This allows for the potential to have all of the objects in the collection published online in the future. The PastPerfect Online software lends itself well to becoming an ongoing project for future students to publish additional portions of the collection, such as the museum's Behrick Collection of Asian Ceramics. The easy-to-use nature of the software will allow for the project to be passed along to incoming students with very little training required.

Opening up the collections for public use through PastPerfect Online will ensure that the Valene L. Smith Museum of Anthropology is at the leading edge of new museum theory and technology by increasing museum accessibility and embracing this technology, both in managing collections and in interpretive and interactive exhibits.

Museums Online: The New Standard

Many museums worldwide are using online databases to share their collections with the public. Johnson (2015) describes this growing trend in art museums and argues that websites are the mechanism for museums to adapt to the modern world. In 2009, the

Getty Foundation awarded grants to nine art museums to create online catalogs and with the Getty's continued influence, online catalogs will surely be standard in many more museums in the future (Johnson 2015). Currently, much of the discussion around online museum databases focuses on art museums, a few of which will be discussed here.

The Metropolitan Museum of Art is one of many large museums that features its collections online. The museum's website currently has close to half a million records available online that can be filtered by artist, object type, geographical location, date, and department (The Met 2017). The online collection consists of objects that are currently on display as well as over 400,000 objects in storage. Thus, the Met's mission statement, which dates to 1870 and states that the purpose of the museum is "...encouraging and developing the study of the fine arts, and the application of arts to manufacture and practical life, of advancing the general knowledge of kindred subjects, and, to that end, of furnishing popular instruction," is being upheld in the twenty-first century using modern technology (The Met 2017).

The British Museum also made the decision to go digital to better uphold the museum's mission. Antony Griffiths, the Keeper of Prints and Drawings, explained that museum missions often refer to preservation for display and education, but many museums have reserve collections so large that most of the collection will never be shown and therefore are unavailable to the public (Griffiths 2010:356). Griffiths (2010:357-358) detailed the museum's journey into the digital age, which began in the 1970s with varying degrees of success. Digitization of the prints and drawings began in

1990 and the collection was published online in 2007 (Griffiths 2010:359-361). The museum found that, after publication, the number of inquiries about the collection fell because questions could be answered straight from the web, while attendance remained steady, with many visitors already knowing the catalog numbers and locations of what they wanted to view, making it more efficient for museum staff to help (Griffiths 2010:361-363). Further, the museum found that the online database was visited by other institutions, demonstrating the widespread demand for online access to museum collections.

Although art museums remain at the forefront of most discussions surrounding the online publication of museum collections, other types of museums are also taking part in the digital age. Like the British Museum, the Smithsonian National Museum of Natural History has been digitizing collections since the 1970s (Wemmer, Erixon-Stanford, and Gardner 1996:36). However, the Smithsonian and many other natural history museums face an arguably more daunting task when the sheer number of specimens in these collections is considered. The Smithsonian's insect collection consists of 33 million specimens, while the fish collection consists of over 500,000 specimens (Wemmer, Erixon-Stanford, and Gardner 1996:36).

Yet, despite the daunting task that faced them, Smithsonian curators were motivated to digitize the museum's collections to aide in the flow of information relating to the world's decline in biodiversity (Wemmer, Erixon-Stanford, and Gardner 1996:35). The Smithsonian, therefore, utilized digital catalogs to instantly send information to

taxonomic specialists worldwide, increasing the rate of species identification compared to previous decades (Wemmer, Erixon-Stanford, and Gardner 1996:37). The benefit of digital collections to public education was not lost on Smithsonian National Museum of Natural History, which has since published the records of over eight million objects on their website for inquiring minds across the globe.

While large and medium-size museums are setting the trend for online collections, small museums are holding their own. Museum software programs such as PastPerfect Online make it easy for smaller museums to host their collections online. There are currently over 800 museums making their collections available online through PastPerfect (PastPerfect 2017). These collections can be found on each museum's website, but are also available on the PastPerfect website, where all of the collections can be searched at once. The majority of the museums included are small museums, such as the Arizona Mining, Mineral and Natural Resources Museum, The University of Denver Museum of Anthropology, and the Yellowstone Art Museum. In a way, the internet has become the great equalizer of museums, allowing small museums to stand alongside large museums when it comes to collections accessibility and the potential for worldwide visitorship.

The Valene L. Smith Museum
of Anthropology

The Valene L. Smith Museum of Anthropology is part of the Department of Anthropology at California State University, Chico. Founded in 1970 by former

Professor Keith Johnson, the California State University, Chico, Museum of Anthropology is part of the Department of Anthropology's Museum Studies Program. The museum's name was changed in 2010 to the Valene L. Smith Museum of Anthropology, following a gift by faculty Emeritus Dr. Valene L. Smith. The museum is located in the Meriam Library Complex, across from the Meriam Library on the CSU Chico campus. The permanent collections storage is housed in Plumas 119E, which is climate controlled, and monitored by a PEM2 Datalogger System.

The museum and its collections were developed to provide hands-on training for students. The collection in its entirety, including the basket and plant-related objects, are part of a larger 2,000-plus object-based permanent collection that comprises primarily ethnographic objects from around the world. The collection has been moved twice within the last 15 years. Due to institutional realities, each move has resulted in further reductions in allocated space. Initially, the collection was housed in a large warehouse on the CSU Chico campus, which has since been torn down for the Wildcat Recreation Center. Full inventories were conducted after each move; since 2001, there have been three full wall-to-wall inventories conducted of the entire collection. In spite of the multiple moves and varying conditions of storage environments over the last 47 years, the majority of the objects are in good to excellent condition. Due to space limitations, the collection has grown slowly, and is carefully guided by the museum's mission:

The Valene L. Smith Museum of Anthropology trains university students in becoming museum professionals. The museum's mission is to promote respect and appreciation for human diversity through our academic museum studies program within the Department of Anthropology. The museum is committed to

the care of collections and to inspiring a diverse community through exhibitions and events.

As the mission statement suggests, the Valene L. Smith Museum of Anthropology is not focused solely on collections management, but also devotes significant resources to public outreach. The museum hosts a number of community events, including free school tours for all ages, an annual summer camp, Museum-in-A-Box, Museum in the Classroom, the World Exploration Lecture Series, The Local Table annual fundraiser, and the Smithsonian Magazine's Museum Day Live.

In keeping with the tradition, the museum also takes great pride in its exhibits. Until recently, the museum only had one gallery (Figure 1), but with the recent gift of support from Dr. Valene L. Smith, an additional gallery, the North Gallery (Figure 2), was added to the museum's building space in the Meriam Library. The addition of this space now allows for the opportunity to have exhibitions all year round. The first exhibit is designed by students enrolled in a formal class and is open in the spring and summer, while the second exhibit is curated by graduate students in the program and is open in the fall. Two more exhibits are now possible in the North Gallery; one in the fall and the other in the spring. All of the museum's exhibitions adhere to the museum's mission to give students experience and hands-on training that will prepare them for a museum profession.



Figure 1. The South Gallery featuring *Hmong Reflections: Stories of Our Own*, which was on exhibit from January 9th until July 27, 2017. Courtesy of the Valene L. Smith Museum of Anthropology.



Figure 2. The North Gallery opened on February 14, 2017 featuring the exhibit *Exquisite Endeavors: The Valene L. Smith Jewelry Collection*. Courtesy of the Valene L. Smith Museum of Anthropology.

The issue of underused collections first came about in 1917, when John Cotton Dana argued that museums had become so focused on acquiring collections that they had neglected to use those collections for public education, which was the very reason that they were collected in the first place (Dana 2008:138). This questioning of the role of objects in museums continued into the late twentieth century (Macdonald 2006:88). Stephen Weil revived Dana's concept of the "New Museum" by suggesting that museums revisit old, unused collections with new ideas for public engagement (Weil 2002:189). While the Valene L. Smith Museum of Anthropology is forward thinking in many ways, the museum can improve the ways it uses its collections by finding creative solutions to facilitate public interaction.

Contributions to the Field

This thesis has brought the Valene L. Smith Museum of Anthropology one step further into new museum theory by increasing public accessibility to museum collections, enhancing civic engagement, and providing multiple voices to object records. This was accomplished by using an online database to make the museum collections available to a wider audience. While this research has clearly enhanced the operations at the Valene L. Smith Museum of Anthropology, my intention is that this research will serve as encouragement for other institutions facing similar challenges.

The majority of museums in operation resemble the Valene L. Smith Museum of Anthropology in that they are relatively small museums with small budgets and few full-time staff members. My hope is that this thesis will help small museums to see the

benefits of an online collections database. Given that many small museums already use PastPerfect to manage their collections, these museums may also be encouraged by how easy PastPerfect Online is to use and how affordable the software is to maintain. Thus, this thesis has the potential not just to put new museum theory into action at the Valene L. Smith Museum of Anthropology, but also many small museums worldwide.

Through this thesis, I also hope to inspire museum professionals to take advantage of the value of their basketry collections. Due to the popularity of Native American baskets in the tourist market during the early twentieth century, many museums of all types and sizes have basketry in their collections. Further, it is common for these baskets to be undocumented. This thesis provides the methodology, utilizing widely accessible resources, to document those collections and make them more available for research. Museums are the repository for these and many other valuable types of objects that can yield unprecedented potential if they are put to their best use.

Finally, this thesis has demonstrated the importance of community engagement. Through this project, I have shown the benefits of utilizing multiple perspectives when working with museum objects. Museum professionals, the objects, and the community can benefit through collaborative efforts that yield new and exciting information about objects. This thesis contributes to the precedent currently being set by new museum theory that community collaboration is the new “normal” in museum practice.

In addition to the contributions this thesis makes to individual museums and their collections management practices, it also has broader implications for the fields of

museum studies and anthropology as a whole. Museum studies, or museology, discussed in greater detail in the following chapter, seeks to open dialogue about the use and interpretation of collections. This thesis serves to not only document a collection, but to explore new ways in which museums can share information with the community. Online databases allow museums to communicate information about their collections to the public and receive feedback. Access to museum collections no longer has to be restricted by limited museum resources such as staff and space. Online databases serve to eliminate these barriers, allowing for an environment in which information is free-flowing and more democratic.

Access to collections is also an important concept in the field of anthropology. Analysis of material culture, often represented by ethnographic and archaeological collections in museums, is an important aspect of understanding human behavior. In her M.A. Thesis, Sarah Izzi (2016) made a case for researchers to revisit extant archaeological collections for reinterpretation using modern analytical techniques. Online databases of museum collections can contribute significantly to researchers' abilities to utilize existing collections for current anthropological research. Making collections available online will contribute to the field of anthropology by opening up collections to research and reinterpretation in the future as new analysis and research questions are updated and refined.

The next chapter presents a thorough review of relevant published literature and a description of the theoretical framework, discussing the history of museums and

collections and the development of new museum theory. It also discusses Native American basketry, including the history of basketry collections and what basketry research can reveal about human behavior.

CHAPTER III

THEORY AND LITERATURE REVIEW

The History of Collections, Museums, and Anthropology

Museums and collecting have played an important role in the development and practice of modern anthropology. Collecting is ubiquitous to the human experience and crucial to the development of modern museums. While collections were initially created by elite members of society as a way to understand the world around them, they eventually came to be used in modern museums for scientific inquiry and public education. The evolution of collecting as it relates to museums has developed parallel to the political and social movements of each time period into a dynamic practice that is employed today to represent a variety of communities and perspectives.

Object-Based Epistemology

Crucial to the origin of museums and modern collection practices is the concept of an “objects-based epistemology,” the idea that objects are a source of meaning and knowledge (Conn 1998:4). In this epistemology, objects are considered to be physical manifestations of facts, and these facts can be gleaned from studying the object. The perfect example of this epistemology lies in the curiosity cabinets that filled both private and public galleries. These cases were packed with specimens without labels, forcing viewers to visually extract the stories held within (Conn 1998:6). However, object-based epistemologies have much deeper roots in the history of collecting.

The Earliest Collections

The origins of the modern museum can be traced back to the Hellenistic period. Many Greek cities contained *Mouseia*, places where intellectuals gathered to worship the Muses (Watts 2006:146). The most noteworthy was the *Mouseion* in Alexandria, established by Ptolemy Soter c280 BCE as an incentive to attract Greece's greatest scholars to the city (Abt 2008:116). Though few details of the *Mouseion*'s functions have survived, it is known that the *Mouseion* housed extensive collections of texts from around the world that were studied, translated, and cataloged by scholars. Some even speculate that the *Mouseion* included natural history specimens in its collections (Abt 2006:116). The *Mouseion* also held public lectures to introduce and perpetuate high intellectual culture in Alexandria (Watts 2006:147). Unfortunately, the concept of object-based epistemologies did not thrive in the subsequent Roman Period and remained dormant until the European Renaissance of the 1500s.

During the Renaissance, objects were not only used to motivate thought, they became a way to make sense of the world (Findlen 2004:26; Macdonald 2006:84). Early collecting was inspired by curiosities; objects that were new and exotic were integrated into collections to understand their place in the world (Clifford 1986:227; Macdonald 2006:84). Collectors developed formal spaces and cabinets to display their collections to their guests, showing that collecting became a form of entertainment as well as a mark of social status by demonstrating the collectors ability to contain the world's wonders within their home (Macdonald 2006:83-85).

Colonialism and the Evolution of Civilization

In the seventeenth century, the increase in colonial practices contributed to a significant influx of foreign objects into Western societies (Findlen 2004:33). Collectors began to organize their objects by physical properties, revealing patterns in nature (Macdonald 2006:84). Rather than seeking out obscurities, collectors sought out the objects needed to fill gaps in their collections, aiming for completion (Findlen 2004:33). Curiosities became less important as collectors strived to complete collections; the completeness of the collection was more important than any one thing within the collection (Macdonald 2006:84).

Collection practices became more systematic as museums continued to develop in the late eighteenth and early nineteenth centuries (Macdonald 2006:85). During this time period, natural scientists were hard at work constructing theories of biological evolution, which were subsequently applied to social systems by evolutionists such as Herbert Spencer, Edward Burnett Tylor, Lewis Henry Morgan, and Karl Marx (McGee and Warms 2008b). These nineteenth century evolutionists erroneously believed that all societies progressed towards civilization through the same stages and that “primitive” societies were “living fossils” of Western Civilization’s past (McGee and Warms 2008b:10). Evolutionists attempted to understand the stages of civilization by comparing “primitive” societies to “civilized” ones. Likewise, collectors were motivated by nineteenth century evolutionism, desiring collections that were organized taxonomically to show the natural progression of nature (Macdonald 2006:87; Clifford 1986:227).

Collectors continued to strive for a complete collection that represented a continuous evolutionary line.

Evolutionary theoretical thought also influenced museums. Objects were utilized to tell the human story, demonstrating the earlier stages of human culture in natural history museums (Clifford 1986:228). Museum visitors viewed the “primitive” natural history exhibits that featured indigenous or non-Western societies and compared them to the “civilized,” themselves. Visitors were led to believe that this comparison was an accurate portrayal of the progression of human civilization. Similarly, national museums used their collections to demonstrate the nation’s dominance of the world (Macdonald 2006:85). These museums exemplify the imperial and colonial practices of Western nations, demonstrating military triumph, entitlement to the subject’s riches and culture, and engineering the idea that the nation is the savior of the subject’s heritage (Barringer 1997:11, 17). Through museums, nations are able to present their own history as a form of propaganda, emphasizing greatness and legitimizing their existence (Macdonald 2006:85).

Salvage Ethnology

Salvage anthropology was an important factor in building ethnographic collections in museums. While eighteenth-century collecting was driven by general curiosity of humans and social trends, nineteenth-century collecting was motivated by observations that cultural groups were disappearing and that their materials should be preserved (Gruber 1970:1290). The idea that an entire cultural group could vanish was a construct

of nineteenth-century evolutionism in which cultures were thought to be evolving from simple to complex, resulting in more advanced cultures prevailing while “primitive” cultures become extinct (Gruber 1970:1290-1291).

One of the most prominent figures in American anthropology, and salvage anthropology more specifically, is Franz Boas. Boas’ intention was to preserve objects for science and mankind in general, not for the native people themselves, whom he assumed would eventually vanish (Jacknis 1996:193). Boas teamed with the American Museum of Natural History to head the Vanishing Tribes of North America project in 1898, which resulted in large ethnographic collections of Native American objects accumulating at this institution (Cole 1999:204-208). Similar efforts in salvage collecting occurred at other American natural history museums, such as the Chicago Field Museum and the Smithsonian Institution.

The history of collections is an important discussion for this thesis, because it provides the contextual nature of museum collections in general that can inform discussion and interpretation of the North American Basketry collection at the Valene L. Smith Museum of Anthropology in particular. The history of museums and the deeply-rooted attitudes of elitism and authoritarianism are still relevant today. While many museums are working to shed these outdated practices, others struggle to change. This discussion is important because it forces museums to acknowledge their institutional history so that they may recognize opportunities for improvement.

University Museums: The Birthplace of American Anthropology

The modern museum was born out of the French Revolution of the late eighteenth century. The French overthrew their monarchy and created a republic, inspiring much of Western Europe to do the same. Many of these newly established democratic nations developed public museums, such as the Louvre, to serve as symbols of national identity (Duncan 1991:93). Museum objects that once served to represent the wealth and power of the king were reinterpreted to represent national heritage (Duncan 1991:94-95). As modern public museums developed through the nineteenth century in Europe, they began to specialize into museums of science, technology, art, and many other subjects (Macdonald 1998:8-9). Further, nineteenth-century museums experienced a change in exhibition techniques, striving to appeal to and educate the general public in addition to the educated elite (Macdonald 1998:10).

Although the modern museum has roots in Europe, someone in the United States of America quickly took note of the benefits that a national museum could have on a new nation. In 1786, Charles Wilson Peale felt that the United States should have a national museum on par with those in Europe. Peale used his own extensive natural history collection, along with donations from friends, and opened a public museum in his Philadelphia home (Sellars 1980). Within fifty years, the American Museum of Natural History, the National Museum of Natural History, and the Chicago Field Museum had all been established.

While museums in the United States kept up with museums in Europe, American curators struggled to compete when it came to national content. During the nineteenth century, discoveries in the Old World such as monumental architecture, elaborate art, and ancient texts, were capturing the attention of people world-wide (Conn 2004:146). These objects were in high demand in American art museums, to be displayed alongside world-renowned artists. Meanwhile, Native American history, lacking any written texts or showy artifacts, was of no interest to historians and, instead, fell into the realm of archaeology (Conn 2004:144). Like American curators, American archaeologists struggled to establish themselves through the study of American prehistory. Some chose to work in the Old World while others were determined to discover the remnants of a great ancient civilization in the New World.

For the archaeologists determined to work in America, there was uncertainty as to where within the university they would belong. Those studying the Old World were welcomed by departments of history, classics, and even art, but those researching American prehistory were not included. Over the course of the nineteenth century, American archaeologists slowly made their way into anthropology departments. The inclusion of archaeology into anthropology was solidified by Franz Boas, who displayed American artifacts as part of the ethnological display at the 1893 World's Columbian Exposition (Conn 2004:146-147). By the end of the century, many universities had established museums to house the collections they had accumulated through the years of curiosity collecting, colonial conquest, and salvage ethnology, and it was within these

university museums that the studies of American archaeology, ethnology, linguistics, and human evolution all coalesced within the department of anthropology (Conn 2004:182).

Twentieth Century Changes in Museums

The turn of the century marks the beginning of significant changes in museums practices. By the 1890s, Boas had grown tired of the way that anthropologists studied and presented culture. Since the field had its roots in natural history, anthropological information was viewed as static, much like geology, in which volumes of information could be compiled that would fully explain culture. Boas felt that this perspective failed to recognize that cultures change over time (Conn 2004:194-195).

Through these early ideas, Boas began to develop what is now considered to be the first American anthropological school of thought, later called historical particularism. Boas believed that methodological shortcomings had caused anthropologists to overlook “inner development,” or independent evolution, to explain cultural phenomena (Boas 1920:314-315). Further, to fully understand these cultural phenomena, Boas argued that they must be studied in the context of their historical development (Boas 1920). Finally, Boas claimed that a culture’s history is dependent on a combination of internal and external forces (Boas 1920), i.e., independent evolution and diffusion.

Likewise, Boas became frustrated with the way that museums studied and presented culture (Conn 2004:194-195). After visiting the United States National Museum, Boas wrote a critique of a display designed by Otis T. Mason, a prominent anthropologist and curator, in which objects from across the globe were arranged based on physical

characteristics in an evolutionary trajectory. Boas declared that, “classification is not explanation,” that simply comparing objects could not possibly lead to a meaningful understanding of culture, and that objects must be placed in their cultural context in order to understand their true meaning (Boas 1887:485). Thus, Boas began to doubt that an object-based epistemology in a museum setting was sufficient for the study of cultures.

Boas’ angst with museums remained for at least another 20 years. In 1907, Boas continued to criticize the museum’s use of formulaic exhibits that simply classified objects, which he felt were unsuccessful in representing the complexity of human culture (Boas 1907:928). He argued that “...effectiveness does not lie in diversity, but in the thoroughness of the material presented,” which echoes his earlier warnings of the ineffectiveness of classification alone to explain an object (Boas 1907:925).

Boas also called into question the role of museums in the future of anthropology. He doubted whether the systematic nature of museums was a suitable institution to shape the direction of such a dynamic and complex field of study (Boas 1907:929). Finally, Boas (1907:929) emphasized the important role of teachers in public education, stating that museums alone could not stand up to the task. By this point in time Boas had left the museum and focused his career at Columbia University, where he mentored the next generation of anthropologists, shaping the development of the discipline in the next century (Conn 1998:102).

The departure of the Father of American Anthropology from the museum is highly symbolic of anthropology, and science in general, in the twentieth century. The idea that

objects were the ultimate source of knowledge faded, and scientific research became a university endeavor (Conn, 1998:102; Macdonald 2006:88). Nevertheless, collecting remained a continued effort, with museums transferring focus to preserving antiquities (Macdonald 2006:87-88). The next substantial change to museum and collections began in the second half of the twentieth century (Macdonald 2006:88). Questions regarding the purpose of museums and collections coalesced into the new museum theoretical framework that would guide museums into the twenty-first century.

Museum Theory and Its Applications

History of the Theory

Although new museum theory took shape in the late twentieth century, its roots reach much further back in museum history. As museums began to fill with collections, some museum professionals began to question the purpose of museums. George Brown Goode, a late nineteenth-century curator at the Smithsonian Institution, felt that the role of museums was to stimulate the minds of the public, who had limited access to higher education (Goode 1895:115). In 1917, John Cotton Dana (2008:138) argued that museums had become too focused on acquiring collections and had neglected to use those collections for public education, which was the very reason that they were collected in the first place. Dana (2008) called for a new approach to thinking about museums, which he called the “New Museum.”

However, the idea of the new museum did not take hold until the second half of the twentieth century. Inspired by the Civil Rights movement of the 1960s, artists challenged

museums to include female artists and artists of color, and demanded influence over how their art was displayed and interpreted (Marstine 2006:6). Museum theorists followed suit, questioning the assumption that museums are authoritative and neutral sources of information. The new museum was introduced yet again by Peter Vergo (1989:3), who described “a state of widespread dissatisfaction with the ‘old’ museology” which he argued focuses on methods over purpose.

Traditionally, objects have been interpreted as authentic direct links to the past or exotics provided by a museum whose authority went unquestioned. New museum theorists push back on this authority, arguing that museums are the product of “individuals making subjective choices” (Marstine 2006:2). Just as museum visitors experience an exhibit through a lens of their past experiences, museum workers create exhibits that are unknowingly influenced by their cultural, social, and educational values. New museum theory looks to examine these values to bring transparency to museum practice in addition to calling for museums to acknowledge the power imbalance and shift control to the communities being represented (Marstine 2006:5).

For example, some curators design exhibits about the “ethnographic other,” using objects that had been removed from their cultural context and assigned meaning by someone outside the culture (Coxall 2006; Kirshenblatt-Gimblett 1991:389). Up until this time, museums reflected national interests by organizing and explaining objects from the colonial perspective from which they were collected under (Shelton 2006:70). Ethnographic objects came to represent the ethnology that was conducted, which was

often detrimental to the culture being studied, rather than the culture itself (Kirshenblatt-Gimblett 1991:387). Through the reflexivity of new museum theory, museums began to realize that their collections represented the ethical and moral standing of their institutions and highlighted the dark past of anthropology and museum collecting.

To confront this, museums began to reach out to the community for input on exhibit design and interpretation (Roberts 2012:151; Coxall 2006). These new perspectives have begun to affect exhibit content, with museums welcoming alternative interpretations and including perspectives of the cultures on exhibit (Roberts 2012:151).

For example, in 2016, Harvard Art Museums featured an exhibit, *Everywhen: The Eternal Present in Indigenous Art from Australia*, which was curated by the Australian Studies Visiting Curator, Stephen Gilchrist, a native to Western Australia. The exhibit featured Australian indigenous art through a non-linear perspective of time, looking beyond colonization to represent the whole of Indigenous Australian past, present, and future (Gilchrist and Skerritt 2016:109). Gilchrist calls for curators to move the focus away from the preservation of objects, saying that “objects become fully realized through active encounters with their community (Gilchrist and Skerritt 2016:114).” *Everywhen* served to extend power and authority to the community being represented, allowing the story of Indigenous Australian art to be told from a new and meaningful perspective.

The “New Museum” framework is incorporated into my research and provides the foundation for this project. First, creating an online database is significant to the new museum approach because it creates a platform in which the museum can better serve the

public. In addition to better fulfilling the museum's purpose of public education, this thesis shares authority with the community through collaborative efforts to document the basketry collection. Contributions by Maidu community members local to Chico, California, provided multivocality and cultural context. The information provided by these community collaborators was added to the permanent record for these objects, allowing for their voice to represent the objects in perpetuity.

Research in the Modern Age

While new museum theory aims to shift the focus of museum to their purpose in serving society, object-based research remains an on-going practice in museums. In the first half of the twentieth century, mainstream anthropological research became more and more separated from the museum (Thomas 2010:6). However, in the 1970s, there was a reemergence in the interest of material culture studies that brought anthropological research back into the museum and established anthropological museology (Shelton 2006:72). While academic anthropology often begins with a question, museum anthropology begins with the object, allowing for new discoveries by examining objects that have been collected and forgotten; an opportunity to see what else can be learned about an already-documented culture (Thomas 2010:7).

Museum anthropology also differs from academic anthropology because it is a public endeavor. The results of museum research are often incorporated into exhibits or other forms of public outreach, which are open to criticism by the public and represented communities (Jones 1993:202-203). This type of accountability is in striking contrast to

academic anthropology, which is often out of reach of non-academic communities (Jones 1993:203). The public aspect of museum anthropology allows for a challenging and fluid environment for anthropological research because it promotes a give-and-take relationship between museum and community that is supported by new museum theory.

This thesis is an exercise in museum anthropology because it is a collections-based research project that gives new meaning and purpose to a neglected collection. In an age in which museums are being challenged to justify their collections or return them to originating cultures, this project gives this collection a new purpose in the museum that demonstrates the educational value of maintaining museum collections. Finally, the results of the project are presented in an online database available to the public and academic community for contributions and criticism that have the potential to further add to their educational value.

Learning Theory and Online Research

The new museum theory established public education as a primary role of museums. As museums began to embrace that role, research in how to maximize learning in the museum flourished. A notable researcher in museum education is George E. Hein who stated that, “in order for visitors to grow and learn from their museum experiences, we need to understand these experiences sufficiently so that we can shape them” (Hein 1998:2). Hein compiled the results of different studies of to determine what influences learning in the museum. His conclusions included the ideas that museum visitors integrate exhibit content with their personal experiences and come to unique

conclusions that are personally meaningful (Hein 1998:153). Constructivism, Hein argues, is the most appropriate theory for explaining how people learn in museums (Hein 1998:154).

Constructivism is an education theory that suggests that individuals construct knowledge within themselves through physical interaction with their environment. Hein (1998:34) stresses that there are two important proponents of constructive learning; the concept of active participation and the idea that the learner's conclusions are unique to the individual rather than representing an objective truth. The learner's individualized conclusions are built within a framework of their background and past experiences. The interactive, flexible, and reflexive nature of exhibits makes museums an optimal environment for constructivist learning.

To take the constructivist theory of learning a step further, Falk and Dierking (2000) developed the "Contextual Model of Learning" as a way to think about and analyze learning. The model is based on the constructivist idea that learning is the result of an individual's interaction between the content and their past experiences. The contextual model expands that idea, stating that the learning is dependent on not only past experiences, but an entire contextual framework that consists of personal, sociocultural, and physical contexts (Falk and Dierking 2000:136-137). The benefit of this model is that it provides categories and subcategories for the purpose of observing and analyzing the factors that influence learning in an organized way. The model provides a tool for evaluating the successes and failures of learning in the museum environment.

While constructive learning theory and the contextual model of learning are important for understanding learning in a museum setting, learning in an online environment reduces or eliminates the active aspect of learning. Thus, for online learning to occur, online materials must be combined with instruction and interaction (Anderson 2008:16). Traditional museum exhibits attempt to facilitate learning by providing both content and instruction strategy. An online database such as the one produced for this thesis provides content without instruction strategy, making it unable to provide the quality of learning in a fully interactive and engaging exhibit.

