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The Significance of Human Remains in Museum Collections: Implications for Collections Management

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The Significance of Human Remains in Museum Collections: Implications for
Collections Management

By

Kacey M. Page

An Abstract of a Thesis
In
History with a Museum Studies Concentration

Submitted in Partial Fulfillment
Of the Requirements
For the Degree of

Master of Arts

December 2011

State University of New York
College at Buffalo
Department of History

ABSTRACT OF THESIS

The Significance of Human Remains in Museum Collections: Implications for Collections Management

The significance of a museum collection has changed over the years, in how it is managed and cared for, and how it is viewed by the public. Best practice mandates that professional policies and guidelines be developed to standardize the acquisition, care, and use of all objects or artifacts that are kept within a museum environment. Although human remains are not an exception to these policies, they hold a unique position within museums; standardized guidelines for their care and management are still developing. The following thesis will look into the policies and issues of housing human remains within museums, both on and off public display. Through research and case studies, it will explore the past, present and future of the care and management of human remains in museum collections.

Kacey Marie Page
December 14, 2011

State University of New York
College at Buffalo
Department of History

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Table of Contents

| | |
|---|----|
| 1. Introduction..... | 1 |
| 2. Literature Review..... | 5 |
| 3. The Presence of Human Remains in Museums..... | 10 |
| • Classification of Human Remains | |
| • Acquisition of Human Remains | |
| • Human Remains as Objects | |
| 4. Exhibition of Human Remains..... | 24 |
| • Context | |
| • Considerations | |
| 5. Care and Management of Human Remains..... | 38 |
| • Storage | |
| • Handling and Accessibility | |
| • Pest Management | |
| • Collection Management Policies | |
| 6. Ethics for Collecting and Managing Human Remains..... | 48 |
| • American Association of Museums | |
| • International Council of Museums | |
| • The United Nations Educational, Scientific, and Cultural Organization | |
| 7. Case Studies: Human Remains and Museums..... | 54 |
| • Mutter Museum | |
| • Body Worlds : An Anatomical Exhibition of Real Human Bodies | |
| • Buffalo Museum of Science | |
| 8. Human Remains in the Museum: Past, Present, and Future..... | 77 |
| • Collecting Human Remains, Past and Present | |
| • Displaying Human Remains, Past and Present | |
| • The Future of Human Remains in Museums | |
| 9. Conclusion..... | 87 |
| References..... | 89 |
| Appendix A..... | 94 |

Chapter 1. Introduction

There are many different definitions of museums. According to the International Council of Museums (ICOM) a museum is “any permanent institution which conserves and displays for purposes of study, education, and enjoyment collections of objects of cultural or scientific significance” (International Council of Museums, 1956). The American Association of Museums (AAM) defines a museum for the purpose of the accreditation program as “an organized and permanent nonprofit institution, essentially educational or aesthetic in purpose, with professional staff, which owns and utilizes tangible objects, cares for them, and exhibits them to the public on some regular schedule” (aam-us.org). While there are many museum definitions from a variety of sources, most emphasize a focus on collections care, management, and exhibition. According to G. Ellis Burcaw, the collections of a museum include “the collected objects of a museum, acquired and preserved because of their potential value as examples, as reference material, or as objects of aesthetic or educational importance” (Burcaw, 14). For some museums, this collection includes human remains.

The practice of collecting materials and objects existed long before the development of museums. It is part of human nature to collect the things of our world. This may be based on the desire for physical security, social distinction, the pursuit of knowledge, and a wish to achieve a kind of immortality (Alexander, 9). Even the collection of natural curiosities, including forms of human remains, was popular before the idea of public institutions. In the 16th and 17th centuries, the collecting of curiosities could be found worldwide. The purpose of collecting human remains was not always for display. Egyptian mummies were prized for their medicinal properties and mummy

powder was often sold by apothecaries for its healing powers. Human skulls and skin from unburied corpses were used for medical cures (Alexander, 41). Collecting ethnographic and cultural materials started privately before these collections began to be viewed more publicly in museums in the late 17th century.

A fascination with death and the dead can be seen in western culture throughout time. Historically, human remains were viewed as curiosities representing strange and foreign practices and traditions from other cultures. People wanted to see the bizarre, curious, and interesting “things” of this world and the people that inhabited it. Early museums gave people the opportunity to view such materials. Our interest in death continues in modern society. The images we see in the media and popular culture on a daily basis feed into this fascination.

This interest in death and the dead is also apparent in blockbuster exhibits in museums around the world. Traveling exhibitions like “Mummies of the World” aim at showcasing the cultural practices associated with death from different societies around the world. The popularity of such exhibits gives human remains a unique position within museum settings. They have the ability to excite, educate, and evoke wonder and curiosity. They play an important role in understanding anatomy, culture, and human history. That being said, human remains can also cause controversy and offend the viewing public due to personal, symbolic, cultural, religious, and/or spiritual beliefs.

Museums provide an exceptional atmosphere for researchers and visitors to interact with human remains, be it through scientific and medical studies, cultural studies, or studies of human evolution. The exhibition of human remains can also cause people to face their own mortality.

There are many reasons why a museum may hold human remains, both for public display and scientific research. Once a museum acquires human remains into its collection, the museum takes on the responsibility for the care and management of these materials in perpetuity.

The presence of human remains at a museum raises many issues, concerns, and responsibilities that a museum should not take lightly. As the museum profession has matured, the appropriate means of acquisition, collection, care, and display of human remains (and other collection elements) has developed over time. The unique and sometimes sacred nature of human remains places them apart from other objects in a museum collection. Proper care and management of all museum collections must be developed, executed, and followed to ensure their wellbeing and longevity. Ethical standards must be followed to ensure their proper legal and ethical treatment.

Human remains fall into different categories in a museum collection. They can be classified as archaeological, ethnographic, scientific and medical, religious and aesthetic. The categories the remains fall under depends not only on the nature of the material but also the nature of the museum they are housed. Although each category will be addressed throughout the paper, the focus will be on the ethnographic material. Human remains with an ethnographic affiliation have a long and complicated history in museums. Current standards and policies for collecting and managing human remains were created due to the haphazard methods of the past. As the museum profession developed, so too did the need to standardize the care and control of museum collections, human remains are no exception.

This thesis looks at the past concerns and policies to understand the current state of museum standards, and addresses the issue of the care and management of human remains in a museum setting. Drawing on historical collecting traditions and current sensitivities to the curation of human remains, the goal of this research is to ascertain if a consensus exists for this artifact class. These standards will then be reviewed in light of public opinion and current practice to reveal possible future ramifications. The need for proper standards and procedures will be discussed and possible new standards will be proposed.

Chapter 2. Literature Review

Much has been written with regard to the cultural and ethical dilemmas surrounding the presence and display of human remains in a museum, however, the care and management of these sensitive artifacts has received far less attention, especially in museums in the U.S. Before we review the lack of standardized policies for the care and management of human remains, we must first understand the purpose of a museum in order to address the importance of this subject.

Theodore Low (1915-1987) who was a museum educator at the Metropolitan Museum of Art, wrote an article for the American Association of Museums titled “What is a Museum?” In the article, he says that the definition of a museum can not be found in words but in the nature of the institutions themselves. Throughout the article, Low places emphasis on three functions of museums; acquiring and preserving objects, the study of the objects, and the transmission of knowledge to people. Although these functions are important, museums place more emphasis on some functions over others, and the importance placed on one role over another has changed over the years. When museums first emerged, more emphasis was placed on collecting and acquiring objects for display. As institutions developed, the educational function of museums grew as well. The need to have a balance between the different functions and departments of a museum continues today.

Displaying objects for public viewing is another major function of museums. The public display of cultural and ethnographic objects has been addressed by Susan Vogel, a museum practitioner who spent much of her professional career creating exhibitions. In her article “Always True to the Object, in Our Fashion,” Vogel describes the difficulty of

presenting non-western cultures in museums in the U.S. “We are too far from the voices of the original owners and makers, too locked into the perspectives of our own culture to presume to be faithful to the object in any exalted way” (Vogel, 193).

In an article by Barbara Kirshenblatt-Gimblett entitled “Objects of Ethnography” the author defines the meaning of ethnographic artifacts as being detached and carried away from their place of origin by ethnographers. Gimblett mentions the display of human remains and how the dead have long been excavated and shown as ethnographic specimens such as tattooed Maori heads, Aztec Skulls, and bones removed from Native American Graves (398). Here, the dead are not separated from the non-living but rather grouped together as one category.

When researching the presence of human remains in museum settings today, much focus is placed on aspects such as legal regulations and ethical concerns. *A Legal Primer on Managing Museum Collections* by Marie C. Malaro discusses state, federal, and cultural laws concerning property and ownership of ethnographic collections, including human remains. *Human Remains: Guide for Museums and Academic Institutions* edited by Vicki Cassman, Nancy Odegaard and Joseph Powell covers many topics from the acquisition of human remains to their treatment in museums. Although not a standard resource in the field, such as Marie C. Malaro’s publication, the authors use personal experience and case studies that focus on human remains in museums. An article by Sherry Hutt and Jennifer Riddle titled “The Law of Human Remains and Burials” focuses on property law and collecting culturally affiliated remains. Another essay in this publication by Vicki Cassman and Nancy Odegaard touches on the topic of

the care and management of human remains in museums, mostly focusing on the storage environment and transport.

The ethics of collecting and housing human remains in museums is addressed by professional museum organizations such as the American Association of Museums (AAM) and the International Council of Museums (ICOM). These organizations create standards that are widely followed and adhered to by museums across the U.S. and world wide. Both organizations have Codes of Ethics that discuss the presence and use of human remains in museums. Their policies and standards continue to develop with changing trends and norms in the museum world. Ethical issues are also addressed in the publication *Museum Ethics*, which features an essay by Paul N. Perrot that focuses on the ethics of collecting culturally affiliated objects, including human remains.

Although legal and ethical aspects of collecting, housing, and displaying human remains in museums will be covered in this thesis, the major focus will be on the lack of standardized policies regarding the care and management of such material. Although the care and management of human remains is addressed in some research, most of this information is found in other parts of the world such as the U.K. The Department for Culture, Media, and Sport (DCMS) found a need to create some standardized policies for the management of human remains in England, Wales, and Northern Ireland. The development of the *Guidance for the Care of Human Remains in Museums* in 2005 was issued following the 2003 report by the DCMS Working Group on Human Remains and in support of Section 47 of the 2004 Human Tissue Act. While the document focuses on the deaccessioning and repatriation of ethnographic human remains, it also includes best practices for the care, curation and use of such materials.

Standardized practices for the care and management of ethnographic human remains in the U.S. are incomplete. Environmental conditions for cultural materials in U.S. museums are mentioned by Paul S. Storch in *Caring for American Indian Objects: A Practical and Cultural Guide*. Recommendations are made for the care and management of bone with no specifics on human remains as a separate category. In *Museum Registration Methods 5th edition*, an essay by Alison Edwards titled “Care of Sacred and Culturally Sensitive Objects” gives an insight into the management of human remains placing emphasis on how the museum treats and views these “objects.” The author focuses on issues of caring for and managing human remains and culturally sensitive objects rather than best practices and policies for their preservation. *Things Great and Small: Collection Management Policies* by John E. Simmons gives a great overview of the management and role of collection items and separates human remains from other objects.

In seminal works such as these, authors discuss multiple aspects of human remains in museums including display, legal regulations, and ethical concerns. However, the principles and policies of Collections Management as it pertains to human remains is either lacking or not present. While the topic of the care and management of sacred objects in museums may be addressed, human remains are often grouped with other items, rather than being looked at as a separate category. This is especially true for ethnographic collections. When reviewing the acquisition, care, management, disposition and display of cultural property, human remains are rarely viewed separately from other objects. Policies created for ethnographic objects will incorporate human remains as part of the general collection, or may not mention human remains at all. Because of this,

standardized practices for the care and management of human remains are often not as specific or detailed as they should be. While legal regulations and ethical policies have developed pertaining specifically to human remains in museums, policies for their care and management should be no exception.

Chapter 3. The Presence of Human Remains in Museums

Cultural and sacred objects such as human remains have a unique and challenging history within museums, both in how they were acquired, and how they are viewed by the institution. To understand their place within museums, it is important to recognize their significance in a collection, starting with how and why they were acquired.

The reasons and procedures for acquiring human remains have changed significantly over the years. As museum standards developed, an increase in the academic and professional role of museum collections grew as well. In order to understand why human remains are sometimes part of a museum collection, we must address the classification of human remains, and the categories under which they are acquired.

Classifications of Human Remains

How people view death and the dead varies throughout the world. Treatment of the dead, including preservation techniques, burial practices, and rituals differ across cultures. Over time, these differences have led to a variety of ways human remains have been collected for museums, namely archaeological, scientific and medical, religious, ethnographic, and aesthetic. In order to understand how the classification of human remains occurs, each artifact group will be explored in more detail.

Archaeological Human Remains

The archaeological category of human remains are those that are unearthed through archaeological excavations. Human remains often appear in archaeological records and excavations around the world. Burial sites and cemeteries can be revealed while excavating past cultures, societies, or civilizations and yielding important

information about daily life. For example, In 1994, archaeological excavations took place at grave sites in the Chesapeake Bay area in Virginia and Maryland, exposing skeletal remains of colonists from Jamestown revealing new information about the hardships faced by the colonists. The exhibition of the results of this field work is discussed in later chapters.

The excavation of burial sites and sacred locations has resulted in ownership and cultural property issues. The Society for American Archaeology (SAA) is “the leading professional organization advocating for archaeology and archaeological resources in the United States” (saa.org). In 1990, the SAA was the primary scientific organization involved in the landmark creation of the Native American Graves Protection and Repatriation Act (NAGPRA). This Act, which became public law on November 16, 1990 was developed to “provide for the protection of Native American graves” (nps.gov/nagpra). The Act includes the protection of burial sites, cultural affiliation, cultural items, associated and unassociated funerary objects, sacred objects, and cultural patrimony.

The development of NAGPRA makes it illegal to excavate sacred lands and burial sites of Native American groups. It also makes it illegal to house or display these remains or sacred objects in museums unless complete compliance with NAGPRA policies are met. NAGPRA and museums across the country accomplish this through open communication between institutions, the scientific community and the local tribes.

Although new policies and laws relating to cultural property may limit some archaeological excavations, human remains are still unearthed all over the world. This has led to new claims by indigenous people around the world to museums that house

these collections. Current issues regarding archaeological remains that end up in museum settings will be further explored through specific case studies.

Historical Human Remains

A subset of archaeological human remains are those from an historic context. The excavation of these sites can uncover remains that represent an historic time, showing medical issues, rituals, death practices or causes, and religious and spiritual practices specific to certain times in history. They can also represent parts of human history spanning geographic and temporal spheres, and give insights into a culture's past. Human remains such as these may be found in universities and medical institutions, in order to be studied for their historic value.

Remains can also commonly be found in museums, representing past cultures, practices, and time periods. Human remains can represent the process and history of human evolution. In 2007, the American Museum of Natural History opened the "Hall of Human Origins" which "presents the remarkable history of human evolution from our earliest ancestors millions of years ago to modern *Homo sapiens*" (www.amnh.org). This gallery features archaeological human remains on permanent exhibit to present current knowledge regarding the story of human evolution.

Scientific and Medical Human Remains

Human remains can also fall under the scientific and/or medical classification. These remains are generally viewed as specimens for study and are seen in research settings, such as cadavers in medical universities. For study purposes, human remains are viewed in full form, separate parts, or even individual organs by academics and

professionals, and can help illustrate how the human body functions as separate parts and as a whole.

