

THE RIDDLE OF THE MANY HEADS:  
TEOTIHUÁCAN FIGURINE FRAGMENTS  
AT THE HOUSTON MUSEUM OF NATURAL SCIENCE

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A Thesis

Presented to

The Faculty of the Department

of Art

University of Houston

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In Partial Fulfillment

Of the Requirements for the Degree of

Master of Arts in Art History

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By

Aline C. Baldwin

May, 2014

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## **ABSTRACT**

The purpose of this study is to examine a collection of 128 terracotta figurine fragments presently housed at the Houston Museum of Natural Science. These terracotta figurine fragments are believed to have originated at Teotihuacán, Mexico and if so, were produced between 200 B.C. and 700 A.D. A visual analysis of the collection was conducted using the organizational system designed by Dr. Sue Scott as part of her work with the figurine fragments from the Sigvald Linné excavations at Teotihuacán. In addition to the visual analysis, archival research was done to determine the provenance of these objects. The thesis also investigates the broader issue of provenance in relation to how museum collections of pre-Columbian artifacts are formed. By adding these figurines to the documented corpus of Teotihuacán artifacts, their existence has been established for further comparative research.

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## Introduction

The purpose of this thesis is to study a collection of unprovenienced Pre-Columbian artifacts presently housed in the storage facility of the Houston Museum of Natural Science. The terracotta figurine fragments in this collection are believed to have originated at Teotihuacán, Mexico and, if so, would have been produced between 200 B.C.E. and 700 C.E. Through my research I was able to establish provenance for many of the artifacts in the collection. I also conducted a visual comparison between the HMNS figurine fragments and images of figurine fragments with established provenience. My original purpose was to authenticate the HMNS figurines in order to add them to the documented corpus of Teotihuacán artifacts, but through the course of my research I came to realize that a simple pronouncement on the authenticity of many of the objects was not possible. Instead of declaring objects simply authentic or inauthentic, I found that it was more productive to engage in a careful visual analysis of the collection. By analyzing this collection I hope to make its existence known so that these figurine fragments can be used to further future comparative research..

Although nothing has been written about this specific collection of artifacts, a great deal has been written about Pre-Columbian figurines in general, and also about Teotihuacán figurines specifically. Chapter One of my thesis explores the way figurines have been excavated and categorized since the late 1800's. In this section I examined the research related to the Teotihuacán figurine corpus, focusing on the history of archaeological excavations in and around Teotihuacán. Research published in conjunction with archaeological digs is important to this thesis because illustrations and photographs of objects catalogued *in situ* at Teotihuacán are essential for visual comparison.

Chapter Two of my thesis presents an analysis of the artifacts in the HMNS collection. By associating the accession slips attached to each fragment with archival documentation, I was able to determine that the collection has been acquired from various donors as gifts to the museum. The archival research indicates that 94 of the artifacts in the collection have some form of documented provenance because we can determine who acquired the artifacts and when they were donated to the museum. The records indicate that although two of the donations make reference to a “find spot”, none of the artifacts can be considered to have definitive provenience because they were not collected at documented archaeological excavations.

Because the artifacts lack definitive provenience I visually analyzed the collection in order to determine if the fragments share traits in common with Teotihuacán figurines possessing established provenience. I chose Dr. Sue Scott’s analysis of the provenienced Linné collection as the primary guide for the identification and classification of the HMNS artifacts. Using the V-Wire system developed by Professor Daniel Price at the University of Houston, I imported images of the figurine fragments provided by the HMNS. The system allowed me to sort and categorize the images using the system developed by Dr. Scott. A careful comparison of the HMNS figurine fragments to those of the Linné collection revealed that many of the artifacts in the HMNS collection share traits similar to those in the provenienced Linné collection.

The problem of authentication is explored in Chapter Three. The way the HMNS collection has formed affects how the artifacts can be placed in the broader figurine corpus. The lack of provenance, and the failure to make exact matches for many of the fragments, reveal a problem that all museums face when trying to authenticate ancient

artifacts. In this section I share a discussion with the HMNS Curator of Anthropology about the collection and study how museums collect ancient artifacts. By learning how the larger collection process works, I have been able to understand how the HMNS collection was formed.