The purpose of the database is to make the basketry collection of the Valene L. Smith Museum of Anthropology available for research and public education, providing objects in digital form with the educational goals and strategy to be provided by the viewer. Thus, the database provides a tool for instructors, curators, and self-motivated learners, but is not meant to be the “whole package” when it comes to promoting higher-order thinking.

Computer Technology and Museums

Museums compile a wide variety of information about their collections. Consumers of that information, which includes curators, researchers, and members of the public, have different informational needs, and these needs can only be met if the museum has an organized way of gathering, storing, and retrieving that information. Traditionally, like libraries before the advent of computerization, museums stored information about their collections in card catalogs, a system with many limitations. First, card catalogs can only

answer basic questions such as, “Does the museum collection contain any drums?” or, “What items in the collection are made of wood?” More complicated questions like, “How many drums in the museum are made of wood?” would require that each card in the catalog section be read individually (Marty, Rayward, and Twidale 2003:263). For many museums with large collections, the task of creating a single catalog was impossible, due to the lack of time, funding, and space to store the catalog (Griffiths 2010:357).

Museums, led by the Smithsonian Institution, followed the trend set by libraries and began to use computers to organize information as early as the 1960s. Museum staff immediately saw the benefit of using computers for the compilation and storage of collections data because it often contains repetitive information (Marty, Rayward, and Twidale 2003:261, 264; Griffiths 2010). Electronic databases allowed staff to search collections using multiple criteria and compile lists faster than ever before.

Ultimately, the goal of digitizing collections was for museums to join forces to create a universal collections database similar to what libraries have done. However, library collections consist primarily of copies of books that are present in many different collections, meaning that a catalog entry for a particular book at one institution can be applied to the same book in other institutions. On the other hand, museum collections are unique, and a catalog entry for an African mask at one museum often will not suffice for African masks in other museums. As a result, each museum must catalog individually rather than sharing the workload. While the *Nomenclature for Museum Cataloguing* was

developed to standardize the way museums named objects, the types of information to be collected varied and museums were never able to implement a standard for data recordation (Marty, Rayward, and Twidale 2003:261, 264). As a result, the digitization of museum collections became complex, expensive, and slow. Nevertheless, the museum field continued plugging away, developing organizations and holding conferences to discuss ways to maximize the use of computers in the museum.

The development of the personal computer in the late 1980s revolutionized the way museums used technology. Personal computers were more affordable and easier to use, and thus more easily applied to a variety of uses in the museum (Marty, Rayward, and Twidale 2003:265). However, the problems relating to the uniqueness of collections remained and museum professionals were still faced with the time-consuming task of digitizing object catalogs. Because the task of developing recordation standards is nowhere near obtainable, museums have switched focus to ways in which museums can share information in a standard way, such as standard terminology and vocabulary, commonly referred to as nomenclature (Marty, Rayward, and Twidale 2003:267).

Technology in the museum was revolutionized once again in the 1990s with the development of the internet. Museums wasted no time in utilizing the internet to share information about their museum, collections, and exhibits to the public. The ability to instantly share information facilitated collaboration between professionals working in different departments in the same museums as well as different institutions (Marty, Rayward, and Twidale 2003:270).

The internet also allows museums and schools to collaborate, which is especially beneficial for teachers limited by resources or location. The internet has made it possible for museums to broadcast live events around the world, allowed researchers and members of the public alike to simultaneously view and compare objects in different museums, and opened up many other new and unforeseen possibilities for people to interact with museums and their collections (Marty, Rayward, and Twidale 2003:280).

The trend of museums making their collections available to the public through online databases is supported by new museum theory. Prior to this development, museum collections that were not on display, and all of the knowledge held within them, were locked in museum storage rooms where the public did not have access. New museum theory calls for community involvement and interaction with collections, which can only be implemented if the community is made aware of what is held within the collection. Providing an open access collections database encourages community collaboration, allows for individualized, independent, and informal learning opportunities, while also facilitating scholarly research among other museums and universities.

The relatively new development of using technology in the museum has led to a new area of research regarding how technology effects the museum environment, called museum informatics, as well as how research into the way that visitors use online museum resources. The use of information technology in the museum has opened new possibilities for the function of museums as well as new expectations from the public.

Paul F. Marty, a leading scholar in museum informatics, conducted a survey to better understand how the public uses information technology in the museum setting. Marty's (2008:89) findings were that, out of 1215 responders, 64.1 percent answered that they were likely or very likely to use online images of collections and 62.4 percent were likely or very likely to use research materials and archives in their daily lives. In contrast, less than half of the respondents reported that they were likely or very likely to use online tours, interactives, or other educational activities (Marty 2008:89). This indicates that the most utilized resource on a museum website is the collections database. This finding is important to draw attention to, as many museums have yet to explore the potentials of online collections, restricted by a lack of training and funding. A small or underfunded museum can make the best use of their resources simply by making their collections database available online, something that can be relatively simple with time allocation and the right computer software.

Museum Software with Online Capabilities

There are numerous companies that provide software for museums to manage collections internally but also share collections publicly. The costs of these products vary dramatically, starting with simple and free open-source software, such as Collective Access, and ending with powerful customizable software with fees of thousands of dollars per month, such as The Museum System. This variety of options allows museums to choose the software that suits their specific needs and budgets, no matter how large or small.

The Valene L. Smith Museum of Anthropology uses PastPerfect to manage its collections. This software is popular among small museums because of its relatively low cost and ease of use. Like many other software products, PastPerfect comes with the option of additional purchases to enhance functionality. One of these add-ons is PastPerfect Online, which gives the museum the ability to share its collections online through a website created and maintained by PastPerfect. This may be a valuable option for other small museums who do not have an information technology department. For museums with an existing website, like the Valene L. Smith Museum of Anthropology, which has a website through California State University, the database can simply be linked from the museum's main website. This solution is ideal for the Valene L. Smith Museum of Anthropology in that it is simple, efficient, and cost-effective.

Native American Basketry and

Basketry Collections

Basketry through Time

The term “textile” refers to any type of woven material, and basketry is considered a type of textile because of its woven construction. However, the distinction has been made between textiles and basketry based on the product itself in addition to the manufacturing process (Adovasio et al. 1997:403). Textiles are a pliable fabric that is made using a loom, while basketry is a rigid item, such as a container or mat that is manually woven without any sort of apparatus.

For thousands of years, basketry has served a functional purpose for people around the world. Baskets are primarily used for gathering and processing plant foods, holding water, storing objects, and other utilitarian tasks. However, baskets are also used in many other aspects of life. Baskets are used to carry babies and intern the dead. They can be important objects in religious ceremonies, soles of sandals, gifts at a wedding, or products for sale. No matter what their function, all baskets are works of art expertly crafted by weavers whose skills are passed down from generation to generation.

But just how long have humans been using baskets in their daily life? The oldest evidence of basketry to date comes from Moravian sites in the Czech Republic. One site, Pavlov I, dates between 27,000 and 24,500 B.P. (Svoboda 1994:74). Being made of perishable materials, the baskets themselves are not preserved. Instead, the evidence of their existence comes in the form of negative impressions made when pieces of clay came into contact with the baskets (Adovasio et al. 1997:403). The nine specimens of basketry impressions discovered at Pavlov I revealed that the inhabitants of the site possessed the skills to create well-made twined basketry, indicating that the techniques had been in practice for some time (Adovasio et al. 1997:416).

In North America, the oldest undeniable piece of basketry comes from the Meadowcroft Rockshelter in Pennsylvania. The simple plaited wall fragment is made from strips of tree bark and dates to approximately 17,000 B.P. (Adovasio et al. 1997:643). Andrews and Adovasio (1996:39) have identified a second possible piece, a

single strip of bark matching those making up the plaited fragment, which dates to 19,000 B.P.

Basketry as a Commodity

Traditionally, many Native American groups exchanged baskets among each other. Merriam (1955) frequently identified Indians as owning baskets made by a different culture during his travels in California in the early twentieth century. He called these “intrusive baskets” and explained that they could be obtained through debt payment, purchase, or trade (Merriam 1955). Just like Euro-Americans, Indians were admirers of fine work and were always on the lookout for baskets to purchase from other tribes (Merriam 1955). Merriam (1955) tells a story of Indians from Nevada coming to the Ukiah area to pick hops and becoming enamored with Pomo basketry. He states that some of the Nevada Indians spent all of their earnings on Pomo basketry to take home to Nevada (Merriam 1955). Merriam (1955) describes hop farms as a place where Indians from different cultures could get together and show their basketry. Basket trade between tribes can be identified through analysis in cases where the basket’s documented origin is not consistent with its mechanical features.

As Euro-Americans moved west across the continent and encountered different Indian cultures, they began to trade Western items for Indian ones. Basketry quickly became a popular item among Euro-Americans, who were impressed with the craft and hunted out the most perfect specimens for their collections (Kallenbach 2003, Mason 1902). Many Euro-Americans in the early twentieth century traveled west to see the

sights and purchase a Native basket as a souvenir. Even travel brochures and magazines advertised the trend of basket ownership (Smith-Ferri 1998). In addition to casual collectors, many universities and museums sent representatives out into the field to collect pieces of Indian culture (Conn 2004, Jacknis 1993). The obsession to own Native basketry was so prevalent that in 1902 Otis Mason described it as a disease called *canastromania* (Mason 1902), a word likely derived from the Spanish word “canasta,” meaning “basket.”

The majority of basket collections were compiled between 1889 and 1939, a period that has been called the “basketry craze” (Jacknis 1993:3). What we know about basketry today is defined by the baskets that each person collected. Their personal tastes create a bias in the collections, and what they chose to document at the time of purchase shapes the provenience records available. Most collectors were interested in aesthetics, looking to buy the most perfect specimens for their collection (Kallenbach 2003; Mason 1988 [1904]:viii-ix). Further, many collectors were not concerned with documenting information about the weavers or the basket’s origins, resulting in many collections that have since been donated to museums having little or no documentation or significant errors in documentation (Kallenbach 2003:30; Merriam 1955:106).

Traditionally, basketry served as an important economic tool for Native American women to support their families through food procurement. Once their traditional lifeways were ended by the arrival of Europeans, basketry remained an important source of income for Native Americans, not as a tool, but as product for sale. In fact, native

crafts were taught in Indian boarding schools as vocational training (Hutchinson 2009:51). Basketry was such a popular product in the early twentieth century that it was even taught in Indian schools located in cultural areas where basket weaving was not a significant part of the traditional culture (Hutchinson 2009:61).

The basketry craze coincided with a period of oppression and poverty for the Native American community. With the marginalization of Native Americans by Euro-Americans, the interest in basketry allowed many Native Americans to earn a living using traditional knowledge. Talented weavers could make a decent living making and selling baskets. For example, Joseppa Dick, a Pomo woman, was well known for her basketry and was sought out by collectors who commissioned her work (Smith-Ferri 1993:61-62). Dick was able to make enough profit to support her family as well as travel throughout the country to participate in basketry demonstrations (Smith-Ferri 1993:62). However, not all Native weavers were financially successful, with many women managing only to supplement their household income and eke out a living selling baskets on street corners. Thus, basketry transitioned from becoming an essential tool to an essential art, in each case contributing to the survival of the people.

Basketmaking After Contact

European Americans romanticized basketry and other Native industries as something “purely Indian;” however, many Native wares were modified to fit Euro-American tastes. As demand for Indian baskets increased, weavers began to experiment with new materials and techniques (Hutchinson 2009:92). Further, Indian schools,

missionaries, and other organizations attempted to “modernize” Indian crafts by forcing weavers to make baskets that appealed more to European tastes (Hutchinson 2009:64-65). This intercultural exchange is typical of what happens when any two cultures meet, and in the case of basketry, the blending of cultures is well represented.

European influence on Native basketry can often be seen in the designs as well as the form. For example, California cultures rarely used anthropomorphic designs in their traditional baskets, but began to use them very frequently for baskets made for sale to Euro-Americans (Shanks 2010). Similarly, Christian symbols, such as crosses, appear in Mission Indian baskets of Southern California during the period of the basket craze (Shanks 2006, Shanks 2010). Western influence can also be seen in the shape of basketry, which began to take on the forms of Western-style vessels, including oval and square shapes, the addition of handles and lids, as well as curves that mimicked pottery (Shanks 2006). As a result of these Western influences, many basketry collections reflect the process of changes the Native American cultures underwent in the nineteenth and twentieth centuries, rather than representing the style of Indian baskets prior to European contact.

History of Basketry Research

Academic interest in Native American basketry has been a part of American Anthropology since its inception in the late nineteenth and early twentieth centuries. There are ethnographic publications that include information about basketry, however, most works are specific to one culture and do not make cross-cultural comparisons. This

literature review focuses on the few basketry analysis publications that compare the technical features of baskets across different cultures for the purpose of cultural attribution.

Basketry research gained momentum in 1904 when Otis Tufton Mason published *Indian Basketry: Studies in a Textile Art Without Machinery*. Mason's book was a massive volume that included chapters on materials, weaving techniques, and cultural types. Mason observes that basketry varies from culture to culture based on the different materials available, different needs of the people, and different ideas of the manufacturers, and that these differences result in "special marks upon the work of different tribes" (Mason 1988:255-258). Mason was a pioneer in basketry research and his book demonstrates the early realization that it is possible to observe cultural patterns in basketry. Mason dove deeper into basketry manufacture than the majority of his peers, but time and continued research by future anthropologists would reveal even more depth to basketry research.

Another important publication came in 1929 with Llewellyn L. Loud's and M. R. Harrington's *Lovelock Cave*, which was the first detailed analysis of a large quantity of basketry recovered from an archaeological site (Adovasio 2010[1977]:3). The report provides information about the wicker, coiled, and twined baskets recovered from cave, including details about stitching techniques, rim finishes, and design elements (Loud and Harrington 1929:60-70). While this report did not attempt to make cross-cultural

comparison, the amount of detailed analysis it provided allows for researchers to make those comparisons in the future.

One of those researchers was Gene Weltfish who, in 1930, published *Prehistoric North American Basketry Techniques and Modern Distributions* in which she describes the important technical features of twined, coiled, and plaited basketry and how those features align to particular culture areas across North America. Weltfish took basketry classification a step further in 1932 by making comparisons between ethnographic collections and prehistoric collections, including those described in the Lovelock Cave report, concluding that the basketry technology of modern Indians bore a strong resemblance to prehistoric collections from nearby sites, indicating strong cultural continuity of weaving methodology.

A very significant development in basketry analysis was the publication of J. M. Adovasio's *Basketry Technology*, originally published in 1977. Adovasio provides an analysis form to standardize the documentation of twined, coiled, and plaited basketry with detailed instructions and diagrams to demonstrate the data that is important to record. While Adovasio's primary research focus is prehistoric basketry, his proposed analytical regime is useful for anyone attempting to analyze a basket, whether it is prehistoric, ethnographic, or contemporary. The downside to *Basketry Technology* is that it does not provide information on cultural patterns in basketry that can be used to attribute baskets.

For information on how to attribute a basket to its originating culture, Ralph Shanks' three-part *Indian Baskets of California and Oregon* series, published in 2006, 2010, and 2015, is an extremely important resource. Each book in the series focuses on a particular region of California and Oregon and is organized by cultural group, providing written descriptions of the basketry made by each group. Shanks (2006, 2010, and 2015) focuses on explaining the mechanical features of basketry and how to use those features to differentiate baskets made by different cultural groups. Although the series is limited in that it only provides information on basketry from California and Oregon, it provides an example of comparing basketry characteristics that can be applied to any area of the world.

In 2013, Justin Farmer provided cross-cultural comparison of basketry cradles from California and the Western Great Basin. Farmer (2013) provides a typology to describe cradle shapes and breaks down the different techniques of cradle manufacture across each cultural group. Like the *Indian Baskets of California and Oregon* series, Farmer's book is a necessary reference for attributing basketry cradles to a particular culture.

Finally, John Kania and Alan Blaugrund published *Antique Native American Basketry of Western North America* in 2014. Like Shanks, this book provides a breakdown of technical features by culture group for the western half of North America. While less detailed than Shanks, *Antique Native American Basketry of Western North America* is very useful for cross-cultural comparisons in areas that are not discussed by Shanks.

As stated above, there is a scarcity of literature that draws comparisons between the basketry technologies of different cultures. This is likely related to the effort involved in collecting enough data from multiple basketry collections that allows for drawing conclusions about cultural patterns in technical features. Creating an online database of basketry that includes detailed descriptions of basketry technical features contributes to the effort to add to the existing literature by increasing the data pool for such research and making that data easily accessible.

Baskets and Human Behavior

What are the anthropological applications of basketry analysis and interpretation? Below are just a few examples of how researchers have used baskets to answer questions about human behavior throughout time.

The basketry and cordage impressions recovered in the Czech Republic discussed above contributed a great deal to basketry research as well as knowledge of human behavior in the Upper Paleolithic. When it comes to archaeological sites that date to 25,000 BP, such as Pavlov I (Svoboda 1994:74), evidence of subsistence strategies of typically comes in the form of faunal bones and stone tools, which are signs of hunting or scavenging animals for meat. However, evidence of basketry in the form of clay impressions found at the site provide insight into another important aspect of the diet: plant foods. While it is no surprise that people in the Upper Paleolithic ate plant foods, the presence of sophisticated basketry provides some insight into the importance of plants in the diet as well as how these plant may have been gathered, cooked, or processed.

Finally, the identification of weaver's knots, which are highly indicative of net-making for the purpose of hunting, reveals new information about hunting strategies and innovations employed in the Upper Paleolithic as well as social behavior, as net-hunting requires significant social organization compared to the use of spears and projectiles (Adovasio et al. 1997:417).

Another area of basketry research involves the evolution of culture as an adaptation to a new environment. Judith K. Polanich investigated the adaptation of coiled basketry in Western Mono following their migration in three separate waves west over the Sierra Nevada Mountains (Polanich 1994). Interestingly, the populations resulting from the first and third migrations coil to the right, while the second migration population coil to the left. Polanich established that the first and third wave of Mono people learned to coil from the Yokuts, who use grass bundle foundations and work to the right, while the second wave of Western Mono learned to coil in their ancestral homeland during interactions with Mono people who had already migrated west (1994:230-247). However, the Eastern Mono lacked grass material for a bundle foundation and used three willow rods for a foundation instead, which, Polanich argues, would have been easier to hold with the left hand while the weaver coiled leftward using the right hand (Polanich 1994:244).

Polanich goes further to consider *why* the Western Mono adopted coiling, arguing that it served a social function rather than a purely subsistence-based function. The Yokuts practiced an annual washing ceremony featuring a coiled washing basket that

served as a display of success and strengthened bonds between neighboring groups (Polanich 1995:62). These neighborly relationships often resulted in the sharing of resources, an outcome that would have been highly advantageous to the unsettled Western Mono (Polanich 1995:62). Thus, Polanich argues that the Western Mono migrated to new lands and adopted coiled basketry as a result of participating in the washing ceremony in order to nurture beneficial social relationships that would ensure their success in their new home.

In this final example, Molly Lee searches for messages communicated through baleen baskets made in Alaska. Lee (1985:164-165) applies symbolic anthropology, a concept based in structuralist anthropology, which aims to interpret art as a “cultural system of meaning,” to baleen baskets. Lee argues that five characteristics of baleen baskets are representative of binary elements that are characteristic of Inupiat thought (Lee 1985:167). The horizon is an important symbol that divides the sea and sky, and is represented by the top of the basket where the zoomorphic finial depicts the portions of animals that are seen above the water (Lee 1985:167). The Inupiat see the whale as sacred and the walrus as devious, a binary that is represented in the baleen basket and ivory finial (Lee 1985:169-170). The opposition of dark baleen and light ivory is also symbolic of light and dark, an important binary in Inupiat culture due to the seasonal, rather than diurnal, shift in sunlight (Lee 1985:171). The shape of the basket is representative of both round and hollow female symbols and projecting male symbols, with the finial, symbolizing the male half, being more prominent to represent the male

weavers of these baskets (Lee 1985:171-174). The weaving and carving techniques employed to make each basket are symbolic of the cultural continuity of these skills that were important in traditional hunting (Lee 1985:177). Lee (1985:179) suggests that, while these baskets were developed solely as a form of tourist art made for sale, they contain symbols that express the complex concepts of Inupiat thought.

These examples demonstrate the potential of basketry research to make significant contributions to anthropological thought. The efforts above demonstrated that basketry, whether considered from a general or specific perspective, can be utilized to reveal information about many different aspects of what it means to be human. The scholars above have touched on the concepts of ancient subsistence strategies, adaptation of technologies and social strategies in response to new environments, and symbolic communication through tourist art using baskets as their medium. Further research on basketry will be facilitated by projects such as this, in which more and more collections are made accessible through online databases. The following chapter will outline the methodology for basketry analysis, reaching out to Native communities, updating the collections database, and publishing the database online.

CHAPTER IV

METHODOLOGY

Basketry Analysis and Attribution

This thesis consists of a collections-based research project, as part of a written Master's Thesis in which North American objects made of hand-woven plant materials from the Valene L. Smith Museum of Anthropology's permanent ethnographic collection were researched, documented, and prepared for an online database available to the public on the museum's website. I used methods and software that are easily accessible to those within the museum community to allow for the process described here to be easily and affordably replicated with other collections of North American basketry.

The portion of the collection that was utilized for this research comprises 67 objects. The collection was analyzed between the summer of 2015 and the fall of 2017. Interviews with Native collaborators took place in October of 2016 and May of 2017. The baskets were photographed during the spring and summer of 2017. Finally, the museum's collections database was updated and published online during the fall of 2017.

Defining the Sample

Each basket from North America at the Valene L. Smith Museum of Anthropology was carefully analyzed. Prior to this process, however, it was first necessary to identify all of the baskets in the collection that would be included in this project. To do this, I used the museum's PastPerfect database to generate a list of each item in the collection with the word "basket" in the object's name or description. Once this list was created, I

looked through the records with the aim of removing objects from the list that were not North American in origin. This was done in several ways, the most straightforward way being inspecting the records for any information indicating its place of origin. This was problematic, as many of the objects in the collections lacked provenance documentation. For those objects that did have a recorded origin, that origin was not always listed in the appropriate field on the PastPerfect record. As a result, each record had to be read in its entirety in order to be confident whether an origin was recorded for that object. After this process, the initial list of baskets to be used for this project included 104 objects.

After this list was generated, an initial inspection of the collection was carried out for several reasons. The first was to address missing baskets in the collection. As I read through the records to generate my original list, I noticed many records stating that the object described in that record was missing. My intention was to confirm that these baskets were actually missing, rather than simply misplaced, as well as confirm that the rest of the baskets in the collection were accounted for, which will be explained below.

Another goal was to determine what the collection included and where the baskets were physically located. In doing this, I simultaneously accomplished my final goal, which was to winnow my list by removing objects that did not fit the scope of the project, yet remained on my list due to poor documentation.

Through this initial inspection, I was able to determine that 15 baskets were accurately listed as missing, and there were three baskets that I was unable to locate, and 16 baskets that did not fit the scope of the project. This is because, when observed with a

trained eye, these baskets were either clearly not from North America or because they were not constructed using a method of weaving, such as baskets made with solid sheets of birch bark. This inspection resulted in a final list of objects to be used in this thesis project that included 67 objects.

The Technical Features of Basketry

As a weaver creates a basket, he or she goes through a specific process to create the start of the basket, weave the base and the walls, and then create the selvage, securing everything as he or she progresses to ensure that the basket is strong enough to withstand its intended use. The decisions that a weaver makes during the basket's construction leave traces that remain evident long after the basket is completed. These traces are referred to here as *technical features*, and they are crucial to basketry analysis and cultural attribution. Although most basketry is made in a predictable way, there are variations in construction techniques. For example, all baskets have a start, but how the start is created can be different from one basket to another, a variation that is important to document because it may have cultural implications.

Further, the technical features that are recorded depend on the overall type of weaving that was employed. There are three major types of weaving used to create plant-based textiles: twining, plaiting, and coiling. To understand the difference among the three techniques, one must first understand the terms warp and the weft. Warp refers to the element in weaving that is stationary while weft refers to the element that does the weaving; warps and wefts are typically perpendicular to each other.

In basketry, twining is accomplished with a passive warp that forms the structure and at least two active wefts that do the weaving. The two or more wefts pass in front of and behind the warps, alternating with each warp and twisting between warps (Figure 3).

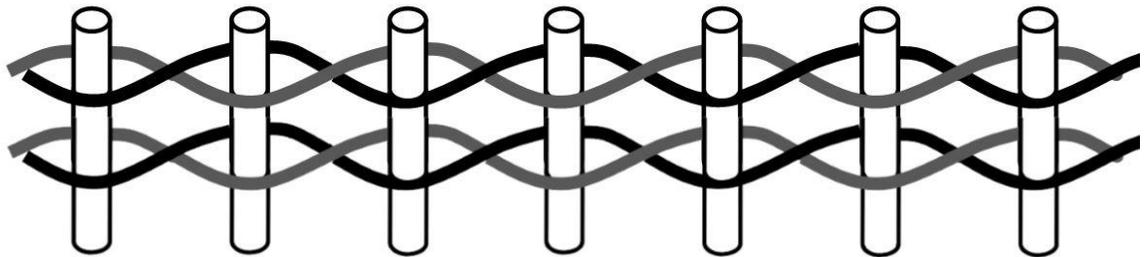


Figure 3. Diagram demonstrating the process of twining. The warps are shown in white and the wefts are shown in black and gray. Diagram by Heather Martin.

In plaiting, the warp and the weft are both active. The simplest plaiting technique involves warps and wefts meeting at right angles, passing over one and under the next, with weft elements acting independently of each other (Figure 4).

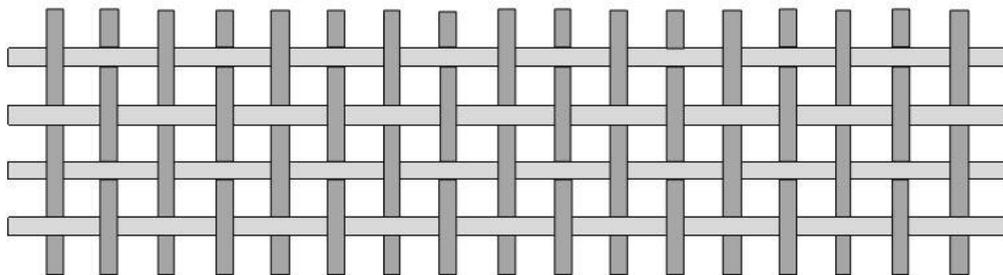


Figure 4. Diagram demonstrating the process of plaiting. The warps are shown here in dark gray while the wefts are shown in light gray. Diagram by Heather Martin.

Finally, coiling uses a single active weft that wraps around the warp to create a coil. Each succeeding coil is attached to the previous coil with the weft element, which wraps the current coil, passing through the previous coil with each wrap. An awl is used to pierce a hole in the previous coil for the weft element to pass through, making coiling more of a sewing technique rather than a weave. Further, because the warp element circles the basket to form the coil rather than remaining stationary and perpendicular to the weft, warps in coiled baskets are commonly referred to simply as the foundation while the weft may be more accurately referred to as a sewing implement (Figure 5).

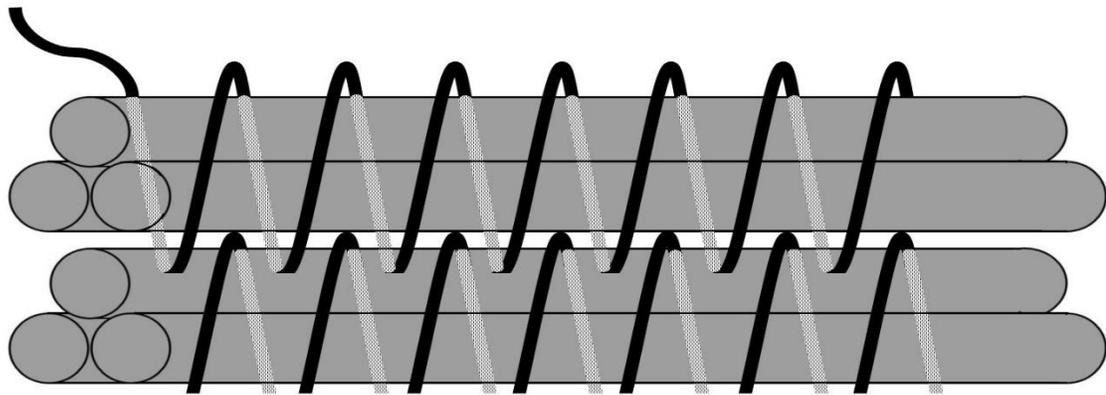


Figure 5. Diagram demonstrating the process of coiling. The foundation is shown in gray while the weft, or sewing implement, is shown in black. Diagram by Heather Martin.

As mentioned above, the technical features of a basket are slightly different, depending on whether the basket is twined, plaited, or coiled. The technical features that were documented for each twined or coiled basket are listed in Appendix A. The technical features for plaited baskets are not included, because plaited basketry is less

common in the western half of North America, and no plaited baskets fall within the scope of this project. For more information on plaiting, see Adovasio's (2010[1977]) *Basketry Technology*.