Scientific and medical human remains can also be used to study death, disease, and health of humans past and present. The information encoded in human remains, such as physiological processes of growth, development, and acclimatization to environmental changes provide valuable information and interpretations of human history (Steckel, Larsen, Sciulli, Walker, 61).

Human remains with an inherent scientific and/or medical nature have gained popularity outside of professionals in the field. They have generated curiosity and interest with the general public, which is why they can be seen in public museums.

Religious Human Remains

In many cultures and societies, human remains hold a religious and spiritual significance. Religious beliefs and practices vary across geographic and temporal spheres. How human remains are treated and the location of their final resting place can depend on these beliefs.

The remains of those with religious significance, such as saints and popes, are sometimes placed in churches or temples. St. Peter's Basilica in Rome houses the remains of St. Peter, the apostle who is considered the first pope. St. Peter is under the main altar, buried with many other popes in the Basilica. The body of Pope John XXIII who died in 1963 is on display in the Basilica behind glass (sacred-destinations.com).

Even the remains of people without religious titles can end up on display in religious places. The Sedlec Ossuary, located in Sedlec in the Czech Republic is a small chapel that is decorated with more than 40,000 human skeletons. The Ossuary is known

as the Church of Bones. One of the most interesting works inside the church is the chandelier of bones that hangs in the center of the building. The 40,000 people on display “wished to be buried in a holy place, and now their bones are right in the middle of the chapel” (sedlecossuary.com).

Sacred remains such as these rarely ever leave their final resting place, but can sometimes be viewed by the public. They are buried and/or displayed in these locations as a remembrance of their religious and spiritual contributions or affiliations. Many churches and temples around the world offer public tours that allow a view of these shrines to the dead.

Religious human remains can also be seen through religious and spiritual practices. Religious beliefs can effect how the dead are preserved, buried or viewed in different cultures and societies.

Ethnographic Human Remains

Ethnographic human remains are those that hold significance and meaning in different cultures throughout the world and were collected from living cultures. They represent views and practices in life, death, religion, war, spirituality and ritual. How the dead are treated and preserved in different cultures varies extensively.

For example, two groups of ethnographic remains commonly found in museums are mummies and shrunken heads. In ancient Egypt, the remains of the dead were preserved through mummification. The process of mummification was used by high status individuals in the society to prepare the dead for their desired afterlife. The process of Egyptian mummification began with the removal of the organs from the body, starting with the brain, and placing them in canopic jars. The skull was filled with a

liquid resin, while the body was treated with natron which was a very hygroscopic substance that extracted the water contained in the body tissues, drying it out and thus conserving it (Germer, 462). The body cavity was filled with linen or sawdust to give the body a lifelike appearance. It was then fully wrapped in linen and the head covered with a painted mask before it was placed into the coffin (Germer, 460-465). Ethnographic remains such as mummies can also be classified as archaeological remains. The collecting of these remains was originally excavated from tombs and burial sites.

In some Amazonian cultures of South America, the people would shrink the heads of their dead enemies in order to preserve them as trophies of war. Known as Tsantas, the process starts with cutting off the head below the neck while leaving some skin from the chest and back attached. A slit is made in the neck and up the back of the head. The skin and hair is carefully peeled from the skull, the eyes are sewn shut with native fiber, and the lips are closed with wooden pegs. The skin then goes into boiling pots or cooking jars and is simmered for approximately an hour and a half to 2 hours. After this process, the skin turns dark and rubbery and is 1/3 its original size. The skin is turned inside out and all the flesh is scraped off with a knife. The slit in the rear is then sewn shut and hot stones are dropped through the neck one at a time and constantly rotated inside to prevent scorching. The stones are removed and heated sand is poured in, entering the crevices of the nose and ears where the stones cannot reach. This process is repeated many times, and then hot stones are applied to the exterior of the face to seal and shape the features. The finished product is hung over a fire to harden and blacken the head (Jones and Ostlund, 3).

For many museums that collect tangible aspects of human history, the presence and display of human remains can be very common and reflects a history of colonial domination of cultures by the west. Ethnographic remains as part of a collection contribute to the representation of a society as a whole. If the remains hold a significant role or meaning in a culture, the collection or display may be incomplete without them. Due to the complicated and sometimes questionable past of ethnographic human remains in museums, this category will be the main focus of the thesis.

Aesthetic Human Remains

Aesthetic human remains are those that are removed from context and viewed from an artistic standpoint. The preceding classifications can be viewed with an aesthetic perspective once they became part of a museum collection. Cultural practices with the dead can be seen as very artistic in nature when viewed by people from other societies.

Art museums can house human remains due to the artistic nature of the material. Ancient Egyptian sarcophagi can be elaborately decorated and painted as well as the mummy itself. Often, the dead are adorned with ornate decorations and jewelry to take with them to the afterlife. Because of such artistic expression, the remains can take on an aesthetic role or classification in a museum.

Acquisition of Human Remains

The types of human remains mentioned above find their way into a museum's collection in a variety of ways. For the purpose of this research, the preceding classifications of human remains will fall under two categories of acquisition; educational and research.

One reason for a museum to acquire human remains is with an educational purpose. Human remains can be donated to museums for scientific and/or historical research. Remains can also be purchased for those reasons as well. An example of this would be articulated human skeletons that are in museums on and off public display, and even in classrooms (see Appendix A. fig. 1 and 2). According to Alan G. Morris, associate professor in the Department of Human Biology at the University of Cape Town, it was common to purchase skeletal remains from scientific supply houses in the early 1900's (152). Although cultural affiliation or identification of any sort is usually unknown for these specimens, the history of selling human skeletons could give some insight into their origins.

“Until the early 1980's, there was a trade in human skeletons from India for purchase by medical schools, but the advance payment of the living poor for their bodies on their death has now been banned by the Indian government and that particular source has dried up” (Morris, 152)

Although skeletons from India are no longer on the market, it is important for museums to be aware that older skeletal remains in their collections may originate from this source. These purchases can be for educational displays or research and are simply used as a tool or instrument to show the bones in the human body, how they fit together, and how they function.

A more recent example of human remains identified as having an educational role are the plastinates on display in “Body Worlds: An Anatomical Exhibition of Real Human Bodies.” People donate their remains to the Institute of Plastination in Germany to be preserved and displayed. Although donor cards are put on display to verify the proper attainment of the remains, names and personal information are blocked out, leaving the plastinates anonymous to the viewing public. There is much controversy

surrounding this exhibit as its educational aspects are questioned. The plastinates were originally created with the intention of teaching anatomy to professionals and students in the field. This unique view of preserved human bodies has since become a popular traveling exhibit featured in museums worldwide.

Human remains acquired for educational reasons will usually hold a scientific or medical value. They are viewed as specimens for study in a collection. Due to cultural affiliations and sometimes sacred nature of ethnographic human remains, the acquisition standards of research materials will be examined in more detail.

The research category includes remains with ethnographic significance, cultural affiliations, and archaeological contexts. Human remains of this nature can be acquired by a museum through donations or even purchase, but were usually originally collected through fieldwork. These types of remains are considered more sacred than those used as educational tools, as many times they are identified with a specific culture, time period, and sometimes a personal identity. According to Alan G. Morris, ethnically identified remains are the central focus of repatriation requests and reburial.

“Some individuals were actually known in life, and linkage with living descendents is often possible, but more often these skeletons have simply been labeled with specific ethnic names (often down to the level of tribe). Their identity therefore rests with the ability of the museum curator to interpret the historical information that is associated with the specimen” (152).

Acquiring cultural property has a questionable past, and according to John E. Simmons, collections manager at the Natural History Museum and Biodiversity Research Center and Director of the Museum Studies Program at the University of Kansas, ownership of cultural property was not always a major concern for museums. “Many

objects currently in museum collections were acquired without proper regard for the rights or desires of other cultures” (142).

Whether in the past, present or future, a museum’s responsibility is to collect and preserve the world around us, using objects and materials as instruments of research, knowledge, and history. For some museums, this includes preserving and collecting human remains. Admittedly this mission conflicts with the current viewpoints and claims of indigenous peoples around the world. Standards for collecting culturally sacred objects developed slowly in the museum world. According to Paul N. Perrot, a museum consultant in Sarasota, Florida, the standards of proper stewardship were sometimes ignored with dire consequences.

“This is particularly true with regard to acquisitions and even more so in those that involve the presentation of human remains. In the latter case, something more than preservation or scholarship is involved: it is respect for the departed and human dignity. These should not be negotiable for they involve fundamental decency” (190).

A lack of standards and ethics in the museum world can lead to questionable collection and acquisition practices, and can reflect greed, manipulation and even falsified information whether it be in disclosing provenance, exaggerating importance, or inflating valuations (Perrot, 190). Improper acquisitions and collecting can have consequences resulting in the loss of trust and propriety, and may also lead to a breach of law and legal ramifications.

When acquiring objects for a museum through improper or illegal methods, the cultural integrity and identity of those objects is compromised. Both individual and cultural information and identity can be lost through the improper method of acquiring human remains. Rather than the remains being recognized with personal and cultural

significance or affiliation, they become an unidentified part of the museum's collection. As a consequence, the institutions moral stature can be questioned and impaired, and public trust in the museum can be lost.

Like all museum collections, once human remains are accessioned into a museum or institution, it is understood that they will receive all the care necessary for their preservation. Objects are not just given to a museum, they are entrusted to them to be cared for, preserved, and promoted as part of their collection and educational mission. Developing standards in acquiring and managing human remains in museums will be discussed in more detail in chapter 6.

Human Remains as Objects

Although past acquisition methods were questionable and often unethical, many museums face the responsibility of managing human remains. Once in a museum, they take on a new role. The original intention of preserving the dead or laying them to rest is disrupted through this transition into an atmosphere to be studied and/or displayed. Once accessioned into a museum, the line between person and object becomes skewed.

While human remains can serve as a connection between the past and the present, and the dead with the living, they are also rendered ambivalent, both person and thing (Brooks and Rumsey, 261). In a museum setting human remains become objects that are part of the collection and like all collection items, they need to be cared for and managed. How someone reacts to and/or connects with human remains, whether museum personnel or public viewers, can depend upon personal views, cultural influences and backgrounds, and religious beliefs.

How museum employees view and regard human remains in the collection can impact how they are managed. “How we approach the care and management of human remains seems to depend on the degree of distancing or connection that one feels toward them” (Cassman, Odegaard, and Powell, 1). When human remains enter a museum, they can become objectified as a representation of a person rather than “being” the person. This linguistic shift has the effect of distancing the remains from the once living individual (Brooks and Rumsey, 264).

Placing barriers between human remains and human contact can create a distance between the living and the dead, whether it’s through physical space or mental detachment. Achieving some degree of distance between the remains and the collections staff in contact with them is important. Although most people who work with these collections in natural history and science museums are trained in handling and encountering human remains, such as in archaeological field work, how individuals react to them will vary. Physical and mental barriers can create a more comfortable and objective atmosphere for the staff that cares for and manages the remains.

Where the remains originate from can affect how a person views them. In western museums, people can distance themselves from remains through geographic and temporal barriers. Museums collecting and owning human remains from other cultures and time periods rather than their own may create a distance between the living and the dead. The geographic and temporal differences can make it less likely for the people in contact with the remains to make or feel any connection with them. The lack of a personal connection can render the remains as objects, just like other materials in the collection (Brooks and Rumsey, 279). This cannot only objectify the dead, but also the

people of said culture. Their beliefs and traditions are suddenly being studied and interpreted through their treatment of the dead by an outside culture in a museum.

The identification or anonymity of human remains can also affect how they are viewed. Remains often enter a museum collection as anonymous individuals. A culture may be identified, and sometimes a gender and age, but a personal identification will be unknown. Anonymity can act as a barrier between the remains and the people handling them. Divorced from name and personality human remains are viewed as objects having only educational or cultural significance. Their personal identification and personality traits while they were alive are lost.

How human remains are preserved can also create a barrier between the remains and those in contact with them. “Complete skeletons or flesh and bones preserved artificially, as with the embalmed Egyptian mummies, or naturally, as in the case of bog bodies, seem unlike the living body” (Brooks and Rumsey, 280). The lack of physical similarities one sees with the human remains in a collection can create a disconnect between the living and the dead.

Containers such as cases, bottles, and jars can also create an additional barrier.

“Human remains are displayed as clean bones or preserved specimens, frequently obscured in glass jars. Cases and bottles act as additional barriers and exclude any smells that might have connotations of death and decay” (Brooks and Rumsey, 279-280).

These contained remains become objects detached from any past organism or idea of life. The sheet of glass between the remains and the people handling them act as a wall, which can create a feeling of distance with the deceased.

Human remains incorporated as part of another collection item can create another level of separation. Human skeletal remains have been included in masks, decorations,

jewelry, and musical instruments. These types of objects disconnect the remains from a deceased person and allow them to be viewed as materials of decoration or accessories.

Although these barriers can create a more comfortable atmosphere when dealing with death and the dead, when human remains are acquired and accessioned into a museum they will take on a new role and meaning. It is important to be able to treat remains as priceless objects that need to be cared for and managed just like any other item in a collection. But when treating and viewing them the same as other items, they can become objectified.

Chapter 4. Exhibition of Human Remains

When a museum chooses to display human remains for public viewing, they take on a great responsibility in how the collections are cared for and managed while on exhibit and how they are viewed and perceived by the public. The ICOM code of ethics requires that public display of human remains be carried out “with great tact and with respect for the feeling of human dignity held by all peoples” (ICOM, 19). With so many people visiting museums that have very different personal views influenced by their cultural and religious backgrounds and beliefs, it seems impossible to create an exhibit that would be universally accepted by everyone. “What may cause offense varies between different ethnic and religious groups and may result in different perceptions of respectful practice in different museum contexts” (Brooks and Rumsey, 267). This is especially true if people are viewing human remains that originate from their own culture.

Discussion and planning of the display of human remains tends to stress the importance of appropriate approach but gives little guidance as to what specifically the approach is (Brooks and Rumsey, 267). Details regarding the public display of human remains will vary between different collections, museums, interpretations, and intentions. In 2004, the Department in Culture, Media, and Sport (DCMS) set out to create guidelines in issues surrounding the housing of human remains by museums in England, Wales, and Northern Ireland. According to the Guidance for the Care of Human Remains in Museums document by the DCMS

“Human remains should be displayed only if the museum believes that it makes a material contribution to a particular interpretation; and that contribution could not be made equally effective in another way. Displays should always be accomplished by sufficient explanatory material” (DCMS, 20).

It also states that those planning the display should consider how best to prepare visitors for their presence. “As a general principal, human remains should be displayed in such a way as to avoid people coming across them unawares” (DCMS, 20).

Context

When viewing human remains on public display at museums, the respectful manner in which they are portrayed and the appropriate interpretation can be achieved through the context in which they are placed. Mary M. Brooks, a senior lecturer in Museum Studies: Culture, Collections, and Communication at the University of Southampton, and Claire Rumsey, a learning and access officer at Beaulieu National Motor Museum in Hampshire, England pointed out that there is a long tradition of displaying human remains in museums. “After the enlightenment, they could be presented as part of scientific, ethnographic, archaeological, or medical exhibitions” (268). The context in which human remains are placed can help the public understand their presence in a display. Currently, human remains can be viewed on display in the following contexts.

Scientific and Medical Context

Human remains in a scientific and medical context can allow visitors to view the human body in a unique way. Usually educational in format, this context can show the human body in an anatomical perspective. These types of displays can create a learning atmosphere, as visitors are given a view of human remains usually only seen by professionals or even students in medical fields.