Teotihuacán is a tale of two cities divided by time. It exists today as an archaeological site, a faded image of its former glory. It is situated about 25 miles north of modern day Mexico City. According to the Columbia University professor Esther Pasztory, Teotihuacán was, during its heyday, a thriving metropolis, populated with over 100,000 souls (Pasztory 1997, 4). Today its once busy streets and extensive apartment complexes have crumbled. It is still bustling. Every day thousands of visitors from all over the world stroll down the Street of the Dead, climbing the majestic stepped pyramids in search of a connection with a long lost past. Standing atop the Pyramid of the Sun it is easy to cast your eyes downward towards the tourists wandering below and imagine a time when the inhabitants of Teotihuacán walked these same streets.

Archaeological evidence indicates that the city we now call Teotihuacán was established in approximately 200 B.C.E. and flourished until 700 C.E. (Pasztory 1997, 5). The three large Pyramids along the Street of the Dead appear to have been built between around the beginning of the Common Era and stand today as monuments to the engineering ingenuity of these ancient people (77). We know very little of the people of Teotihuacán – not even what they called themselves. They left no records to tell us who they were, where they came from or where they went. Although the city complex was all but abandoned in 700 A.D., the city itself was never really deserted. People have been attracted to the monumental architecture of the pyramids for thousands of years and so a steady stream of

visitors has kept the city alive. We do know that the people of Teotihuacán appear to have had interactions with the Mayans (Pazstory, 1997, 100) and that the Aztecs, in their travels through the Valley of Mexico, gave it the name “Teotihuacán”, which means: “The Place of the Gods” (7).

The Teotihuacán civilization did not have a writing system that has survived. Because we have no written records, we rely entirely on archaeological evidence to help us make assumptions about what life would have been like in the city. Archaeologists have uncovered what appear to be large housing complexes and residential apartment barrios. Their discoveries tell us that the city once housed people from various Mesoamerican cultures living in segregated wards (Coe and Koontz 2008, 112) Was there a political elite? Most certainly, but the Teotihuacán, unlike the Mayans or the Aztec who came later, did not build large statues to extoll the importance of their leaders. Evidence from murals painted on residential walls indicates that the Teotihuacán worshipped many gods, but few statues of these deities have been found (Pasztory 1997, 83). What have been uncovered in the ruins are thousands of small terracotta figurines. For the most part these figurines do not appear to be representations of gods because they do not share the iconographic markers depicted on the murals<sup>1</sup> that would identify them as such. Perhaps it is the Teotihuacán emphasis on the common man that makes the civilization so fascinating.

#### A note on Terminology

Certain terminology will be used in this paper that has specific meaning to the study. Although the terms provenience and provenance are related, there are distinctions

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<sup>1</sup> Murals depict what appear to be men masquerading as gods. They wear elaborate costumes with iconographic markers such as goggles or feathered panaches.



between these terms that I would like to clarify. Provenience refers the archaeological find spot of an object, which establishes its origin. Provenience is established through scientifically documented practices and provenienced objects, because they were uncovered in situ at an archaeological site, are recognized as authentic. The term provenance refers to the detailed ownership history of an artifact. Many ancient artifacts have records of provenance – we have written historical records tracing the various owners back to the point where the artifact was purportedly found. It was not until the late 1800's that scientific archaeological practices were employed, so any artifacts unearthed before that time may have a very well established provenance, but without provenience, their authenticity can only be established through scientific testing or close visual comparisons.

## Chapter One: Historiography

Since the 1940's Teotihuacán has been recognized as one of the important civilizations in Mesoamerica (Pasztory 1997, 16). Numerous books and articles have been written about the city and many symposia held. The foundation for all of this research rests on the shoulders of the men and women who have meticulously labored to uncover the city's secrets and bring them into the present. Although much of the research has focused on the monumental structures, many excavations have been done in the domestic areas as well. The foundations of these vast housing complexes contain a multitude of terracotta fragments, providing the key to this identification project.