There are various types of cradles used throughout North America. Cradles can generally be divided into two types: sitting and standing cradles, named for how the baby is oriented when in the cradle. Most cradles consist of two parts, the platform that the baby lays or sits on, and a sun shade. In this thesis, the two parts, if present, were described in detail. Any technical features described above were documented if they applied.

Cultural Attribution Based on Technical Features

It has been established that baskets originating from a particular culture will have a high probability of exhibiting a particular set of technical features (Adovasio 2010[1977]:xv). This is due to the way that basket weaving is culturally transmitted in each culture group. When young girls were taught to weave, they were expected to repeat the steps exactly as they were shown (O'Neale 1995[1932]:11). As a result, generations of weavers from the same culture made baskets in the same way with very little room for innovation. By looking at baskets in museum and private collections that have reliable documentation of their origin, the suite of technical features utilized by a particular group can be determined. This is precisely the work completed by Ralph Shanks in his *Indian Baskets of California and Oregon* series.

Following Shanks (2006; 2010; 2015), I documented the technical features for each basket and used the available literature to make the best determination possible as to which culture the basket originated from as well as an approximate time period for the basket's construction and/or collection. For baskets that I suspected a California or Oregon origin, I used the *Indian Baskets of California and Oregon* series to determine the most likely cultural attribution due to the series' detailed description of technical features used by each cultural group.

Baskets that were not believed to have originated in California or Oregon, either due to their documentation stating otherwise or their suite of technical features not matching any California or Oregon cultures, more extensive research was required. In most cases, the basket's documentation was enough to provide a general area or culture of the basket's origin that helped to narrow down my research. I researched books, articles, and even radio interviews on applicable cultures, looking for any information on their basketry technology.

This proved to be difficult, as many ethnographic accounts simply list basketry as part of the material culture without describing them in detail. I relied heavily on books that featured baskets of a particular culture or area. These books contain a varying degree of information regarding the technical features of the baskets, with many just mentioning a few of the necessary features. For these baskets, I often relied on pieces of information from multiple sources, as well as performing my own analysis on the photographed baskets in the books, to gain a general understanding of the baskets from these cultures.

On one occasion I visited the C. Hart Merriam basketry collection in the Anthropology Museum at the University of California, Davis, to compare baskets with documented origins to those that were undocumented in the Valene L. Smith Museum of Anthropology collection.

It is important to note that cultural attributions made in this manner should never be taken as absolute. It is never possible to say with absolute certainty that a basket was made by a person of a particular culture. While it has been documented that weavers are discouraged from straying from the norm when weaving a basket, innovations were integrated in the basket-making process, such that many baskets have been documented with unusual technical features (see basket 045.020 in Appendix B).

Further, borders between adjacent cultural groups were fluid, with interactions such as trade or marriage resulting in cross-cultural influences that have been observed in the technical features of basketry. For example, Shanks (2010:157-158) noted that the Southern Sierra Miwok basketry was susceptible to influences from neighbors to the east and the west of Miwok lands. Along the western border of the Southern Sierra Miwok and the Yokuts, Shanks (2010:157) observed both Miwok- and Yokuts-style baskets exhibiting technical features from the neighboring cultures.

Similarly, in the Yosemite region along the eastern border of the Miwok, influence from the Mono Lake Paiute was so strong that baskets have been observed with an equal mix of technical features from both cultures (Shanks 2010:157). The reservation period, in which many Native peoples from different cultures were forced to live together on

reservation land, resulting in amplified interactions and technology sharing that further complicates matters of cultural attribution.

While basketry classification aims to draw harsh lines between cultures and the baskets they made, human nature and cultural upheaval make this type of clear division impossible. These issues must always be considered when determining cultural attributions of basketry, as a basket's technical features often do not fit the set of technical features for any one culture.

During the process of analysis and attribution, there were times when I struggled to describe a technical feature or attribute a basket on my own. During these times, I relied on colleagues for direction and second opinions. Ralph Shanks was immensely helpful with my many questions. Others that contributed were Elizabeth Guerra, Senior Museum Scientist, Gregory Wada, Museum Scientist, and Lisa Dietz, retired Senior Museum Scientist at the Anthropology Museum at the University of California, Davis, as well as Anna Jeanne Camp, Ph. D student at the University of Nevada, Reno.

Collaborating with Native Communities

Aside from other basketry research, I sought the contribution from Native peoples local to the Chico area. My original intention was to interview Native peoples representing every culture that related to a basket in the collection. However, due to time constraints and the difficulty of finding and coordinating with people across the continent, I decided to narrow down the focus to finding local Maidu to collaborate on the Maidu baskets that are local to the Valene L. Smith Museum of Anthropology. An

application for Human Subjects in Research was approved on March 30, 2016 by the Office of Graduate Studies (see Appendix C).

Two individuals collaborated on this project to describe and identify the Maidu baskets in the Valene L. Smith Museum of Anthropology. The first, Dr. Don Hankins, is a Miwok basket weaver and geography professor at California State University, Chico. Dr. Hankins was referred to me by my advisor, Dr. Georgia Fox, who had worked with Dr. Hankins in the past. Dr. Hankins then referred me to Susan Campbell, a local basketry weaver from Susanville, California, who identifies as Mountain Maidu, Pit River, and Washoe.

Dr. Hankins and Susan Campbell visited the Heritage Resources Conservation Laboratory at the museum separately. They each signed an Informed Consent document that explained the purpose of this project and the risks involved in the study. Twelve baskets from the collection were determined to be of Maidu origin and were selected for this portion of the project, and both Dr. Hankins and Susan Campbell were given time to view the baskets in the collection. Susan Campbell commented on one additional object that she came across and had knowledge of. Each were given the option to provide their descriptions and comments through a written form or by oral recordings.

Dr. Hankins chose to write his contributions, whereas Susan Campbell opted to be recorded. After the meetings were completed, the written forms and audio recordings were transcribed. Susan Campbell asked that I edit her transcribed interview for clarity. For example, there were instances in which she described something a particular way and

then decided to change her previous statement. In other instances, Ms. Campbell struggled to put into words the complex nature of the basketry she was observing; only her final descriptions were included in the written transcripts. I made every attempt to maintain Ms. Campbell's original intended meaning when transcribing her oral interviews.

Photographing the Baskets

Photographs of each basket were taken to complete the record for each basket and to enrich the online database. Prior to this project, the museum was lacking photographs of many of the baskets in the collection. A Canon Rebel XS was used to capture digital photographs of each basket, including those that already had images attached to the record, to make sure that all of the images were as recent and consistent as possible. Multiple photographs of each basket were taken to capture multiple angles and points of interest. At least one photograph of each basket included a scale. Finally, the digital files were uploaded, renamed, and touched up using the stock Photos application for Windows 8.1.

Photo-documentation of the baskets was extremely time consuming. As a result, I focused on producing more digital images quickly rather than producing less images at a higher quality. This decision was made following Griffiths (2010:361) discussion of digitizing the collection of prints and drawing at the British Museum. Griffiths and his team decided that sharing the images with the public was the top priority, even if the images were not the highest quality available. The most important goal of an image is to

be able to see what something looks like; quality can be sacrificed if the resources are not available (Griffiths 2010:361). Thus, the decision was made to make the priority of the photo-documentation to obtain the best pictures possible in one session for each basket so that online viewers would have a reasonably clear photograph to view.

Updating the PastPerfect Database

Once the basketry descriptions, interview transcripts, and photographs were complete, all information was added to the existing records in the museum's PastPerfect database. The PastPerfect Objects catalog contains six different screen views. Each view is intended for different types of objects and contains different data fields pertinent to that object type.

For this project, I chose to use the history screen view. Descriptions and interview transcripts were added to the Description field, with the name of the informant and date of contribution included. In many cases, information was already entered into the Description field. This information was reviewed and removed if determined to be redundant or not appropriate for this particular data field. For example, descriptions often contained very general information, information about objects, or information such as dimensions, which were moved to the appropriate location in the dimensions tab.

Other fields contained within the history tab were populated if applicable information was available. For most baskets, these were the Collector, Place of Origin, Material, and Provenance fields. Information in these fields was made as specific as possible, and all opinions on cultural attribution were included in the Provenance field.

Once the descriptions were added, other information in the record was reviewed and updated for accuracy and efficiency. Previously, the Object Name for most records were often manually typed, resulting in a variety of different terms being used across the database. These free-typed names were replaced with names pulled from the PastPerfect lexicon, which uses the nomenclature standard for museum cataloging, making searching within and between museums more efficient. The Other Name field was used for a more specific free-typed name when needed. The name and date of the original cataloger was preserved, if present, and any dates pertaining to the object itself were left blank unless there was specific documentation. The museum has a great track-record of maintaining condition reports on the objects in the collection, and the information in the Condition tab was often accurate and up to date. Information was only added to the Condition tab in the few cases that repairs were made during the course of this project.

Finally, all photographs of each basket were uploaded to each record. Some records already included images, whereas others did not. Existing photographs were kept for each record unless they were of poor quality, in which case they were removed. All images, new and old, were given captions that described the image.

Publishing Records Online

The process for creating online records and publishing them to the internet was very simple. Once the PastPerfect Online add-on was purchased, the company mailed a disc that simply unlocked the Online component in the already-installed software. Once the add-on was unlocked, a PastPerfect representative developed the website that the records

would publish to and sent the museum the internet link. The website that PastPerfect developed mimicked the style of the museums website, allowing for a seamless transition when online viewers traveled from the museum's website to the PastPerfect online website. While PastPerfect offers to design or adjust the website based on the museum's needs, we were happy with their initial design and did not request to make any changes.

With the online tools set up and the database updated with the information gathered during the course of this thesis research, the final step was to publish the files online. The first step in this process was to select which records were to be published online by checking the "Include in Web Export" box in each record. Once this was done for each record, I entered the Web Publishing Wizard by clicking the PastPerfect Online button on the Main Menu.

The Web Publishing Wizard takes you through six steps to create online records. The first step allows you to select the data fields that will show online. This allows the museum to control and customize what information is shared with the public and what information remains private. For this project, I selected only the fields that provided basic information about the object. These fields were Object ID, Object Name, Other Name, Description, Material, Place of Origin, Images, and Captions. The second step in the Web Publishing Wizard allows you to customize the names of the fields. The only name that I chose to customize was the Object ID, which I changed to Catalog Number to make the field more recognizable to the public.

The third step allows you to customize the Advanced Search categories. I chose to use the default settings for the purpose of this project; the museum may decide to work with a PastPerfect representative in the future to fine-tune the Advanced Search capabilities. The fourth step allows you to browse the files before publishing. It provides a list of the records that will be published, compiling the records that have the “Include in Web Export” box checked in their record. I simply verified that the correct records were in the list and then moved on to the next step.

The fifth step creates the web publishing files. Again, I utilized the default settings, though I did take advantage of the option to create a watermark on each image. I did this knowing that images are often duplicated and reused on the internet. If someone comes across one of the museum’s images in a place other than the museum’s website, they can easily find the origin of the photo and the information about the basket depicted. The final step publishes the files to the web. All I needed to do was click the “Upload Data and Images to Website” button, and the export began, taking just minutes to complete. The records were viewable online almost immediately.

While this process was incredibly easy, there was a slight amount of troubleshooting involved. Once the records were online, a few mistakes were noticed that needed to be corrected. Many of these were typos or misspellings that were overlooked in the imputed data, or preexisting in the data prior to the commencement of this project. These mistakes were quickly corrected in the PastPerfect database, and the six steps in the Web Publishing Wizard were repeated to update the online records. The ease and

efficiency of the Web Publishing Wizard made correcting these mistakes stress-free, though the process was an important reminder to never underestimate the potential for human error when dealing with technology in the public realm!

With the online database up and running, the final step was to introduce it to the public. A link to the database was added to the museum's website, and the museum used their social media accounts to spread the word about the new online feature at the museum. The following chapter discusses the information that was gathered during this project, evaluating the benefits of the project and the collaboration with the local community, as well as the trends in the collection that lend themselves to future research.

CHAPTER V

ANALYSIS AND INTERPRETATION

This thesis project intended to improve access to the North American basketry collection at the Valene L. Smith Museum of Anthropology via online access. This process encompassed multiple components, the first of which involved documenting the baskets – from multiple perspectives when possible – so that interested parties would have information about the individual baskets available to them online.

The second component of this process involved attributing each basket to an originating culture whenever possible. Through these processes, data on the collection was generated that has the potential to aid researchers, Native communities, or other self-motivated researchers in their pursuits of knowledge about Native American basketry. This chapter evaluates the data collected, highlighting areas of improvement to the documentation, evaluating the variation in information resulting from collaboration, and noting trends in the collection that have potential in future research endeavors.

General Attributions

A total of 67 objects were included in this project. Twenty-six of the 67 baskets in the collection had preexisting information on the cultural origin or the location that the basket was collected in their PastPerfect record. Of those records with prior documentation, 16 were donated by Dorothy Hill in 2011, a notable anthropologist who kept records on her acquisitions. Aside from the Hill Collection, very few baskets in the

Valene L. Smith Museum of Anthropology collection had prior documentation of their origin, many of which were donated to the permanent collection during the 1970s and 1980s. No baskets in the collection had any detailed descriptions of its technical features that would be useful to basketry researchers.

As a result of this project, all 67 baskets in this sample now have documentation that details their technical features in a way that will be useful for inquiring researchers. In addition, all baskets have cultural attributions down to a specific Native culture or cultural area, except for five pine needle baskets, which I argue are not identifiable due to their lack of antiquity and wide range of documented makers of many ethnicities. Eleven baskets that had no provenience prior to this project received a new cultural attribution and 22 baskets had a previous attribution that was changed as a result of reanalysis.

An example of a basket with a new cultural attribution and a significantly improved description is basket number 254.006 (see Appendix C), a tray that was found in the warehouse during a collections inventory in 1990. No prior documentation about the basket existed. The PastPerfect record for the basket included a very general description, stating only that it was round, flat, and made of natural fibers of a natural color and dark color that made a circular design. The description created for this project now includes a detailed explanation of the basket's technical features that is searchable in the online database. The discussion of the basket that follows the description includes information about the cultural attribution, the traditional use of this type of basket, and the determination that the basket likely was made for sale. The discussion also includes

references that facilitate viewers who are interested in seeking additional information.

This new record provides a variety and depth of information that would be educational for a wide variety of audiences, while also demonstrating the research potential of baskets in museum collections with no prior documentation.

Overall, the documentation on the collection was generally reliable. However, most of the documented objects (16 of 26) came from the Hill Collection. With the Hill Collection set aside, the documentation was reliable 50% of the time. The reliability of the Hill Collection demonstrates the importance of obtaining documentation at the time of the donation, as well as maintaining that information in an organized fashion.

Basketry appraiser Mary Wahl visited the museum in 2001 and examined 33 baskets in the collection. Only three of the baskets Ms. Wahl examined had existing documentation in the record, two of which Ms. Wahl's attribution contradicted the records and the third basket received no definitive conclusion as to its origin. Attributions based on my analysis agreed with 26 of Mary Wahl's 33 attributions, though there were seven instances in which I concluded that a basket was from a particular culture area, but was not identifiable to the specific culture that Ms. Wahl identified. On the other hand, there were three baskets in which Ms. Wahl made attributions to a general culture area, while I felt that I had enough information to make an attribution to a specific culture.

The majority of the attributions made by Ms. Wahl were consistent with my attributions. Unfortunately, Ms. Wahl rarely provided a justification or explanation for her attributions, making it impossible to understand the rationale for her attributions in

the cases that we did not agree. If justifications had been provided, it would be possible for me and other readers to consider both perspectives and make an independent decision.

Dr. Hankins was the first collaborator to view baskets from the Valene L. Smith Museum of Anthropology for this project. Dr. Hankins examined 11 baskets and provided written descriptions. Of the 11 baskets that he examined, Dr. Hankins provided cultural attributions for six, all of which were consistent with my cultural determinations.

Sue Campbell was the second collaborator to view the basketry in the collection. Ms. Campbell examined 13 baskets and provided verbal descriptions for each of them. She provided attributions for seven baskets, all of which were consistent with my cultural determinations.

The collaborators on this project were encouraged to share anything that they felt was important for others to know about the baskets. It is interesting to note that each collaborator did not always provide a cultural attribution, indicating that a system of cultural classification may have been less important to them as it was for me.

Providing detailed descriptions and determining the cultural origins for the 67 North American baskets in the Valene L. Smith Museum of Anthropology vastly improved the documentation of the collection. Previous documentation, at best, contained very general descriptions a few sentences in length. The project also vastly improved the provenance of the collection, with 12 baskets being identified for the first time and attributions updated for 22 baskets. The fact that attributors often agreed with each other when more than one person identified the basket is an indication that these new or

changed attributions are likely to be accurate and improved the overall integrity of the collection. The inclusion of a detailed description, in addition to a cultural attribution, will allow anyone viewing the collection database online to make their own attributions based on their experience and knowledge, or to use the collection for some other form of research involving basketry technology in North America, opening up the collection for numerous interpretations or avenues of research.

Information Provided by Multiple Perspectives

Thirteen baskets were examined by the Native collaborators. Much of their descriptions contained similar information to the descriptions provided by the author, described in the Methods chapter. However, their descriptions also provided different types of information based on the personal experience and cultural affiliation with the baskets they viewed. The unique information provided by the collaborators is described here to demonstrate the benefits of collaborating with the appropriate communities when working with museum objects in the spirit of the new museum theory.

The most common insights provided by the collaborators related to materials. There were seven cases in which the collaborators provided identification of materials that were unidentified by the author. These materials were most often shoots with the bark removed. The collaborators were better able to identify these materials, probably due to their personal experience stripping bark from these materials, which allowed them to recognize the bare wood.

For materials with bark remaining, collaborators were able to identify the season in which the materials were collected based on the color of the bark, again, likely due to personal experience collecting materials. Finally, there was one instance in which a collaborator commented on the quality of materials, noting insect damage that weakened materials and was typically avoided when gathering materials. An example of this is object number 2011.02.04, a twined woodpecker trap. In my description, I identified the material as willow, however, Dr. Hankins was able to provide a more precise description. He identified the type of willow used, sandbar willow, and was able to detect that it was collected during the winter. This example demonstrates that, while one analyst may be able to provide general information when identifying a particular attribute, collaboration with others who have different knowledge-bases can provide an even more detailed description.

Collaborators were also able to provide information about the construction of the basketry they viewed. This typically occurred for cradle baskets, in which collaborators provided information on how the frame for the cradle was made. Information was also provided on how the platform was made, revealing that it is the desire of the weavers to keep the sticks running horizontal, with some weavers having more success than others. For example, Sue Campbell identified that the weaver of basket number 2011.02.07 (see Appendix C), a Maidu cradle, struggled with keeping the platform straight, “At one point it started leaning to one side and the weaver actually corrected midway and got the sticks going straight again.” Collaborators also provided information on beaded designs,

explaining that there are patterns of beading that are unique to particular cultural groups. Again, these details are known to the collaborators as a result of their personal experience making basketry in their cultural context.

Other information provided by the collaborators related to the sociocultural aspects of basketry. In five cases, the collaborators provided information on the gender-specific designs on cradle hoods. Weavers are able to identify these designs because they themselves apply them to the cradles they make. The collaborators also provided information on the role that basketry cradles play in the lives of Native people. Collaborators explained that the shape of forked stick cradles was not just to carry the baby, but to allow the baby to be propped up so that it can observe the community around it and begin to learn their lifeways through observation. Further, slipper-shaped cradles have a handle for carrying, but this handle was broken if the baby met with tragedy. This type of information in the basket's record benefits the collection because it can be applied to similar baskets in other collections, and it allows the reader, whether museum staff or an online visitor, to have instant access to interpretive information that facilitates a more personal engagement with the object.

Trends for Potential Research

The purpose of this project has been to improve the accessibility of the Valene L. Smith Museum of Anthropology North American basketry collection for educational purposes. The detailed descriptions provided for each basket are intended to facilitate remote research, aiding researchers who are looking to increase their sample size of

baskets that apply to their particular research questions. During the description and analysis of the collection several trends in the collection were revealed and are described below.

The majority of the North American baskets at the Valene L. Smith Museum of Anthropology demonstrate signs that they were made for sale to the tourist market. This was determined by the presence of handles, lids, non-traditional shapes or designs, or miniature productions, traits typically not associated with pre-contact basketry production. As stated in previous chapters, these characteristics arose in baskets as weavers adjusted their techniques to appeal to the Euro-American market (Hutchinson 2009; Shanks 2010).

A total of 40 of the 67 baskets examined for this project contain one of these features. Baskets made in miniature size are the most common feature in this collection, represented by 18 objects, that alludes to a basket made for sale. Thirteen baskets have non-traditional shapes, six baskets have lids, and six baskets handles, all of which mimic European-style vessels. Finally, nine baskets in the collection have non-traditional designs, such as animals, roses, and words spelled in the English alphabet.

Several baskets in the collection contain non-Native materials, demonstrating that weavers experimented with new materials as they became available, either for sale or for personal use. Twenty-one baskets in the collection contain yarn or other types of commercial string. Fourteen baskets have objects attached such as glass beads, plastic beads, or machine made fabric. Seven baskets contain commercial dyes and seven

baskets are made with non-traditional materials such as pine needles or raffia, a material not native to North America.

Some baskets in the collection show other signs of the sociocultural atmosphere at the time that they were made. Three baskets show signs of multiculturalism by containing traditional features of more than one culture. These baskets could be the result of cultural mixing occurring through trade, intermarriage, or displacement. Three additional baskets have documentation or demonstrate characteristics specific to origins on reservations, which provides some insight into the material culture of Native Americans during a particularly dynamic and difficult time in history.

Finally, 16 baskets in the collection do not show any signs that they were made from non-Native materials, made for sale, or made with any outside influence. These baskets may be older than the rest of the collection or they may have been made to honor traditional techniques.

The majority of the North American baskets in the Valene L. Smith Museum of Anthropology demonstrate the fluidity of Native American material culture. A prominent potential avenue of research in which this collection could be put to use would be an examination of how Native American basketry changed as a result of contact with Europeans. The collection may also lend itself to studies of Native Americans adapting to tourism and commerce. Although these subjects have been topics of research in the past, the availability of new samples that results from the growing trend of online databases may warrant these subjects to be reevaluated and/or refined. It is important to note that all

baskets, even if only represented by one specimen, can inform new research if combined with collections worldwide through the internet to create larger samples.

Limitations

The limitations to this project are important to discuss, as they reveal potential areas to improve our understanding of the North American basketry collection at the Valene L. Smith Museum of Anthropology in the future. The first limitation relates to the basketry analysis and descriptions provided by the author. The descriptions I provided are a single perspective based in my previous experience working with basketry scholar Ralph Shanks. The field of basketry research has not been standardized, and there are multiple opinions on how to best document baskets, what terms to use, and how to interpret data. I chose to use methods found in sources that are easily accessible to the public, but others may not agree with my choices. In addition, my knowledge is limited in certain areas, such as materials, types of knots, and methods of treating animal skins, indicating there is potential for additional information to be added by researchers with different knowledge bases.

Attributing baskets to their originating culture can also be problematic. Cultural attributions made many years after the basket was made, purchased, or donated to a museum can never be completely reliable. Basketry technology is always fluid and weavers cannot be guaranteed to follow a particular cultural pattern, though it is shown that they often do. Forced cultural mixing resulting from European contact complicates the cultural compartmentalism that existed to some degree prior to contact. For the

purpose of this project, baskets are assumed to be made in a particular cultural style, but the cultural identity of the weaver is assumed to be unknown.

Another limitation to this project relates to the collaborative efforts that were made to gain a multi-perspective description of the baskets. Several members of the Native community were invited to participate, though only two responded to the request. While the contributions of these two individuals helped to fill in the gaps of my knowledge and provide a deeper perspective on these objects, the collection would benefit from continued efforts of community participation in the future. The collaborators were limited by time, as they themselves have busy lives. In an effort to minimize their time spent in the lab, it was decided that they would only be asked to examine a sample of the collection. The sample consisted of baskets that were ones that I determined to be of local origin, therefore, the baskets viewed by the Native collaborators were subject to bias resulting from my attributions.

The final limitation of this project is the lack of an evaluation of the online database. Data on the traffic to the website, as well as surveys evaluating visitor response to its content, will be valuable tools for the museum to manage the database and maximize its educational potential. Unfortunately, due to time constraints, these evaluations will not be part of this thesis. However, the author and the museum staff are looking forward to monitoring the success of the online database following the completion of this thesis.

CHAPTER VI

CONCLUSION

This thesis asked, “How can the Valene L. Smith Museum of Anthropology make the best use of its collections?” It was decided that to make the best use of the collections, the collections needed to be more accessible to the public, reinforcing the importance of the new museum theory approach toward transparency, accountability, and inclusiveness. Working with community members to create an online database of North American basketry has opened the collections up to the public and provides engaging and interpretive information to objects that were once inaccessible to the public. Anyone can now view the basketry collection from anywhere in the world, search for particular features or navigate wherever their interests take them. They can read the physical descriptions of the objects, but also have the opportunity to learn from Native people about how these objects were made and used.

Many museums have had a difficult time integrating technology into their everyday practices due to financial and technical constraints. However, developing technology has made the integration of collections management software and the internet much more seamless. This thesis has shown that PastPerfect Online, or other similar software, is accessible to most museums and easy to use. While an online database can never replace a real-life museum experience, it provides a new and modern way for people to engage with museums and expand their knowledge on countless subjects.

This thesis marks a new beginning for research on the Valene L. Smith Museum of Anthropology collection of North American basketry. With the collection available online, the potential exists for additional information to be added to the records through the website's Feedback Form. While the collaboration for this project was limited by location, the future of this project can now expand to include collaboration with Native communities beyond Chico, California. This also opens the door to including catalogs of other objects in the museum's collection in the goal toward achieving greater accessibility to the museum's collection and the sharing of information.

The potential to expand research to other areas within the museum's collection of over 2,000 objects is exciting and possible. Some notable collections include the Behrick Asian ceramics, numerous ethnographic pieces from Alaska donated by the museum's benefactor, Valene L. Smith, and samples of textiles from around the world. All of these collections are now available for future students to follow the lead of this thesis to work with appropriate communities, make the records available online, and include additional aspects as new ideas come to light about how to make best use of the collections.

Other uses and improvements to the database are also possible. For example, more research can be done to improve the database website itself, potentially improving handicap accessibility to reach additional audiences. Further, the database can potentially be integrated with current exhibits, encouraging museum visitors to interact with an exhibit and the online database simultaneously using mobile devices, while also expanding the number of objects in the exhibit beyond what is limited by available

exhibit space. This type of online interaction in a physical exhibit space will invite museums visitors to see more of the collection on exhibit, but also encourage them to explore the collection beyond the exhibit to find something new.

There is no doubt that modern museums will benefit by embracing technology into their practice while also nurturing and maintaining relationships with their local community. For hundreds of years, museums have operated under inward-focused practices that have shaped contemporary museums. New museum theory has cracked these ancient foundations and thrown modern museum practices into a period of dynamic change. This thesis has demonstrated that museums can meet their goals of public education through cutting-edge technology as well as nurturing collaborative relationships with community members.

Earlier in this thesis, I discussed the departure of the Father of American Anthropology, Franz Boas, from the museum. Boas accurately stated that, “classification is not explanation,” and that formulaic exhibits are not sufficient for explaining the complexity of human culture (Boas 1887:485; Boas 1907:928). New museum theory provides an answer to Boas’ critiques on the static nature of museums. The new museology challenges museums to be more engaged, and this thesis accepts that challenge by finding new ways to increase community benefits in both museum practice and product.

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APPENDIX A

Technical Features of Twined Basketry

Shape

This describes the overall shape of the basket and can include bowl-shaped, tray-shaped, globular, or straight-sided.

Function

The function was noted only if it was obvious, such as a baby carrier, water bottle, hat, or cooking basket.

Workface

The workface is the surface of the basket that faces the weaver as the basket is made. The workface can be the exterior, or convex, surface or the interior, or concave, surface and is determined by comparing the neatness of each surface. The workmanship is often superior on the workface simply because the weaver is observing it as he or she weaves.

Work Direction

The work direction is the direction that the weaver moves as work progresses. Once the workface has been identified, the weft rows can be followed, particular at the start or at the rim, to determine if the weaver was working to their right or to their left. It is common practice to describe basketry as being clockwise or counterclockwise, a method that has not been utilized here because it does not necessarily describe the work direction from the weaver's perspective.

Slant of Weft

The slant of weft is the direction that the weft slants as the weaver twines. The weft pairs are twisted between each warp, resulting in each weft row having the appearance of a rope with each weft stitch having a diagonal slant. Depending on the direction that the weaver twists the wefts, they can slant up to the right or down to the right. It is common practice to refer to these slants as having a Z-twist an S-twist, referring to cordage terminology. However, because the process of twining is different than the process of cordage making, this method was not utilized here.

Type of Start

The way in which weaving begins is described as the type of start. In twined baskets, the most common start is a cross-warp start in which two sets of warps are stacked perpendicular to each other and secured in some way with weft material. Variations of this start or any other type of start were explained in more detail.

Indented Start

The presence or absence of an indentation at the start is noted. Regardless of the type of start, some starts of the basket are indented, similar to the base of a wine bottle.