The Hunterian Museum collection in London, England is an example of placing human remains in a scientific and medical context. John Hunter was an eighteenth

century surgeon who collected human remains to use as teaching aids and to aid in the development of more effective and innovative surgical techniques. After the collection was purchased for the Royal College of Surgeons in England in 1793, the museum opened in 1813 and was originally used as a reference and educational collection for medical students and scientific research (Brooks and Rumsey, 274). Currently, the museum is open to all visitors. The Mutter Museum in Philadelphia was another institution created as an educational tool for future physicians before it opened to the public in the 20th century. The Mutter Museum is later explored in more detail as a case study to address the management and display of medical remains.

Museums such as these dedicate their time and effort in displaying human remains. Smaller exhibitions and temporary displays may also place human remains in an anatomical context. The presence of human skeletons, articulated and disarticulated, can be seen on display at many science museums, including the Buffalo Museum of Science in Buffalo, New York (see Appendix A. Fig.1 and 2). These human remains show visitors how the human skeleton functions. “Body Worlds: The Anatomical Exhibition of Real Human Bodies” is a traveling exhibit featuring actual human bodies preserved and manipulated into positions of action. Many of these remains feature internal organs relocated outside the body in almost a decorative and artistic manner. According to Dr. Gunther von Hagens, creator of the exhibition, the process of preserving human bodies was “created for the sole purpose of sharing insights into human anatomy” (31). These exhibits will be looked at in more detail in chapter 7.

Ethnographic Context

Ethnographic displays place human remains in a culturally significant context. Throughout geographic and temporal spheres, human remains can play important roles in a culture's view on life, death, war, religion, and spirituality. When placing a culture on display, the presence of human remains may be important or even vital to the interpretation and public understanding of said culture.

Mummies and the practice of mummification can be seen in many Egyptian exhibits around the world. Mummification of human remains was an important part of ancient Egyptian culture. It was a mortuary ritual performed on the dead to ensure their "gateway into eternity" in the afterlife (Bunson, 172). When displaying Egyptian Culture, it is common to see mummies and mummified remains as part of the exhibit. The Cairo Museum of Egyptian Antiquities displays 27 mummified remains throughout more than 80 rooms. The Pitt Rivers Museum at the University of Oxford is an anthropology and archaeology museum with a large collection of human remains. When the human remains are on display the museum ensures that "the intended educational and cultural information is communicated well and that the displays are respectful to both visitors and the dead" (prm.ox.ac.uk). The museum's displays include a case on the "Treatment of the Dead" and includes mummification in Ancient Egypt and Peru. A case on the "Treatment of Dead Enemies" includes shrunken heads, scalps, and trophies of human remains. "Their local significance in their regions of origin is explained and a cross-cultural perspective on the theme of the display is provided" (prm.ox.ac.uk). The Buffalo Museum of Science also has a long term exhibit on display called: "Whem Ankh: The Cycle of Life in Ancient Egypt." On display are two ancient Egyptian Mummies on

long-term loan from the Buffalo and Erie County Historical Society. The exhibit includes research into the remains of the mummies that reveals information on their lives and deaths such as age, diet, illness, injuries and the mummification process. This exhibit will be examined in more detail in chapter 7.

Archaeological Context

Archaeological exhibits display objects found at excavation sites from past and present fieldwork. When excavating sites around the globe, objects and materials found can include human remains. Egyptian and Peruvian Mummies are an example of remains that could be found in past and current archaeological excavations of ancient societies. When researching past cultures and civilizations, burials and graves can sometimes be unearthed and human remains collected along with the burial's contents.

Current excavations can also become part of a museum display. The Smithsonian National Museum of Natural History has a temporary exhibit on public display that opened in February 2009 called "Written in Bone: Forensic Files of the 17th-Century Chesapeake." On display are skeletal remains of colonists from Jamestown Virginia and St. Mary's City Maryland dating back to the 17th century. The exhibit is a result of an archaeological excavation of gravesites in the Chesapeake Bay area. The excavation and the museum exhibit give information on the lives and deaths of the colonial settlers that have long intrigued historians and scientists through skeletal analysis (Walker, 9).

This exhibit introduces viewers to the discipline of historical archaeology. Using archaeological excavation and the documentary record, researchers were able to determine the identity and context for the individuals unearthed. This exhibit had the benefit of context for the human remains. The focus of this work are those items devoid

of context. This example was included here to illustrate the variety of ways human remains can be added into a collection and utilized in a museum if provenance and context is available.

Aesthetic Context

More recently, human remains in museums can be found in an aesthetic context. The display of ethnographic and cultural remains can be found in some art museums, focusing on the aesthetic nature of the remains. “Art museums may put on a mummy show and haul out the mummy and painted sarcophagus from the basement to attract new crowds” (Cassman, Odegaard, and Powell, 22). Although an over-simplification of these exhibits, museums can display human remains while emphasizing the aesthetic or artistic nature of the material. Human hair, skin, and bone may even be included as elements of a particular work of art. “In such a case, the artist must be able to certify where the human remains came from and that they are not compromising laws or disrespecting any particular individual or ethnic group” (Cassman, Odegaard, and Powell, 22).

Since 1875, the Museum of Natural History at Rouen in Normandy has had a mummified tattooed head of a Maori warrior in its permanent collection. There was no record of its provenance and no listing in the inventory for the item. According to a New York Times article written by Elaine Sciolino, when the newest mayor of Rouen arranged to have the mummified head returned to New Zealand as a act of “atonement” for colonial-era trafficking in human remains, a debate sparked as to whether the head was considered a body part wrongly taken from the culture of origin, or a work of art that should remain in the museum’s collection. The Ministry of Culture in Normandy contends that the head is a work of art that belongs to France, while other authorities in

Rouen insist that the head is a body part and must be returned to its place of origin in order to right an injustice. In the end a high level New Zealand delegation visited Rouen for a symbolic transfer ceremony (Sciolino, 2007).

Even human remains of a scientific or medical nature can create an aesthetic effect in displays. “Body Worlds” has been interpreted as being more artistic than scientific in nature due to the poses and positions of plastinates on display and the almost decorative re-arrangement of the internal organs.

“Experience at exhibitions has shown that the aesthetic aspects of posed specimens make such an impression that visitors consider a number of these to be works of art. There is no dispelling that conclusion either, because “art is in the eye of the beholder.” No anatomical works of art have been created; they become works of art through the judgment of the visitors to the exhibition” (Hagens, 31).

While visitors form their own opinions and perceptions of the exhibits, Dr. Gunther von Hagens insists that the plastinates on display were created for the purpose of anatomical study and an educational view of the human body.

Considerations

The display of cultural and archaeological human remains holds unique positions in museums. These buried remains were never originally intended to be preserved and exhibited. The intention was to lay the dead to and undisturbed rest. This is also true for most ethnographic displays. Although remains were treated and preserved in different forms such as mummies or trophies of war, their preservation was never meant for display in museums. They held a cultural purpose and value to the people involved. Human remains are recontextualized in museums. They are removed from graveyards, tombs, or their sacred context and placed into a new one, preserved for a different function (Brooks and Rumsey, 261).

Once removed from their place of origin and introduced into a museum, how they are cared for and displayed becomes the responsibility of the museum. Because of the original intention of ethnographic and archaeological human remains, the collection and display of these objects can bring up issues of ownership, religion, repatriation, and re-burial.

The displays of scientific and medical human remains are not without their issues as well. Displaying human remains in a scientific and/or medical context can bring up questions of consent. Although permission can many times be granted from the more recently deceased, remains collected many years ago do not come with consent forms for their public display.

To address the issues that may arise when displaying any category of human remains, a museum must rely on its mission statements and Collections Management Policy, provide the proper documentation and interpretation of its collection, and be aware of and follow all legal regulations that pertain to their collection on and off display.

Mission Statements

According to the book *Museum Ethics*, a mission statement is “a written document that states a museum’s institutional philosophy, scope, and responsibility” (Edson, 270). It should give the public an idea of the museum’s goals and objectives they plan to execute through its collections, programs, and exhibits. Without clearly stated goals, a museum’s collections are more likely to suffer from misuse or grow in unsupportable ways and suffer from poor storage and neglect. If a museum houses human remains with no real goal or objective for them (either public display or private use) the objects will not be as properly cared for as they would be in an institution that

has more focus on remains. Individual institutions have to decide if human remains fit into their mission and goals. Following the museum's mission statement will help guide an institution with its acquisition choices.

When displaying human remains at a museum, its mission statement can help justify their presence. The Smithsonian National Museum of Natural History adheres to the following mission statement: "We inspire curiosity, discovery, and learning about nature and culture through outstanding research, collections, exhibitions, and education" (mnh.si.edu/about/mission.htm). This small declaration is but an introduction to the possible exhibitions that will be on display. Exhibits like "Written in Bone: Forensic Files of the 17th-century Chesapeake" is linked to their dedication to collecting and exhibiting nature and culture.

Mission Statements are more of a general introduction to the museum's goals and purpose. A museum's Collection Management Policy will go into more detail, explaining all policies and guidelines they follow when collecting, acquiring and displaying objects, including human remains. These museum policies will be looked at in more detail in chapter 5.

Documentation and Interpretation of Human Remains

Before considering placing human remains on display, it is also critical to consider their interpretation and documentation. It is important to make sure the correct information and documentation accompanies any collection item on display. It is the museum's responsibility to check that all the information presented to the public is accurate, correctly interpreted and identified. "It is the moral obligation of staff not to

allow donors or viewers to be in doubt about what they are given or what is presented” (Perrot, 195).

Proper documentation and research upon the acquisition of human remains can help ensure that all the information presented is as accurate as possible in the label copy when they go on display. If documentation on the authenticity, origin, or proper attainment of the remains is not available, their public display can be more difficult to validate.

Legal Regulations

Legal issues can also arise in collecting and displaying human remains and sacred objects. When encountering human remains in collections there are levels of state, federal, and international laws that build on the common law to be considered (Hutt and Riddle, 223). Different legal issues can apply to different types of human remains. The display of scientific and medical remains follow different laws and regulations than those with ethnographic and archaeological significance.

Human remains in scientific and/or medical displays tend to be more educational in nature and personal identifications or cultural markers are absent or intentionally left out of an exhibit. The intention of these exhibits is to look at the body in an educational manner. Providing proof of consent to display these remains is sometimes necessary. Following proper protocol and documentation in terms of consent and permission does not mean the public display of the remains will never be met with concern or controversy. “Does the consent of a person, for their body to be used either for medical research or for museum display, eliminate ethical problems-or changes in public taste and susceptibility-in displaying human remains?” (Brooks and Rumsey, 278-279). We take our personal tastes, beliefs, and biases every where we go. Knowing that the human remains on

display were legally attained and consent granted will not change how an individual feels about it personally. Providing consent is not always a possibility as we can see in the display of children and babies, and of those remains attained before permissions were required or necessary.

Over the years, issues of ownership have come into question in the United States. How museums collected and treated human remains from other cultures was questionable at best, and legal actions needed to be taken in order to change the way this material was attained and managed.

“After sacred objects and human remains entered U.S. museum collections, museums often reflected dominate-culture bias in their treatment of these sacred artifacts. Museum’s treatment of sacred objects in ways that are offensive to practitioners and violate cultural practices has led in many cases to demands by groups affiliated with these objects-from governments to religious institutions to individuals or families-that they be returned or handled with heightened sensitivity” (Edwards, 408).

Issues of ownership resulted in new federal laws and regulations such as NAGPRA which was the culmination of many years of discussions between Native Americans and the museum community. This law concerns the disposition and use of Native American human remains and cultural property. NAGPRA “set the stage for greatly improved communication between Native Americans and the museum community in the United States” (Malaro, 112). It is Indian law and property law and requires consultation with tribes where their property is concerned. This can many times result in the repatriation of Native American and Native Hawaiian objects from museums.

Along with federal and international laws, the development of policies and standards surrounding sacred objects and culturally significant human remains were instituted by individual organizations with a stake in the issue. The AAM, ICOM, and

UNESCO have developed policies and guidelines to follow. Individual institutions also create their own set of policies and guidelines to follow for collecting and displaying human remains. These organizations and policies will be looked at in more detail in the following chapters.

Visitor Reaction

After a museum validates the appropriate use and display of human remains, they then must contend with their audience. It is important for museums to remember that different cultural groups have different attitudes and beliefs. Because of personal sentiments and values, it is just as easy to offend someone as it is to inspire and educate people in a museum. How conservative or adventurous a museum chooses to be with its public displays can be influenced by outside forces and funding. When an institution relies on these forces to stay open and operating, the people, group, or companies providing the funding become very influential in making decisions for the museum. “The capricious and increasingly politicized funding policies of governments and private sectors along with growing dependence on admission fees and other generated revenues, also favor those [museums] who play it safe” (Ames, 7).

Although some museums may take a more cautious approach to their public displays, the presence of human remains in museums is almost expected. According to a survey Claire Rumsey undertook in the U.S. in 2001, eighty-two percent of the respondents thought it was important to see human remains in museums, while 17 percent were against it and 1 percent was undecided (Brooks and Rumsey, 280). “Those in favor thought such displays were important in enabling people to understand evolution and lives of our ancestors” (Brooks and Rumsey, 280). Some even made judgments relating to the origins of the human remains and their own religion or feelings toward them.

Those against the display of human remains felt they were disrespectful. The survey also revealed the types of human remains people want to see in museums “with clear distinctions made between displaying recent human remains as opposed to prehistoric remains, dry bones as opposed to flesh, and partial mature remains as opposed to complete babies” (Brooks and Rumsey, 280).

Because visitor reaction to the display of human remains will vary by personal sentiments and attitudes, museums cannot rely solely on how every individual will respond to the exhibit to make their decisions. A more important factor to consider is the local community as a whole. Knowing the different ethnic and cultural groups that will be visiting the museum should play a larger role in the nature of human remains that go on public display. For the U.S., this is especially important when concerning the indigenous community. Although NAGPRA prevents the collection and public display of Native American human remains, their beliefs on death and the treatment of the dead will also effect how they view any type of human remains on display.

While displaying human remains for public viewing may cause some issues, it is the idea of controversy that sometimes influences a museum in its decision in order to attract visitors. Museums know that human curiosity takes many forms, ranging from the scientific to the morbid. Although the main reasons for displaying human remains are to illustrate and exhibit scientific and educational information, “it will in another way also attempt to satisfy the natural curiosity of the visiting public, which wishes to know more about its own species” (Wilkschke-Schrotta, 2).

Katherine Goodnow, a professor at the University of Bergen in Norway, compares our fascination with the dead to our fascination with horror movies.

Psychologically, our fascination with such topics has to do with the way encounters with the “abject” or “forbidden” are regulated. “Clearly there is a sense of being allowed to see what is normally kept on the ‘other’ side: that which is normally hidden or forbidden” (Goodnow, 125). Horror movies, like human remains, have the ability to terrify and fascinate people around the world. The idea that we are seeing things considered taboo or controversial captivates people and grabs attention. Museums create a unique atmosphere for human remains, allowing visitors a glimpse at things not only usually seen by professionals, but that are usually hidden in tombs, graves, or the rituals of other societies.

Taking into consideration the preceding internal and external factors, displaying human remains can be a difficult process to consider. Once it is determined that all legal regulations will be met and followed, the decision on whether or not to display human remains, no matter the nature, rests with the museum.