Because the documentation of scientifically excavated figurines is crucial to my thesis, I think it is important to look to the excavation records in order to pinpoint the research that has focused on figurines. The figurines uncovered through these excavations form the body of provenienced specimens necessary to perform the visual comparisons of collections like the one found at the HMNS.

As reflected in the Teotihuacán Excavation Chronology Chart (Appendix A), quite a bit of research has occurred at Teotihuacán since 1886. Many more researchers have worked at the site, but the ones appearing in the chart have either spent an extended amount of time working at, or writing about the site, or have studied the Teotihuacán figurines specifically. This section will explore the work of seven of the men and women who have engaged in significant Teotihuacán figurine research.

In the course of their excavations archaeologists have mapped out the environs of the city, identifying ceremonial and domestic areas and establishing a chronology of ceramic production to help us understand the progression of style and technological developments

that were made during the millennium that Teotihuacán was in existence. Over the years, the interpretation of the function and meaning of many Teotihuacán artifacts has changed.

One of the earliest contemporary writings on the subject of the Teotihuacán figurines appeared in an 1886 *American Journal of Archaeology* article by Zelia Nuttall. At the time of her article, the figurine heads were still being found in countless numbers at the base of the pyramids and in the fields surrounding the site. Nuttall was working primarily with surface collections, which at that time were mostly heads. At first the fact that there were heads without bodies was curious and led to the mistaken assumption that the heads were not associated with figurine bodies (Nuttall 1886a, 157). Nuttall later amended this theory, associating the heads with the figurine limbs that were also found in great numbers (Nuttall 1886b, 328). Her research is supplemented with extensive footnotes indicating that as early as 1844, published commentary was circulating about “the riddle of the many heads”.<sup>2</sup> Nuttall hypothesizes that these heads were representations of individuals (Nuttall 1886a, 158n6). In 1902 she was working at San Angel, a location that is now recognized as a Teotihuacán outpost, when she discovered a trove of figurine heads in a quarry. She noted that they had an appearance and style distinctly different from the Aztec. (Noguera 1962, 127). The contributions of Zelia Nuttall are referred to repeatedly in the literature on Teotihuacán.

Thirty years later Edward Seler, one of the foremost Mesoamerican scholars at the turn of the twentieth century, identified 18 different types of Teotihuacán figurines (Seler 1993, 215). Of particular interest for this study is the article found in volume five of his multivolume work on Mesoamerican Archaeology. His research studies the different types

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<sup>2</sup> Nuttall gives credit to Professor F. W. Putnam, Curator of the Peabody Museum, for coining this term.

of facial styles and provides numerous illustrations to accompany his descriptive analyses. Throughout the article he refers the reader back and forth through the volumes, pointing out similarities with other images from Teotihuacán, Tenochtitlan and even from distant Mayan and Atlantic coast cultures. Although he sees in the faces more similarities between the Aztec pantheon than Nuttall, he does note, especially in Type 18, that the heads may in fact represent individuals (*ibid*).

The 1920's and 30's found George Vaillant at work north of Mexico City in the towns of Zacatenco and Ticoman. He was working for the American Museum of Natural History and was one of the first archaeologists to employ the practice of scientific excavation (American 2008). His field techniques helped set the standard for the documentation that is still in use today.

Although several miles from the Pyramids of Teotihuacán, Vaillant uncovered a trove of clay figurines similar to the ones studied by Nuttall and Seler. In contrast to the trove of disarticulated heads found in great numbers near the surface at Teotihuacán, the figurines described by Vaillant were uncovered from excavated trenches that contained complete figurines,. Focusing his attention on the more commonly occurring types in the area, he divided the figurine corpus into three periods: Early, Middle and Late and further divided these periods into a series of numbered sub groups (Vaillant 1930, 85). His work was quite extensive and set the standard for excavation practice in the area.