Details in Twining Techniques

The different twining techniques used in the basket are described from start to finish, counting the twining rows or measuring the width of each section of twining that differs from the main technique. There are several different types of twining that are created by adding elements to the twining process or by twining around warps in a different way.

Treatment of the End of the Last Weft Row

How the wefts are secured when weaving is finished is important to describe. Some examples are knotting of the wefts, fastening the wefts with thread or string, or securing them to the previous weft rows.

Type of Rim Finish

It is important to describe how the warps are treated at the basket's selvedge. Some examples include warps that are trimmed after the final weft row or bent over and secured on the interior with the final weft row.

Materials

The materials that are used to construct the basket are listed.

Splices

The point at which weft materials are exhausted and new materials are added are referred to as splices. The ends of the old weft element are referred to as moving ends and the beginning of the new weft is referred to as the fag end. Splices in twined baskets are not always easily identifiable, but were noted if they were observed.

Design Elements

The design on the basket, if any, is described in detail. Examples include shapes and bands created using different colored materials or attached items such as beads or feathers.

Design Methods

The way that the design was created is described. The most common way to create a design is by substituting weft materials. Any variations of this or methods for attaching objects to that basket were noted.

Signs of Use or Damage

Any signs of use in an ethnographic context, which can include stains or burn marks that are a likely result of cooking, were noted. Other types of damage, including breaks or tears, nail marks from hanging, or ink and paint stains, were also noted.

Technical Features of Coiled Basketry

Shape

This describes the overall shape of the basket and can include bowl-shaped, tray-shaped, globular, or straight-sided.

Function

The function was noted only if it was obvious, such as a baby carrier, water bottle, hat, or cooking basket.

Workface

The workface is the surface of the basket that faces the weaver as the basket is made. The workface can be the exterior, or convex, surface or the interior, or concave, surface and is determined by comparing the neatness of each surface. The workmanship is often superior on the workface simply because the weaver is observing it as he or she weaves.

Work Direction

The work direction is the direction that the weaver moves as work progresses. Once the workface has been identified, the weft rows can be followed, particular at the start or at the rim, to determine if the weaver was working to their right or to their left. It is common practice to describe basketry as being clockwise or counterclockwise, a method that has not been utilized here because it does not necessarily describe the work direction from the weaver's perspective.

Foundation

The type of foundation used to make the basket is noted. Common foundation types include a bundle of grass or three rods of a peeled plant shoot.

Type of Stitch

How the weft stitches attach to the previous coil is described. Interlocking stitches pass under and through the corresponding stitch of the previous coil to create a link, while non-interlocking stitches pass between the stitches of the previous coil. Instead of passing under or between previous stitches, new stitches can actually pierce through previous stitches, causing them to split. Stitches can be split on the both the workface and the non-workface and can be intentional or accidental.

Slant of Weft

The slant of weft is related to both the work direction and the type of stitch. The weaver creates each stitch by inserting the weft through the previous coil on the workface. The weft is pushed through to the back surface, brought over the top of the coil, and reinserted again in the workface. If the work direction is to the right, the weft will be inserted just right of the previous stitch, creating a down-to-the-right slant of weft. Conversely, a

leftward work direction will result in a down to the left slant. However, stitches that are interlocking or split can sometimes be pulled one way or the other to be threaded through the stitch below. This can cause the slant of weft to vary throughout the basket.

Type of Start

The way in which the first coil is constructed is described. Common starts in coiled baskets include tight spiral or pinhole starts in which a small bundle is coiled on itself to create the first coil. Variations of this start or any other type of start were explained in more detail.

Indented Start

The presence or absence of an indentation at the start is noted. Regardless of the type of start, some starts of the basket are indented, similar to the base of a wine bottle.

Type of Coil Ending

How the final coil is finished is described. The final coil will either terminate with a blunt ending in which the foundation materials are trimmed after the last stitch or the coil ending can be tapered in which the volume of foundation material is slowly decreased as coiling progresses, resulting in a coil ending that blends into the previous coil. The anchoring of the final weft moving end is noted. Some examples include a weft that is knotted or sewn. Weavers sometimes complete the coil and then stitch back over it in the reverse the direction for a few stitches or longer and secure the ending when finished.

Type of Rim Finish

After the final coil is finished the weaver may add a decorative finish to the rim. Common rim finishes are diagonal or herringbone patterns in which weft material is used to stitch over the rim in a decorative way, similar to a coil without any foundation material. Rims without finishes are called plain-wrapped. Plain wrapped rims can be decorated with ticks in which the colors in the final coil alternate, either every other stitch or in blocks of stitches

Materials

The materials that are used to construct the basket are listed.

Splices

The point at which weft materials are exhausted and new materials are added are referred to as splices. The ends of the old weft element are referred to as moving ends and are found on the non-workface, while the beginning of the new weft is referred to as the fag end and is found on the workface. Common examples of splices include clipped ends, ends that are bound under successive weft stitches, or ends that are laid parallel to and then covered by the successive stitch.

Design Elements

The design on the basket, if any, is described in detail. Examples include shapes and bands created using different colored materials or attached items such as beads or feathers.

Design Methods

The way that the design was created is described. The most common way to create a design is by substituting weft materials. Any variations of this or methods for attaching objects to that basket were noted.

Signs of Use or Damage

Any signs of use in an ethnographic context, which can include stains or burn marks that are a likely result of cooking, were noted. Other types of damage, including breaks or tears, nail marks from hanging, or ink and paint stains, were also noted.

APPENDIX B

2.9

(Heather Martin 2/21/2016) This is a twined tray made with cordage warps. Both the warps and wefts are made with tule (*Scirpus sp.*). It is generally flat with undulations caused by the flexibility in the warp materials. The slant of weft is down to the right and the work direction is to the right. The starting knot is flat and created by wrapping all of the warp elements in one bundle and then dividing them into smaller bundles as the twining progresses. The entire basket is plain twined with a banded design created using weft substitution where the weft splice ends are laid in on the workface and knotted with existing weft elements on the non-workface. Twining begins with undyed tule for one and a half inches. The first band is created by alternating dyed and undyed tule that results in vertical stripes, although these stripes are irregular in some areas. Then there is a half an inch of undyed tule, followed by three rows of dyed tule. Then three quarters of an inch of undyed tule is followed by four rows of dyed tule, a pattern that repeats three more times. There are five bands in total, including the striped band. The basket is finished with four rows of undyed tule. The warps are secured at the rim by binding them down on the non-workface with the final twining row. The end of the last weft row is missing, making it impossible to tell how the wefts were secured. There are no signs of use.

Baskets with cordage warps such as this were made by the Klamath, Modoc, Achumawi, and Atsugewi of northeastern California and Oregon. Of these groups, the Klamath and Modoc were known to make cordage warp trays that were used for winnowing, sifting, and parching wokus, or water lily seeds (Shanks 2015:117). However, these trays are 20-30 inches in diameter, while this tray is under 13 inches. This may mean that this tray was made for sale rather than for use in wokus processing. This attribution is consistent with Mary Wahl's attribution of Klamath for the origin of this basket.

(Mary Wahl 4/19/2001) Klamath tray or mat.

2.2

(Heather Martin 5/15/2016) This is a twined tray with a decorative rim finish in which the warps extend from the rim in groups of four, creating arches that are intricately woven together and then attached at the backface by a second basketry element (described below). The end of the last weft row is knotted, the slant of weft is up to the right, the workface is the decorated side, and the work direction is to the right. The basket has a cross-warp start that was probably flat originally but now has a convex shape, probably due to the fact that the center portion has been torn from the basket. The start is surrounded by about half an inch of three-strand twining and is then plain twined to the rim. The warps are probably hazel (*Corylus sp.*), the wefts are conifer root, and the overlay is a combination of bear grass (*Xerophyllum tenax*) and maiden hair fern stem

(*Adiantum sp.*). The warps are added by incorporation into existing weft crossings, with no concentric circles observed. The design is created with a single-sided overlay. The design element consists of a black band around the start with six inward pointing triangles around the outside edge. The outer band is a geometrical band that creates negative and positive triangle shapes. As previously mentioned, the warps are woven at the rim to form a decorative pattern. To do this, the weaver would have completed the basket, leaving the warps extending from the rim. The basket was then turned over so that the weaver faced the backface. The first group of warps was looped over and the ends placed after the 12th warp to the left (this allowed for three groups to extend from under the newly formed arch). With these warp ends held in place the weaver began to twine by doubling a single weft element over the warp end on the left. As the weaver twined to the right they looped over the next set of warps and twined the ends next to the previous warp ends. As the process continued, the warps were woven decoratively. Once all the warps were secured to the back, two additional rows were twined to secure them. This second basketry element was finished by fastening the weft ends with commercial string to the previous row.

This basket was likely made in the Northwestern region of California. These cultures included Yurok, Karuk, Hupa, Tolowa, and Whilkut. All of these cultures use single-sided overlays of bear grass and maiden hair fern stem, which can be seen in this basket (Shanks 2015:18). This type of basket is not typical of the traditional forms made in this area. In particular, the decorative treatment of the warps is undocumented in baskets made for traditional use. On the contrary, this type of decorative finish is fairly common in baskets that were made to appeal to non-Native people. This type of basket provides an example of the changes in basketry styles due to contact with non-Native people and the transition of basketry from a utilitarian object to a commodity made for financial gain.

2.3

(Heather Martin 2/29/2016) This is a twined bowl made with cordage warps. It has a rounded base and at one time probably had a globular shape, but is now warped and misshapen. The work direction is to the right, the slant of weft is down to the right, and both the warp and wefts are made of Tule (*Scirpus sp.*). The starting knot is flat and oval shaped and is created by wrapping all of the warp elements in one bundle and then dividing them into smaller bundles as the twining progresses. The start is surrounded by a quarter of an inch of three-strand twining and half an inch of plain twining, all in the darker tule. There is half an inch of diagonal twining that uses one light and one dark weft to create alternating diagonal bands. This is followed by a quarter of an inch of plain twining in light tule and then another half an inch of diagonal twining in alternating colors. The base of the basket is finished with two rows of three-strand twining. The wall of the basket is plain twined and decorated with three repeating bands. The two lower bands have a central solid band in darker tule with vertical lines extending above and

below it. The third band is identical except that the central band has two rows of light tule. Just above the final band there is a quarter of an inch where the warps are exposed and decoratively crossed. The basket is finished with three rows of light and then two rows of dark tule. The warps are bound down at the rim on the non-workface with the final twining row and the weft at the end of the last row is secured by knotting it with the final remaining warps. The design is created by substituting undyed, buff colored tule with tule that is either died or naturally darker in color by knotting the new weft with the existing weft on the non-workface.

This basket is consistent with Klamath or Modoc cordage warp bowls. The lack of the use of overlay to create the design suggests that this basket is more likely to be Klamath. This is consistent with Mary Wahl's attribution of a Klamath origin for this basket. The use of three-strand twining, diagonal twining, and crossing the exposed warps are features that distinguish the Klamath and Modoc cordage warp basketry from similar styles of the Atsumawi and Atsugewi. An interesting note is that diagonal twining was not traditionally used by the Klamath and Modoc cultures, rather is an indication that this basket was made later in time to be sold to tourists (Shanks 2015).

2.4

(Heather Martin (10/17/2016) This is a small coiled oval basket. The workface is the exterior and the work direction is to the left. The stitches are interlocking and not widely spaced, with a mixed slant to the weft. About half of the stitches on the non-workface are split, though this does not appear to be an intentional part of the design. The basket has a three-rod foundation of a peeled shoot material while the weft is made of split sumac (*Rhus sp.*) and devil's claw pod (*Harpagophytum procumbens*). The basket has an oval start and a plain-wrapped rim with a tapered coil ending. The design is created using weft substitution and consists of a single band of large black diamonds. The fag ends are clipped and the moving ends are clipped or concealed. There are no signs of use.

This basket is consistent with those made by the Havasupai in the Southwest. The groups in the Yavapai-Apache Region use three-rod foundations, but the Havasupai are the only group in the area that use sumac (Kania and Blaugrund 2014:97). This is consistent with Mary Wahl's attribution of "Havasus."

(Mary Wahl 4-19-2001) Havasus, Arizona. Weave is to left. Basket is about 40 years old, probably a tourist item, bread basket.

2.5

(Heather Martin 7/11/2016) This is a small coiled bowl with straight, slightly flaring sides. The work direction is the exterior and the work direction is to the left. The basket

has a grass bundle foundation and closely spaced, non-interlocking stitches. The slant of weft is up to the right, and there are some split stitches on the interior, though they seem to be unintentional due to their random nature. The basket has a non-indented tight spiral start and a design that consists of an all-over repeating geometric vertical and horizontal bars. The background material is probably willow (*Salix sp.*) and the design material is devil's claw pod (*Harpagophytum procumbens*). The design is created by substituting the weft material, clipping the fag ends on the exterior and concealing the moving ends on the interior. The rim is finished with diagonal over stitching in black and the coil ending is blunt with the final stitch binding down the previous stitch before it is clipped on the interior.

This basket most closely resembles those made in the O'odham regional complex of the Southwest, which includes the Pima (*Akimel O'odham*) and the Papago (*Tohono O'odham*). The bear grass (*Nolina microcarpa*) foundation and exterior workface are distinct Papago traits, while the diagonal rim finish is typically a Pima trait (Kania and Blaugrund 2014:97). Further, the start of this basket does not match the trends of either culture, who traditionally use plaited starts (Kissel 1916:206). While this basket does not match either culture perfectly, it is likely that it was made by a weaver who was influenced by both cultures. This is somewhat consistent with Mary Wahl's attribution of a Pima origin for this basket.

2.6

(Heather Martin 3/18/2016) This is a twined pedestaled bowl or cup made with cordage warps. It is misshapen due to the flexibility in the warp materials. The basket was started at the narrow neck and then woven in opposite directions to form the bowl and the pedestal. The slant of weft is down to the right, the workface is the exterior, and the work direction is to the right. The entire basket is plain-twined using tule (*Scirpus. Sp.*) warps and wefts with a double-sided overlay of *Phragmites* and designs done in an overlay of mud-dyed tule. The pedestal is buff colored until the last half inch, which is done in checkered buff and dark colors. The design in the bowl appears to be a series of random stair-stepping segments that evenly fill the basket's surface. To alternate colors, the weaver knotted new and old weft elements on the non-workface. The rim finish on both the bowl and the pedestal are created by binding the warps down on the non-workface using a commercial string. However, the final three and a half inches of the last row of the bowl lacks the commercial string. Instead the warps appear to be clipped below the final row and, the tule wefts of the last row, lacking any overlay, are lashed to the previous row with tule to finish the basket. The final weft row of the pedestal is also lashed with tule.

Baskets with cordage warps such as this were made by the Klamath, Modoc, Achumawi, and Atsugewi of northeastern California and Oregon. Of these groups, only the Klamath

and Modoc used mud-dyed tule for designs (Shanks 2015:120). Further, the Klamath more often used *Phragmites* (Kroeber 1925:331). The pedestaled shape of this basket is not a traditional form. Instead, baskets were often made in this shape to sell to non-Native collectors and tourists. This contradicts Mary Wahl who identified the buff material as bear grass, which influenced her attribution of a Modoc origin for this basket.

(Mary Wahl 4/19/2001) Modoc, but basket is a white person's request or influence. Bear grass signifies it is Modoc.

2.8

(Heather Martin 10/17/2016) This is a small coiled basket tray with decorative handles. The coil foundation is a bundle of pine needles and the binding weft is a commercial cotton string that is held double to increase the thickness. The basket is worked to the left with the weaver facing the interior. The stitches are spaced in a way that creates columns up the walls of the basket. After the first two inches of the base were completed, a decorative effect was implemented by placing two stitches in each location, the first stitch is oriented diagonally as the weaver moves leftward and places the new stitch while the second stitch, which wraps around the foundation and is placed in the same hole made by the first stitch, is oriented vertically. Together, these two stitches create a slanted "V" shape. Each stitch that is made interlocks with the vertical leg of the "V." To replace exhausted weft strands the weaver knotted a new string to the end of the previous string on the non-workface where it is hidden. The basket is started with a tight spiral, has a flat base, straight sides, and is decoratively folded outward at the rim to create a half inch lip. The coil ending is tapered, with the final stitch anchored into the stitch directly below it in the previous coil. Each of the handles of the basket are a single coil that is decoratively looped in the center and attached to the basket with string at each end of the handle. The basket has been coated with pitch or another similar substance that is abrading away on the rim. The stitches along one side of the final coil are missing, allowing the pine needles to fall from the foundation. The damage was stabilized with braces made with Japanese tissue paper and wheat starch paste.

Coiled baskets made with pine needle foundations have not been documented in Native American cultures prior to contact with Europeans. In the twentieth century, these baskets were made by Native communities throughout the United States, particularly in the south. It has been suggested that Native American pine needle baskets were influenced by African American baskets made of sweet grass, a technique that is believed to have originated in Africa and brought to the United States along with slavery (Perdue, Jr. 1968). Additionally, Mrs. M. J. McAfee, a Caucasian woman from Georgia, claims that she invented the pine needle basket when she had no access to materials to make hats for her family during the Civil War (McAfee 1911). McAfee developed the technique into an artful craft and began teaching classes to Caucasian women. In 1917, William C. A.

Hammel, the Superintendent of City Schools of Greensboro, North Carolina, advocated for teaching pine needle basket making in schools to encourage students to be resourceful when finding materials and to be creative and artistic while making a craft that has both economic and utilitarian value (Hammel 1917). With so many possible origins and so many communities making pine needle baskets, it is difficult to attribute the origin of this basket to any location or community within the United States. This is consistent with Mary Wahl's attribution in which she gave numerous possibilities for an origin for this basket.

(Mary Wahl 4/19/2001) Pine needle tourist basket, either southeast, Florida area, Seminal Indians from Louisiana, or Arizona, unknown. This type of basket is still sold today.

2.9

(Heather Martin 10/16/2016) This is a large coiled basket with handles that somewhat resembles a modern cooking pot. The coil foundation is a bundle of pine needles and the binding weft is a commercial cotton string. The workface is the interior and the work direction is to the left. The stitches are spaced in a way that creates a spiral on the base of the basket and columns up the walls of the basket. A decorative effect was implemented on the walls by placing two stitches in each location, the first stitch is oriented diagonally as the weaver moves rightward and places the new stitch while the second stitch, which wraps around the foundation and is placed in the same hole made by the first stitch, is oriented vertically. Together, these two stitches create a slanted "V" shape. Each stitch that is made interlocks with the vertical leg of the "V." To replace exhausted weft strands the weaver knotted a new string to the end of the previous string on the interior of the basket where it is hidden. The basket is started with a tight spiral, has a flat base, straight sides, and is decoratively folded outward at the rim to create a lip that measures three quarters of an inch. The coil ending is tapered, with the final stitch anchored into the stitch directly below it in the previous coil. The handles of the basket are of a single large coil that is separated into two faux coils with a string that runs along the inside and then pierces the coil to capture each weft stitch on the exterior. The handle creates a rectangular shape that encompasses the entire basket, attaches along two sides underneath the lip and then extends from the basket on opposite sides. With the exception of the base, the exterior of the basket has been coated with pitch or another similar substance that is abrading away on the rim and handles. The basket is much more delicate on the base as a result of the lack of coating. The start of the basket has torn from the center, and there is a strip of brown cotton fabric wrapped around the handle and fastened with thread.

Coiled baskets made with pine needle foundations have not been documented in Native American cultures prior to contact with Europeans. In the twentieth century, these baskets were made by Native communities throughout the United States, particularly in the south.

It has been suggested that Native American pine needle baskets were influenced by African American baskets made of sweet grass, a technique that is believed to have originated in Africa and brought to the United States along with slavery (Perdue, Jr. 1968). Additionally, Mrs. M. J. McAfee, a Caucasian woman from Georgia, claims that she invented the pine needle basket when she had no access to materials to make hats for her family during the Civil War (McAfee 1911). McAfee developed the technique into an artful craft and began teaching classes to Caucasian women. In 1917, William C. A. Hammel, the Superintendent of City Schools of Greensboro, North Carolina, advocated for teaching pine needle basket making in schools to encourage students to be resourceful when finding materials and to be creative and artistic while making a craft that has both economic and utilitarian value (Hammel 1917). With so many possible origins and so many communities making pine needle baskets, it is difficult to attribute the origin of this basket to any location or community within the United States.

2.10

(Heather Martin 10/16/2016) This is a glass bottle covered in coiled basketry. The coil foundation is a bundle of pine needles and the binding weft is a commercial cotton string. The workface is the exterior and the work direction is to the right. The basket is made with interlocking stitches that are widely spaced and have a predominantly down-to-the right slant. To replace exhausted weft strands, the weaver knotted new string to the end of the previous string on the interior of the basket where it is well hidden. The basket is started with a tight spiral and then woven using the bottle as a form. The basket is woven beyond the rim of the bottle and then decoratively folded out and downward. The coil ending is tapered, with the final stitch anchored into the stitch directly below it in the previous coil. Under the folded rim there are two coiled rings attached with string on either side of the basket. These rings are made of a single large coil that is separated into two faux coils with a string that runs along the inside of the ring and then pierces the coil to capture each weft stitch on the exterior. The exterior of the basket has been coated with pitch or another similar substance that is abrading away on the base, rim, and rings of the basket. Objects covered in basketry such as this were commonly made for sale during the 20th century.

Coiled baskets made with pine needle foundations have not been documented in Native American cultures prior to contact with Europeans. In the twentieth century, these baskets were made by Native communities throughout the United States, particularly in the south. It has been suggested that Native American pine needle baskets were influenced by African American baskets made of sweet grass, a technique that is believed to have originated in Africa and brought to the United States along with slavery (Perdue, Jr. 1968). Additionally, Mrs. M. J. McAfee, a Caucasian woman from Georgia, claims that she invented the pine needle basket when she had no access to materials to make hats for her family during the Civil War (McAfee 1911). McAfee developed the technique into an

artful craft and began teaching classes to Caucasian women. In 1917, William C. A. Hammel, the Superintendent of City Schools of Greensboro, North Carolina, advocated for teaching pine needle basket making in schools to encourage students to be resourceful when finding materials and to be creative and artistic while making a craft that has both economic and utilitarian value (Hammel 1917). With so many possible origins and so many communities making pine needle baskets, it is difficult to attribute the origin of this basket to any location or community within the United States. This is consistent with Mary Wahl's attribution in which she gave numerous possibilities for an origin for this basket.

2.11

(Heather Martin 10/17/2016) This is a large coiled basket tray with handles. The coil foundation is a bundle of pine needles and the binding weft is a commercial cotton string. The basket is worked to the left with the weaver facing the interior. The stitches are spaced in a way that creates columns up the walls of the basket. After the first five inches of the base were completed, a decorative effect was implemented by placing two stitches in each location, the first stitch is oriented diagonally as the weaver moves leftward and places the new stitch while the second stitch, which wraps around the foundation and is placed in the same hole made by the first stitch, is oriented vertically. Together, these two stitches create a slanted "V" shape. Each stitch that is made interlocks with the vertical leg of the "V." To replace exhausted weft strands, the weaver knotted a new string to the end of the previous string on the non-workface where it is hidden. The basket is started with an oval spiral, has a flat base, straight sides, and is decoratively folded outward at the rim to create a one inch lip. The coil ending is tapered, with the final stitch anchored into the stitch directly below it in the previous coil. Each of the handles of the basket are a single large coil that is separated into two faux coils with a string that runs along the inside of the handle and then pierces the coil to capture each weft stitch on the exterior. The handle is attached to the basket with string at each end. The basket has been coated with pitch or another similar substance that is abrading away on some of the stitches throughout the basket.

Coiled baskets made with pine needle foundations have not been documented in Native American cultures prior to contact with Europeans. In the twentieth century, these baskets were made by Native communities throughout the United States, particularly in the south. It has been suggested that Native American pine needle baskets were influenced by African American baskets made of sweet grass, a technique that is believed to have originated in Africa and brought to the United States along with slavery (Perdue, Jr. 1968). Additionally, Mrs. M. J. McAfee, a Caucasian woman from Georgia, claims that she invented the pine needle basket when she had no access to materials to make hats for her family during the Civil War (McAfee 1911). McAfee developed the technique into an artful craft and began teaching classes to Caucasian women. In 1917, William C. A.

Hammel, the Superintendent of City Schools of Greensboro, North Carolina, advocated for teaching pine needle basket making in schools to encourage students to be resourceful when finding materials and to be creative and artistic while making a craft that has both economic and utilitarian value (Hammel 1917). With so many possible origins and so many communities making pine needle baskets, it is difficult to attribute the origin of this basket to any location or community within the United States. This is consistent with Mary Wahl's attribution in which she gave numerous possibilities for an origin for this basket.

(Mary Wahl 4/9/2001) Pine needle tray, similar to 2-008, but older. From the southeast, or Arizona, unknown.

29.1

(Heather Martin 7/11/2016) This is a coiled tray with curving sides for winnowing, sifting, and parching. It has a grass bundle foundation, probably of bear grass (*Xerophyllum tenax*), the workface is the concave side, and the work direction is to the left. The stitches are non-interlocking and are not widely spaced. There are split stitches on the non-workface, but they seem to be unintentional due to their random nature. The slant of weft is up to the right, the fag ends are clipped and the moving ends are concealed. The tray has a non-indented plaited start similar to those on a boondoggle keychain. The rim is plain wrapped in alternating black and white stitches. The coil ending is slightly tapered with a few backstitches. The background material is a split leaf, possibly sotol (*Dasyilirion wheeleri*), while the black design material is probably strips of devil's claw pods (*Harpagophytum procumbens*). The design is done in weft substitution and consists of four bands of even spaced triangles and six ticked rectangles.

This basket resembles those made by the Papago and Pima in the American Southwest. Although both regularly use tree materials for light colors, only the Papago are known to make baskets out of sotol leaves to sell (Kissell 1916:197). The Papago are also known to make trays that are more globular shaped such as this one, while the Pima make more straight-sided trays (Kissell 1916:254). Therefore this basket is likely to be a Papago basket. This corroborates Mary Wahl, a basketry appraiser who also attributed this basket to the Papago. However, this assessment contradicts the documentation for this basket; which attributes this basket to Sally Bell of Humboldt County, California. This is unlikely due to the fact that Native Americans in Humboldt County traditionally did not make coiled baskets and did not have access to the materials used to make this basket. The original description also states that this basket had quail feathers woven in, but there are no signs that there are or ever were feathers woven into the foundation.

(Unknown contributor) Tan and dark brown coiled basket, with quail feathers woven in; triangular patterns woven in dark brown around body of basket. Basket made by Mrs.

Sally Bell, a Native American who resided near Thorn, Humboldt Co., California. She wove the baskets in 1910 when she was 70 years old. She is believed to have lived well over 100 years.

(Mary Wahl 4/19/2001) Papago Indians, Arizona. Papago are now called Odamtash. Basket is about 30 years old. An older Papag basket would have had a tighter weave.

29.2

(Heather Martin 3/18/2016) This is a small twined bowl made with cordage warps. The bowl is round with fairly straight sides. The slant of weft is down to the right, the workface is the exterior, and the work direction is to the right. The indented start is created by wrapping all of the warp elements in one bundle and then dividing them into smaller bundles as the twining progresses. The entire basket is plain twined using mud-dyed and undyed tule (*Scirpus sp.*). The first three-quarters of an inch of the basket consists of alternating light and dark vertical bands. After about a half an inch of light tule there are two rows of three-strand twining of both light and dark colors. At the point where the basket walls begin there are repeating pyramid-shaped design elements made of three rectangles. Another larger series of pyramid-shaped designs, bordered above and below with checkered bands, makes up the design on the walls of the basket. New weft elements are knotted to old ones in the undecorated portions of the basket. Where the solid decoration elements exist, however, the unused wefts are floated on the back face. The basket has a decorated edge created by allowing the warps to extend from the edge of the basket and then binding down on the interior of the basket approximately one inch to the right, creating a loop. Between the loops there are warps that are not incorporated into the decorative edge, these warps are bound down on the interior. The end of the last weft row is knotted. On the base of the basket there appears to be faint red color, possibly a dye that spread from the basket becoming wet. This reddish color can also be seen in the dark tule on the walls of the basket. Many of the decorative warps at the rim have become dethatched or lost completely, but there are no signs of Native use.

Baskets with cordage warps such as this were made by the Klamath, Modoc, Achumawi, and Atsugewi of northeastern California and Oregon. The lack of overlay and the use of mud-dyed tule for the design material indicate that this basket was made by a Klamath and Modoc weaver (Shanks 2015:74, 120). The decorative edge and the use to red dye are not traditional characteristics and indicate that this basket was made for sale to non-Native people. The original record for this basket indicates that it came from Alaska around the year 1900. Mary Wahl attributed the basket to the Klamath, which is in line with the current attribution.

(Paul Russel 3/9/1996) This basket was brought to the United States from Alaska approximately 60 years ago (1900) by Mr. William Johnston, uncle of Mrs. Johnson, as

stated by collector. Identified as being made from tule by members of Chewyien Pomo Native Basket Makers Assoc.

(Mary Wahl 4/19/2001) Klamath, older basket.