Chapter 5. Care and Management of Human Remains

The care and management of museum collections has developed standardized practices over the years, although there are currently no professional standards to follow specifically concerning human remains in museums in the U.S. According to Vicki Cassman, conservator at the University of Delaware, and Nancy Odegaard, conservator at Arizona State Museum, “there are no publicly available housing standards, nor has there been any unspoken minimum agreed on by the diverse communities that have stake in the issues surrounding human remains” (103). The responsibility falls mainly on the institution holding them. Just like any other collection held in a museum, it is the staff’s responsibility to create the best possible environmental conditions for human remains.

According to Genevieve Fisher, Registrar at the Peabody Museum of Archaeology and Ethnology, “it has been estimated that a lack of proper routine maintenance is responsible for 95 percent of conservation treatments; the remaining 5 percent result from inappropriate handling” (287). The number one priority of caring for and managing human remains, just like all museum collections, is preventative conservation. It is the museum’s job to provide appropriate conditions for its collection. This can be accomplished through proper storage, handling and accessibility, and environmental monitoring.

Storage

Preventing deterioration, damage, and harm starts with proper storage. The storage of human remains includes the building, room, cabinet, box, tray, and bag (Cassman and Odegaard, 104). The building and room determine the environmental conditions and security. Storing remains in closed cabinets and shelving provides another layer of protection from harmful agents. Containers, including boxes, bags, and

trays, are in the most intimate contact with the remains. These containers should be made of inert and acid free materials and should be durable and able to support weight. Storing human remains in such containers can reduce direct handling which can cause the most damage. Museums with large collections of human remains should have a dedicated storage space in order to provide the best possible storage conditions and security. Institutions with smaller collections of remains should designate shelving and space away from the main activity of the room where they are to be housed.

For all collection items, the storage area should not be susceptible to abrupt humidity and temperature changes. Although skeletal remains are not as sensitive as remains containing flesh or tissue, they still need to be properly maintained. According to Paul S. Storch, a Senior Objects Conservator from the Daniels Objects Conservation Laboratory (DOCL) at the Minnesota History Center, “a consistent temperature and humidity are important for these materials” (132). Maintaining stability and avoiding major fluctuations in temperature and humidity is important for all museum collections. The optimum temperature for bone and other organic material is 68 degrees F with fluctuations no more than +/- 3 degrees a day. Humidity levels should not be less than 30 percent in the winter and not more than 55 percent in the summer (Storch, 132).

It is not always easy or even possible for museums to provide the ideal temperature and humidity in the storage areas. If remains are stored with other collections made from varying materials in a room, the required temperature and humidity will vary. In cases like this, the most important thing you can do is maintain consistency. “Avoid storing and exhibiting items containing bone, antler, ivory, or teeth

near radiators, heat pipes, outside windows, or incandescent lights, which can cause excessive drying and temperature fluctuations” (Storch, 132).

For all collection items in a museum, proper lighting is also very important. The kind of lighting in the storage area can affect the human remains being stored. Day light is extremely damaging to organic materials because of the Ultra Violet rays from the sun. Storage areas should not allow any natural light into the room. “Blocking daylight is a vital preventative measure that can be achieved by painting or, better, blocking and filling in window depressions” (Odegard and Cassman, 117). Florescent lights are also damaging as they produce a lot of UV rays and cause deterioration. These rays can be reduced using diffusers or UV filters placed over the light bulbs. Storage areas should be kept dark when they are not in use.

The intensity of visible light is measured with a light meter which gives a reading in lux. Fifty lux is the minimum amount of light needed to adequately see the shape and color of an object. It is also the maximum recommended level for very sensitive objects like textiles, fur and feathers, dyed leathers, prints, drawings, watercolors, stamps, manuscripts and old photographs. A maximum level of 200 lux is recommended for moderately sensitive items such as plastics, wood, furniture, horn, bone, ivory, un-dyed leathers, minerals and modern black and white photographs (Hill, 1995).

Handling and Accessibility

It is also important to limit the possibility of human error. Museums can accomplish this by limiting access to the remains and the storage areas. The head of the museum’s collections should know who has access to the collection, and who should not have access to the storage areas. Anyone working at the museum that does not have

proper training and education in collections care and management should not be allowed access to collections or storage areas. It is also important to limit the number of people that access a collection in a storage area at any one time. Should there be tours, classes, or multiple researchers in a storage area, they should be constantly monitored and attended to by collections specialists.

Pest Management

Pest control is very important for all collections, especially organic materials. Insects and rodents can cause great damage and because treatment is time consuming, difficult, and sometimes expensive, prevention is important. IPM (Integrated Pest Management) systems combine monitoring and eradication methods. Monitoring the museum with sticky traps is a quick and easy method for pest control. These traps should be monitored regularly, and the insects found should be inventoried and reported. If materials become infested, some non-chemical eradication methods include freezing, heating, or placing the remains in anoxic environments (oxygen decrease).

Skin and other organic materials attract protein-consuming pests such as clothes moths, carpet/furniture beetles, cockroaches, crickets and flies (Cassman and Odegaard, 117). Bone is not particularly susceptible to insects, but rodents and other small mammals can cause structural damage (Storch, 133). Any bugs or rodents found in or around the remains should be recorded and reported immediately. Regular inspections are required for a successful IPM program and should include an initial assessment of insect activity, control of insect entry points, procedure of eradication, and evaluation of the plan (Cassman and Odegaard, 117-118).

Collection Management Policies

Museums must maintain and regulate the care and management of their collections using a Collections Management Policy developed by the collections staff and approved by the Board. According to Marie C. Malero, lead lecturer and co-instructor of the Collections Management: Legal and Ethical Issues course for the Distance Education Program at The George Washington University,

“A collection management policy is a detailed written statement that explains why a museum is in operation and how it goes about its business. The policy articulates the museum’s professional standards regarding objects left in its care and serves as a guide for the staff and as a source of information for the public” (46).

A satisfactory Collection Management Policy will explain the purpose, scope, and goals of the museum’s collection and provide a set of guidelines that outline the proper processes for acquiring, accessioning, deaccessioning, caring for and managing their collections. The Collections Management Policy should outline proper care and management for each collection, including sacred objects and human remains.

Many museums and institutions in the United States face the necessity and issues of maintaining human remains in their collections. Because the care of organic materials (such as wood, bone, fur, feathers, etc.) is covered in many professional collections care policies, museums holding human remains have some guidelines to follow but it may not cover all aspects or materials involved with human remains.

Extensive research into Collections Management Policies yielded the following examples of some museums that make specific reference and indications to the management of human remains in their collections.

The Phoebe A. Hearst Museum of Anthropology

The Phoebe A. Hearst Museum of Anthropology at the University of California, Berkeley, houses the oldest and largest anthropological collection in the Western U.S. Their mission is to “collect, preserve, research, and interpret the global record of material culture, so as to promote the understanding of the history and diversity of human cultures” (hearstmuseum.berkeley.edu). Both their ethnology and archaeological collections include human remains. Although they are currently re-writing their Collections Management Policy, the University of California has written documents concerning the management of human remains in their collections. According to the University of California Policy and Procedures on Curation and Repatriation of Human Remains and Cultural Items,

“It is the policy of the University of California to assure the respectful and dignified treatment of human remains and the consideration of living descendants of those deceased. The University recognizes that individuals and communities have cultural and religious concerns that must be considered in determining the treatment and disposition of human remains in its collections” (1).

The Phoebe A. Hearst Museum of Anthropology recognizes the value of human remains in their collections as having educational and research purposes. This document details the use and management of its collections as well as recognizing NAGPRA law and the concerns and process of repatriation. “The Phoebe A. Hearst Museum of Anthropology (PAHMA) is in full compliance with all provisions of Native American Graves Protection and Repatriation Act of 1990 (NAGPRA)” (hearstmuseum.berkeley.edu).

Denver Museum of Nature and Science

The Denver Museum of Nature and Science (DMNS) in Denver Colorado is the Rocky Mountain region’s leading resource for science educations. Their mission is to

“Inspire curiosity and excite minds of all ages through scientific discovery and the presentation and preservation of the world's unique treasures” (DMNS.org). This museum also has a collection of human remains, including mummified remains on display in the exhibit “Egyptian Mummies.”

The DMNS addresses the presence and management of human remains in their collection. According to The Manual of Collections Policies for the Denver Museum of Nature and Science, approved and adopted by the DMNS on April 15, 2008, Under Section 5: Use of DMNS Collections and Associated Data:

“Human remains and religious, ceremonial, ritual, and sacred objects should always be cared for and used with respect. Access to these items may be restricted in accordance with stipulations made by the appropriate curator with guidance from the appropriate descendant community or communities” (11).

The DMNS also recognizes the unique and sensitive nature of human remains, objects of cultural patrimony, and funerary and sacred objects, and takes this into consideration in all decisions concerning deaccessioning and repatriation.

American Museum of Natural History

The American Museum of Natural History (AMNH) is one of the world's preeminent scientific and cultural institutions. Their mission is to “Discover, interpret and disseminate - through scientific research and education – knowledge about human cultures, the natural world, and the universe” (amnh.org)

The AMNH has a large collection which includes different types of human remains. Although mentioned in their CMP, the AMNH does not go into detail concerning the human remains in their collection. Under the Disposition section of their CMP, where restrictions exist, the museum shall observe all mandatory conditions. “The

unique and special nature of human remains and funerary and sacred objects shall be considered in disposition decisions concerning such collections” (10).

The AMNH also has separate policies concerning the management of its collections by different departments. The Anthropology department includes 3 sub-disciplines; archaeology, ethnology, and biological anthropology. According to the Collections Management in Anthropology “the ethnology collection is the most difficult to preserve because it is 99% organic” (amnh.org). The facilities storing the ethnology collections are climate controlled at 70 degrees Fahrenheit and 45 percent relative humidity. “This stable environment limits expansion and contraction in organic materials and is a large factor in the long-term preservation of ethnological objects” (amnh.org).

Smithsonian National Museum of Natural History

The National Museum of Natural History is part of the Smithsonian Institution in Washington D.C. Through research, collections, education and exhibition, the NMNH serves as one of the world’s greatest institutions of scientific and cultural heritage (mnh.si.edu). Their mission is to “increase knowledge and inspire learning about nature and culture through outstanding research, collections, exhibitions, and education, in support of a sustainable future” (mnh.si.edu). The NMNH has human remains in their collection, including some on display. “Osteology: Hall of Bones” gives viewers a chance to view and compare bones of different species, including humans. “Written in Bone: Forensic Files of the 17th-Century Chesapeake” displays the remains of those unearthed in an archaeological excavation of Virginia and Maryland (see chapter 4).

The presence of human remains are mentioned in their CMP under Specific Legal and Ethical Issues with regards to Native American and Hawaiian human remains and objects.

“Native American and Native Hawaiian human remains, funerary objects, sacred objects, and objects of cultural patrimony are subject to the terms of the National Museum of the American Indian (NMAI) Act. Under the NMAI Act the Smithsonian is required to compile information about such material, to disseminate the information to and consult with tribes about collections that may be subject to repatriation, and, in certain circumstances, to return such material to affiliated Native American Tribes, Native Hawaiian groups, or lineal descendants” (NMNH, 40).

Similar to the other Collection Management Policies, the NMNH mentions human remains in their collections only in regards to their cultural affiliations and legal compliance.

Where human remains are mentioned in the preceding individual professional policies, the museum usually focuses on the ethical issues of acquiring, utilization and disposing of such material. Since indigenous laws are a major concern in the U.S., the compliance with NAGPRA, repatriation procedures, and other Native American laws are a major focus and concern in many museums, and therefore are highlighted in their Collection Management Policies.

Less concern is placed in the actual care and preservation of human remains whether in storage or on display. Even less attention is paid to the orphaned human remains or the remains with little to no information on cultural origin or significance. Although Native American remains are a major concern in the museum world and should be reviewed and addressed in much detail, a lack of standards and guidelines in caring for all human remains can lead to insufficient management of such materials. It is important

for museums to address the policies and procedures in caring for and managing all types of human remains.

Chapter 6. Ethics for Collecting and Managing Human Remains

Collecting and managing human remains in the museum world has changed and developed over the years. It became important for individual institutions and organizations with stake in the issues to expand their current policies and create new ones to ensure the ethical acquisition and management of human remains.

American Association of Museums (AAM)

This national organization's mission is "to enhance the value of museums to their communities through leadership, advocacy, and service" (aam-us.org). Since 1906, the AAM has been helping museums develop standards and practices, gather and share knowledge, and provide advocacy on issues affecting the entire museum community. They represent every type of museum big and small including art, history, science, military and maritime, youth, aquariums, zoos, botanical gardens, arboretums, historic sites and science and technology centers.

In 1925, less than 20 years after its formation, the American Association of Museums attempted to codify museum standards in its first Code of Ethics. Although the document reflected some of the perceptions at the time, it did not address questions of illicit acquisitions because no one believed such collecting could occur. According to Paul N. Perrot, the impact of new discoveries in medicine and agriculture, the flow of new ideas, the destructiveness of world wars, and more specifically the closer examination of how cultural institutions and museums were using their resources led to a growing need to "codify behavior and refine principals in every aspect of museum management and especially acquisitions" (192).

In the 1970's the AAM finally updated its code of ethics recognizing that the original no longer applied to current trends and needs. Under the current AAM Code of Ethics for Museums, a museum ensures:

- Collections in its custody support its mission and public trust responsibilities
- Collections in its custody are lawfully held, protected, secure, unencumbered, cared for, and preserved
- Collections in its custody are accounted for and documented
- Access to the collections and related information is permitted and regulated
- Acquisition, disposal, and loan activities are conducted in a manner that respects the protection and preservation of natural and cultural resources and discourages illicit trade in such materials
- Acquisition, disposal, and loan activities conform to its mission and public trust responsibilities
- Disposal of collections through sale, trade, or research activities is solely for the advancement of the museum's mission. Proceeds from the sale of nonliving collections are to be used consistent with the established standards of the museum's discipline, but in no event shall they be used for anything other than acquisition or direct care of collections.
- The unique and special nature of human remains and funerary and sacred objects is recognized as the basis of all decisions concerning such collections
- Collections-related activities promote the public good rather than individual financial gain
- Competing claims of ownership that may be asserted in connection with objects in its custody should be handled openly, seriously, responsively and with respect for the dignity of all parties involved (aam-us.org).

Although the American Association of Museums does not go into a lot of detail in their Code of Ethics, the presence of human remains in museums is mentioned as holding a unique position. Details in collecting and maintaining human remains can be seen in the Code of Ethics of the International Council of Museums.

International Council of Museums (ICOM)

“ICOM is the international organization of museums and museum professionals which is committed to the conservation, continuation, and communication to society of the world's natural and cultural heritage, present and future, tangible and intangible” (ICOM.com). Created in 1946 by Chauncey J. Hamlin, ICOM is a non-governmental

organization dedicated to the advancement of museums through raising public awareness and setting professional standards and ethics. In 1986 ICOM developed a code of ethics with a strong focus on acquisition policies. The International Council for Museums' guidelines on acquisitions states that museums hold collections in public trust and any acquisitions should involve rightful ownership, permanence, documentation, accessibility and responsible disposal. In acquiring human remains, ICOM states under section 2.5 of the Code of Ethics:

“Collections of human remains and material of sacred significance should be acquired only if they can be housed securely and cared for respectfully. This must be accomplished in a manner consistent with professional standards and the interests and beliefs of members of the community, ethnic or religious groups from which the objects originated, where these are known” (ICOM.org)
In the Code of Ethics for Museums, ICOM places human remains under the

heading of Culturally Sensitive Material. Museums are responsible for acquiring, preserving, and promoting their collections. If human remains or culturally sensitive materials are part of a museum's collection, the acquisition policies, care and uses should be outlined in the museum's Collection Management Policy.