During the 1930's, Swedish archaeologist Sigvald Linné was working at Teotihuacán. During the field seasons of 1932 and 1934-35 he collected and catalogued hundreds of artifacts using the now established standards of excavation practices. Perhaps the most interesting aspects of his excavations were that they were focused away from the

ceremonial center. He chose to work in the outlying areas of the city, excavating two large residences that produced literally thousands of artifacts (Scott 2001, 8).

Linné was not particularly interested in figurines so, although he carefully documented each find, he did not classify the figurines he unearthed. This task fell to Sue Scott, who undertook the classification of Linné's figurines in the 1990's. It is the Linné collection, analyzed by Scott, which forms the basis of the comparative figurine study found in Part Two.

A well-known figure at Teotihuacán for over forty years was the noted Mexican archaeologist Eduardo Noguera. In 1962, Eduardo Noguera published an article in *Cuadernos Americanos* that presented a brief history of figurine discoveries. He noted that the facial features of the figurines "are distinct and specific to each cultural period and horizon" making them an excellent means of identifying the "culture to which they belong". (Noguera 1962,126). In the article he gives a nod to Nuttall and mentions the stratigraphic work done by Vaillant and Gamio, which helped cement an idea that had been brewing in archaeological circles that distinctly different cultures existed in the Valley of Mexico before the Aztecs (127).

It is interesting to note that before 1940 it was assumed that Teotihuacán was simply an outpost of the Aztec Empire (Noguera 1962, 127). Nuttall suspected that Teotihuacán might be an earlier civilization when she excavated at San Angel in 1902, but it was the stratigraphic work of Gamio, Vaillant and Noguera that provided evidence of a civilization that pre-dated the Aztec empire by hundreds of years (Pasztor 1997, 57).

Using the basic numerical classification typology developed by Vaillant, Noguera identified five figurine subtypes within the Teotihuacán I Period, 10 subtypes in the

Teotihuacán II Period, three subtypes within the Teotihuacán III Period, and at least 15 subtypes in the Teotihuacán IV period. He describes the Teo I as being identified by hand-modeled figurines with eyes made either by incision or by pastillaje<sup>3</sup>. They are found with and without headdresses. Eyes made of fine incisions identify the Teo II. There is evidence of clothing on these figurine bodies, with petticoats, necklaces and earflaps. Mold made heads appear in the Teo III period. The common “portrait” types originate from this period, as well as articulated “puppets” and hollow figurines. The final Teo IV period is marked by many varied subtypes, which are distinguished by elaborate headdresses (Noguera 1962,129). He notes that the Pre-classic and Early Classic figurines were made exclusively by hand, but that mold made figurine heads began to appear during the Middle Classic period. He uses the term “portrait” as a figurine type, mentioning that they are “extremely abundant at Teotihuacán ” (ibid).

By the mid-nineteenth century, as more figurines were excavated, the manufacturing and distribution processes became better understood which shed new light on the role of the figurines in Teotihuacán culture. The discovery of workshops providing evidence of mass-produced, mold made figurines and large quantities of figurine fragments associated with apartment complexes led most to agree that the figurines played a role in household routines. Although they are found at religious sites and occasionally in burials, the large quantity of figurines found on the surface in and around homes and apartment complexes indicate that the figurines belonged to the living.

The 1960's and 70's found a group of archaeologists working at Teotihuacán as part

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<sup>3</sup> The term pastillaje refers to small pieces of clay that are stuck to the surface of the figurine as opposed to being inscribed into the clay. Usually these pastillaje shapes surround the eyes, creating something that resembles a coffee bean.

of the Teotihuacán mapping project. Rene Million, George Cowgill, Warren Barbour, James Bennyhoff and Evelyn Rattray were just a few of the people on site. The project, sponsored by the University of Rochester, New York was an attempt to map all of the structures in the city. Rene Million, using a computer program run by George Cowgill, directed the mapping project (Bennyhoff 1966, 19). Teams of workers divided the city into grids and every structure was plotted. Every artifact uncovered was labeled, its location entered into the computer database, and eventually stored. Evelyn Rattray and James Bennyhoff worked with ceramics and Warren Barbour assembled data on the figurines (22).