045.003

(Heather Martin 5/16/2016) This is a small globular twined basket. The slant of weft is up to the right, the workface is the exterior, and the work direction is to the right. The basket has an indented cross-warp start surrounded by four rows of three-strand twining. The basket is plain twined to the rim, with the final three rows in three-strand twining. The warps are trimmed at the rim and the end of the last weft row is missing. The warps are probably willow (*Salix sp.*) or hazel (*Corylus sp.*). The wefts are conifer root with an overlay of bear grass (*Xerophyllum tenax*), red dyed woodwardia fern stem (*Woodwardia sp.*), and darkened redbud (*Cercis occidentalis*). On the base of the basket there are six dotted bands of bear grass and woodwardia. There are three bands on the walls of the basket. The lowest band consists of upward pointing triangles. Each triangle is banded with conifer root and woodwardia. The middle band is a thin zig-zag of woodwardia and the upper band is a thin zig-zag of red bud. There are no signs of use, and the basket has very little damage.

The double-sided overlay of this basket indicates that it originated from Northeastern California. This technique is used among the Atchumawi, Atsugewi, Wintu, and Yana (Shanks 2015:74). The use of a single color in the design indicates that the basket is unlikely to be of Wintu origin (Shanks 2015:99). While Atsugewi, Achumawi, and Yana basketry is very similar, Yana basketry is distinctly more coarsely woven compared to the other two groups (Shanks 2015:90). Atsugewi and Achumawi baskets are often indistinguishable. The Wintu more commonly used red and black designs while the Atsugewi and Achumawi used only one color (Shanks 2015:99). The Wintu also more commonly placed designs on the baskets base as well as used bands of conifer root to create stripes that run through the designs (Shanks 2015:99-100). These characters indicate that this basket may be Wintu; however, the globular shape with incurving rim is more indicative of Achumawi and Atsuwewi baskets (Shanks 2015:99). The basket has more features of Wintu basketry, although the Achumawi and Atsugewi cannot be ruled out as a possibility for the origin of this basket. This is consistent with Mary Wahl's attribution of Wintu.

045.005ab

(Heather Martin 6/20/2016) This is a tall twined bowl with slightly flaring sides. The slant of weft is down to the right, the workface is the exterior, and the work direction is to the right. The basket has a start in which the warps are bound with a single weft and then

separated into a radiating pattern. The base of the basket is warped, though it appears that the start was not indented. The basket is plain twined for four rows. Then the base is woven by alternating one row of between-weave and one row of plain twining. The base of the basket is finished with three rows of plain twining and one row of three-strand twining. The walls of the basket are plain twined to the rim. The warps and wefts are likely to be Sitka spruce (*Picea Sitchensis*). Splice ends appear to be knotted to the warp elements. The design is done using false embroidery of undyed and brown dyed grass and consists of five bands. The upper, lower, and central bands are geometrical designs that resemble rhombuses while the other two bands are geometrical designs of rectangles. The rim is finished by clipping the warps after the final weft row of the basket. At the end of the last weft row, the wefts appear to be knotted on the interior of the basket. The basket has no signs of native use, but has extensive damage. The base (045.005b) has been torn from the walls (045.005a) of the basket. There is a beige thread that has been sewn around the rim of the basket, though it is now broken throughout, leaving the ends protruding. This thread appears to have been used to sew the base to the walls, however if this is the case, the walls would have been reattached upside-down. The basket has now been properly repaired using Japanese tissue paper and wheatstarch paste.

This basket is consistent with the spruce root basketry made by the Haida and Tlingit. The fineness of weaving, thin walls, use of between-weave, and false embroidery are all typical of these cultures. While both of these cultures work in a rightward direction, the groups differ in how the basket is oriented during the weaving process. The Haida weave with the basket upside down with the warps pointing downward (Weber 1986:82). The Tlingit, on the other hand, weave the basket right-side up with the warps pointing upward (Weber 1986:82). The result is that the jog, the area where the weaver completes a row and begins the next, moves up in an upright Haida basket and down in an upright Tlingit basket. This basket has "jog downs" that indicate that it is a Tlingit basket (Busby 2003:47). This is consistent with Mary Wahl's determination that this basket comes from the Northwest coast or Alaska.

(Mary Wahl 4/19/2001) Northwest coast, possibly Alaska.

045.007

(Heather Martin 5/15/2016) This is a twined globular shaped basket. The slant of weft is up to the right, the workface is the exterior, and the work direction is to the right. The basket has an indented cross-warped start surrounded by one and one-quarter inches of three-strand twining. This is followed by half of an inch of plain twining, three rows of three-strand twining, one inch of plain twining, and three more rows of plain twining. The remainder of the basket is plain twined, except for the final four rows, which consist of a row of three-strand twining, one plain twined row, and two rows of three-strand twining. The warps are probably willow (*Salix sp.*) or hazel (*Corylus sp.*). The wefts are

conifer root with a double-sided overlay of bear grass (*Xerophyllum tenax*) and darkened redbud (*Cercis occidentalis*). The design consists of two zig-zagging bands, each bordered with triangles. Of the final four rows, the lower two are ticked with dark wefts. The warps are trimmed at the rim and the end of the last weft row is missing. The basket had extensive tears that have been repaired using Japanese tissue paper and wheat starch paste.

The double-sided overlay of this basket indicates that it originated from Northeastern California. This technique is used among the Atchumawi, Atsugewi, Wintu, and Yana (Shanks 2015:74). The use of a single color in the design indicates that the basket is unlikely to be of Wintu origin (Shanks 2015:99). While Atsugewi, Achumawi, and Yana basketry is very similar, Yana basketry is distinctly more coarsely woven compared to the other two groups (Shanks 2015:90). Atsugewi and Achumawi baskets are often indistinguishable. However, the Atsugewi more often used a reinforcing rod at the rim as well as floating design elements (Shanks 2015:78), both of which are not found in this basket. This leads to the conclusion that this basket is more likely to be Achumawi. This contradicts Mary Wahl's finding that the basket is Atsugewi.

(Mary Wahl 4/19/2001) Shasta area, Hat Creek, Atsugewi.

045.010

(Heather Martin 6/11/15) This is a small, diagonally twined seed-beater basket. It has a cylindrical handle with a scoop-shaped body. The work face is the exterior of the handle and the concave side of the scoop, the work direction is rightward on the handle but then alternates from left to right on the scoop. Despite the rightward and then alternating work direction, the slant of weft is down to the right throughout. The splices are laid in. The start is at the handle of the basket and is created by twisting the warps together, two at a time, creating a rope-like finish. The warps protrude from the twist in pairs, while the warp ends are clipped, one on the exterior and one on the interior of the cylinder. The basket is then diagonally twined throughout. The warps are a peeled shoot, while the wefts are a combination of split willow (*Salix sp.*) and split unpeeled redbud (*Cercis occidentalis*). The entire basket is made with alternating red and buff stitches created by alternating willow and redbud wefts. On the back face of the basket the redbud is twisted so that the bark is facing inward, eliminating the alternating color pattern. The majority of the basket, including the handle, has an up the left diagonal pattern. At the broad end of the scoop, the diagonal design switches direction for a half inch, then changes again to create vertical bands of alternating colors for 2 inches, followed by two rows of all buff, two rows of all red, and then three rows of diagonal patterning to finish. At the finish, some warps are bent to the right, secured under adjacent bent warps, and then clipped while others are clipped at the last weft row. A reinforcing stick is lashed to the rim of the scoop using unpeeled redbud. There are no obvious signs of use.

This seed beater is consistent with Western Mono seed beaters in the shape and materials, especially the abundant use of redbud, which distinguishes the Western Mono from their neighbors (Shanks 2010:106-107). This is consistent with Sue Campbell's (1996) and Mary Wahl's (2001) Mono attributions.

(Mary Wahl 4/19/2001) Mono, made with redbud.

(Paul Russel 3/9/1996) Identified as being Mono (Indian) made from Redbud and Willow by Susan Campbell of Chewyiem Pomo California Native Basket Weaver's Association.

045.011

(Heather Martin 6/11/15) This is a small twined water bottle. It has a pointed bottom and the neck is constricted with a slight flare at the rim. The basket is close-twined with a slightly undulating surface. This shape is typical of a water bottle, with a pointed bottom that allowed for it to sit upright in the bottom of a conical burden basket and a constricted mouth that prevented water loss. The slant of weft is up to the right, the workface is the exterior, and the work direction is to the right. The basket has a cross warp start, with the exterior warps wrapped in weft material. After the start, there is half-inch of three-strand twining and then the basket is diagonally twined to the rim. The warps are trimmed at the rim with a coil row incasing the warp ends and the final twined row. The fag ends are laid in, however the moving ends are not visible due to the restricted mouth of the basket. Both the warps and the wefts are probably willow (*Salix sp.*). The warps are added by incorporating them into preexisting weft crossings. The basket has subtle design bands made by alternating peeled, unpeeled, and sunburned willow. The bands near the base are difficult to distinguish, but appear to be fairly random. Where the basket is widest, there are two bands, one at the upper and lower portions of this section that consist of diagonal lines. There is a final band of diagonal lines covering the constricted mouth. Between the two bands at the widest portion there are two handles attached. Each handle consist of two loops of natural cordage with an S-twist. The handles are five inches apart. This basket has no signs of use. The interior is not coated with pitch, which was the traditional way of making the basket water-tight.

This basket is consistent with traditional Paiute water bottles, which is in agreeance with the attribution made by Mary Wahl. Although many Southern California and Great Basin cultures made water bottles, only the Paiute and Chemehuevi used primarily willow for these baskets, and only the Paiute are known to use designs made of sunburned willow or to make bottles with pointed bottoms (Shanks 2010:139).

(Mary Wahl 4/19/2001) Paiute, basket for water. Shape is designed to keep some water if the basket is dropped.

045.018

(Heather Martin) This is a small coiled shallow bowl with flaring sides. It has a three-rod foundation, exterior workface, and leftward work direction. It has a sewn over start with no indentation. The stitches are interlocking and are not widely spaced. The rim finish is plain wrapped and the coil ending is tapered. There are some split stitches on the interior and exterior of the basket, though they do not seem intentional. The slant of weft is mixed due to the interlocking nature of the stitches. The fag ends are concealed, but sometimes clipped, while the moving ends are clipped. The foundation is a peeled shoot. The weft background material is a split peeled shoot, possibly willow (*Salix sp.*), cottonwood (*Populus fremontii*), or sumac (*Rhus trilobata*), with the exception of one row, about half way from the start, that appears to be a grass material. The black design material is split devil's claw pod (*Harpaophytum sp.*). The design is made up of four repeats of two vertical elements. The first element is three rhombus shapes, one above the other, while the second element is a zigzag. It should be noted that the design is not present at the base of the basket, yet extends to the final coil. The black material is also used to sew over the start. There are no signs of use.

The materials and overall style of this basket are consistent with those made in Southern California and the Southwest. The three-rod foundation of the basket, leftward work direction, clipped splices, and materials indicate that the basket is more likely to have originated in the Yavapai-Apache region of Southern California and Arizona. The groups in this area are the Yavapai, Havasupai, Western Apache, and Chemehuevi. This is consistent with the attribution made by Mary Wahl, who identified the basket as Chemehuevi or Apache. The four groups in this region make baskets that are nearly identical with the exception of the use of black materials. Yavapai and Western Apache baskets almost always have black starts and rims, as well as a design that uses a lot of black material. Both Havasupai and Chemehuevi can have white starts and rims, and have more sparse designs, all of which are characteristics found in this basket.

(Mary Wahl 4/19/2001) Probably Chemehuevi, but could be Apache. This is because it could have been made in California by the Chemehuevi, who were originally from San Bernardino, CA, but moved to Parker, AZ. Weave is to the right.

045.020

(Heather Martin 5/14/15) This is a coiled basket with flaring sides that was likely a cooking basket. The foundation is three rods. The workface is the exterior and the work direction is to the left. The basket has a pinhole start with a thick first coil that may have been started with a bundle of shredded material. There is no indentation at the start. The stitches are non-interlocking and not widely spaced. The rim finish is plain wrapped and

the coil ending is missing. There are many split stitches on both the interior and exterior, though they do not seem to be intentional. The slant of weft is up to the right. The fag ends are concealed and the moving ends are mostly concealed while some are bound under multiple stitches of the coil above. This technique results in the moving end visibly crossing diagonally over one coil before it is bound under. Interestingly, the loose moving end is incorporated with the foundation in the opposite direction of the coil and then stitched over until it is taught. Signs of use include abrasion at the base, loss at the rim, weight that indicates that the basket has absorbed food particles, and an unidentified dried substance between the stitches that blocks any light from passing through the basket. The foundation is a peeled shoot. Both the background and red design material are red bud (*Cercis occidentalis*), with the design created by twisting the weft so that either the red bark or buff interior is showing in the desired locations. The design consists of three horizontal zigzag bands. Each band has vertical extensions above and below and the uppermost band only appears on the basket at the low points of the zigzag. In the spaces above these low points there is a "U" shape created by three connected rectangles. There are no decorative items attached.

All of the mechanical features and materials indicate that this basket is of Maidu origin. The Maidu people include three linguistic branches: the Nisenan (southern), the Konkow (northwestern), and the Mountain Maidu (northeastern). Interestingly, the differences in basketry among the Maidu relates to environmental differences rather than cultural boundaries (Shanks 2006: 134). Maidu baskets made in the valley and in the foothills share many features, such as a leftward work direction and a three-rod foundation, which can be seen in this basket. Further, the concealed fag ends and the use of red bud for both the design and background material are typical of foothill Maidu baskets. On the other hand, the concealed moving ends are more typical of baskets made in the valley (Shanks 2006:136-137). However Shanks (2006:137) comments that weft splicing techniques were known to be mixed among foothill groups living in the transition zone between the valley and the foothills. Therefore it is likely that this basket was made by a Maidu weaver from the foothills. It should also be noted that the moving ends in this basket are concealed in a manner not typical of any cultural group. Basketry appraiser Mary Wahl has described this basket as "Northeast Maidu" and the basket is labeled with the same distinction. All of these forms of evidence are consistent in that the Mountain, or Northeast, Maidu traditionally occupy land in the foothills. It is important to note that Maidu baskets very often contain split stitches on the interior and that the lack of this extremely diagnostic feature is unusual (Shanks 2006:135-138).

(Don Hankins 10/27/2016) Cooking basket with redbud pattern and possibly maple with willow foundation. Basket is woven in clockwise direction, which is not typical Mt. Maidu style. Pattern is reminiscent of Achumawi/Atsugewi twined work, and may be a product of weavers from those tribes who learned coiled techniques. Diagonal back lash

of some inside weavers are incorporated into later rows. Start is a course bundle of material with an opening in the center.

(Sue Campbell 5/2/2017) This is a Maidu basket. It is a three-stick foundation coil basket with redbud from the spring, which is the white, and from the fall, which gives you the beautiful red color. It has the quail top knot design on it. It's a large basket, and it has that design kind of like the flower-where it has three pointed mountain or valley-I call it. They repeated it three times but at the top they would wrap the design up and off the basket and then bring it back down to continue the design. There's three levels of the design and then there's a fourth level of the square box and I'm not sure if that's a signature design. It's beautiful. The weaver would weave with the spring redbud, which is white, and at a certain point she would leave a tail, and then after weaving one or two rounds, she would bend the tail backwards and lock it into the third round of her stitching. She would be stitching to the right and then she would weave the tail in from the left. So she is putting in there backwards and then stitching over, leaving it open from about one or two of the rounds, which is really interesting. I've never seen that. She has done this throughout her basket, every so often, so that you can see where she is bringing it backwards into the stitching. Very unique. She finished off the top of the basket with the white redbud.

(Mary Wahl 4/19/2001) Foothill Maidu.

045.021 ab

(Heather Martin 6/5/16) This is a miniature baby carrier with a seat, handle, and sun shade. Following Farmer's classification, this cradle is designated as a sit down cradle in the Slipper style, where the toe of the slipper shape creates a seat for the baby (Farmer 2013:20). The warps are made of willow (*Salix sp.*) and the wefts are made with willow or hazel (*Corylus sp.*). The seat of the carrier is formed by twining a series of horizontal warps. This portion has four groups of plain twining with a slant of weft that alternates between up-to-the-right and down-to-the-right. The back of the carrier is connected by wrapping the vertical warps of the back to the lower-most horizontal warp of the seat. These vertical warps then double over themselves and are secured by the first three rows of twining on the back. These first rows of twining on the back also incorporate the lower portion of horizontal warps, serving to bend the horizontal warps into the vertical position to form the walls of the carrier. As twining continues, all of the warps that form the seat are bent upward to form the walls. The back and walls of the carrier are done in open plain twining in groups of two and three rows, also with an alternating slant of weft. The warps are trimmed after the final row of twining. The front edge of the basket is reinforced with a coil of weft material and bear grass (*Xerophyllum tenax*) that incorporates the edge wefts. This front coil extends from the top of the basket and is looped over to join the opposite edge, creating a handle. At the top front edge there are two pieces of beige cotton string that are strung from edge to edge. The sun shade is

made with the same materials. It has a cross-warp start and is made with open-work plain twining that spirals to the outer edge. The slant of weft is up-to-the-right, the workface is the convex side, and the work direction is to the right. The rim is finished in the same manner as the carrier.

This Slipper style baby carrier is typical of those made by Northwestern California cultures, which includes Hupa, Yurok, Karuk, Tolowa, Whilkut, as well as Shasta. (Farmer 2013: 20). This corroborates Mary Wahl's identification, who identified the baby carrier as Hupa in 2001. However, with no further information, it cannot be determined which of these six cultural groups the weaver identified with.

(Susan Campbell 5/2/17) This is a Yurok or Hupa basket, I would say Yurok. It has bear grass on the rim of the basket along with the bull root. This basket is made out of hazel sticks, so is the hood. And this is a shade hood that goes along with the basket, and that beautiful yellow is the bear grass. Sometimes they could dye it with porcupine quills, and I think some of these are dyed and some are not. But they can turn a kind of yellow, but that definitely looks like it is dyed. This bottom part (the opening near the seat) will tell you whether the cradle is for a boy or girl. If it's really wide at the bottom then it is a girl's; that's to let the baby girls have plenty of room for their hips to grow. They pray that when the baby grows, she won't have any problems during childbirth; that the baby can come through and the mother will have good luck having the baby. Boy's cradles would be more rounded because they don't need that hip width. These are beautiful baskets, made to actually hang. There would normally be leather across the front to strap the baby in, and the baby sits in these baskets. Our (Maidu) babies lay, these babies sit with their legs coming out, and then on the backside they would have leather to hold them, also hang them in the tree and stuff. And what they would do if anything happens to the baby, they would break the handle part on the very top in half to destroy the basket, then they would bury it. So if you see a broken handle on top you know a tragedy befell the baby, but there's a great little video out about the cradle baskets that talk a lot about this.

Mary Wahl 4/19/2001) Hupa.

053.011a

(Heather Martin 7/11/16) This is a small twined trinket basket with a lid typical of the style made on the northwest coast of Canada and southern Alaska. The workface is the exterior and the work direction appears to be to the left. However, culture groups in this area traditionally weave to the right, though some weave with the warps pointing downward which gives the appearance of a leftward work direction when the basket is held upright. Therefore, this basket actually has a rightward work direction and was woven in an inverted position. The start of the basket is indented and made by doubling over three bundles of warps, with the folded ends facing towards the center and the free

ends radiation out to form the warps. The basket is entirely plain twined with a down-to-the-right slant of weft. The base of the basket is worked openly to create a decorative pattern of exposed warps. The designs on the walls of the basket are made by incorporating blue and red yarn into the weft stitches. The design consists of three bands of squares of one color with lateral extensions of the other color. The colors seem to be chosen randomly. At the rim, the final row of twining is used to bind down the warp ends, with the warp of the previous stitch bent downward and bound with the following stitch. The weft ends are secured by tying them with a white string. The weft splices are created by knotting new and existing wefts on the interior of the basket. Both the warp and weft are made using an unidentified grass. The lid of the basket is made in the same manner, with an upward pointing start and one band of exposed warps. The design consists of an inner and outer red band, with sporadic shapes in between that match the walls of the basket except that the shapes are solid colored.

This basket is consistent with the grass basketry made by the Aleut. The Aleut and Haida are documented as weaving with the basket upside down with the warps pointing downward (Weber 1986:82). The result is that the jog, the area where the weaver completes a row and begins the next, moves up in upright Haida and Aleut baskets. This basket has "jog ups" that indicate that it was woven in the inverted position (Busby 2003:47). However, the Aleut are the only culture who weave baskets in this style using grass whereas the Haida used spruce root (Weber 1986:82). Therefore, this basket fits the description of an Aleut basket, despite its recordation describing it as a Hupa, Yurok, or Karuk basket.

053.011b

(Heather Martin 4/14/16) This is a twined basket hat made for a female child. The slant of weft is up to the right, the work direction is to the right, and the workface is the exterior. The splices are laid in. The basket has an indented cross-warp start surrounded by half an inch of three-strand twining. There is then three-fourths of an inch of plain twining followed by one row of three-strand twining. The basket is then plain twined to the rim, with the exception of one row of three-strand twining just below the final coil. The warps are trimmed at the rim and the end of the last weft row is missing. The warp material is probably hazel (*Corylus sp.*). The weft material is conifer root with overlays of bear grass (*Xerophyllum tenax*), maiden hair fern stem (*Adiantum sp.*), and red dyed woodwardia fern stem (*Woodwardia sp.*). The designs include alternating bands of maiden hair fern stem and bear grass around the start, as well as bordering the main design panel of the hat. The main design consists of two stacked parallelograms in red dyed woodwardia that are bordered with maiden hair fern stem. This design repeats three times. There are no obvious signs of native use, though there is extensive damage due to rodent gnawing near the top and rim of the basket.

This basket hat is consistent with those made in Northwestern California. These cultures include Yurok, Karuk, Hupa, Tolowa, and Whilkut. While Mary Wahl attributed this basket to the Hupa or Karuk, the hats made by these cultures are often indistinguishable.

(Mary Wahl 4/19/2001) Hupa/ Karok, hat or bowl.

053.012

(Heather Martin 3/5/17) This is a bag of basketry fragments. Upon close examination, fragments from a minimum of two different baskets can be identified. The first basket is plain twined with a grass material as both the warp and the weft. The slant of weft is down to the right and the warps at the rim are bent downward and secured with the following weft stitch. There are fragments of red and blue yarn present in some fragments. The second basket is also plain twined, but is made with a peeled shoot warp and conifer root wefts with a bear grass (*Xerophyllum tenax*) and maiden hair fern (*Adiantum sp.*) stem single-sided overlay. One fragment has a portion of overlay design in which bear grass and maiden hair fern are alternated to create vertical bands of alternating colors.

Each of the two baskets that are distinguishable from the fragmentary materials match other baskets in the collection with similar accession numbers. The first basket made of grass has identical features to 053.11a, a lidded basket that has been attributed to the Aleut. The second basket has features identical to 053.11b, a basket hat attributed to the cultures of Northwestern California. Both of these baskets have missing portions that are large enough to reasonably assume that the fragments came from these baskets. The fragments that are identifiable have been separated into two bags, with a third bag for indistinguishable pieces.

076.001

Won by Mrs. Ruth Gregory in raffle as part of American Indian festival May 10-11, 1974 at California State University, Chico.

(Heather Martin 6/5/16) This is a baby carrier with a seat and handle. Following Farmer's classification, this cradle is designated as a sit down cradle in the Slipper style, where the toe of the slipper shape creates a seat for the baby (Farmer 2013:20). The warps are made of willow (*Salix sp.*) and the wefts are made with willow or hazel (*Corylus sp.*). The seat of the carrier is formed by twining a series of horizontal warps. This portion is plain twined, except for the second to last rows on each end, which are three-strand twined, with an up-to-the-right slant of weft. The back of the carrier is connected by wrapping the vertical warps of the back to the lower-most horizontal warp of the seat. These vertical warps then double over themselves and are secured by the first row of twining on the

back. These first rows of twining on the back also incorporate the lower portion of horizontal warps, serving to bend the horizontal warps into the vertical position to form the walls of the carrier. As twining continues, all of the warps that form the seat are bent upward to form the walls. The back and walls of the carrier are done in open plain twining in groups of two rows at the toe, groups of three rows over the body of the carrier, and a group of five rows at the top of the carrier. The final rows of twining are concealed in a coil at the rim that is reinforced with additional willow shoots. The front edge of the basket is finished and reinforced in the same manner, with a coil that incorporates the edge wefts. This front coil extends from the top of the basket and is looped over to join the opposite edge, creating a handle. Under the lashing of each reinforcing rim there appears to be a white nylon string that was possibly used to hold the bundle together while the lashing was done. At the top front edge there is a strand of *Olivella sp.* shells, red abalone (*Haliotis rufescens*), and yellow glass beads strung from edge to edge. This strand extends to the outside of the carrier on one side to form two dangles of *Olivella* and yellow glass beads, each terminating with a large abalone pendant. The interior of the seat has a leather strap attached to the back to secure the baby as well as a netting to form the sitting surface.

This Slipper style baby carrier is typical of those made by Northwestern California cultures, which includes Hupa, Yurok, Karuk, Tolowa, Whilkut, as well as Shasta. (Farmer 2013: 20). This corroborates the information in the object record, which states that basket is Hupa.

254.001

(Heather Martin) This is a small coiled globular shaped bowl. The foundation is a combination of rods, splints, and grass. The workface is the exterior and the work direction is to the right. The basket has a pinhole start with no indentation. The stitches are not widely spaced, and at least fifty percent of the stitches are split on the interior, while stitches are only occasionally split on the exterior. The rim finish is plain wrapped and the coil ending is tapered, with the weft knotted on itself for the last two stitches. The slant of weft is mixed due to the interlocking stitches. The fag ends are clipped and bound under, while the moving ends are concealed. The foundation is a combination of a peeled shoot and grass, probably deer grass (*Muhlenbergia rigens*). The weft background material is a split peeled shoot, possibly willow (*Salix sp.*) or maple (*Acer macrophyllum*). There are no obvious designs on the basket, however there are remnants of designs that have been lost. Two coils below the rim, there are downward facing triangle shapes created using weft substitution. This material appears to be a grass that was dyed red, but the dye has since faded. This design repeats four times around the basket. At the widest point of the basket there are two coils (four coils apart) with feather quills in the foundation, indicating that there were once feathers extending from the basket. There are additional areas with quills in the foundations throughout that basket

that do not seem to form a pattern. At the base of the basket there are two spots where a split peeled shoot is woven in front of and then behind the weft stitches. At the widest point of the basket there is one spot where there is a green piece of commercial thread tangled in the foundation and weft stitches. The start of the basket is done in a grass material that resembles the grass used in the foundation. There are no obvious signs of use, though there are some white stains that appear to be paint on the interior, and insect burrowing holes throughout the basket.

This basket was previously identified by Mary Wahl as being an old Maidu basket. While this basket features the Maidu characteristics of split stitches and the use of maple and feathers, the rightward work direction, use of splints in the foundation, and the weft splices are not consistent with Maidu basketry (Shanks 2006:135-138). The use of splints in the foundation is a unique feature used only by the Yuki, Wailaki, and Cahto (Shanks 2006:104; Shanks 2015:55, 70). All three groups also are known to work to the right, irregularly split stitches, and clip the fag ends, all features in this basket (Shanks 2006:104-106; Shanks 2015:55, 70). These three groups use red bud wefts, which have not been identified in this basket, though the material in this basket has not been positively identified. The Yuki, Wailaki, and Cahto have some differences in their basketry technology that may aid in a more specific identification. Yuki baskets often have what Shanks calls "random rectangles," strips of weft material in which the red bud bark is not fully stripped, resulting in random rectangles in a darker color. This basket has no random rectangles, indicating that it is less likely to be a Yuki basket. Wailaki coiled baskets are often trinket or gift baskets, rather than utilitarian baskets, which is consistent with this basket. The Cahto are the only of the three groups known to use feathers in their coiled baskets. Therefore, this basket is most likely to Wailaki or Cahto, though the Yuki cannot be confidently ruled out. It is also important to note that the use of non-native materials, such as died grasses and commercial threads, complicate any attribution to a particular cultural style.

(Don Hankins 10/27/2016) Coiled basket foundation in primarily pine needle, with some willow, and feather rods. Sourberry start finished with maple or willow. Some burnt willow incorporated into "pattern." Not sure of the origin of this one, and I wonder if it is not made by a Native American weaver.

(Mary Wahl 4/19/2001) Maidu start. Basket is older, not tourist. Made by either a novice or an elderly woman. Weave is uneven. Split-stitch signifies Maidu. Start is a different material, not willow, than rest of basket

254.002

(Heather Martin 7/3/16) This is a twined treasure or fancy basket with a lid. The workface is the exterior and the work direction is to the right. The basket has a 3X3

plaited start in cedar bark (*Thuja plicat*). These cedar elements extend from the square start to form the warps, with additional warps added to form a circle. Following the plaited start, the basket base is plain twined with a root weft over wide warps, ending with a row of plain twining over narrow wefts followed by a row of three-strand twining where the walls of the basket begin. The walls are woven in wrapped twining with bear grass (*Xerophyllum tenax*) wefts and cedar bark warps. There is a slight shoulder with a neck made with a cedar bark strip that is woven between the warps strands. The neck is finished with two rows of plain twining with an up to the right slant of weft. The final row of twining is used to bind down the warp ends, with the warp of the previous stitch bent downward and bound with the following stitch. At the end of the final row, the weft end is knotted on the interior. The design is created using dyed bear grass. There are two rows of blue near the base of the basket. At the center, there is a single row of green with four green birds spaced evenly above it. The design is created using weft substitution, with the splices being clipped on the interior of the basket. The lid is woven in a similar manner to the base. However, the lid starts with a knot of root warps, rather than a plaited square of cedar bark. The design on the lid consists of a purple circle in the center with three zigzag lines, in purple, green, and brown, radiating from it. The rim of the lid is done in blue. All of the colors are extremely faded on the exterior of the basket.