The use of human remains in a museum includes using them as research objects and furthering knowledge. The research on human remains must be accomplished in a manner consistent with professional standards and take into account the interests and beliefs of the community and the ethnic or religious groups from whom the objects originated. (ICOM sec. 3.7). It is important for museums to properly monitor the care, accessibility and interpretation of the remains. If they are to be researched and studied in storage, a professional should supervise access at all times. If they are to be exhibited to the public, the remains should be well researched and information accompanying them should be accurate and appropriately credited.

The ICOM's Code of Ethics includes the exhibition and removal of sensitive materials. Human remains should be

“displayed in a manner consistent with professional standards and, where known, taking into account the interests and beliefs of members of the community, ethnic or religious groups from whom the objects originated. They must be presented with great tact and respect for the feelings of human dignity held by all peoples” (ICOM sec. 4.3).

Displaying human remains can prove to be difficult, no matter how careful and respectful the museum is in exhibit design and interpretation. The interests and beliefs of members of the community are very diverse and how they view human remains on display cannot be predicted. The ethnic or religious groups from whom the objects originated should be well researched and understood. Certain religious and ethnic groups follow rituals and customs concerning human remains, so it is very important to know what can and cannot be publicly displayed and the appropriate context and interpretation of the remains in a public display.

The issues that arise from human remains on exhibit can lead to their removal from public display. “Requests for removal from public display of human remains or material of sacred significance from the originating communities must be addressed expeditiously with respect and sensitivity. Requests for the return of such material should be addressed similarly. Museum policies should clearly define the process for responding to such requests” (ICOM sec. 4.4). Requests for removal may come from individual visitors, groups, or even people with ethnic and/or religious associations with the remains in question. Museums should develop and be aware of their own policies regarding the removal of remains from public display and repatriation of human remains.

The United Nations Educational, Scientific, and Cultural Organization (UNESCO)

The development of other organization guidelines also focused more attention on the ethics of collecting cultural objects. The United Nations Educational, Scientific, and Cultural Organization (UNESCO) came into effect on November 4, 1946. UNESCO works to “create the conditions for dialogue among civilizations, cultures and peoples, based upon respect for commonly shared values” (UNESCO.org). In 1970 UNESCO adopted a Convention on the Means of Prohibiting and Preventing the Illicit Export, Import and Transfer of Ownership of Cultural Property. This convention recognizes that the illicit import, export and transfer of ownership of cultural property is one of the main causes of the impoverishment of the cultural heritage of the countries of origin of such property (UNESCO.org). The convention protects ownership of cultural objects, including human remains and can also result in the return of stolen property to the state of origin. This organization speaks to the importance of cultural resources as a whole, realizing that the entire global community is richer for the preservation of all cultural items regardless of where they are found (Hutt and Riddle, 225).

Although policies were developed, many museums and cultural institutions face an issue with the cultural or sacred objects that were acquired for their collection prior to modern established museum standards. Many of the remains have no documentation or acquisition information since standards and guidelines for acquiring human remains did not exist at the time of donation. Alexander P. Alexander, former Director of the Museum Studies Program of the University of Delaware and former president of the AAM has suggested in these cases that museums “proceed cautiously and adhere scrupulously to the conditions under which such objects were acquired until legal

remedies can be found” (Alexander, 124).

Codes of Ethics are updated periodically to respond to changing conditions, values, and ideas; but the need for a set of standards and ethics is always present among museums. The institution itself can develop standards and ethics to practice, but they are also responsible for following an authoritative Code of Ethics in the museum world. The AAM and the ICOM continually stress and make available a professional Code of Ethics for museums and institutions in the United States and worldwide.

For both the AAM and ICOM, the Code of Ethics for Museums gives a guideline of professional standards. It is up to each museum to develop and enforce detailed policies and procedures. The responsibility of acquiring, storing, caring for and managing, exhibiting, and removing human remains in a collection falls completely on the museum. It is important to create a Collections Management Policy that covers these topics, and even more important to constantly enforce and maintain the policies. The ethical treatment of collections is often a subsection of a museum’s collections management policy. This document is often reinforced by the museum’s overall code of ethics, which addresses ethical issues beyond those found in collections. The majority of museums make their Collection Management Policy available to the public through their website or by request.

Chapter 7. Case Studies: Human Remains and Museums

Many museums or exhibitions that hold human remains acquire or collect them for different reasons. The context, setting, and value of the remains change from museum to museum or exhibition to exhibition. It all depends on what the museum or institution wants to portray to its audience.

There are many museums and institutions worldwide that have human remains in storage and on public display. Some even base their entire collections and exhibits on human remains and the study of the human body. The following case studies were chosen to illustrate the variety of museum settings in which human remains can be found. After researching museum standards, it is important to ascertain if these values are reflected in specific museums or exhibits. The following is a look at three specific, yet diverse, instances of human remains available to the public in a museum setting. The first example, The Mutter Museum, has a mission devoted entirely to human pathology. The second, Body Worlds, is a for profit exhibit which sensationalizes human anatomy for public viewing. The third, the Buffalo Museum of Science, is a medium sized natural history museum which houses a variety of collections, human remains comprising less than 5% of their total holdings.

The Mutter Museum

The Mutter Museum in Philadelphia represents a non-profit museum that is dedicated to the acquisition and collection of human remains. Establishing a museum of specimens was not an immediate goal for the College of Physicians in Philadelphia. A member of the college, Thomas Dent Mutter (1811-1859), bequeathed his collection of medical specimens and artifacts. Founded in 1856, The Mutter Museum was originally

created for future doctors and physicians as an educational tool. Its focus is on the study of anatomy and human medical anomalies. Because of rising interest from the general public, the Mutter Museum opened its doors to everyone in the 20th century. The museum serves as a “valuable resource for educating and enlightening the public about our medical past and telling important stories about what it means to be human” (muttermuseum.org).

The Mutter Museum embodies The College of Physicians of Philadelphia’s mission to “advance the cause of health, and uphold the ideals and heritage of medicine.”

The college and the museum both strive to

“enable individuals, families and communities to take greater responsibility for their health, improve the health of the public through service to health professionals, enhance appreciation of the heritage of medicine, and provide information for the development of health policy”(muttermuseum.org).

The museum achieves its mission through its wide collection of human remains. The Mutter Museum holds over 20,000 objects which includes fluid-preserved anatomical and pathological specimens, skeletal and dried specimens, medical instruments and apparatuses, anatomical and pathological models in plaster, wax, papier-mâché, and plastic, memorabilia of famous scientists and physicians, medical illustrations, photographs, prints, and portraits (muttermuseum.org). Some of the prominent collection pieces are a plaster cast of the torso of Chang and Eng, the Siamese twins conjoined at their livers, the tallest skeleton on display in North America, a large collection of skulls, and 2,000 objects extracted from people’s throats.

The Mutter Museum recently received a grant from the William Penn Foundation through the CCAHA to have their outdated Collection Management Policies redone and updated. This grant funded endeavor is an example of how museums are revisiting their

policies and guidelines regarding their collections. The development of new standards, ethics and legal regulations is forcing museums to re-examine and reformat their own policies on attaining, accessioning, and managing their collection of human remains and sacred objects. For an institution like the Mutter Museum, whose main purpose is the collecting, managing, and display of human remains, it is important to be up to date on all professional standards as well as keeping their own policies and guidelines current.

Body Worlds: An Anatomical Exhibition of Real Human Bodies

“Body Worlds” represents a for profit company that serves museums and institutions around the world by developing and managing traveling exhibits. Similar to the Mutter Museum, it was originally created to educate professionals in the field of anatomy; doctors, physicians, medical students, etc. and gained interest and popularity with the general public. Although “Body Worlds” does follow structured, and unique, acquisition policies, because it is not a museum, a Collections Management Policy is not necessary.

From 1995-2004, the exhibit “Body Worlds: An Anatomical Exhibition of Real Human Bodies” was displayed throughout Europe and Asia. The exhibit drew in crowds from all over the world and was viewed by over fifteen million people. It was developed by Dr. Gunter von Hagens in Germany and it features more than 200 human specimens preserved through his process of plastination. Plastination consists of stopping the process of decomposition using formaldehyde. Posed specimens are dissected with forceps and scalpels. Bodily fluids are removed and replaced by acetone in a cold acetone bath. Fat molecules are replaced by acetone in a warm acetone bath. In a

vacuum, acetone is extracted and replaced with plastic. The bodies are then positioned, cured in gas, and infused with silicon rubber. According to Dr. von Hagens,

“The primary goal of BODY WORLDS is health education. On the one hand, individual specimens are used to compare healthy and diseased organs, i.e., a healthy lung with that of a smoker, to emphasize the importance of a healthy life-style. On the other hand, life-like posed whole-body plastinates illustrate where in our bodies these organs are positioned and what we are: naturally fragile in a mechanized world” (bodyworlds.com).

The objects in the collection include entire bodies, individual organs and body parts, and transparent body slices. Many entire body specimens are positioned to look as though they are performing every day activities such as dancing, athletics, playing chess, and even riding horseback.

The acquisition policy for Body Worlds is unique compared to most museums and institutions. The majority of the plastinate specimens on display in “Body Worlds” exhibitions come from the body donation program managed by The Institute for Plastination (IfP) in Heidelberg, Germany. The countless donors make exhibiting real human specimens possible.

“During their lifetimes, these people willed that, upon their deaths, their bodies should be plastinated and thus made available for educating doctors and providing instruction for anyone else with interest in medicine” (Hagens, 30).

The donor’s intent on donating their bodies is that they will be useful to others even in death, and can help educate and provide further knowledge to the public. All donors are provided with detailed information regarding the program and process. Donors then sign consent forms and the body donor ID card. In many of the “Body Worlds” exhibits, donor cards are on public display as an example of the donation process. They also give an explanation from the donor on why they decided to be part of the exhibit. Names are blacked out to maintain anonymity and the plastinates on display are never identified.

The exhibition, which is still traveling the world with 6 different stories, is meant to be scientific and educational, giving visitors a close and in-depth look at human anatomy. Throughout its travels in Europe and Asia “Body Worlds” faced some controversy, and was met with even greater difficulties and protests when it came to the U.S. The major conflicts the exhibit caused include religious offenses, ethical issues, medical issues, gender stereotyping, educational issues, and the donation and acquisition of the cadavers put on display.

Although not all religious groups have opposed “Body Worlds” individual values and sensitivities contributed conflict for the exhibition. There were various religious groups that took offense to the collection of human cadavers. According to Ulrich Fischer, dean of the Lutheran Church of Mannheim, Germany, the media hype over the exhibition of real human bodies made them believe that the church had to respond to “Body Worlds.” In their efforts, the State Museum reacted to their concerns.

“children not accompanied by a parent or guardian were denied admittance to the exhibition; a sign indicating the potential for offending religious sensibilities was placed outside the museum entrance; and signing consent forms for donating one’s body to plastination was prohibited on museum grounds” (Fischer, 236).

Fischer believes that religious associations are unmistakable in the exhibit, “such as when plastination was referred to as an “act of resurrection” or that plastinates had been “preserved for all eternity” (238).

Ethical issues over how the cadavers were viewed and displayed also contributed to the concerns and controversy “Body Worlds” caused in the U.S. Many people, both professionals and amateurs, believed the display of human remains in such a manner takes away from any human aspect or life of the person. They become subjects in an exhibit and objects to be viewed for entertainment. The positions in which the plastinates

are placed can be construed as denoting them to that single act, and may take away from that person's life as a whole of who they were.

“An inevitable effect of the display of corpses at the BODY WORLDS exhibition is to depersonalize human beings. The person, the corpse, is presented as an inanimate object, similar to the way in which our media frequently portrays corpses as objects rather than as dead persons” (Fischer, 237).

What people see in the media can desensitize them to death and how we contextualize the dead. The anonymity of the cadavers on display may also contribute to these feelings of the remains being “objectified.” Once donated, the human remains are plastinated into a position that may be a reflection of their life and are entitled as such. Examples of this include *The Skateboarder*, *The Reclining Pregnant Women*, and *The Kneeling Lady*.

While on display, any personal information including names remains unknown.

Medical concerns were also raised over the handling and transportation of the plastinates. In the U.S., State Anatomical boards normally oversee the handling of bodies for medical purposes. Many have objected to the lack of oversight and supervision of the human bodies for public display. International Trade experts also have issues with the way bodies for commercial displays are transported. According to Dr. Gunther von Hagens, the Plastinates are items in anatomical collections and are shipped under Customs Classification Code 97050000 which encompasses zoological, botanical, mineralogical, or anatomical collections (Hagens, 228).

The process of body donation and acquisition is also questioned and highly scrutinized. Dr. Gunter von Hagens has been accused of using bodies from deceased persons that did not give consent. This included prison inmates, hospital patients, and executed prisoners from China. These accusations led to lawsuits, which Dr. von Hagens

eventually won because of his stringent body donation process. He maintains that all bodies displayed come from donors who gave consent.

In 2004, the California Science Center became interested in launching the debut of “Body Worlds: An Anatomical Exhibition of Real Human Bodies” in America. With all the issues and concerns that had been previously raised from the exhibition, the Science Center instituted a rigorous review process which included a local Ethics Advisory Committee to advise the Science Center on the ethical issues and concerns that were sure to be brought up. Composed of religious, medical, and bioethics leaders in the Los Angeles community, the overall opinion and recommendations included:

“The consensus of the Ethics Advisory Committee was that the exhibit has considerable educational value and is appropriate for the Science Center. What makes the exhibit so compelling (real bodies in everyday poses) is also what makes it most controversial. Without those very features, the exhibit would not be such a powerful educational experience. The religious advisors felt that the exhibit was not a breach of ethical and moral Judeo-Christian tenants. However, there may well be opposition to the exhibit based on individual values and sensitivities, and these need to be carefully considered. The two most sensitive areas are likely to be the source of the bodies and the display of the bodies in everyday poses. The Science Center needs to properly address both these issues and effectively communicate this to the public. The plastinates are displayed in the context of science, health and medical education, and create an atmosphere of respect. The key goal of the exhibit is nicely worded in the Body World’s catalog: “For the medical enlightenment and appreciation of lay people” (Summary of Ethical Review, 2004-2005).

The summary concluded that the educational aspects and important nature of the content in the exhibit outweighed any protests or conflicts that may arise. With proper donation and acquisition documentation, and consideration and respect for presentation and layout, the exhibit was approved and set to debut in America.

Through all the precautions and preparations taken for exhibiting “Body Worlds,” issues were also raised within the displays themselves. The exhibit was accused of

gender stereotyping. Some visitors took offense to the way certain plastinates were positioned and presented on display. Many male plastinates are portrayed in heroic roles such as *The Horseman*, *The Muscleman*, *The Fencer*, and *The Runner*. Many female plastinates are presented in the context of motherhood, passivity, and beauty. *The Reclining Pregnant Women*, *The Angel*, and *The Ballerina* are examples of these stereotypical female attributes. These accusations of gender stereotyping don't hold much merit as the positions the plastinates are in reflect an action or attribute of the person while alive. While their identities remain anonymous to visitors, the positions they are in humanize them with identifying attributes or hobbies they had in life.

Although much time and energy has been spent on addressing probable issues and preparing the visitors for the exhibition, the general idea and concepts behind "Body Worlds" is going to cause controversy or concern wherever it travels. Even with the significant educational values it possesses, there are so many individual, ethnic, and religious values and sensitivities at stake that nothing is ever completely acceptable or tolerable to everyone.