In the course of the mapping project, areas of what appear to be figurine production workshops were revealed. Barbour, working on his doctorate at the time, studied the figurine fragments uncovered in these areas with the intention of establishing a chronological ordering of the figurines and to understand the process of how the figurines were made. To date his finds he used the phase number structure developed by Noguera in the 1960's (Barbour 1975, 23), but tied the system to the ceramic phase name system being used in the mapping project (see Appendix B). He seems to have adopted this practice as a way for the figurine chronology to stay in step with the ceramic terminology used by the mapping project ceramicists James Bennyhoff and Evelyn Rattray (Scott 2001, 23). Barbour places the figurine types into two basic categories: flat and cylindrical, which he then, using existing naming conventions, further divides into three types: Round Heads, Portraits and Puppets. The terms "portrait" and "puppet" are misleading and will be discussed further in the section dealing with figurine function.

Barbour described the portrait types as sometimes having a handmade head, but most often found with a mold made head and handmade body. His theory is that the hand

modeled, round-headed figurines were the antecedent of the mold made portrait types.

Barbour notes that hand-modeled portraits and puppets were made well into to the Early Xolalpan phases but became scarce after the Early Metepec phase. He noted that both hand-modeled and mold made portraits and puppets occur on the surface with the same frequency and are usually found nude (Barbour 1975, 27). The hand-modeled figurines are later replaced in the Late Metepec phase by elaborately dressed and head dressed mold made figurines. Unfortunately the photographic reproductions in Barbour's dissertation are of such poor quality that they are virtually unusable for the comparative purposes of this study.

In 2001 Sue Scott published an analytical study of the Teotihuacán figurines excavated by Sigvald Linné during the 1930's. This study is important to my thesis because I used the images of these provenienced artifacts to visually analyze the HMNS figurines. Chapter Three of Scott's book arranges the figurine corpus into three broad categories: Teotihuacán hand-modeled figurines, Combination hand-modeled and molded figurines, and Molded figurines. Like Barbour, Scott refers to the established naming convention to identify the "portrait" figurines in the Linné collection. She prefers to use the term "articulated" rather than "puppet" when referring to the figurines with moveable limbs (Scott 2001, 29).

Although many of the photographs in Scott's book are of objects from the Linné excavations, she uses examples from other museum collections, including the American Museum of Natural History, the British Museum, Department of Ethnology, London, and the Museés Royaux d'Art et d'Histoire, Bruxelles (Scott 2001, 36). Because most of her images are taken from the Linné excavations at Xolalpan, Tlamimilolpa and Las Palmas, I will refer to the image corpus in Scott's work as the Linné collection. For the purposes of



this study I will use Scott's descriptors to categorize the figurines in the HMNS collection.

### Notes on Form and Function

Before I go further, it is important to briefly discuss the processes used to create these figurines and to address the naming conventions and purported function of these objects. The scope of this paper does not allow a close look at these topics, but in order to appreciate the figurine corpus I feel it is important to give the reader some insight into how and why the figurines might have been made.

The terracotta figurines made at Teotihuacán from 200 BCE to 700 CE usually represented humans and were generally under 10 cm in height. Because of their delicate nature and possible ceremonial breakage, intact figurines are rare (Scott 2001, 22). The variety of figurine features are extensive, with very few figurines exactly the same. The surviving figurine fragments often show evidence of pigment, indicating that they were once colorfully painted (29). The earliest figurines were hand modeled with coiled clay bodies and appendages attached to a clay ball head (Noguera 1962, 129). The faces were minimally shaped, with slit or "coffee bean applique" (pastillaje) eyes attached to the surface. Although rarely clothed, the early figurines often were constructed with elaborate clay headdresses and jewelry. When molds came into use after 200 CE, there was much more standardization, and yet minor differences still appear. The introduction of the mold was a chronological marker not just in figurine technology, but in other ceramic media as well. Even after molds became common, the molded head was attached to a hand modeled body (Scott 2001, 37).