This basket is typical of the styles made on the Northwest Coast of North America, in British Columbia. More specifically, this basket is of the style made by Nootka (*Nuu-chah-nulth*) and Makah weavers. However, Makah are known for using plaited cedar bark starts and bear grass wefts, a unique combination of features in the area (Gogol 1981:8). Therefore, this basket was likely made by a Makah weaver.

254.003

Baskets found in storage during reorganization in 1990, no other information or documentation available.

(Heather Martin 2/3/2016) This is a miniature globular coiled basket. It has a single rod foundation, except for at the start, where the foundation is made of shredded material. The workface is the exterior and work direction is to the left. The basket has a pinhole start with no indentation. The stitches are non-interlocking and widely spaced, creating vertical rows of stitches up the walls of the basket. There are occasional, unintentional split stitches on the interior of the basket. The rim finish is plain wrapped and the coil ending is slightly tapered, with the final stitch wrapping around the previous coil and then clipped on the interior. The slant of weft is up to the right. The fag ends are clipped or bound under the stitches of succeeding coil(s) of the same vertical stitch row. The moving ends are clipped. Both the foundation and the weft material is willow (*Salix sp.*). There are no designs on the basket and there are no signs that the basket was used. There

are several missing stitches on the final two coils, and the foundation rod on the second to last coil is broken.

This basket does not fit the traditional mechanical features that have been observed for any particular Native American culture. Many of the mechanical features, including the single rod foundation, leftward work direction, and the method of concealing the weft ends are consistent with both Maidu and Sierra Miwok basketry. However, other features, such as the non-interlocking stitches and weft material are not consistent with those cultures (Shanks 2006:135-138, 152-154). The records for this basket indicate that it has been identified by Denise Davis as being Maidu. Her claim is that this basket was made by their family because only they weave this type of coiled demonstration baskets. More information is needed to determine exactly what she means by this. Further, Mary Wahl identified this as a Paiute/Shoshone basket. For the time being, it is impossible to say for sure where this basket originated.

(Don Hankins 10/27/2016) Miniature single rod coiled basket. Willow on willow with open work coils. I have seen this in some northern and central Miwok baskets as well as Washoe. The clockwise orientation is typical of these tribes' weaving. Most likely it is Washoe because of the strict use of willow.

(Sue Campbell 5/2/2017) This is a very small, one-stick, coiled basket. It has willow foundation with the redbud stitching and, from my understanding, this little basket had been identified by Denise Davis, who is my master weaver. I think the what she meant by uniqueness of the stitch is, you make the coil and then as you come out you do a split stitch to start up these straight line stitching. But as you come around from the flat bottom and turn it up, again she does a split stitch that comes up and makes the design to go straight. Not a lot of one stick baskets were made, but some of these were made for sale, some were made for trade, and other things. This is a beautiful little design for weavers to look at if they're coming to learn how to do a one stick basket, and for coiling this is a great basket to actually look at to see how the stitches are done. It's so perfectly done, going straight up and making those stitches so that they don't tend to lean to one side or the other. They actually go up perfectly straight, so very nice. It has a little damage on the top where a couple of stitches have broken, and one of the foundation sticks have also broke.

(Denise Davis, CIBA with the Chewyien Pomo, Native basket Weavers Association) Maidu. She identified it as being from her family, as far as she could remember, her family are the only ones who do this type of coil, demonstration baskets. Possibly made by her Grandmother.

(Mary Wahl 4/19/2001) Paiute Shoshone, California/ Nevada border. This contradicts our records.

254.004

Baskets found in storage during reorganization in 1990, no other information or documentation available.

(Heather Martin 3/22/16) This is a medium-sized globular twined bowl. The slant of weft is up to the right, the workface is the exterior, and the work direction is to the right. The basket has an indented cross-warp start. The basket begins with half an inch of three-strand twining and is then plain-twined for one and one-fourth inches. Then there are two rows of three-strand twining separated by one row of plain twining. The basket is then plain-twined to the rim, with the final three rows in three-strand twining. The warps are trimmed at the basket's rim. The end of the last weft row is fastened with beige thread, which may be a modern repair if the final weft stitch is missing. The warps are difficult to see, but are likely to be hazel (*Corylus sp.*) that is added in concentric circles. The plain-twined portions of the basket are woven with a single-sided overlay. The wefts are conifer root while the overlay is a background of bear grass (*Xerophyllum tenax*) and design in maiden hair fern stem (*Adiantum sp.*). On the base there are two bands of checkered light and dark material. The basket's main design consists of five columns of vertically stacked parallelograms. Each column has four parallelograms, each with three vertical bands down the center. Just above this design is a final band of checkered light and dark material.

This basket was likely made in the Northwestern region of California. These cultures included Yurok, Karuk, Hupa, Tolowa, and Whilkut. Mary Wahl identified this as a Hupa basket, though all of these cultures use single-sided overlays of bear grass and maiden hair fern stem, which can be seen in this basket (Shanks 2015:18). This basket resembles a cooking basket, which varied in shape across cultures in Northwestern California. This basket more closely resembles Whilkut cooking baskets, which are globular, yet widest at the lower one-third of the basket (Shanks 2015:22). Whilkut cooking baskets typically have two rows of three-strand twining at the rim (Shanks 2015:23). While this basket has three rows of three-strand twining at the rim rather than two, this may be a variation on Whilkut technique. However, this basket does not have the lattice-twined reinforcing rods typical to this area, which may indicate that it was a ceremonial cooking basket (Shanks 2015:23).

(Mary Wahl 4/19/2001) Hupa group.

254.005

Baskets found in storage during reorganization in 1990, no other information or documentation available.

(Heather Martin 2/15/15) This is a small, slightly oval shaped twined basket with flexible cordage warps. The slant of weft stitch is down to the right, the workface is the exterior, and the work direction is to the right. The start is oval shaped and consists of parallel cordage bundles that are divided into smaller bundles that radiate out until each section consists of just one cordage warp. The start is slightly indented. The base of the basket is plain twined, for about one and a half inches, while the walls of the basket are diagonally twined. At the end of the last weft row, the warps appear to be tucked vertically into the preceding three or four weft rows. The rim is finished by binding the warp ends down on the interior of the basket. The basket is made entirely of tule (*Scirpus sp.*). New weft pieces are added by knotting them to exhausted weft ends. Warps are added irregularly on the base of the basket, while on the walls of the basket warps are only added in one row near the base, just above the first design band. The design consists of three bands against a buff background. The bands are made of diagonal stripes, alternating buff and reddish-brown mud-died tule. The diagonal stripes are created by twining with one strand of each color. The color shown on the workface alternates with each twist around the warp. There are no signs of use.

This basket is consistent with Klamath or Modoc cordage warp bowls. The lack of the use of overlay to create the design suggests that this basket is more likely to be Klamath, which is consistent with Mary Wahl's conclusion. The use of three-strand twining, diagonal twining, and crossing the exposed warps are features that distinguish the Klamath and Modoc cordage warp basketry from similar styles of the Atsumawi and Atsugewi. An interesting note is that diagonal twining was not traditionally used by the Klamath and Modoc cultures, rather is an indication that this basket was made later in time to be sold to tourists (Shanks 2015:117-119).

(Mary Wahl 4/19/2001) Maybe Klamath, but weave is slightly different, basket could also be from Washington area. Not tourist.

254.006

Baskets found in storage during reorganization in 1990, no other information or documentation available.

(Heather Martin 2/29/2016) This is a twined tray made with cordage warps. It is generally flat with undulations caused by the flexibility in the warp materials. The slant of weft is down to the right and the work direction is to the right. The weft splice ends are knotted with existing weft elements on the non-workface, with the splice ends occasionally left unclipped for less than half an inch. The starting knot is created by wrapping all of the tule (*Scirpis sp.*) warp elements in one bundle and then dividing them into smaller bundles as the twining progresses. The very first warp bundle is wrapped a

second time at a 90 degree angle, creating a second wrap that is perpendicular to the first. There is no indentation at the start. The entire basket is plain twined. The design is created using weft substitution. Twining begins with undyed tule for one fourth of an inch. The first band is created by alternating dyed and undyed tule that results in vertical stripes. Then there is one and three-fourths of an inch of undyed tule, followed by three rows of dyed tule. Then four rows of undyed tule are followed by three rows of dyed tule. Finally, half of an inch of undyed tule is followed by three rows dyed tule. The basket is finished with three-eighths of an inch of undyed tule. There are four bands in total, including the striped band. The rim is finished by binding the warps down on the non-workface and the weft at the end of the last row is secured by knotting it with the warps. There are no signs of use.

This is consistent with a Klamath or Modoc cordage warp tray. The lack of the use of overlay to create the design suggests that this basket is more likely to be Klamath. These flat trays were used for winnowing, sifting, and parching wokus, or water lily seeds. However, these trays are 20-30 inches in diameter (Shanks 2015:121-122), while this tray is under 9 and one half inches. This may mean that this tray was made for sale rather than for use in wokus processing.

254.008

Basket found in storage during reorganization in 1990, no other information or documentation available.

(Heather Martin 10/16/2016) This is a heart-shaped coiled basket with a handle. The workface is the exterior and the work direction is to the left. The foundation is a bundle of pine needles and the weft is a commercial cotton string. Rather than a traditional start, the basket has a flat base made of birch. The heart-shaped base has holes drilled around the perimeter to facilitate the attachment of the first coil. The stitches slant downward and to the left, are non-interlocking, and are spaced in a way that creates columns that slightly spiral up the walls of the basket. A decorative effect was created by placing two stitches in each location, the first stitch is oriented diagonally as the weaver moves leftward and spaces the new stitch while the second stitch, which wraps around the foundation and is placed in the same hole made by the first stitch, is oriented vertically. Together, these two stitches create a slanted "V" shape. Weft splices are secured by knotting the string on itself to prevent the weft from pulling through the foundation. The coil ending is tapered and the weft is secured to the coil below. The rim is finished with a braid of pine needles that are lashed to the top of the final coil. The handle of the basket is "Y" shaped, attaching to the lower point and two upper curves of the heart with string. The handle is a single bundle of pine needles that is wrapped with two crossing pieces of string to create an "X" pattern. There are pine cone fragments attached where the handle joins the

basket, one at each curve and two at the point, and a final cone at the joint of the "Y" at the top of the handle.

Coiled baskets made with pine needle foundations have not been documented in Native American cultures prior to contact with Europeans. In the twentieth century, these baskets were made by Native communities throughout the United States, particularly in the south. It has been suggested that Native American pine needle baskets were influenced by African American baskets made of sweet grass, a technique that is believed to have originated in Africa and brought to the United States along with slavery (Perdue, Jr. 1968). Additionally, Mrs. M. J. McAfee, a Caucasian woman from Georgia, claims that she invented the pine needle basket when she had no access to materials to make hats for her family during the Civil War (McAfee 1911). McAfee developed the technique into an artful craft and began teaching classes to Caucasian women. In 1917, William C. A. Hammel, the Superintendent of City Schools of Greensboro, North Carolina, advocated for teaching pine needle basket making in schools to encourage students to be resourceful when finding materials and to be creative and artistic while making a craft that has both economic and utilitarian value (Hammel 1917). With so many possible origins and so many communities making pine needle baskets, it is difficult to attribute the origin of this basket to any location or community within the United States. Mary Wahl suggested that this basket may have been made by the Cree in Washington.

(Mary Wahl 4/19/2001) Pine needle basket with birch bark. Washington area, possibly Cree. Tourist basket.

254.009

Basket found in storage, no other information or documentation available.

(Heather Martin 4/25/2016) this is a tall twined bowl with slightly flaring sides. The slant of weft stitch is down to the right, the workface is the exterior, and the work direction is to the right. The basket has an indented start in which the warps are bound with a single weft and then separated into a radiating pattern. The basket is plain-twined for one and a half inches. Then there is one row of between-weave followed by two inches of plain twining to complete the base of the basket. At the bottom corner of the basket there is one row of three-strand twining in which each weft stitch crosses over three warps. This row is followed by three rows of plain twining and then a second row of three-strand twining, except in this row each weft stitch passes over only two warps. Both of these three-strand twined rows are made with black dyed wefts, except every third weft, which is dyed red. The basket is then plain twined to the rim. The warps and wefts are likely to be Sitka spruce (*Picea Sitchensis*). The design is done using false embroidery of dyed grass, as well as dyed spruce root. The lower half of the basket features false embroidered letters that read "KYAK." The upper half of the basket has three bands of colorful geometric

shapes. The upper and lower band consists of rhombuses while the center band consists of rectangles. The final three weft rows are falsely embroidered, with the lowermost row having a checkered design that alternates in one inch sections. Splice ends appear to be knotted to new warp elements. The rim is finished by folding the warps towards the interior and binding it with the last weft row of the basket. At the end of the last weft row, the wefts appear to be clipped and bound down by the final weft, which is threaded through the weft of the previous row. There is a strand of olive-green thread sewn around the circumference of the basket approximately three rows from the rim. The basket has no signs of native use, but has many tears in the walls that have been repaired using Japanese tissue paper and wheatstarch paste.

This basket is consistent with the spruce root basketry made by the Haida and Tlingit. The fineness of weaving, thin walls, and the use of between-weave and false embroidery are all typical of these cultures. While both of these cultures work in a rightward direction, the groups differ in how the basket is oriented during the weaving process. The Haida weave with the basket upside down and the warps pointing downward (Weber 1986:82). The Tlingit, on the other hand, weave the basket right-side up and the warps pointing upward (Weber 1986:82). The result is that the jog, the area where the weaver completes a row and begins the next, moves up in an upright Haida basket and down in an upright Tlingit basket. This basket has "jog downs" that indicate that it is a Tlingit basket (Busby 2003:47). It is also typical for Tlingit baskets to feature three bands, with the center band differing from the other two (Busby 2003:97). The Tlingit were also known to use dyed wefts, as well as weave place names into baskets that were made for the tourist market (Busby 2003:97-99). Therefore, this basket is most likely to be a Tlingit basket made for sale to tourists in the twentieth century. Mary Wahl also attributed this basket to the Tlingit.

(Mary Wahl 4/19/2001) Tlingit.

255.008

(Heather Martin 7/3/16) This is a miniature twined treasure or fancy basket with a lid. The workface is the exterior and the work direction is to the right. The basket has a plaited start that uses three warps and three wefts to create a square of cedar bark (*Thuja plicata*). These cedar elements extend from the square start to form the warps of the basket, with additional warps added at the corners to form a circle. Following the plaited start, the basket base is plain-twined with a root weft, ending with a row of three-strand twining where the walls of the basket begin. The walls are woven in wrapped-twining with bear grass (*Xerophyllum tenax*) wefts and cedar bark warps. There is a slight shoulder with a neck made with a cedar bark strip that is woven between the warp strands. The neck is finished with two rows of plain twining with an up-to-the-right slant of weft. The final row of twining is used to bind down the warp ends, with the warp of

the previous stitch bent downward and bound with the following stitch. At the end of the final row, the weft end is knotted on the interior. The exterior of the basket appears to be without decoration, however, the interior of the basket shows that there was a design created using dyed bear grass that has since been faded. The majority of the wall is woven in deep turquoise with a depiction of a whale that repeated twice in undyed bear grass. Below this design there is a single row of pink and a single row of turquoise. The design is created using weft substitution, with the splices being clipped on the interior of the basket. The lid is woven in a similar manner to the base. However, the lid starts with a knot of root warps, rather than a plaited square of cedar bark. The design is the same as on the walls of the basket, with two whales on a turquoise background. There is a checkered ring around the start and a single turquoise band on the lip of the lid.

This basket is typical of the styles made on the northwest coast of North America, in British Columbia. More specifically, this basket is of the style made by Nootka (*Nuu-chah-nulth*) and Makah weavers. However, Makah are known for using plaited cedar bark starts and bear grass wefts, a unique combination of features in the area (Gogol 1981:8). Therefore, this basket was likely made by a Makah weaver.

265.007

(Heather Martin 6/30/16) This is a miniature baby carrier made with a wood frame and sun shade that holds a small doll. Following Farmer's classification, this cradle is designated as basketry platform with a one-ply platform that is covered (Farmer 2013:22). The front of the frame is covered with vertical shoots to create a platform for the baby to lay on. The platform warps are held together by widely-spaced plain-twining and has a down-to-the-right slant of weft done with strips of cotton fabric. The frame is covered with hide, making it impossible to see how the platform is attached to the frame. There is a scoop-shaped sunshade attached at the top of the carrier with three visible rows of plain twining in commercial cotton string. The warps of the shade have broken near the attachment of the supporting arch, with portions of the warp sticks missing across the majority of the shade. There are many areas of this break that appear to be coated with a clear glue. There appears to have been, at one time, a fourth row of twining across this broken area. Although the warps are missing, the twining row is still attached and hangs from the shade in the form of two twisted strings with two warp segments still passing through. The slant of weft is down to the right. At the widest point of the sunshade there is a zig-zag band made with white or yellow string. This band is made by passing the string over one warp at a time and then wrapping it around the sticks that make up the sunshade supporting arch. However, this area is where warps are missing and the remnants of the design can be seen in the loose string that is looped around the arch sticks. It is difficult to determine the start and finish end of the shade because the edges are covered with brown velvet and green plaid material. At the wide end of the sun shade, the velvet is decorated with a zigzag in blue glass beads, as well as a coral-colored bead

of unknown material around the margin of the shade. The sides of the supporting arch have remnants of twining, though it appears that most of it is missing. The majority of the cradle is covered in leather, with only the sun shade, platform behind the doll, and the looped frame at the bottom exposed. The cover has two rows of fringe on the front which is decorated with additional coral-colored beads. On the back, there are four leather strips, probably used to attach the shade to the front, that are decorated with blue, clear, brown, and green glass beads. The opening of the cover is laced closed with a leather strip to secure the doll. The leather is very stiff, brittle, and dirty.

Covered one-ply platform cradles with a looped frame such as this were made by the Washoe, Pyramid Lake Paiute, Mono Lake Paiute, and Northern Paiute (Farmer 2013:150-181). As there are no particular distinguishing features on the cradle and there is no documentation on the origins of the basket, it is impossible to narrow down which culture group this basket originated from.

Doll: 19cm long and 6cm wide. Doll is strapped within cradleboard. Doll is painted a copper color with dark hair and eyes, clothed in green. Paint is chipping over 20-30% of body. Material underneath is cork-like. Doll's left arm and leg are hanging by cotton twine. Right arm is in raised position, and paint has chipped from hand and wrist. Pencil marks are present on lips.

269.001

(Heather Martin 7/3/2016) This is a twined treasure or fancy basket over a glass bottle mold. The workface is the exterior and the work direction is to the right. The basket has a 2X2 plaited start in cedar bark (*Thuja plicat*). These cedar elements extend from the square start to form the warps, with additional warps added to form a circle. Following the plaited start, the basket base is plain twined with a root weft over wide warps, ending with six rows of plain-twining over increasingly narrow wefts followed by a row of three-strand twining where the walls of the basket begin. The design is created using dyed bear grass. The walls are woven in wrapped twining with bear grass (*Xerophyllum tenax*) wefts and cedar bark warps for three-fourths of an inch. This design panel contains bands of blue and red stripes as well as blue checkered stripes. Then there is a band of exposed warps with decorative crossings bordered above and below by two rows of plain twining. Wrapped twining continues for about two inches. This panel contains the main design, which consists of checkered bands and a flower and petal motif in pink and green. The exposed warp band repeats one more time before the basket is wrap-twined to the rim, with several checkered and solid stripe bands. The final row of twining is used to bind down the warp ends, with the warp of the previous stitch bent downward and bound with the following stitch. At the end of the final row, the weft end is knotted on the interior. All of the colors are extremely faded on the exterior of the basket.

This basket is typical of the styles made on the Northwest coast of North America, in British Columbia. More specifically, this basket is of the style made by Nootka (*Nuu-chah-nulth*) and Makah weavers. However, Makah are known for using plaited cedar bark starts and bear grass wefts, a unique combination of features in the area (Gogol 1981:8). Therefore, this basket was likely made by a Makah weaver, which corroborates the documentation that this basket was collected at Qualicum Beach, Vancouver Island, BC.

270.001

(Heather Martin 7/3/16) This is a twined treasure or fancy basket over a glass bottle mold. The workface is the exterior and the work direction is to the right. The basket has a 2X2 plaited start in cedar bark (*Thuja plicata*). These cedar elements extend from the square start to form the warps, with additional warps added to form a circle. Following the plaited start, the basket base is plain twined with a root weft over wide warps, ending with six rows of plain-twining over increasingly narrow wefts followed by a row of three-strand twining where the walls of the basket begin. The design is created using dyed bear grass. The walls are woven in wrapped twining with bear grass (*Xerophyllum tenax*) wefts and cedar bark warps for three-fourths of an inch. This design panel contains bands of blue and red stripes as well as blue checkered stripes. Then there is a band of exposed warps with decorative crossings bordered above and below by two rows of plain twining. Wrapped twining continues for about two inches. This panel contains the main design, which consists of checkered bands and a flower and petal motif in pink and green. The exposed warp band repeats one more time before the basket is wrap-twined to the rim, with several checkered and solid stripe bands. The final row of twining is used to bind down the warp ends, with the warp of the previous stitch bent downward and bound with the following stitch. At the end of the final row, the weft end is knotted on the interior. All of the colors are extremely faded on the exterior of the basket.

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(Denise Davis and Susan Campbell, members of the Chewyiem Pomo California Native Basket Weaver's Association 3/9/1996) identified the basket as Pomo.

(Mary Wahl 4/19/2001) Pomo, single rod, Lake County. Not tourist.

270.002

(Heather Martin 4/14/2016) This is a twined cooking basket with relatively straight sides. The slant of weft is up to the right, the work direction is to the right, and the workface is the exterior. The basket has an indented cross-warp start surrounded by a half an inch of three-strand twining. There is one inch of plain twinning followed by two rows of three-strand twining separated by one row of plain twining. The basket is then plain twined to the rim. The warps are trimmed at the rim and the end of the last weft row is missing. The warp materials are probably hazel (*Corylus sp.*) and the weft material is conifer root with a single-sided overlay (showing through on the back face in an irregular pattern) of bear grass (*Xerophyllum tenax*). The overlay design creates a band on the upper portion of the basket with a geometric abstract design created in the negative spaces. The basket has five burn marks on the interior, no light passes through the spaces between the stitches, and the basket is relatively heavy. These are all indications that the basket was used for cooking.

This basket was likely made in the Northwestern region of California. These cultures included Yurok, Karuk, Hupa, Tolowa, and Whilkut. While Mary Wahl attributed this basket to the Hupa, all of these cultures use single-sided overlays of bear grass, which can be seen in this basket (Shanks 2015:18). This basket resembles a cooking basket, which varied in shape across cultures in Northwestern California. This basket more closely resembles Tolowa cooking baskets, which are widest at the upper portion of the basket, typically near the reinforcing lattice-twined bands (Shanks 2015:22). However, this basket does not have the lattice-twined reinforcing rods typical to this area, which indicate that it was a ceremonial cooking basket (Shanks 2015:23). The indications that the basket was used for cooking suggest that this was a utilitarian basket, rather than for ceremonial use.

(Mary Wahl 4/19/2001) Negative basket means there is more dark color than light. Very rare design, made by Hupa. Dark brown is brown conifer root. Light color is bear grass. Dark pattern does not show through on the inside of the basket.

270.003

(Heather Martin 5/15/16) This is a twined globular-shaped bowl. The slant of weft is up to the right, the workface is the exterior, and the work direction is to the right. It has a cross-warp start with a very slight indentation. The start is surrounded by four rows of three-strand twining followed by one and three-fourths inches of plain twining. There are three rows of three-strand twining at the point where the base begins to turn upward to from the walls of the basket. The basket is then plain twined to the rim. The warps are trimmed at the rim, with the end of the last weft row missing. The warp materials are probably hazel (*Corylus sp.*) and the weft material is conifer root with a single-sided

overlay (showing through in the back face in an irregular pattern) of bear grass (*Xerophyllum tenax*), maiden hair fern stem (*Adiantum sp.*), and red dyed woodwardia fern stem (*Woodwardia sp.*). The base of the basket has several dotted bands of bear grass. The design on the basket's wall consists of three dark bands against the light bear grass overlay. The lower band is created by the absence of an overlay and consists of upward pointing triangles. The second band is a woodwardia zig-zag with a row of maiden hair fern stem in the lower portion of the band. The upper band is also created by the absence of an overlay and consists of downward pointing triangles. There are no signs of Native use on this basket, though it is misshapen and has extensive loss at the rim.

This basket was likely made in the Northwestern region of California. These cultures included Yurok, Karuk, Hupa, Tolowa, and Whilkut. All of these cultures use single-sided overlays of bear grass, red-dyed woodwardia fern, and maiden hair fern stem, which can be seen in this basket (Shanks 2015:18). This basket resembles a cooking basket, which varied in shape across cultures in Northwestern California. This basket more closely resembles Karuk cooking baskets, which are globular and widest at the mid-point, as well as broad in comparison to its height. (Shanks 2015:22). The Karuk were also known to use red-dyed woodwardia more often than other Northwestern California groups. Mary Wahl previously attributed this basket to either the Hupa or Wintu. While a Hupa origin is possible, it is important to note the Wintu use double-sided overlays, which do not match the description of this basket.

(Mary Wahl 4/19/2001) Hupa or Wintun.

270.004

(Heather Martin 5/16/16) This is a twined basket with a relatively flat bottom and straight sides. The slant of weft is up to the right, the work direction is the exterior, and the work direction is to the right. The basket has a cross-warp start with a slight indentation. It is plain twined with the exception of one row of three-strand twining on the base. The warps are probably willow (*Salix sp.*) and the wefts are conifer root. There is a single-sided overlay of a dark brown material that may be mud-dyed conifer root. The design on the bottom consists of an irregular shaped band that was possibly intended as a star shape. Where the base curves upwards into the walls, there are irregular shapes that, upon close investigation, turn out to be letters that spell "SILETZ" followed by a few characters that are unintelligible. Some of these may be numbers, possibly a "1" or "0" and "2," and may possibly represent a date. Above these figures there is a zig-zag band. Above this band the warps are crossed for decorative affect. There are two rows of twining above the warp crossing to secure the warps. These final two rows are concealed, along with a reinforcing rod, with a lashing of an unidentified bark material. Other than some abrasion of the overlay material, this basket is undamaged and has no signs of use.

This basket is typical of those made on the Siletz reservation in Western Oregon, yet shares many mechanical features of basketry made in Northwest California. The Siletz reservation was home to many cultures, and the group that became known to make the typical "Siletz basket" was actually the Tututni culture of southwestern Oregon, who share a basketry technology with their neighbors in Northern California (Shanks 2015:44). Of the cultures on the Siletz reservation, the Tututni was the only group whose basketry style relates to Northern Californian groups (Shanks 2015:44). The lettering on the basket indicates that it was probably made for sale to non-Native tourists.

(Mary Wahl, 4/19/2001) Northwest coast, basket has a Siletz start.
270.005

(Heather Martin 5/16/16) This is a globular-twined basket. The slant of weft is up to the right, the work direction is the exterior, and the work direction is to the right. It has a cross-warp start with a slight indentation. The basket is plain twined with the exception of two rows of three-strand twining on the base as well as two rows of three-strand twining below the rim. The warps are probably willow (*Salix sp.*) and the wefts are conifer root. The design is created using weft substitution with a dark brown material that may be mud-dyed conifer root, and consists of two checkered bands, about three-fourths of an inch apart, at the widest point of the basket. There is also one to two rows of dark material at the rim. The rim is finished by bending the warps over and braiding them decoratively. Only some of the warps are incorporated into this finish, the unused warps are trimmed. This basket has possible acorn mush or other Native food material on the interior and exterior of the basket, as well as diagnostic burn marks on the interior.

This basket is typical of those made on the Siletz reservation in Western Oregon, yet shares many mechanical features of basketry made in Northwest California. The Siletz reservation was home to many cultures, and the group that became known to make the typical "Siletz basket" was actually the Tututni culture of Southwestern Oregon, who share a basketry technology with their neighbors in Northern California (Shanks 2015:44). Of the cultures on the Siletz reservation, the Tututni was the only group whose basketry style relates to Northern Californian groups (Shanks 2015:44).

329.018

(Heather Martin 9/25/16) This decorative wicker basket is made with honeysuckle vines. The workface is the exterior and the work direction is to the right. It has a cross-warp start and a base that is woven in vines that are dyed a burgundy color using a walnut dye. At the bottom corner of the basket, the warp groupings are divided, with some warps continuing outward to form a platform while others point upward to form the walls. Both the platform and walls are woven using alternating colors to form a banded pattern. The weft splices are secured by tucking them into the warp spaces, threading them towards

the center of the basket. A decorative edge is created at both the platform and the walls by looping the remaining warp downward and tucking it into the second warp space to the right.