Buffalo Museum of Science

The Buffalo Museum of Science (BMS), located in Buffalo New York, represents a mid-sized non-profit collecting museum that holds some human remains in its collection, but the collection of human remains is not a major driving force of its mission or goals. Similar to many museums in the United State, the BMS acquired human remains before museum standards, policies, and guidelines were developed in regards to them and has worked them into its mission, Collections Management Policy, and Collections Plan as they were developed. Because the BMS represents a common trend

or practice regarding the presence of human remains at many museums across the nation, this paper will take an in depth look at its policies, standards, and collection, and the issues and concerns that they, like many museums across the United States, may face due to the presence of these collections.

The Museum was originally founded as The Buffalo Society of Natural Sciences (BSNS) in 1861, and was composed of scientists, professionals and amateurs in the fields of natural history and the natural sciences. The objective of the BSNS was the “promotion and study of the natural sciences through the formation of a museum and library, the procurement of lectures, and by such other means as shall be desirable and efficient of that purpose” (Goodyear, 13). The Buffalo Society of Natural Sciences started collecting while they were located over the New York and Erie Bank. Among the collections were objects of entomology, geology, library, conchology, anatomy and ethnology.

Once the BSNS had an established location in the basement of the Buffalo and Erie County Public Library, they were able to display much of their collection in large exhibits. The displays incorporated many of their collections including mounted birds, casts of Mastodon bones, fossils from local areas, the largest public collection of eurypterids in the world, cases of taxidermy mammals, African implements and weapons from the Pan American Exposition of 1901, and human skulls from local Native American village sites (Goodyear, 28-31). The founders and affiliates of the BSNS were avid collectors of natural history specimens; the objects on display came mostly from their own collections. From 1891-1901, the Board of Managers of the BSNS focused on

collecting only local ethnology, but at the end of 1901, the Pan American Exposition offered the BSNS the ethnological collection, expanding the scope of the collections.

After several temporary locations, the Buffalo Society of Natural Sciences built a permanent location to house, store, and exhibit its collections. This permanent building came under the direction of Chauncey Jerome Hamlin, president of the BSNS from 1920-1948. The Buffalo Museum of Science on Humboldt Parkway opened January 19th 1929. With his interest in esoterica, Chauncey J. Hamlin spent much time in locating and purchasing artifacts and whole collections from exotic cultures, broadening the Buffalo Museum of Science's collections even more.

The Buffalo Society of Natural Sciences has been around for almost 150 years and pre-dates the development of museum standards and ethics. When first organized, the members and staff had only general goals and missions regarding its collection and purpose, but no Collections Management Policy (CMP) was developed and no acquisition guidelines existed. As museum standards were developed and the need for policies and guidelines became vital to all institutions, the BMS created its own set of policies and procedures to follow based on professional principals. A mission statement, CMP and acquisition plan were developed to help create order and to give the museum a driving goal and purpose.

Today, the Buffalo Museum of Science houses over 700,000 collection items in the fields of anthropology, botany, entomology, mycology, geology and zoology. The objects fall under 3 categories of collections; Research, Special, and Teaching. In the Museum's Research Collection, pertaining to the scientific divisions, are examples of human remains spanning geographical and temporal spheres. Therefore, in order to

address the issues previously described we will look at how the Buffalo Museum of Science deals with human remains in its collection through the mission, CMP, and acquisition policies.

In the late 19th century, the Board of Managers of the BSNS wanted to focus on collecting locally and develop a museum that showed the natural history of the Greater Niagara region. Although the collection has expanded beyond local objects and artifacts, the focus is still intact.

In 2009, a new mission statement for the Buffalo Museum of Science was developed and approved, “Inspiring Curiosity Through Exploration.” The previous mission statement is still used as a guideline in the Collections Management Policy and continues to outline the goals and objectives of the Buffalo Museum of Science:

“The Buffalo Museum of Science, through collections, research, education and interpretation, provides opportunities for all people to develop a scientific understanding of the natural and cultural world with an emphasis on the Greater Niagara Region. The Museum challenges everyone to use their knowledge of science to enhance respect for each other and the environment.”

The mission statement is used as a general guideline in the policies, procedures and practices regarding the development and use of the collections at the Buffalo Museum of Science. The Collection’s guidelines are outlined in more detail in the Museum’s Collections Management Policy and the Collections Plan.

The current Collections Management Policy (CMP) adopted in 2008 lays out the ground work for the growth and development of the museum’s collection, while supporting the museum’s mission statement. It establishes the general principals and guidelines for the collections and explains what materials can be accessioned or deaccessioned and how. The CMP is used to ensure professional and legal standards of collection development and outlines policies on care and management.

The Buffalo Museum of Science adheres to the following guidelines for the growth and development of its Collection:

- Comprehensive representation of specimens and artifacts from the Greater Niagara Region.
- Representation of specimens from the Lower Great Lakes region.
- Synoptic representation of materials that reflect biological, geological and cultural diversity throughout the world and throughout time.
- Specimens and artifacts that reflect, document, and support the research specialties of the scientific staff.
- Materials that have particular value and interest for supporting exhibits.
- Comparative and reference material which support research and teaching (BSNS Collections Management Policy, 7).

The Buffalo Museum of Science has acquired, and continues to acquire, objects and materials for its collections through field collecting, gifts, purchases, transfers, bequests, and exchanges. Any of these objects and/or materials that pertain to the collecting guidelines and the Museum's mission statement will be considered for acquisition. The objects the Buffalo Museum of Science acquires are meant to "strengthen and enhance the collections of the Museum to further its research, interpretation and educational activities" (Collections Management Policy, 14). Once objects are acquired and meet the BMS standards, they can be accessioned into the collection.

The BMS has a small collection of human remains falling under different collection categories. The majority of human remains at the BMS are part of the Anthropology division and are for ethnographic or cultural history studies, while a few fall under an educational function. As a consequence of past fieldwork, the BMS even has Native American remains that are inventoried into the collection and are protected and in compliance with NAGPRA. According to section 4.7 of the collections management policy on Human Remains and Sacred Objects:

“In all matters relating to collections, the Museum will be in full compliance with the applicable laws of ownership and collection (e.g. NAGPRA, CITES) and any new legislation relating to the treatment of culture property” (Collections Management Policy, 26).

The Native American items will not be a focus of this in depth look at the collection of human remains at the BMS, as their presence, purpose, and repatriation status are well documented and in compliance with all laws and regulations relating to them. Instead, attention will be placed on remains with unknown cultural affiliations and identity. The human remains at the BMS are split into the two collection categories mentioned in chapter 3, Educational and Research.

Educational Collections

The Buffalo Museum of Science holds a few examples of human remains that were acquired and accessioned into the collection for educational purposes. These remains are anonymous and unidentified with no cultural or ethnic connections. Their purpose in the museum is to be used as a tool for educating the public on human osteology, and show how the human body functions.

Articulated Human Skeleton

Affectionately known as “Wobbling Willy,” this is an articulated human skeleton (Appendix A. Fig. 1). It arrived at the Buffalo Museum of Science in 1934. “Wobbling Willy” was a name given to the skeleton by staff and patrons due to the movement capabilities. A button on the outside of the display case allows visitors to operate the skeleton, moving the arm, wrist and neck. This is meant to demonstrate how the human skeleton works and moves.

The articulated human skeleton was originally made for the Century of Progress Exposition in Chicago 1933/34. The Buffalo Museum of Science purchased it at the end

of the fair to display in the new museum. “Wobbling Willy” is unidentified in terms of personal information and origin. He is most likely Caucasian or, because of the era it was created and purchased, it could originate from a human skeleton trade in India (chapter 1).

Disarticulated (Exploded) Human Skeleton

Another educational item on exhibit is the Disarticulated Exploded Human Skeleton, also received by the BMS from the World’s Fair 1933/1934, Century of Progress Exposition in Chicago Illinois (Appendix A. Fig. 2). The disarticulated skeleton provides a view of each individual bone of an adult. This view allows the public to see the smaller and obscure bones including the ear bones, tailbones, and inner nostril bones. Visitors can also view the points of articulation of the skeleton.

Similar to Wobbling Willy, the disarticulated human skeleton was intended for exhibit. It is another example of an educational tool used in the museum to show the number of bones and the function of them in an adult. Like the Articulated Human Skeleton, the Exploded Skeleton is an unidentified adult.

The articulated skeleton and exploded skeleton are on long term display at the BMS in the “From the Hall of Man....to Today” exhibit. Not only are they an educational tool for viewing the human skeleton, but they also represent a history of the Museum and its past collections and exhibits. The original “Hall of Man” exhibit (Appendix A. Fig. 3) was on display when the museum first opened and featured the same articulated skeleton on display today (Goodyear, 37).

Research Collection

The human remains in the research collection are part of the anthropology department at the museum and span geographic and temporal spheres, as well as represent diverse subject matter and materials. Their presence within the Museum vary from object to object and have to be looked at individually, rather than grouped together as a collection of human remains. They serve many different purposes and are representative of different cultural collections, practices, and beliefs. The anthropological collection includes human remains that have been on short term and long-term public display, objects on permanent display, and objects that have never been on public display.

Egyptian Mummies

The permanent exhibit at the Buffalo Museum of Science “Whem Ankh: The Cycle of Life in Ancient Egypt” has been on display since 1998 and chronicles the daily life, death, traditions, and practices of Egyptians more than two thousand years ago. The exhibit features over 250 Egyptian artifacts and is designed in a way that allows visitors to feel immersed in the Egyptian culture. Many of the objects are on long-term loan from different institutions and include tools, charms, jewelry, mummified animals, and canopic jars.

On display at the BMS are 2 mummies on loan from the Buffalo and Erie County Historical Society (BECHS). Nes-min (Appendix A. Fig. 4) was a priest from the temple of the Egyptian Fertility god Min in the city of Kent-min. He lived during the 5th century BC. Nes-hor (Appendix A. Fig. 5) was also a priest from the temple of the Egyptian fertility god in Khent-min. He lived from 255 BC to 195 BC. His name means “The One

Who Belongs to Horus.” When he died, Nes-hor was 5’5” tall and 60 years old (sciencebuff.org). The exhibit also features the coffin of Djed-hor-ef-anh. The remains of the last priest were not preserved so only his coffin is on display. He was a choirmaster in 725 BC for the temple of Min in Khent-min. Djed-hor-ef-anh means “Horus Speaks and He Lives.” While on display, the environmental conditions are monitored through temperature and RH reports done weekly.

Although “Whem Ankh” opened in 1998, the mummified remains have been on long-term loan to the Buffalo Museum of Science from BECHS since the 1960’s. A tomb like structure was built to encompass 2 of the mummies, and the walls were painted with Egyptian scenes. Along with the mummies, the exhibit featured other Egyptian and Mesopotamian pottery, and Syro-Hittite and Greco-Buddhist artifacts. The original “Egyptian Room” opened on May 16, 1967 (Goodyear, 139). The current interpretation in Whem Ankh, places the mummies in a specific cultural context and time period, focusing on the life and death of Egyptian people approximately 2,330 years ago (sciencebuff.org). Included in the current exhibit is information on both Nes-min and Nes-hor that were obtained through x-rays and computed tomography scans done at Buffalo General Hospital in 1998. Detailed information about life histories and how they were mummified are presented with x-rays and scans revealing injuries, illnesses, and the process of their mummification.

Shrunkened Heads

Another example of human remains at the Buffalo Museum of Science is its small collection of shrunken heads. Of the three in the collection, one is a reproduction made

of monkey skin, one is a human head artificially shrunk by the Jivaro Indians, and the third is an authentic shrunk head from South America.

Figure 6 is a picture of the artificially shrunk head from the Jivaro Indian culture in Amazonia (Appendix A. Fig. 6). Sought after by collectors, shrunk heads from the Jivaro have achieved much fame. According to Rex L. Jones and Catherine E. Ostlund from the Riverside Municipal Museum, because the government outlawed the practice of shrinking heads, many of the recently collected shrunk heads, or *tsanta*, are fakes. “Even a real shrunk head may not be a true *tsanta*, since it has no ceremonial significance and is simply the head of a person who died by natural causes rather than one killed in a battle or raid” (2).

The Buffalo Museum of Science received this shrunk head as a gift from a local collector, Henry Burgard in 1939. It is made of skin, hair, and plant fiber and is currently located in storage. This object was on display in a temporary exhibit in Fall 2007 called “Viva Las Americas” featuring the cultural life and traditions in Latin America, as a representation of their practices in death and war.

Figures 7 and 8 are of the authentic shrunk head in the Buffalo Museum of Science’s collection (Appendix A. Fig. 7 and 8). Collected by George J. Heber, also a local collector, and given to the museum as a gift by him, the shrunk head came from the Lowlands region or Amazonia. This item was most likely an actual head of a man killed in battle by this Amazonian culture and went through the process of head-shrinking as a trophy of war. The shrunk heads are located together in storage in an environmentally controlled room. The temperature and relative humidity are checked monthly to make sure they are in the ideal conditions of 68 degrees temp and 40% RH.

Pest traps are also located in the room and checked monthly. Both of these Shrunken Heads were on display at the Museum when the building first opened in one of the side halls. The authentic shrunken head has never been on public display since then.

Mummified Trophy head

Another artifact from the anthropological collection is that of a human mummified head (C1864) from the Mundrucu in western Brazil (Appendix A. Fig. 9-11). The Mundrucu are an indigenous people living in the lower Madera and Tapajos river region in the state of Para. They were famous with neighboring tribes due to their fierceness and head hunting campaigns. The men of the Mundrucu gained special status through warfare. “The taking of trophy heads was a critical part of being a Mundrucu man” (Hudak, 24). When attacking a village, the Mundrucu would slaughter their victims with a lance or bow and arrow, cut off their heads and collect them in a basket.

The process of mummifying the trophy head began with removing the brains from the head through the foramen magnum. The head was then dipped multiple times in boiling hot water and dried before a roaring fire. Once preserved, the trophy heads were placed in the men’s house as reminders of their status and skill (Hudak, 24).

The mummified head was collected by Xavier Pene from the Mundrucu society in Brazil between 1890 and 1900. It was exhibited at the Buffalo Pan American exhibition in 1901 before it was deposited with the BMS, where it would have been viewed as a curiosity, rather than a culturally significant object. When it arrived at the museum, it was in very poor condition. It is a preserved human head with hair still attached and a feather tassel attached to the left ear. The materials include skull bone, skin, feathers, resins, and fibers.

The mummified head from the Mundrucu society was on public display for the Winter 2008 exhibit “Culture Quest.” The exhibit featured objects from the anthropology, geology, entomology, botany, zoology, and mycology departments and was a representation of the museum’s past and present collectors and showed how and what they collected. Due to the fragile nature and deteriorating state of the object, the mummified head stayed in its custom storage box while on display and environment checks were done throughout the exhibit. In storage, it is sealed in the custom box and maintained at 68 degrees and 40% RH.

Mummy of a Small Child

The Peruvian child mummy is another example of human remains at the BMS with cultural significance (Appendix A. Fig. 12-14). The mummy is most likely male, and age has not been determined. The child mummy was collected from the Andean Culture in Peru from the Colon site and dates to the Pre-Columbian period. It was given to the BMS by Mrs. A. G. Hatch on July 26th 1905 as part of a collection of Peruvian textiles (Cummings, 69).

Peruvian mummification was very different from the ancient Egyptian method. The hot, dry environment would have desiccated the bodies and a form of natural mummification would occur. Depending on where the remains are found, the bodies can also be preserved by freezing. Although mummification was practiced among some Peruvian cultures, the natural desiccation of the dead was sometimes unintentional.