This basket has a tag from the Indian Arts and Crafts Board that identifies it as a genuine Indian handicraft. It has the logo of the Qualla Arts and Crafts Mutual, Inc., a Cherokee cooperative that was established in 1946 (<http://www.quallaartsandcrafts.com/>). The tag identifies the weaver as Irene P. Wolfe and the material as honeysuckle vine with walnut dye.

329.019

(Heather Martin 9/25/16) This is a small coiled basket. The documentation of the basket describes the foundation material as Spanish moss. The weft material appears to be a grass. The workface is the exterior, the work direction is to the right, and the stitches are interlocking and widely spaced. The start is a tight spiral and the splices are clipped, with some ends knotted, probably to prevent them from pulling through the foundation bundle. The rim is plain wrapped and the coil ending is tapered with two and a half inches of backstitching.

This basket has a tag that says "L. Langley" and "Coushatta Tribe." The basket's documentation states that it was purchased by the donor in 1975 from the basket collection at Moundville National Historical State Park, site of the impressive constructions of the Natchez Indians.

337.001

(Heather Martin 5/15/2016) This is a twined, globular shape basket. The slant of weft stitch is up to the right, the workface is the exterior, and the work direction is to the right. It has a cross-warp start with no indentation. The start is surrounded by half inch of three-strand twining followed by two and three-quarters inches of plain twining. At this point there is two rows of three-strand twining and then plain twining to the rim, where there are two final rows of three-strand twining. The warps are trimmed at the rim and the end of the last row, though now missing, was once fastened with beige commercial thread, which is still knotted at the third coil from the rim. The warp materials are probably hazel (*Corylus sp.*) and the weft material is conifer root with a single-sided overlay (showing through in the back face in an irregular pattern) of bear grass (*Xerophyllum tenax*), maiden hair fern stem (*Adiantum sp.*), and red dyed woodwardia fern stem (*Woodwardia sp.*). The warps are added in concentric circles by incorporation into preexisting weft crossings. The design on the base consists of three concentric dotted bands, one of bear grass, one of maiden hair fern (black), and one of dyed woodwardia (red). The design on the main panel of the basket consists of a band of red downward facing triangles. Above

this there is an up-to-the-right stair step shape that is bordered on each side by a diagonal row of triangles. This design is red with black and brown (conifer root) horizontal stripes, and repeats four times around the baskets circumference. The final band is made of red downward facing triangles. There are no signs of Native use on this basket. However, there is some damage including a small hole near the base likely caused by rodent gnawing and a tear in the rim that was improperly repaired with glue. The entire basket is warped with an undulating surface.

This basket was likely made in the Northwestern region of California. These cultures included Yurok, Karuk, Hupa, Tolowa, and Whilkut. While Mary Wahl identified this basket as Hupa, all of these cultures use single-sided overlays of bear grass and maiden hair fern stem, which can be seen in this basket (Shanks 2015:18). This basket resembles a cooking basket, which varied in shape across cultures in Northwestern California. This basket more closely resembles Whilkut cooking baskets, which are globular, yet widest at the lower one-third of the basket (Shanks 2015:22). Whilkut cooking baskets typically have two rows of three-strand twining at the rim (Shanks 2015:23). However, this basket does not have the lattice-twined reinforcing rods typical to this area, which may indicate that it was a ceremonial cooking basket (Shanks 2015:23).

(Mary Wahl 4/19/2001) Hupa group, basket was made around 1900-1930, using alder bark, the red color.

337.002

(Heather Martin 6/11/15) This is a large coiled basket with flaring sides. The basket has a three-rod foundation. The workface is the exterior and the work direction is to the left. The basket has an indented pinhole start with a very small opening. The stitches are non-interlocking and are not widely spaced. The rim is plain wrapped and the coil ending is tapered. There are some split stitches on the interior and exterior, though none seem to be intentional. The slant of weft is up the right. Both the moving ends and the fag ends appear to be in the non-workface of the basket, which is unusual. The splices are either clipped or bound under in fairly equal proportions. The fag ends are bound under the succeeding coil, while the moving ends are bound under the current coil. The ends are bound under multiple stitches, evidenced by a bump that can be seen to extend for up to one inch. The foundation material is a peeled shoot, the weft background material is sedge (*Carex barbarae*) root, while the black material is wart root (*Smilax californica*). The rim finish is done in a split peeled shoot. The design is done in weft substitution and consists of several design elements. There are three "V" shaped designs created by sets of three stair-stepped "Vs", one above the other. Two of these "Vs" are close together and appear to "overlap" at their shared end. The third "V" is separated from the others by a vertical design on either side. One design consists of four stacked upward-pointed arrows with a horizontal band at the top. The other design is a continuous vertical band that has

rectangles extending from it on both sides and throughout its entire length. The basket has no obvious signs of use, though it is abraded to the foundation on the base.

The mechanical features of the basket indicate that it was made by a Maidu weaver. More specifically, the sedge root wefts indicate that it was made by the Valley Maidu, and the wart root material was used most frequently by the Valley Maidu of Butte County (Shanks 2006:76). This contradicts Mary Wahl's determination that this basket is Miwok based on the design.

(Don Hankins 10/27/2016) Large cooking basket with willow foundation 3-rod. Weaving material is Santa Barbara sedge with California green briar root. Sedge is highly polished. Rim looks to be a different material, possibly sourberry (*Rhus Trilobata*). Origin of basket is not attributed. I'd compare it to works of Nisenan, Patwin, (Wintu), and Konkow.

(Sue Campbell 5/2/2017) This is a large coil, three-rod, sedge basket. I don't think it's a cooking basket because it actually has an indentation on the bottom so the rocks would have worn that away if they were using it. It would have been more of a flat bottom, so it may be more of a storage basket. It's a very old- it has a beautiful patina- that really golden color. I was confused by the shininess on the outside, so I was thinking, "I don't remember sedge being shiny," but if you look on the inside of the basket you can absolutely see the sedge and how dull looking it is. On the very bottom it really has the lighter look of the sedge, but on the outside it has a really pretty shininess to it, so that kind of threw me off for a little bit. You can also see all the variation of the different color of sedge, you've got some lighter, some darker as the weaver went around. She did a really good job in keeping the colors not too uniform, but throughout it it's kind of here and there and everywhere so it is a beautiful color. It looks like she finished it off on the very top with a maple, but it has kind of a cracking look to it. I would still say it is maple, somebody could come along and maybe say it is redbud, but I'm going to say it's maple. It has the design -I'm not an expert on these designs -using a black Smilax root. It's a beautiful black. On the inside you can see little warts on it identify it, and on the outside it has this beautiful shininess to it. It is definitely a very dark black and every so often it actually turns into a little bit of a red color and I think that could be from actually some of it being worn off, and boy this is a very beautiful basket. It has kind of like a zigzag pattern or it's like a lightning pattern and they're coming together. It's on three sides of the basket and then coming down it has three of them -one within the other stacking on each other. On one side it has a tree-like look where it's coming up through the center and then with rectangles on the outside of each side. Then there's one that looks like a tree -with stackable triangles, one on top of the other, four with a top that's actually just stitched two rows of the black root finishing the top of it. This is a beautiful basket. It's nice and big. It's sturdy. It has some damage on the top of the rim -we were thinking it might have been a repair at some point because some of the maple looks a lot shinier.

(Mary Wahl 4/19/2001) Rod as opposed to bunch. Maybe Miwok due to bifurcation of the weave. Older basket.

2001.06.13

(Heather Martin 2/29/2016) This is a twined tray made with cordage warps. It is generally flat with undulations caused by the flexibility in the warp materials. The slant of weft is down to the right and the work direction is to the right. The entire basket is plain twined using tule warps and wefts. The starting knot is oval shaped and created by wrapping all of the warp elements in one bundle and then dividing them into smaller bundles as the twining progresses. There is no indentations at the start. Surrounding the start there is a band of alternating light and dark columns for one-fourth of an inch. Next is three-eighths of an inch of light color followed by another alternating light and dark band for two rows. Surrounding this is a band of dark colored diamonds, each about an inch apart but connected with two rows of dark tule. This design repeats a second time, except in this second band the outer half of the diamonds is checkered light and dark tule. Just outside this final diamond band there is two rows of dark tule, five-eighths of an inch of light tule, and two final rows of dark tule. The rim is finished by binding the warps down on the non-workface and the wefts at the end of the last weft row are knotted together. The design is created using weft substitution, except in the diamond elements where wefts are floated on the non-workface. The weft splices ends are knotted with existing weft elements on the non-workface. There are no signs of use, though there are some lost stitches at the rim and a one-inch tear near the rim.

Baskets with cordage warps such as this were made by the Klamath, Modoc, Achumawi, and Atsugewi of northeastern California and Oregon. Of these groups, the Klamath and Modoc were known to make cordage warp trays that were used for winnowing, sifting, and parching wokus, or water lily seeds (Shanks 2015:117). However, these trays are 20-30 inches in diameter, while this tray is under 14 inches. This may mean that this tray was made for sale rather than for use in wokus processing.

2001.06.14

(Heather Martin 3/18/16) This is a twined tray made with cordage warps. It is generally flat with undulations caused by the flexibility in the warp materials. The slant of weft is down to the right and the work direction is to the right. The entire basket is plain twined using tule (*Scirpus sp.*) warps and wefts. The starting knot is created by wrapping all of the warp elements in one bundle and then dividing them into smaller bundles as the twining progresses. There is no indentations at the start. The start is surrounded by one-half of an inch of mud-dyed tule followed by a band of irregularly alternating light and dark stitches for three-fourths of an inch. Next is three-fourths of an inch of light color

followed by another alternating light and dark band for one-half of an inch. The basket proceeds with alternating light and dark bands, each about three-fourths of an inch thick, for a total of five dark bands. The basket is finished with two rows of light tulle and then a final row of alternating light and dark wefts that serves to bind the warps down on the non-workface. The warps at the end of the last weft row are knotted together. The weft splices ends are knotted with existing weft elements on the non-workface. There are no signs of use, though there is some lost stitches at the rim.

Baskets with cordage warps such as this were made by the Klamath, Modoc, Achumawi, and Atsugewi of Northeastern California and Oregon. Of these groups, the Klamath and Modoc were known to make cordage warp trays that were used for winnowing, sifting, and parching wokus, or water lily seeds (Shanks 2015:117). However, these trays are 20-30 inches in diameter, while this tray is under 16 inches. This may mean that this tray was made for sale rather than for use in wokus processing.

2009.01.33 ab

(Heather Martin 9/25/2016) This is a lidded coiled basket. The workface is the exterior, the work direction is to the right, and the slant of weft is down to the right. The stitches are not interlocking and there are many split stitches on the interior of the basket, though these appear to be unintentional. Both the foundation and the weft are an unidentified grass material, with designs done in grass that is died green and brown. The basket has a tight spiral start that is not indented. The walls of the basket are decorated by substituting weft colors, concealing the fag ends and moving ends in the foundation. The designs consists of brown crosses with green centers, spaced evenly around the basket in a checkerboard pattern. The rim of the basket is plain wrapped with a tapered coil ending that is secured with one backstitch. The lid of the basket is made in the same way. After the lid was finished, an additional thick coil was added to the underside of the lid to form a lip. The design on the lid consists of a zigzag band that was created by passing alternating green and brown pieces over the completed coil row. Other than a few broken stitches on the lip of the lid, that basket has no signs of use or other damage.

The documentation of this basket states that it was made around 1930 in Kotzebue, Alaska and was made by the Yupik. Since there is little published information on basketry from this region, I visited the C. Hart Merriam Basketry Collection at the Museum of Anthropology at UC Davis to find baskets similar to this one. I analyzed five baskets, four that came from Port Clarence, Alaska, and a fifth that had no documentation. The four baskets from Port Clarence had mechanical features that were similar to this basket. The only difference was that each of the Port Clarence basket had clipped fag ends. The basket that lacked documentation had mechanical features that were identical to this basket. The slight difference between the Kotzebue basket and the Port Clarence basket is likely due to the fact the two groups of baskets were made by

neighboring cultures. Kotzebue is within the territory of the Kotzebue Sound Eskimo (Burch, Jr. 1986:303-319), while Port Clarence is within the Bering Strait Eskimo territory (Ray 1986:286). The Kotzebue Sound Eskimo belong to the Inupiaq group, rather than the Yupik group.

2009.02.05 ab

(Heather Martin 6/13/16) This is a small coiled baleen basket with lid and ivory finial. The basket is started using an ivory disk with eyelets around the circumference used to attach the basketry elements. The first coil is created by sewing the weft through these eyelets while encompassing the first foundation piece. The basket is constructed using a single-rod foundation, with the rods being flat, or splint-like, around the starter and then rounded throughout the rest of the basket. The stitches are widely spaced and non-interlocking. The workface is the exterior and the work direction is to the left. The rim is plain wrapped and the coil ending is tapered. The weft at the coil ending is tucked beneath the previous two stitches to the interior. The splices are bound under. The lid is constructed in the same way, with the inverted finial as the starter piece. The lip of the lid is created by attaching two coils with splint foundations to the second-to-last coil of the lid. The ivory finial is in the shape of a wale fluke. The start disk is engraved with the name "James Omnik PHO," a weaver from Point Hope, Alaska, known for weaving baleen baskets with whale fluke finials.

According to Molly Lee, baleen baskets such as these were made only in Barrow, Point Hope, Wainwright, or Point Lay, Alaska beginning in 1915 (Lee 1983:38). The weavers of these baskets are Alaskan Inuit people. The name, James Omnik, on the bottom of the basket is may refer to James Omnik, Jr. or Sr., who were both from Point Hope. It may also be the case the "PHO" engraved on the bottom of the basket is an abbreviation of "Point Hope." Lee (1983) provided a list of museums and the number of baleen baskets in their collections. It should be noted that, aside from museum in Alaska and Seattle, only a select number of museums have small collections of baleen baskets. Even museums as noteworthy as the American Museum of Natural History, the Chicago Field Museum of Natural History, and the Peabody Museum have no baleen baskets in their collection, according to Lee (1983). Therefore, a basket of this type is a very significant piece in a relatively small university collection such as this one.

2011.02.01

(Heather Martin 5/23/2016) This is a miniature baby carrier made with a wood frame and sun shade. Following Farmer's classification, this cradle is designated as having a forked stick frame (Farmer 2013:18). The front of the frame is covered with horizontal shoots that are lashed to the frame with commercial string to create a platform for the baby to lay on. On top of this there is a strip of hide running down the lateral edges, attached to

the frame with smaller strips of hide. An additional strip of hide is attached to these lateral strips at alternating sides, zig-zagging down the carrier. This strip of hide is used to secure the baby in the carrier. There is a scoop-shaped sunshade attached at the top of the carrier that has seven rows of plain twining in white commercial string. The slant of weft is up to the right. The start is likely to be the broad end based on the way that warps are reduced to narrow the shade. It is difficult to determine the start and finish end because each side is covered with hide. At the widest point of the sunshade there is a zig-zag band made with red commercial string. This band is made by passing the string over one warps at a time and then wrapping it around the sticks that make up the sunshade supporting arch. The sides of the supporting are decorated with zig-zag patterns in white string. The ends of this arch are also covered in hide trimmed with pinking shears and then tied to the carrier's frame with additional strips of hide. The warps at the narrow end of the sun shade have been crushed.

This baby carrier is typical of those made by Maidu cultures, which corroborates the information in the object record. The Maidu commonly made forked-frame cradles with a platform made with horizontal shoots (Farmer 2013: 145; Shanks 2006:147).

(Don Hankins 10/27/2016) Miniature Maidu cradle with buckskin and cotton twine binding. Pattern on hood is a zigzag (guessing male). Frame looks like valley oak, with ladder back of peeled sandbar willow (*S. exigera*). Hood is also willow. Maidu.

(Sue Campbell 5/2/2017) This is a doll sized cradle basket and it is in the Mountain Maidu style. It's got the oak fork, one side is taller and it's pulled all the way over, spliced, and married on one side of the basket. It looks like willow going across on the lattice and it has string tying the sides on. They use string to go up on each side of the basket to hold the sticks in place going all the way up. It also has a very small gray willow hood, which has damage on the top. It has a zigzag design, which normally you would make a design either boy or girl, but since it's a doll sized, I think they were just practicing their zigzags. They did it with yarn in the color red. They also used yarn to go back and forth to hold the hood in place on the sticks. It has white deer hide for the front of the hood, and it also is tied to the sides of the hood to hold it in place. Also, on the very back of the hood where the damage is, again it is deer hide that is stitched to hold the backside of the hood. The deer hide is also used for the lacing to hold the baby, or the doll, in. It's all white deer hide and it's still pretty soft too. They made the cradle pretty straight on the bottom and as they went up, if they would have alternated the sides of the willow, like there is a small side and a big side it would have stayed uniformly straight up, but it got cricked, so as you get to the top you can see the crookedness. It's a very pretty basket. It's in a Mountain design, but I'm not sure who did it. It could come either from somebody up around Susanville, Greenville, or all the way to Oroville, even here in Machoopta, I'm not sure.

2011.02.04

(Heather Martin 12/12/16) This is a conical shaped twined woodpecker trap. The workface is the exterior, the work direction is to the right, and the slant of weft is up to the right. The materials consist entirely of willow (*salix sp.*) with the warps being whole, unpeeled shoots and the wefts being a combination of whole and split unpeeled shoots. The basket is started at the narrow end by doubling a weft piece in half and using both ends to plain twine the warps into a tube shape. As twining continues, warps are added to increase the diameter of the trap. Twining rows are increasingly spaced towards the wide end, with a maximum space of three inches between rows. At the rim, the warps are bent at right angles to the right and secured by twisting them amongst each other. The end of the last weft row is incorporated into the bundle created by the warps. On opposite sides of the rim, the warp bundle is lashed with weft material.

Traps like this were used by many different Native American cultures.

(Don Hankins 10/27/2016) Sandbar willow collected in winter. Twined bird trap. Central California.

2011.02.05

(Heather Martin 6/27/16) This is a sunshade made to be attached to a baby carrier. Both the warps and wefts are probably willow (*Salix sp.*). It is difficult to determine where the start of the shade is because both ends are concealed. The body of the shade is diagonally open twined, with each row about half of an inch apart, with the exception of the last three rows at the broad end, which are not spaced. The narrow end is covered with leather, while the broad end is concealed in a coil. The slant of weft is up to the right. At the widest point of the sunshade there is a band of diagonal lines made with blue yarn. This band is made by passing the yarn over one warp at a time and then wrapping it around the sticks that make up the sunshade supporting arch. The sides of the supporting arch are bound together in a coil of weft material. At the end of the support coils there is a piece of red yarn that wraps around one and extends across the width of the shade and is anchored to the other support coil.

The construction of this sun shade is very common to all scoop-shape shades with the exception of the supporting arch. The legs of arches are typically open twined, whereas the legs of this arch are bound and coiled. This style of arch legs is most similar to Hat Creek Atsugewi sun shades, except these shades have two supports on each side, rather than the one seen here (Farmer 2013:132). The documentation for this piece attributes it to the Maidu. It is possible that the supports were unfinished when purchased and the weaver wrapped them in a coil to secure them, or simply that the shade was made in an innovative style that does not conform to traditional styles.

(Don Hankins 10/27/2016) Cradle head made of willow. Scraped willow rods with split willow twining. Support rods are bounded and wrapped with willow. Buckhorn fur attachment to cradle. Blue yarn pattern, many rods have stem borer exit holes. Paiute.

(Sue Campbell 5/2/2017) This is a full-size hood for a cradle basket. It is made of willow, and I would say the willow is a winter willow because the sap that turns rusty red is still on a lot of, what we call the rib sticks. The ribs are the ones that hold the hood together and that they adhere all the little sticks to. It has a blue yarn to make the boy design, which is the lines going across. On the sides it has maple wrapping all the sticks together, all the way down to a deer hide which is a white- yellow, so it could be a smoked deer hide at one time. On both sides the rib sticks are wrapped with maple so that you do not see them at all from the side. The willow sticks that are going across look like winter willow because, again, you can still see a lot of the sap on the skins. They haven't been sanded, it looks like they've just been scraped and used because there's a lot of "hair" from the willow on it. It looks like they used maple to go across to twine the sticks that make the hood together. There was also at one time maple wrapped on at least on one side, and it doesn't have leather on the front like you normally would with a Maidu basket, nor does it have any hanging decoration. The very back of the hood where the sticks gather together which would attach to the top of the cradle basket has leather over it. It's one of these baskets that I would say is really influenced by the Paiute or Washoe style, but yet it has a lot of the Maidu materials on it. It looks like it might have been rushed a little bit because of the sticks not being completely cleaned. Maybe a baby was coming and they did their best they could do. It's a really pretty little hood.

2011.02.06

(Heather Martin 5/23/16) This is a miniature baby carrier made with a wood frame. Following Farmer's classification, this cradle is designated as having a forked stick frame (Farmer 2013:18). One end of the fork is looped over and lashed to the other end with hide. The front of the frame is covered with horizontal shoots that are lashed to the frame with commercial string to create a platform for the baby to lay on. There is a long string extending from each end.

This baby carrier is typical of those made by Maidu cultures, which corroborates the information in the object record. The Maidu commonly made forked frame cradles with a platform made with horizontal shoots (Farmer 2013: 145; Shanks 2006:147).

(Don Hankins 10/27/2016) Unfinished miniature baby cradle. *Ceanothus* frame with sandbar willow ladder back. Cotton string to bind willow sticks. Chamois used to lash frame loop. Maidu.

(Sue Campbell 5/2/2017) This is a small doll-size cradle basket. It is just the back of the basket- there is no hood on it. It has an oak fork and one side that is longer is brought over from maybe left to right, and then adhered to the right side of the stick. What they did is they used a hide, and they wet it, and then they wrapped it to keep the two sides together- the fork and the looping over- and they let it dry and so it really tightened it down. What they used to put on the willow- looks like a grey willow stick- is string. They tied the strings on both sides and wrapped going from, it looks like from right to the left, and looped over and over to get the sticks to stay on the sides of the basket- on both sides. So they have string, and they have the grey willow, and they have the oak fork, and it has the white deer hide that was wetted to adhere it.

2011.02.07

(Heather Martin 5/22/16) This is a baby carrier made with a wood frame and sun shade. Following Farmer's classification, this cradle is designated as having a forked stick frame (Farmer 2013:18). The front of the frame is covered with horizontal shoots that are lashed to the frame with commercial string to create a platform for the baby to lay on. On top of this there is a strip of hide running down the lateral edges that is attached to the frame with smaller strips of hide. An additional strip of hide is attached to these lateral strips at alternating sides, zig-zagging down the carrier. This strip of hide is used to secure the baby in the carrier. In the center of the platform, beginning at the top of the horizontal shoots, there is a strip of hide that is doubled on itself and twined over two warps down the center of the carrier about half way, where the ends are tied together on the backside. There is a scoop-shaped sunshade attached at the top of the carrier that has eight bands, each consisting of two rows of diagonal twining. The slant of weft is up to the right. The start is likely to be the broad end based on the way that warps are reduced to narrow the shade. It is difficult to determine the start and finish end because each side is covered with hide that is trimmed with pinking shears. There are many areas in the twining rows that appear to be coated with a clear glue. At the widest point of the sunshade there is a band of inward pointing chevrons that meet in the middle to form an "X." This band is made using green and blue yarn that passes over two warps at a time and then wraps around the sticks that make up the sunshade supporting arch. The sides of the supporting arch are decorated with single plain-twined rows and vertical "X" patterns. The ends of this arch are also covered in hide that is trimmed with pinking shears and then tied to the carrier's frame with additional strips of hide. The broadest end of the sun shade is decorated with dark and light blue glass seed beads.

This baby carrier is typical of those made by Maidu cultures, which corroborates the information in the object record. The Maidu commonly made forked frame cradles with a platform made with horizontal shoots (Farmer 2013: 145; Shanks 2006:147).

(Don Hankins 10/27/2016) Maidu cradle. Oak frame with scraped willow ladder back, lashed with cotton twine. Brain tanned ties. Hood is willow with split willow twining and yarn pattern. Blue beads accent trim.

(Sue Campbell 5/2/2017) This is a full sized baby cradle basket, and the interesting thing about this is that it's Mountain Maidu, but instead of using an oak fork they used a choke cherry fork. The choke cherry comes all the way up and attaches on the right side if you look at it from the back. Sometimes in my baskets I'll do an oak fork on the bottom and I'll do a choke cherry on the top, and splice it in on both sides. That can also be really close to the way Pit Rivers do it. This weaver decided to use all choke cherry because they probably found this beautiful fork and decided, "that's good, that's gotta be used." It is a winter basket, it has a lot of what we call the sugars from the willow, where the red showing on the gray willow sticks. They did a good job. At one point it started leaning to one side and the weaver actually corrected midway and got the sticks going straight again. It also has string that they used to attach the willow sticks going across the basket. The white string goes up both right and left sides all the way to the top in a pattern that they've done on both sides, where they've overlaid two and they'll pick up one. So, they've done a thing we call the "split stitch" going all the way up on both sides. It also uses a white deer hide to lace the baby in the basket and for the loops on the side to tie the baby down. I think this is a white hide that's been done in the fashion to make it look white. They do a lot of that over in Pyramid Lake. I don't think that this hood was made for this basket. This hood looks more of a Great Basin, or sometimes they call them Paiute basket hoods, because the leather on this hood is more of a tan and it looks a little older. It looks like maybe this hood came off another basket and was put on this one. There are scallops where they used pinking shears to split the leather that covers the ends of the eight ribs of the hood to do that really pretty design. Then they've sewn the light blue and the dark blue beads across the front part of the hood. That's not always a Maidu trait. That actually is more of a Paiute or Great Basin trait. The yarn that they used on the hood is blue and green and it is in the shapes of an arrow, so it is a boy hood. On the very bottom of the hood that attaches to the top of the cradle basket is a brown deer hide leather, which also has the scallops that are cut with the pinking shears, used to tie on to the hood. The hood is made with gray willow, and split willow is used as the twiner for the twining of the hood. They've gone five twines across before the design, and probably four twines past the design, going towards the top. My Aunt Lucy Lowry used to make these hoods and she was Paiute. They make them so rounded like a bowling ball, and this has got the same type of design, style, and shape. It's got this beautiful roundness to it, and it's a really nice hood. On the side, instead of zig-zagging the split willow down, it's more of a box-shape where they wrapped around the front of the rib and then twined across to the backside of the last rib stick and then wrapped around the rib stick and then twined straight across. The box shape goes all the way down on both sides of the hood rib that attaches down to the back of the cradle basket. On the very bottom is also a kind of a brownish colored deer hide. If you put a white on for lacing, but yet you have a different

color of deer hide on the hood, then I think this hood was actually another hood for another basket that was put on here, either for sale or they just didn't have time to make the hood. The bottom looks like it was hurried or rushed because some of the sticks are not quite straight, some have big bulges, there's big gaps in it, some sticks are really smaller, and then there's these big sticks that make big lumps. There might've been a baby coming in the winter that needed a basket real quick or they wanted to sell this real quick and they found a hood to put on it.

2011.02.09

(Heather Martin 12/5/16) This is a baby carrier made with a wood frame and sun shade. This cradle is most similar to Farmer's classification of a basketry platform with a one-ply platform that is covered made in the Western great basin (Farmer 2013:22). However, this basket differs from that classification in that the platform is made with horizontal sticks and the entire frame is covered with no portions of the frame exposed. The platform warps are lashed using strips of white cotton fabric to the looped frame sticks as well as to two additional supporting sticks that are evenly spaced and run the length of the carrier. The edges of the platform and frame are covered in a heavy beige canvas material that is sewn using a cotton string that passes between the platform sticks to incorporate the front and back sides. The opening of the leather cover is laced closed with an additional strip of leather. There is a scoop-shaped sunshade attached at the top of the carrier with sixteen visible rows of plain twining in split, peeled willow (*Salix sp.*). The slant of weft is up to the right. At the widest point of the sunshade there was a band of "Xs" and diamonds in green yarn with a border in purple yarn. The lines were made by passing the yarn over a varying number of warps at a time and then wrapping it around the sunshade supporting arch. It is difficult to determine the start and finish end because the wide end is covered with leather and the narrow end is covered in a coil of willow. At the wide end of the sun shade, the leather is decorated with a scalloped finish. The sides of the supporting arch are twined in a zigzag pattern, with the ends covered in leather. The shade is attached at the narrow end and the two ends of the arch with a strip of leather tied in a bow, however one end of the arch as become detached. The cover has a row of fringe on both sides of the front and an additional row on the back. The fringe is decorated with red plastic pony beads, one bead on every third piece of fringe.

The documentation for this cradle indicates that it was made by Elsie Hall and purchased in 1981. Elsie Hall was from the Duck Valley Reservation of Owyhee, Nevada. The documentation includes two photographs of Elsie Hall, one in which she poses with this cradle. The cradle is identified as Shoshone in origin, and there is a hand drawn note that indicates that Shoshone cradles have horizontal platforms while Paiute cradles have vertical platforms. This difference between Shoshone and Paiute cradles is corroborated by Martha Dick, a Shoshone weaver from the Duck Valley reservation during a radio series by the Folk Arts Program of the Nevada Arts Council in 1986. It is worth noting

that there are Northern, Western, and Eastern Shoshone groups and that this particular style of cradle was traditionally made by the Northern Shoshone. The Paiute referred to by the hand-drawn note and by Martha Dick are the Northern Paiute.