In 2005, the child mummy underwent conservation provided by the museum’s art conservator, Dena Cirpili, who has an MA and Certificate of Advanced Studies in Art Conservation. Noted in her conservation assessment, the mummy of a small child

measures 70 cm long x 20 cm in width and 15 cm in height. There are different textiles associated with the mummy situated below and next to the remains. There is fur-like fiber that fill the mouth and the cupped hands. A darker fur-like fiber runs along the inside of the thighs. Housed with the mummy is a corncob and rope (Ciripili).

The mummified remains are stored in its own microclimate made from a clear polypropylene storage container manufactured by the Sterilite Corporation as per the direction of the Art Conservator. Silica gel was placed around the mummy on the inside of the container to keep the RH low. An RH indicator card was also placed inside to monitor the humidity within the container.

The Peruvian child mummy is an object from the anthropological collection that has never been on public display due to its sensitive nature and delicate condition. This anthropology item does not have to go on public display to validate its presence at the museum. While the BMS emphasizes the importance of using its collection as a tool to educate the public and interpret the cultural world around us, the society also places importance on “the historical collecting activities of society staff that have lead to areas of excellence for research, education and exhibition” (BMS Collections Plan, 5).

Trends in displaying human remains have changed over the years and can be seen in the public display of the anthropological collection at the BMS. Early on, the exhibitions of these objects focused on their curiosity aspect, rather than the academic and cultural significance. The Egyptian mummies were placed in an “Egyptian Room” before they were re-interpreted in a specific cultural context and time period in “Whem Ankh: The Cycle of Life in Ancient Egypt” in 1998. The Peruvian Shrunken Heads were placed in an anthropological exhibit with little detail or specifics of their cultural origins

or significance before the “fake” head was put into a cultural context in “Viva Las Americas” in 2007. The Peruvian Mummified Head was on display in the for-profit Pan American fair as a simple curiosity of the world before it arrived at the BMS. The trends in displaying human remains in museums will be looked at in more detail in the next chapter.

In Summary

Although different in their goals, mission, and use of human remains, the preceding institutions have faced and/or continue to face many issues surrounding the appropriate policies and guidelines for collecting, caring for and managing human remains on and off public display.

The issues surrounding the educational collections of the medical and scientific specimens we see in “Body Worlds” and in the Mutter Museum are usually in their public display. Because “Body Worlds” was developed around the intentions of preserving the dead for anatomical study, the Institute for Plastination is able to place all its focus on preserving and managing human remains. The acquisition and preservation of the dead is their main business, and they are able to focus all of their attention on the proper care and management of these remains. Similar to “Body Worlds,” the Mutter Museum is also able to focus its time and energy in the proper care and management of its massive collection of human remains.

Museums like the BMS face important and urgent issues surrounding human remains in their collection because they are not a driving force of its mission or goals and represent a small portion of their collection. Since museums like the BMS have a vast variety of objects and collections held in their institution, focusing much, if not all, of

their time into creating policies and standards, or even following current standards precisely and accurately, is just not plausible. Due to the variety of different materials and collection items, these museums face issues concerning the care, management, and public display of human remains. This may result in only the minimal amount of standards being met. Collecting policies and documentation can also be an issue with older items obtained when there was a lack of standards and guidelines in attaining cultural property, including human remains.

Although many of these issues have been recognized and changed in the past few decades, with the development of collecting policies created by organizations like AAM and ICOM, there is still a lack of set professional standards available for the management of human remains collected over time in museums. Since most museums like the BMS no longer collect human remains, they must create their own policies and guidelines to follow in managing the remains previously collected. These institutions have to consider many factors when it comes to human remains in their collection; do they fit into the museum's mission, can they provide the best environment for the human remains, do they have the proper documentation and policies in place for them, should they consider deaccessioning the human remains and transferring them to another museum.

For the Buffalo Museum of Science, while they no longer actively collect human remains, the presence of previously collected remains can be clearly justified both on and off display. According to the Museum's Collection Plan (2010), the collecting themes include a "synoptic collection of materials that reflect biological, geological and cultural diversity throughout the world and throughout time" as well as themes in cultural diversity and extraordinary learning experiences (BMS Collections Plan, 6).

While the standards for collecting and managing human remains continue to develop and improve, the BMS has created its own policies and set of ethics for the remains previously collected stated in its Collections Management Policy, Collections Care and Control Section:

Human remains. In pursuit of its mission, the Society periodically undertakes the scientific investigation of archaeological sites, during the course of which human remains and associated funerary objects may be uncovered. To protect rights of the deceased and/or their living descendants, the Society shall document these remains fully in the field and work with appropriate representatives of clearly descendant cultures to determine their proper and ultimate disposition. Where, in the best judgment of the Society's representatives, such human remains and their associated funerary objects can best be preserved through proper curation and where refusal to curate or accept such human remains and funerary objects would result in their destruction, desecration or commercialization, with attendant loss of critical contextualizing records, the Museum strives to work with authorized members of the cultures represented and, within the confines of its mission, finances, legal liability and trusts, makes efforts to ensure that such remains and funerary objects are handled and treated with proper respect, informed by the traditions and interests of the cultures they represent. In all relevant situations, the Society will comply with appropriate federal, state and international statutes regarding remains and funerary objects and considers applications for their repatriation in accordance with such statutes, where appropriate.

Throughout the care and management of these materials, the BMS is always observant and compliant with NAGPRA. The Museum's policies on human remains are very detailed and can serve as a model for future research in developing standardized policies for caring for and managing human remains.

The human remains at the Buffalo Museum of Science fit into its mission and goals as an institution in different ways, whether educational or anthropological in nature. The CMP clearly states its purpose for retaining them in the museum, how they are cared for and maintained, and how they are to be viewed in the collection on and off display.

Chapter 8. Human Remains in the Museum; Past, Present and Future

It is clear that human remains, especially those with ethnographic affiliation, have a long and complex history in the museum world. Past methods in acquiring and displaying remains has led to evolving standards and practices, affecting their presence within museums.

Collecting Human Remains; Past and Present

A lack of standards and ethics early on made collecting and acquiring human remains very easy, and remains were collected with little regard to cultural affiliations or respect for the dead. Remains were stolen, questionably excavated or removed from their place of origin without thought or consideration for their cultural significance and value. The information regarding the human remains collected in such a manner would have been minimal at best. Without documentation and records, the human remains lost their cultural value, history, and in some cases, their identity.

Because of the way they were acquired the museum, and therefore the public, viewed human remains as just another object from a different culture without an identity, past, or cultural value. On display there would have been very little information presented to the public. An example of poor collecting regarding human remains is the “excavation” of Egyptian tombs. When graves were robbed and tombs ransacked, the identity and significance of the dead may have been lost in the search for treasures. Removing the mummy from the tomb without regard for identity or interpretation of the deceased and the site would make for very little information and documentation existing in museums.

This type of collecting objectified their significance to mere curiosities of the world. The famous Robert L. Ripley (1890-1949), “cartoonist of life’s oddities,” dedicated his life to finding the curiosities of the world. “He combed through 201 countries around the globe in his endless quest for marvels” (Miles, 1). Everywhere he went, he collected artifacts; “cold, hard evidence of his unbelievable tales” that he brought back for his for profit “odditoriums” and World’s Fairs around the United States (Miles, 1). In the book “Ripley’s Search for the Shrunken Heads and Other Curiosities” which takes excerpt’s from his writings about his travels, Robert L. Ripley mentions a shrunken human head he purchased in Peru for a little less than one hundred dollars in Panama City (Miles, 29). Such collecting practices illustrate how the 19th century viewed other cultures around the world. Exploiting these remains as curiosities rather than materials with ethnographic significance and importance objectified not only the dead, but the people and traditions of these cultures.

The questionable collecting practices eventually led to legal ramifications and the development of professional standards, specifically regarding cultural and ethnological objects. These standards and policies not only question how objects are collected and acquired, but also bring up issues of patrimony and ownership. With organizations like UNESCO, AAM, and ICOM developing standards and ethics regarding collecting and acquisition practices, along with laws and regulations concerning ownership and patrimony, how museums collected and what they collected began to change. Protective laws such as NAGPRA limits what can and cannot be collected. Regulations such as these have many times resulted in the repatriation of cultural objects to their place or culture of origin, especially human remains. The Peabody Museum of Archaeology and

Ethnology at Harvard University is engaged with working with Native American groups in order to stay in compliance with the law. According to their website, these consultations include

“visits to the Museum to discuss human remains, funerary objects, and sacred objects or objects of cultural patrimony; inquires for additional information on collections; arrangements for physical repatriations; co-curation, with an emphasis on traditional care; and web consultation through the collections database online” (www.peabody.harvard.edu).

The Peabody Museum even encourages groups involved in repatriation activities to consult their collections available online for access to collections information and NAGPRA consultations.

With new laws and restraints in collecting human remains, has their presence or popularity within museums changed? According to Edward P. Alexander, as long as the countries of origin are too weak and poor to enforce protective laws, smuggling and illicit sales are going to continue (134).

“The decision of museums not to acquire objects of doubtful provenance will not cause the market for such materials to dry up, and in some cases may result in the collections of value being kept from public knowledge and even destroyed” (Alexander, 134).

Since a public institution is meant to serve its community in the most ethical and appropriate manner possible, a museum cannot condone the acquisition or public display of stolen or questionably collected human remains. Acting in accordance with laws and regulations and the development of its own acquisition plan allows a museum to function ethically and better serve its public. Many museums, including the Buffalo Museum of Science, develop relationships with local cultural groups that may have a stake in the issue. This allows the opportunity to stay in compliance with protective laws and regulations like the NAGPRA. Once communication is established between an

institution and a cultural group, it can be decided what is best for the objects; should they be returned or allowed to be stored at the museum.

What has also changed is the information and documentation provided with the remains. With the development in standards and ethics in acquiring human remains came an increase in documentation and information provided with them, whether they entered a museum through purchase, donation, excavations, transfers, or exchanges. The remains can now be interpreted with historic background, cultural affiliation, significance, value, and identification. The presence of more information and knowledge regarding the human remains allows for them to be viewed differently; with more respect and understanding by both the museum and its patrons. “Museums have always been warehouses for the physical remains of past societies” (Hudak, 30). The ideas, thoughts, feelings, and understandings of human remains should always be stored with them and at times, presented to the public in thoughtful and appropriate interpretations.

Along with new standards and regulations in collecting human remains, came new acquisition methods and techniques for collecting and displaying them. Dr. Gunther von Hagens created an exhibit which features contemporary techniques of preserving the remains of those that are recently deceased. His acquisition policy relies on people donating their remains to his institution, and preserving them through his process of plastination.

The care and management of remains, and of all collections, has also changed over the years. When collections were private they could be kept relatively safe, but the proper environment and conditions were unavailable and even unknown. With public access, precautions had to be developed against the theft and handling of collection items

by the visitors. The Industrial revolution also created harmful affects like high-intensity lighting, central heating, air pollution and other conditions that could speed the deterioration of many materials (Alexander, 9). The revolution also brought scientific study and knowledge allowing for the conservation and restoration of objects. Good housekeeping methods, proper control of lighting and relative humidity in the last fifty years have “revolutionized the preservation of museum objects and added to museum staffs skilled conservators trained in physics and chemistry” (Alexander, 10).

Displaying Human Remains: Past and Present

Collections started privately and began to go public in the late 17th century the world over. In the U.S., museums developed later. The first permanent museum was started in 1773 when the Charleston Library Society decided to collect materials for the natural history of South Carolina. Early accessions were not limited to the local area and included an Indian hatchet, a Hawaiian woven helmet, and parts of a skull and other bones from a fossilized Guadeloupe man (Alexander, 47-48). Charles Wilson Peale, the “first great American museum director” started his museum in his home in the late 1700’s.

The first function and role of a museum was to collect. Collections “preserve objects of artistic, historic, and scientific importance for the enlightenment and enjoyment of present and future generations” (Alexander, 119). A museum’s collection was the most important aspect of the institution because the objects and materials tell much about the universe, nature, and regarding cultural objects and human remains; they inform on human heritage and the human condition.

The collections of the early museums would have been erratic, with no clear theme or goal. Their public displays would have been just as disordered. When first presenting collections to the public, museums aimed at an aesthetic look, rather than organizing objects culturally or scientifically. In the 1700's, Ole Worm's Museum in Copenhagen used shelving around the walls to place smaller objects and suspended from the ceiling or mounted on the walls larger objects such as taxidermy animals, skeletons, and armor. The Museo Kircheriano placed an Egyptian mummy at the entrance to lure in visitors (Alexander, 42). The order and arrangement of collections was not important. Early museums were not concerned with presenting accurate information or documentation of the objects collected and on display. First, displays were arranged to benefit a knowledgeable audience satisfied with the minimum amount of labels and interpretations (10).

“The collection usually was arranged either aesthetically or according to the principal of technical classification in chronological or stylistic order – a kind of visible storage with crowded walls of paintings or heavy glass cases crammed with ceramics, textiles, metal ware, or natural history specimens” (Alexander, 10).

Rooms, shelves, and cabinets of curiosities were developed in a way to satisfy the curiosity of visitors. In many cases, this included human remains that showed the beliefs, practices, and traditions of other cultures. It wasn't until the 19th century when exhibition function began to change with European institutions experimenting with culture arrangement and period rooms.

Many forces have changed how a museum's collection is exhibited and viewed by the public. According to Edward P. Alexander, museums transformed into cultural and educational institutions serving the general public with the democratization of Western society (175). World's fairs also influenced and changed how objects were exhibited,

with dramatic displays and large objects that could be easily walked around attracting the attention of people. Museum's also had to start competing with stores, malls, sports, and popular culture. With so many ways for people to enjoy their free time, museum's had to develop ways to attract visitors (and income). This can be seen in the development of blockbuster exhibits such as *Body Worlds*, *King Tut*, and the most recent traveling exhibit; *Mummies of the World*. Although the popularity of many blockbuster exhibits can be attributed to Hollywood-esque themes or popular culture interests, the exhibits mentioned above include many forms of human remains, which can still create a shock value that draws in publicity, both negative and positive.

A more recent affect on how human remains are viewed in museums is the media. Although exhibits with human remains on display can still draw in crowds, are they as shocking or even as popular as they were fifty years ago? Or even 10 years ago? With popular television shows like CSI, Bones, and medical dramas showing in more and more detail dead bodies and mutilated human remains, generations are beginning to become desensitized to death.

Although pop culture and the media may have reduced the shock value of human remains, they do not necessarily reduce the popularity within museums. As mentioned above, museums can be highly influenced by pop culture in attracting visitors to their institution. Movies like "The Mummy" can pique peoples' interests and can almost be seen as marketing and advertising for traveling exhibits like *King Tut*, and *Mummies of the World*. Medical dramas and TV shows like "Bones" can do the same thing for an exhibit like *Body Worlds*; as people may gain interest in learning about anatomy and the

human body. Media like this may even make people more curious and fascinated with death, and displaying human remains at a museum can sometimes satisfy that curiosity.

Exhibits are even developed based around some of these pop culture creations. CSI: The Experience is a new traveling exhibit based on the hit CBS show “CSI,” about forensics and crime scene investigation. CSI: The Experience is “an immersive, interactive forensic science exhibit related to the hit TV series that invites people to use real science to solve hypothetical crimes in an exciting multimedia environment” (csitheexperience.org). Its mission is:

“To advance critical thinking skills through forensic investigation, scientific inquiry, and technology.
To promote public awareness of modern advances in forensic science”
(csitheexperience.org).

The television show can be graphic; showing mutilated human remains and murder victims. Like the show, the interactive exhibit takes visitors through a crime scene and allows them to collect evidence and solve a case.

Graphic scenes in the news, TV shows, movies, and video games may affect people’s perception on death. Human remains, murder victims, and casualties are becoming more and more popular in the media; desensitizing people to the reality of death, and creating a barrier between the living and the dead. Because we see human remains in fictional settings, the reality of human remains is no longer that shocking. When viewing actual human remains on display at a museum, they may seem tame and subtle compared to what we are exposed to on a daily basis. Even how we view remains from other cultures can be effected. How does an old practice of collecting and preserving a victims head after battle compare to the images of war we see in the news or even video games? Such cultural traditions can even be downplayed in current society.

In the third installment of the Harry Potter movies, “Harry Potter and the Prisoner of Azkaban,” a shrunken head is seen hanging from a rearview mirror on a bus talking to the passengers.

New trends in preserving human remains have also affected how they are exhibited. How do new techniques for preserving human remains such as plastination, although not widely practiced, compare to mummification; a tradition no longer practiced? In the past, the practice of mummification was done in societies like ancient Egypt as a means of preparing the dead for the afterlife. While in practice, there was never any intention of having such a technique studied or displayed. Plastination was developed by Dr. Gunther von Hagens to preserve the human body so it could be studied by professionals. Although not originally intended for general public viewing, its popularity eventually led to its public display in museums through the creation of Body Worlds. Plastination continues to be practiced for the intention of public viewing. Plastination also allows for the donated bodies to be manipulated into unique arrangements. Many of the bodies are in different positions and forms of action.

The Future of Human Remains in Museums

With the extremes in the media and popular culture, displays of human remains do not seem to create the shock and awe effect they use to evoke. Death on display, such as mummified remains, skeletons, and trophy heads can be seen in many arenas outside of the museum, such as movies, television, and video games. With such changing perceptions of death, it is difficult to predict the future of their presence in museums.

As policies and laws develop in their acquisition, and new practices and techniques for preserving them are created, the type of human remains we see in the

future may change. Cultural displays of the dead have been done and such remains are almost expected to be seen in many museums around the world. Mummies and trophy heads are no longer as shocking or eye-catching as they once were. New techniques of preserving and displaying human remains like plastination open up a new world of exhibits and the types of human remains on public display. Although displays such as these are not without issues and controversy, the remains of the more recently deceased are almost easier to attain.

Developing techniques in preserving and displaying human remains can bring about changes in museum exhibits. Displays such as Body Worlds varies from other exhibits displaying human remains like “Written in Bone” (chapter 2) in terms of context and visual effect. Where historical archaeology tells stories of past lives and people, Body Worlds gives viewers a unique look at the present human condition. The consent and donation process seems to bypass the issues of ownership and cultural property. At the same time, they raise many more ethical concerns surrounding attainment and display.

Chapter 9. Conclusion

Although the collection and display of human remains has been practiced in museums for a long time, the creation of policies, standards, and ethics concerning their acquisition, public display, and management is a recent development and continues to progress. Past trends in collecting and attaining human remains for museums was questionable at best, and has resulted in the development of ethical codes and standards created by organizations such as the AAM, ICOM, and UNESCO. The attainment of cultural property has also led to questions of ownership, resulting in new legal regulations such as NAGPRA. These codes of ethics and regulations can create a better environment for human remains in museums. Understanding their significance and value, whether educational or anthropological, can help us understand their place in the museum and effect how they are viewed in a collection.

The public display of human remains has also changed over the years. Once seen as curiosities, the display of human remains, and all museum objects, has placed more importance on their academic, cultural, or scientific background and significance. The context they are placed in and the documentation and interpretation provided while on display creates an atmosphere of learning. Although displaying human remains may still cause controversy and issues, relying on the mission statement and following all legal regulations can help the museum create an educational and exciting atmosphere.

The care and management of human remains in museums has also improved, although professional standards are still developing. Creating the proper storage and environment for all museum collections is vital to their management. Any policies regarding the acquisition, storage, care, and accessibility to human remains and sacred

objects should be outlined in detail in the institution's collection management policy.

As new policies and standards continue to change, so do the ways we perceive death and the dead. In turn, changing how human remains are viewed in a museum setting. What was once found controversial is often times accepted practice due to the media and changes in popular culture. Skeletons and mummified remains in museum exhibits do not compare or elicit the same response as graphic scenes we see in current movies, television, and video games. We continue to face our own mortality, be it on television or a visit to a museum. Museums have a responsibility to be storehouses of the human condition. In order to maintain this lofty title they are forced to re-examine past practices and procedures. As the profession grows, standards are adopted and revised. As illustrated in this thesis, the curation of human remains is no exception. As stewards of their collections, the museum profession must continue to strive for national standards that support the care and management of the collections left in their custody.

References

- Alexander, Edward P. *Museums in Motion: An Introduction to the History and Functions of Museums*. New York: Altamira Press, 1996. Print.
- American Association of Museums. Code of Ethics. www.aam-us.org/aamcod.cfm. 2000 Accessed May 2010.
- American Museum of Natural History. Collections Policy. 1996. <http://www.agiweb.org/smmp/policy-AMNH.pdf>. Accessed March 2011.
- American Museum of Natural History. Division of Anthropology Collections Management. 2011. <http://research.amnh.org/anthropology/database/management>. Accessed February 2011.
- Ames, Michael M. *Cannibal Tours and Glass Boxes: The Anthropology of Museums*. Vancouver and Toronto: UBC Press, 1992. Print.
- “A Mundrucu Mummified Head Tropy.” *Bulletin of the Buffalo Society of Natural Sciences* 11.2 (1915): 198-199. Print.
- “A Jivaro War Trophy: Human Head Artificially Shrunk by the Jivaro Indians.” *Bulletin of the Buffalo Society of Natural Sciences* 11.2 (1915): 196-197. Print.
- Body Worlds. Institute for Plastination. 2005-2010. <http://www.bodyworlds.com/en.html>. Accessed February 2010.
- Brooks, Mary M. and Claire Rumsey. “The Body in the Museum.” *Human Remains: Guide for Museums and Academic Institutions*. Ed. Vicki Cassman, Nancy Odegaard, and Joseph Powell. United Kingdom: Altamira Press, 2007. 261-289. Print.
- Buffalo Museum of Science. <http://www.sciencebuff.org/>. Accessed January 2010.
- Buffalo Society of Natural Sciences. “Collections Management Policy.” 2008. Manuscript on file at the Buffalo Museum of Science.
- Buffalo Society of Natural Science. “Collections Plan.” 2010. PDF file. Manuscript on file at the Buffalo Museum of Science.
- Bunson, Margaret. *A Dictionary of Ancient Egypt*. New York and Oxford: Oxford University Press, 1991. Print.
- Burcaw, G. Ellis. “Museum Defined.” *Introduction to Museum Work*. New York: Altamira Press, 1997. Print.
- Cassman, Vicki, Nancy Odegaard and Joseph Powell. *Human Remains: Guide for Museums and Academic Institutions*. United Kingdom: Altamira Press, 2007. 1-4. Print.

- Ciripili, Dena. Conservation Report for the Buffalo Museum of Science. 2005.
Manuscript on file at the Buffalo Museum of Science.
- CSI: The Experience. 2000-2008. <http://www.csitheexperience.org/>. Accessed October 2010.
- Cummings, Carlos E. "The Ethnology Collection." *75 Years: A History of the Buffalo Society of Natural Sciences*. Bulletin of the Buffalo Society of Natural Sciences 1861-1936. 18 (1938). Print.
- Denver Museum of Nature and Science. "The Manual of Collection Policies for the Denver Museum of Nature and Science." 2008.
<http://www.dmns.org/media/6901/DMNS-Manual-of-Collection-Policies.pdf>.
PDF file. Accessed May 2011.
- Department for Culture, Media, and Sport. "Guidance for the Care of Human Remains in Museums." 2005. PDF file. <http://www.culture.gov.uk/>. Accessed November 2009.
- Edson, Gary. *Museum Ethics*. New York: Routledge, 2005. Print.
- Edwards, Alison. "Care of Sacred and Culturally Sensitive Objects." *Museum Registration Methods 5th Edition*. Ed. Rebecca A. Buck and Jean Allman Gilmore. Washington, DC: American Association of Museums, 2010. 408-425. Print.
- Wiltshcke-Schrotta, Karin. *Human Remains on Display – Curatorial and Cultural Concerns*. Fellowships in Museum Practice. 2000. Print
- Fischer, Ulrich. "When Death Goes on Display." *Body Worlds: An Anatomical Exhibition of Real Human Bodies*. Gunther von Hagens and Angelina Whalley. Heidelberg, Germany: Verlagsgesellschaft mbH, 2007. 236-239. Print.
- Fisher, Genevieve. "Preventative Care." *Museum Registration Methods 5th Edition*. Ed. Rebecca A. Buck and Jean Allman Gilmore. Washington, DC: American Association of Museums, 2010. 287-292. Print
- Germer, Renate. "Mummification." *Egypt: The World of the Pharaohs*. Ed. Regine Schulz and Matthias Seidel. Konemann Verlagsgesellschaft mbH, 1998. 462-469. Print
- Goodnow, Katherine. "Bodies: Taking Account of Viewers' Perspectives." *Human Remains and Museum Practice*. Ed. Jack Lohman and Katherine Goodnow. UNESCO. 2006.123-130. Print
- Goodyear, George F. *Society and Museum: A History of the Buffalo Society of Natural Sciences 1861-1993 and the Buffalo Museum of Science 1928-1993*. New York: Buffalo Society of Natural Sciences, 1994. Print.

- Hagens, Gunther von. "Anatomy and Plastination." *Body Worlds: An Anatomical Exhibition of Real Human Bodies*. Gunther von Hagens and Angelina Whalley. Heidelberg, Germany: Verlagsgesellschaft mbH, 2007.9-36. Print.
- Hagens, Gunther von. "On Gruesome Corpses, Gestalt Plastinates and Mandatory Interment." *Body Worlds: The Original Exhibition of Real Human Bodies*. Gunther von Hagens and Angelina Whalley. Heidelberg, Germany: Verlagsgesellschaft mbH, 2008. 208-230. Print
- Hill, Linda J. K., Wilma Bouwmeester. "Factsheet: Conservation and Lighting." *Scottish Museums Council*. 2005. PDF file.
http://www.netnebraska.org/extras/treasures/pdfs/fs_cons_and_lighting.pdf.
 Accessed November 2009.
- Hudak, Monica. "Opening Our Eyes: Considerations in the Conservation Treatment of Human Remains." Research Project. Buffalo State College Art Conservation Department, 2004. Print. Manuscript on file at the Buffalo Museum of Science.
- Hutt, Sherry, Jennifer Riddle. "The Law of Human Remains and Burials." *Human Remains: Guide for Museums and Academic Institutions*. Ed. Vicki Cassman, Nancy Odegaard, and Joseph Powell. United Kingdom: Altamira Press, 2007. 223-243. Print
- International Council of Museums. Code of ethics. <http://icom.museum/ethics.html>.
 Accessed May 2010.
- Jones, Rex L. and Catherine E. Ostlund. "Tsanta – Shrunk Heads of the Jivaro Indians." *An On-line Exhibit of the Riverside Municipal Museum*. 2003.
- Kirshenblatt-Gimblett, Barbara. "Objects of Ethnography." *Exhibiting Cultures: The Poetics and Politics of Museum Display*. Ed. Ivan Karp and Steven D. Lavine. Washington D.C.: Smithsonian Books, 1991. 386-443. Print.
- Local Ethics Advisory Committee. "Body Worlds: An Anatomical Exhibition of Real Human Bodies. Summary of Ethical Review 2004/2005." *California Science Center*. 2005. PDF file.
- Low, Theodore. "What is a Museum?" *Reinventing the Museum: Historical and Contemporary Perspectives on the Paradigm Shift*. Ed. Gail Anderson. Oxford: Altamira Press, 2004. 30-43. Print
- Malaro, Marie C. *A Legal Primer on Managing Museum Collections*. 2nd Edition. Washington: Smithsonian Books, 1998. Print.
- Morris, Alan G. "Documentation: History and the Sources of Skeletons in Collections." *Human Remains: Guide for Museums and Academic Institutions*. Ed. Vicki Cassman, Nancy Odegaard, and Joseph Powell. United Kingdom: Altamira Press, 2007. 151-161. Print

- Mutter Museum. The College of Physicians of Philadelphia, 2005.
http://www.collphyphil.org/Site/mutter_museum.html. Accessed February 2010.
- Nation Parks Service U.S. Department of the Interior. Native American Graves Protection and Repatriation Act. 1990.
<http://www.nps.gov/nagpra/mandates/25usc3001etseq.htm>. Accessed May 2011.
- Peabody Museum of Archaeology and Ethnology at Harvard University. "NAGPRA and Repatriation, 2009. <http://www.peabody.harvard.edu/node/310>. Accessed July 2011
- Perrot, Paul N. "Museum Ethics and Collecting Principals." *Museum Ethics*. Ed. Gary Edson. New York: Routledge, 2005. 189-195. Print.
- Phoebe A. Hearst Museum of Anthropology. "University of California Policy and Procedures on Curation and Repatriation of Human Remains and Cultural Items." 2001. PDF file. <http://www.ucop.edu/ucophome/coordrev/policy/5-01-01att.pdf>. Accessed May 2011.
- Pitt Rivers Museum. 2010. <http://www.prm.ox.ac.uk/>. Accessed March 2011.
- Ripley, Robert L. *Ripley's: Search for the Shrunken Head and other Curiosities*. Ed. Rebecca Miles. China: Ripley Entertainment Inc., 2007. Print
- Sacred Destinations. The Dead on Display. 2005-2010. <http://www.sacred-destinations.com/sacred-sites/dead-on-display.htm>. Accessed May 2011.
- Sedlec Ossuary. The Church of Bones. 2009. <http://sedlecossuary.com/>. Accessed May 2011.
- Sciolino, Elaine. "French Debate: Is Maori Head Body Part or Art?" *The New York Times*, 26 Oct. 2007.
- Simmons, John E. *Things Great and Small: Collection Management Policies*. Washington DC. American Association of Museum, 2006. Print.
- Smithsonian National Museum of Natural History. Collections Policy. http://entomology.si.edu/Collections/NMNH_CMP_Sept-18-2006.pdf. 2006. Accessed March 2011.
- Society for American Archaeology. <http://saa.org/>. Accessed May 2011.
- Steckel, Richard, Clark Spencer Larsen, Paul Sciulli and Phillip Walker. "The Scientific Value of Human Remains in Studying the Global History of Health." *Human Remains and Museum Practice*. Ed. Jack Lohman and Katherine Goodnow. UNESCO. 2006. 60-70. Print
- Storch, Paul, S. "Bone, Antler, Ivory, and Teeth." *Caring for American Indian Objects: A Practical and Cultural Guide*. Ed. Shereyn Ogden. Minnesota: Minnesota Historical Society Press, 2004. 130-134. Print

Vogel, Susan. "Always True to the Object, in Our Fashion." *Exhibiting Cultures: The Poetics and Politics of Museum Display*. Ed. Ivan Karp and Steven D. Lavine. Washington D.C.: Smithsonian Books, 1991. 191-204. Print.

Walker, Sally. *Written in Bone: Buried Lives of Jamestown and Colonial Maryland*. Minneapolis and New York: Carolrhoda Books, 2009. Print.