2011.02.10

(Heather Martin 5/23/2016) This is a miniature baby carrier made with a wood frame and sun shade. Following Farmer's classification, this cradle is designated as having a forked stick frame (Farmer 2013:18). The front of the frame is covered with horizontal shoots to create a platform for the baby to lay on. The frame is covered with hide, making it impossible to see how the horizontal sticks are attached to the frame. An additional strip of hide is attached to the covered frame at alternating sides, zig-zagging down the carrier. This strip of hide is used to secure the baby in the carrier. On the back of the platform there is a vertical shoot that runs down the center and is lashed to the horizontal shoots. There is a scoop-shaped sunshade attached at the top of the carrier with three rows of plain twining in raffia. The slant of weft is up to the right. The start is likely to be the broad end based on the way that warps are reduced to narrow the shade. It is difficult to determine the start and finish end because each side is covered with hide. At the widest point of the sunshade there is a band of red diagonal lines bordered in plain twined raffia. The red lines are made using string that passes over one warp at a time and then wraps around the sticks that make up the sunshade supporting arch. The sides of the supporting arch are decorated with vertical zig-zags in raffia. The ends of this arch are doubled over to form a loop, covered in raffia, and then tied to the carrier's frame with additional strips of hide. The broadest end of the sun shade is decorated with white and red glass seed beads. At the center there are three dangling elements of red, blue, and white beads, two of which have an abalone shell pendant at the end.

This baby carrier is typical of those made by Maidu cultures, which corroborates the information in the object record. The Maidu commonly made forked frame cradles with a platform made with horizontal shoots (Farmer 2013: 145; Shanks 2006:147).

(Sue Campbell 5/2/2017) This is a doll-size cradle basket in Maidu design style. It has an oak fork which goes all the way over and adheres to one side to make the curve on the top. It has winter willow, because some of the color is still on it. There is a willow stick up the back in the center that is twined on with yarn going all the way up through the center. It has deer hide, but this deer hide is not a smoked deer hide. This hide looks like it's a chemically processed hide because it is more of a tan color and it is soft on one side. It is on both sides, going from one side up to the other side. It also has a lacing with a deer hide going down the front to hold the baby in. The hood is made with very small willow sticks, but the interesting thing is that it has raffia coming down the sides. It looks like it is raffia doing the zig-zag pattern. At the bottom of the rib sticks they made a loop to tie onto the sticks, and it is also wrapped with raffia. On the top of the basket is deer

hide that goes across the front of the basket and adheres on both sides to the ribs. It has red and white beads going up on both sides, and in the center it has a beaded hanging design with two abalone pieces. The beading is a flower design with a blue center, and red and white beads, and then it goes into red and white looped beads, and then down to straight blue, white, and red beads, then down into the two abalone. On the backside the design is a boy design with the lines and it is done with red yarn. There is some white yarn or string tied on the sides where the design ends that enter the rib sticks. They're criss-crossed, and it looks like that's to hold it together. There is some damage on (if you face the basket) on the left-hand side, where the sticks have been broken. One broken all the way, and about two or three sticks that are cracked. Again on the very bottom of the hood that attaches to the top of the basket, there is deer hide that is sewn and then tied to the top of the basket. It's really cute. Nice little basket.

2011.02.11

(Heather Martin 6/27/2016) This is a sunshade made to be attached to a baby carrier. Both the warps and wefts are probably willow (*Salix sp.*). Weaving is begun at the narrow end with four rows of plain twining. The body of the shade is open twined over two warps, with each row about three quarters of an inch apart. At the narrow end there are three rows of plain twining with one quarter of an inch gap before the final row, which is lattice twined, with the lattice piece on the underside of the shade. The slant of weft is up to the right, with the exception of the lattice twined row, which is down-to-the-right. At the widest point of the sunshade there is a band of green diagonal lines. The lines are made using yarn that passes over one warp at a time and then wraps around the sticks that make up the sunshade supporting arch. The sides of the supporting arch are bound together in a coil of weft material. At the end of the support coils there is piece of green yarn that wraps around one and extends across the width of the shade and is anchored to the other support coil.

The construction of this sun shade is very common to all scoop-shape shades with the exception of the supporting arch. The legs of arches are typically open twined, whereas the legs of this arch are bound and coiled. This style is most similar to Hat Creek Atsugewi sun shades, except these shades have two supports on each side, rather than the one seen here (Farmer 2013:132). The documentation for this piece attributes it to the Maidu. It is possible that the supports were unfinished when purchased and the weaver wrapped them in a coil to secure them, or simply that the shade was made in an innovative style that does not conform to traditional styles.

(Don Hankins 10/27/2016) Cradle head made of willow. Scraped willow rods with sedge twining. Support rods are bounded and wrapped with willow. Green yarn pattern, many rods have stem borer exit holes. Paiute.

(Sue Campbell 5/2/2017) This is a doll hood- just the hood- for a baby basket. It has got willow, looks like a summer willow or spring willow, that has been very well cleaned but it's not completely finished on the ends. It has willow six rib sticks and they're kind of small because it's the doll size. Then they have the same summer willow going across to make the hood. They are nicely cleaned and they are broken to get the hood to come in, so every so often you see them snapped to make that beautiful narrowing shape. It has a green yarn across the top to make the lines for a boy design. The rib sticks on both side are wrapped with sedge, so that would tell me that this basket comes from the valley, either Chico, Oroville, or somewhere down here in the valley that uses sedge. It also has sedge weaving together the sticks going across the ribs to make the hood. It is all done with sedge going across. There is no leather on the front or the back of the hood. On the very bottom of the hood where it normally attaches to the basket there is a stick that goes across to form a foundation to kind of widen out the bottom and to adhere the sticks together. And again, it is all done with sedge root. The interesting thing about the sedge, and Pomo people would know this, is when you separate your sedge you would do it by color because you get some sedge more of a whiter color, some more of a redder color, some more of a grey color. This weaver actually just kind of mixed up her sedges because you got pretty white sedge, and I had to really look at it to make sure it wasn't something else, and then you got kind of this reddish-brown sedge on the front going down, and what I discovered is that this is all sedge that's going across to twine the basket together but it's been different colors of sedges. That happens because when you pull the root out sometimes you get, in certain types of soils, they can be different colors. I'm not an expert on that, the Pomo basket maker would probably be an expert on that, but I have worked with sedge. My conclusion is that this is a valley Maidu hood because of the sedges that have been used on this basket.

2011.02.13

(Heather Martin 6/5/2015) This is a baby carrier with a seat and handle. Following Farmer's classification, this cradle is designated as a sit-down cradle in the Slipper style, where the toe of the slipper shape creates a seat for the baby (Farmer 2013:20). The warps are made of willow (*Salix sp.*) and the wefts are made with willow or hazel (*Corylus sp.*). The seat of the carrier is formed by twining a series of horizontal warps. This portion is plain twined, except for the second to last rows on each end, which are three-strand twined, with an up-to-the-right slant of weft. The back of the carrier is connected by wrapping the vertical warps of the back to the lower-most horizontal warp of the seat. These vertical warps then double over themselves and are secured by the first row of twining on the back. These first rows of twining on the back also incorporate the lower portion of horizontal warps, serving to bend the horizontal warps into the vertical position to form the walls of the carrier. As twining continues, all of the warps that form the seat are bent upward to form the walls. The back and walls of the carrier are done in open plain twining in groups of two rows at the toe, groups of three rows over the body

of the carrier, and a group of four rows at the top of the carrier. The final rows of twining are concealed in a coil at the rim that is reinforced with additional willow shoots. The front edge of the basket is finished and reinforced in the same manner, with a coil that incorporates the edge wefts. This front coil extends from the top of the basket and is looped over to join the opposite edge, creating a handle. At the top front edge there is a piece of white cotton and nylon string that is strung from edge to edge. The interior of the seat has a netting to form the sitting surface.

This Slipper style baby carrier is typical of those made by Northwestern California cultures, which includes Hupa, Yurok, Karuk, Tolowa, Whilkut, as well as Shasta. (Farmer 2013: 20). This corroborates the information in the object record, which states that basket is Yurok.

2011.02.14

(Heather Martin 6/30/2016) This is a miniature baby carrier with a sun shade that holds a doll. Following Farmer's classification, this cradle is designated as a basketry-platform cradle with a two-ply platform (Farmer 2013:23). In other words, the platform is made by sandwiching two separate plat pieces together. The back ply, which has horizontal warps cut into a trapezoidal shape, was made first by creating two rows of diagonal twining in red bud (*Cercis occidentalis*) along each vertical margin of the platform. The rows were twined to create a checkered pattern by twisting the weft material so that the red bud bark only showed on every other stitch. The vertical warps of the front ply were diagonally twined together for two and a quarter inches using the same checkered pattern. This vertical ply was then placed over the horizontal ply and connected with a piece of weft material that passes under two warps of the back ply and over one warp of the front ply, creating a repeating diamond shape pattern that can be seen on both sides of the platform. During this process, warps were added to the margin of the front ply to create a trapezoidal shape to match the back ply. It should be noted that the front ply is slightly smaller than the back ply, with the back ply extending three-quarters of an inch beyond the front ply on the sides. To finish the cradle the margins and top of the platform are concealed in a coil of red bud weft that includes the outermost row of diagonal twining on the back ply. The sun shade is shaped like an arch and created using four spaced bands of diagonal twining, two rows for each band. In the middle of the shade there is a band of diamonds created with a redbud weft that also incorporates the shade support in the same way that the two plies of the platform are attached. The sides of the support are diagonally twined in the checkered pattern. Attached to the sun shade are three groups of two beaded strands, each with white, red, blue, and black beads and a whole Olivella shell bead at the end. The doll in the cradle is probably hand made with cloth using a sewing machine. It has a yellow and plaid dress and is bound to the cradle with complex braids of colored yarn and leather strips.

Two-ply cradles such as this are made by the Foothill Yokuts, Western Mono, Northern Paiute, and Owens Lake Paiute (Farmer 2013:71, 76, 160, 182). This cradle most closely resembles those of the Western Mono, which use designs on peeled and unpeeled redbud that match on the shade and platform, as well as an arch shaped shade, rather than a scoop (Farmer 2013:76-80). The pattern on the hood is often an indicator of the gender of the baby that the cradle was made for, with diamonds traditionally representing a girl (Farmer 2013:77). The cultural attribution of Western Mono for this cradle corroborates the documentation provided by the donor.

2011.02.15

(Heather Martin 5/23/2016) This is a miniature baby carrier made with a wood frame and sun shade that holds a small doll. Following Farmer's classification, this cradle is designated as having a forked stick frame (Farmer 2013:18). The front of the frame is covered with horizontal shoots to create a platform for the baby to lay on. The frame is covered with hide, making it impossible to see how the horizontal sticks are attached to the frame. An additional strip of hide, used to secure the baby, is attached to these lateral strips and zig-zags down the carrier. On the back of the platform there is a vertical shoot that runs down the center and is lashed to the horizontal shoots. There is a scoop-shaped sunshade attached at the top of the carrier with four rows of plain twining in raffia. The slant of weft is up to the right. The start is likely to be the broad end due to the way that warps are reduced to narrow the shade. It is difficult to determine the start and finish end because each side is covered with hide. There are many areas in the twining rows that appear to be coated with a clear glue. At the widest point of the sunshade there is a band of blue diagonal lines bordered in plain twined white string. The blue lines are made using string that passes over a varying number of warps at a time and then wraps around the sticks that make up the sunshade supporting arch. The sides of the supporting arch are decorated with vertical zig-zags in raffia. The ends of this arch are also covered in hide and then tied to the carrier's frame with additional strips of hide. The broadest end of the sun shade is decorated with white and blue glass seed beads. At the center there are three dangling elements of blue and white beads, each with a cowry shell at the end. The doll in the carrier has "REGAL / MADE IN CANADA" stamped on the back of the head.

This baby carrier is typical of those made by Maidu cultures, which corroborates the information in the object record. The Maidu commonly made forked frame cradles with a platform made with horizontal shoots (Farmer 2013: 145; Shanks 2006:147).

(Don Hankins 10/27/2016) Miniature baby cradle. Frame looks like *Ceanothus* with sandbar willow ladder back. Hood is sandbar willow with cotton twine and raffia. Blue cotton twine on hood is in slash pattern (female?). Buckskin chamois edging on cradle with cotton twine lashing. Hood has blue and white beads with cowrie shell pendants. Doll in cradle is wrapped in faux fur. Maidu.

(Sue Campbell 5/2/2017) This is a very sweet little basket, it is so cute. It is a cradle basket. It has a doll wrapped in imitation rabbit skin. This has the oak fork on the bottom, and because the sides are wrapped with leather, I cannot tell if the top is folded over or if two separate parts are married together. A lot of times what they will do is take a chokecherry and make it the top and adhere it into the fork to make that curve on top. No, it's oak, so I think that they've brought it all the way over. It has what looks like gray willow going across to make the lattice going up, and they go pretty straight and they start getting a little bit off right here, but then they correct it when they get to the top, so the top is actually straight. So, the weaver was really good at making sure her sticks were straight as possible. This cradle has a deer hide. It's too old to smell if it has been smoked or whether this is a chemically-done hide, but it's a white deer hide. It has the deer hide all along the sides of the fork, for the lacing of the baby, and then on the hood. The hood has very fine willow sticks, and has the boy design, which is just what they call "chevron" going across. And, with this one they actually used willow or redbud, it looks like very fine stripped willow going across to keep the sticks on the hood together. This also has the deer hide going across the front of the hood and then it goes down and attaches to the sides of the hood, and it has blue and white beads. Not a lot of people remember but Maidus always had a hanging design on the front of the hood. This one has seashells, which would give you the status. A lot of the time they were looped, and that would tell you that was a Mountain Maidu basket, because I believe they were the only ones who actually did this looping. The design with the shells that come from the coast would show your wealth. So your baby could actually show other people wealth, so it's an outward way of saying, "See how wealthy I am? I have shells on my basket." The bottom also has the leather on the very backside of the hood. It's a very cute, with a little dolly in it. It has a lot of hanging leather on the backside, and that's very prominent. Sometimes they would use these to actually tie together to hang them on trees. If this was a true basket, these baskets would be pushed into the ground by the fork, and they would be tied up towards the trees so that the baby stands upward. The reason they would do that is so, laying down in case they bob it or something the baby could accidentally bend forward, and also the baby has eyesight where mommy is and what they're doing, and they're pretty content in there. They also learned to have visual learning skills. This is an early start of how we learn our skills by seeing where things are and what we do. Also, we lived with a lot of animals, mountain lions and stuff, so sometimes these babies would hang high in trees, and so the women could do the acorn gathering and maybe working on the acorns and other things like that. So, there's always a purpose.

2011.02.16

(Heather Martin 6/27/16) This is a trapezoidal-shaped baby carrier with a sun shade. Following Farmer's classification, this cradle is designated as a basketry platform cradle in the one-ply platform style with vertical warps (Farmer 2013:21). Both the warp and

weft material are probably willow (*Salix sp.*). The cradle is likely started at the narrow end where the warp ends are covered in leather. The platform is twined to the right with an up-to-the-right slant of weft. At the end of the row, both wefts are wrapped around the edge warp to create an "X" pattern as it is carried up one and a half inches to the next row. The platform is then flipped over to twine the next row, continuing to the right with an up-to-the-right slant of weft. Weaving continues in this manner to the top edge of the basket, where the warp material is used to conceal the warp ends and a reinforcing stick. There are two horizontal reinforcing rods lashed at even intervals to the back of the platform. On the front bottom two-thirds of the platform there are two strips of leather running down the lateral edges, tied at even intervals. There is a bundle of leather attached to the left side, presumably used to secure the baby by tying it to the lateral strips. A leather carrying strap is attached to the lateral strips at the front and then wrapped around the back of the carrier. The scoop-shaped sunshade is attached at the top of the carrier with pink yarn. The shade is diagonally twined, with twining rows grouped in pairs that are spaced about an inch apart. The slant of weft is up to the right. It is difficult to determine the start because the narrow end is concealed in a coil and the edges and broad end are covered with purple cotton cloth. At the widest point of the sunshade there is a zig-zag band made with pink, green, and purple yarn. This band is made by passing the yarn over two warps at a time and then wrapping it around the sticks that make up the sunshade supporting arch. The sides of the supporting are decorated with zig-zag patterns in the warp material and then attached to the platform with strips of purple cotton material.

One-ply platform cradles such as these are common among the Native people of the southern Sierras and western great basin. However, cradles with two horizontal reinforcing rods are known only from Washoe and Mono Lake Paiute weavers (Farmer 2013:157, 177). The only difference in this cradle type between the two groups is in the overall shape of the cradle, with Washoe cradles tending to be more narrow, straight-sided, and tapering only in the bottom half (Farmer 2013:157). This cradle fits that description, implying that it is more likely to be a Washoe cradle. This contradicts the documentation provided by the basket's collector that states that the cradle is Paiute. It may be that this was a misidentification or that the carrier is truly of Paiute origin and only coincidentally matches the Washoe shape.

2011.02.18

(Heather Martin 12/5/2016) This is a baby carrier made with a wood frame. This cradle is most similar to Farmer's classification of a basketry platform with a one-ply platform that is covered (Farmer 2013:22). However, this basket differs from that classification in that the platform is made with horizontal sticks and the entire frame is covered with no portions of the frame exposed. This covering makes it impossible to see how the platform warps are lashed to the looped frame stick. There is an additional supporting stick that

runs the length of the carrier to which the platform sticks are attached with a patterned green cotton fabric in a kind of braid that incorporates the supporting stick and the platform sticks. The canvas cover is sewn to the frame using strips of leather. The opening of the cover is also laced closed with strips of leather and there is a patch of leather covering the bottom of the cradle for reinforcement. On the back of the cradle there is a row of fringe created by unraveling the weave of the canvas and twisting the strings into loose strips of cordage.

The documentation identifies this as a "Shoshone Bannock" cradle. The construction is almost identical to another cradle in the same collection, 2011.02.09, identified as Northern Shoshone and made on the Duck Valley reservation. The documentation for 2011.02.09 contains a hand-drawn note that indicates that Shoshone cradles have horizontal platforms while Paiute cradles have vertical platforms. This difference between Shoshone and Paiute cradles is corroborated by Martha Dick, a Shoshone weaver from the Duck Valley reservation during a radio series by the Folk Arts Program of the Nevada Arts Council in 1986. . It is worth noting that there are Northern, Western, and Eastern Shoshone groups and that this particular style of cradle was traditionally made by the Northern Shoshone. The Paiute referred to by the hand-drawn note and by Martha Dick are the Northern Paiute. The Bannock are closely related to the Northern Paiute and spoke the same language, however they shared a territory and overall cultural practices with the Northern Shoshone (Murphy and Murphy 1986:284). This cradle could have been made by either a Northern Shoshone or a Bannock weaver.

2011.02.21

(Heather Martin 6/27/16) This is a trapezoidal-shaped baby carrier. Following Farmer's classification, this cradle is designated as a basketry platform cradle in the one-ply platform style with vertical warps (Farmer 2013:21). Both the warp and weft material are probably willow (*Salix sp.*). The cradle is likely started at the narrow end where the warp ends are covered in leather. Weaving begins at this end, about one inch above the leather covering, by doubling the weft strand over the first warp and weaving to the right with an up-to-the-right slant of weft. At the end of the row, both wefts are wrapped around the edge warp to create an "X" pattern as it is carried up one and a half inches to the next row. The platform is then flipped over to twine the next row, continuing to the right with an up-to-the-right slant of weft. Weaving continues in this manner to the top edge of the basket, where the warp material is used to conceal the warp ends and a reinforcing stick. There are two horizontal reinforcing rods lashed at even intervals to the back of the platform. A leather carrying strap is tied to the upper-most horizontal reinforcing rod. One the front bottom two-thirds of the platform there are two strips of leather running down the lateral edges, tied at even intervals. A third strip of leather is woven between the lateral strips in a zig-zag pattern.

One-ply platform cradles such as these are common among the Native people of the southern Sierras and western great basin. However, cradles with two horizontal reinforcing rods are known only from Washoe and Mono Lake Paiute weavers (Farmer 2013:157, 177). The only difference in this cradle type between the two groups is in the overall shape of the cradle, with Washoe cradles tending to more straight-sided and tapering only in the bottom half (Farmer 2013:157). This cradle does not fit that description, implying that it is more likely to be a Paiute cradle. This corroborates the documentation provided by the basket's collector.

2011.02.22

(Heather Martin 6/5/16) This is a miniature baby carrier with a seat and handle. Following Farmer's classification, this cradle is designated as a sit-down cradle in the Slipper style, where the toe of the slipper shape creates a seat for the baby (Farmer 2013:20). The warps are made of willow (*Salix sp.*) and the wefts are made with willow or hazel (*Corylus sp.*). The seat of the carrier is formed by twining a series of horizontal warps. This portion is plain twined with a slant of weft that alternates up-to-the-left and down-to-the-right. The back of the carrier is connected by wrapping the vertical warps of the back to the lower-most horizontal warp of the seat. These vertical warps then double over themselves and are secured by the first row of twining on the back. These first rows of twining on the back also incorporate the lower portion of horizontal warps, serving to bend the horizontal warps into the vertical position to form the walls of the carrier. As twining continues, all of the warps that form the seat are bent upward to form the walls. The back and walls of the carrier are done in open plain twining in groups of two rows, also with an alternating slant of weft. The warps are trimmed after the final weft row. The front edge of the basket is reinforced with a coil that incorporates the edge wefts. This front coil extends from the top of the basket and is looped over to join the opposite edge, creating a handle. At the top front edge there is a strand of black and yellow glass beads strung from edge to edge. This strand extends to the outside of the carrier one side to form a loop. The sitting surface is formed by weaving a piece of weft material between the front and back edges.

This Slipper style baby carrier is typical of those made by Northwestern California cultures, which includes Hupa, Yurok, Karuk, Tolowa, Whilkut, as well as Shasta. (Farmer 2013: 20). This corroborates the information in the object record, which states that basket is Karuk.

2011.02.24

(Heather Martin 12/12/2016) This is a coiled basket start. It has a pinhole start with a single-rod foundation of a whole peeled shoot and weft of a split, partially peeled shoot. Both materials are probably willow (*Salix sp.*). The fag ends are clipped and the moving

ends are bound under. The work direction is to the left, the stiches are interlocking, and the slant of weft is mixed. The end of the last weft row is left unfinished, with the last stich remaining loose with the weft piece extending for three and a half inches. The warp extends from the coil for seven inches.

Coiled baskets with single-rod foundations such as this are known to be made by the Pomo, Wappo, Patwin, and Sierra Miwok. The Pomo, Patwin, and Wappo traditionally use sedge as the weft material, however the Patwin are known to use split willow and redbud in more recent times. The Sierra Miwok used sumac in their single-rod baskets. Therefore, this basket could be Sierra Miwok if the material is actually sumac rather than willow, or the basket may be Patwin if it was made in more recent times, which is highly likely.

2011.02.25

(Heather Martin 6/13/2016) This is a baby carrier with a tump line. Following Farmer's classification, this cradle is designated as s sit-down cradle in the Nail Keg style (Farmer 2013:19). The basket is constructed using willow (*Salix sp.*) warp sticks that are secured using a decorative braid of cotton string. The warps are bent in an upward pointing arch to form the sides and bottom of the carrier. The back is filled in using a second arch in that resembles an inverted rainbow. The negative space created by the second arch is filled using straight warp sticks. The upper four rows of braiding extend from side-to-side, securing the straight warps in the center. The five warp sticks closest to the front of the carrier extend beyond the top for about two inches, each with their own row of braiding. There is a stick, more bulky than the weft sticks, which is bent into a circle and lashed to the uppermost braided row. A portion of this circle extends beyond the front of the carrier and may serve as protection for the baby as well as a handle. A series of cotton cords, created using the crochet method of chaining, is attached to the interior to secure the baby to the carrier. A length of machine-sewn cotton canvas is attached to the carrier at each end by weaving it between the wefts to the interior and then once more to the exterior. This is likely a tump line, a strap that extends across the forehead or shoulders of the person carrying the baby.

This baby carrier is typical of the style made only by the Pomo (Farner 2013:19). This is verified by the documentation of the carrier that names the weaver as Salome Alcantra, a known Pomo weaver featured in the book *Remember Your Relations: The Elsie Allen Baskets, Family, and Friends* by Suzanne Abel-Vidor, Dot Brovarney, and Susan Billy. The documentation for this cradle includes a photograph of Salome Alcantra with the baby carrier, presumably at the time it was purchased from her by Dorothy Hill.

2011.02.28

(Heather Martin 5/23/2016) This is a miniature baby carrier made with a wood frame and sun shade. Following Farmer's classification, this cradle is designated as having a forked stick frame (Farmer 2013:18). The front of the frame is covered with horizontal shoots that are lashed to the frame with commercial string to create a platform for the baby to lay on. There is a scoop-shaped sunshade attached at the top of the carrier that has at least three rows of plain twining in white commercial string. The slant of weft is down to the right. It is difficult to determine the start and finish end because each side is covered with hide. At the widest point of the sunshade there is a bordered zig-zag band made with raffia. This band is made by passing the raffia over the warps and then wrapping it around the sticks that make up the sunshade supporting arch. The sides of the supporting arch are decorated with zig-zag patterns in raffia.

This baby carrier is typical of those made by Maidu cultures, which corroborates the information in the object record. The Maidu commonly made forked frame cradles with a platform made with horizontal shoots (Farmer 2013: 145; Shanks 2006:147).

(Don Hankins 10/27/2016) Ultra Miniature Maidu baby cradle. Frame is willow with willow ladder back. Cotton twine for lashing. Hood is willow with chamois trim and raffia twine.

(Sue Campbell 5/2/2017) This is a palm-size cradle basket, it is a Maidu one, and it was made with an oak fork but the fork or the bend of the fork was cut off so it doesn't really have a stick too big on the bottom. It is curved over to adhere to one side, and it has willow sticks that are tied with strings, but on this one it was tied with two sticks together, so instead of going every other stick they went every two. At the bottom they did one, and then they would do two sticks, two sticks, two sticks as they go up. It has a very small, very tiny hood, probably as big as my thumb, and that hood has split willow on the top to attach it to the ribs. It has three rib sticks to hold the hood up. It has a white deer hide over the front of the hood that ties to the sides of the ribs. Also on the very back, the very bottom of the hood is tied to the top of the curved spot on the basket. The hood is also a grey willow. It is really tiny and looks really old. The sides were done with string, and it is really interesting how they tied two together: instead of doing every one, they did one and then they did two, two, two... Very cute.

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APPENDIX C

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www.csuchico.edu/graduatestudies



March 30, 2016

Heather Martin
2182 Bella Casa Street
Davis, CA 95616



Dear Heather Martin,

As the Chair of the Campus Institutional Review Board, I have determined that your research proposal entitled "The Valene L. Smith Museum of Anthropology Collection of North American Basketry: Analysis, Documentation, and Publication" is exempt from full committee review. This clearance allows you to proceed with your study.

I do ask that you notify our office should there be any further modifications to, or complications arising from or within, the study. In addition, should this project continue longer than the authorized date, you will need to apply for an extension from our office. When your data collection is complete, you will need to turn in the attached Post Data Collection Report for final approval. Students should be aware that failure to comply with any HSRC requirements will delay graduation. If you should have any questions regarding this clearance, please do not hesitate to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "John Mahoney".

John Mahoney, Ph.D., Chair
Human Subjects in Research Committee

Attachment: Post Data Collection Report

cc: Georgia Fox (400)

**HUMAN SUBJECTS IN REVIEW COMMITTEE
Post Data Collection Questionnaire**

Under Federal law relating to the protection of Human Subjects, this report is to be completed by each Principal Investigator at the end of data collection.

Please return to: Rosemary White, HSRC Assistant
Office of Graduate Studies
Student Services Center (SSC), Room 460
CSU, Chico
Chico, CA 95929-0875

Or Fax to: Rosemary White, 530-898-3342

Name: Heather Martin Chico State ID#006521438

Phone(s) 916-718-1323 Email: hmartin13@mail.csuchico.edu

Faculty Advisor name (if student): Georgia Fox Phone _____

College/Department: Anthropology

Title of Project: The Valene L. Smith Museum of Anthropology Collection of North American Basketry: Analysis, Documentation, and Publication

Date application was approved (mo/yr.): 03/2016 Date collection complete (mo/yr.): 06/2017

How many subjects were recruited? 5 How many subjects actually completed the project? 3

***HARM--**Did subjects have severe reactions or extreme emotional response? no

If yes, please attach a detailed explanation: _____

Your signature:  Date: 9/6/2017

***Final clearance will not be granted without a complete answer to this question.**

Approved By:  Date: 9/7/17
John Mahoney, Chair

VERY IMPORTANT: If you will or have used this research in your project or thesis you are required to provide a copy of this form (with John Mahoney's signature in place) to your graduate committee.

Do you want a photo copy of this form emailed to you? yes

If yes, provide email address: hmartin13@mail.csuchico.edu