photo courtesy of HMNS

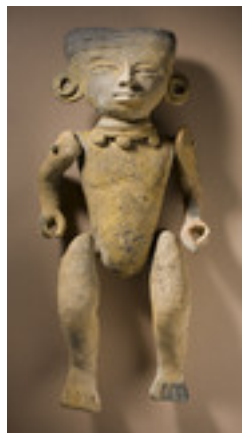
The function of the objects is a mystery. Because the Teotihuacán left no written records and their civilization essentially vanished around 700 C.E., we are left to speculate on why so many figurine fragments have survived and what role they might have played in Teotihuacán society. Most of the fragments are found in apartment complexes, so it is natural to assume that there was some kind of human interaction with the figures. The existing naming conventions of “portrait” and “puppet” reflect this assumption. These terms are misleading but have become so well established in the literature that for continuity sake, they have been retained in the terminology. Although Sue Scott prefers the term articulated instead of “puppet”, the earlier term is still often found in the literature.

The term “portrait” or “retrato” refers to figurines that represent humans rather than deities (Scott 2001, 37). Early researchers such as Zelia Nuttall assumed, because of the wide variety of figurine types, that the figurines represented individual people (Nuttall 1886, 178). By the mid 1900’s archaeologists had begun to believe that the figurines were not portraits in the sense that they represent an individual (Scott 2001, 22). As more figurines were uncovered and molds were found indicating the mass production of identical “portrait”

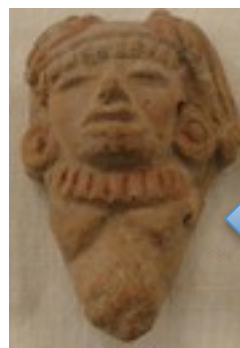
heads, most agreed that it was more likely that the unornamented figurines were highly stylized representations of different groups of people at Teotihuacán. Many did concede that, due to the great quantities of these “portrait” figurine heads found in apartment complexes, it is possible that the figures might have been ornamented to represent individuals (23).

The “puppet” naming convention is also misleading. This figurine type refers to the fact that some heads were attached to an articulated body, with arms and legs that could be moved much like a child’s puppet. Warren Barbour has speculated that these figurine types were likely used in domestic rituals (Barbour 1975, 15).

The examples below show articulated, or puppet head/torsos. The figure on the left is a complete figurine from the Los Angeles County Museum of Art. The torso on the right is one of the fragments from the HMNS collection. If you look carefully at the right side of the HMNS torso you can see evidence of a hole where the arm would have been connected.



Los Angeles County Museum of Art



Torso from HMNS

Because there are no written records, it is impossible to state with certainty how these small figurines might have been used. Because they appear in such large numbers, we

can assume that they were not objects of great value. They are usually found in domestic contexts, so they could have been used as children's playthings or more likely in some sort of domestic cult rituals. Zelia Nuttall, in the second part of her study of the heads presents an argument that the figurines were used as a form of ancestor worship related funeral rituals (Nuttall 1886. 329). I tend to agree with Nuttall, but, because we can only speculate about what their true function might have been, I have chosen not to address this aspect of the figurines in this paper. An excellent source for further study of this topic is *Mesoamerican Figurines: Small-Scale Indices of Large-Scale Social Phenomena*.<sup>4</sup>

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<sup>4</sup> Christina T. Halperin et al., eds., *Mesoamerican Figurines: Small Scale Indices of Large-Scale Social Phenomena* (Gainesville, FL: University Press of Florida, 2009)

## Chapter Two: The HMNS Collection Examined

### Archival Research

The collection of figurine fragments at the HMNS storage facility was formed from donations from amateur collectors. The first donated fragments were collected in the late 1800's or early 1900's and the collection was added to over the course of the twentieth century. Most of the objects were donated before 1970, but donations to this collection are still being made today. The policy of the HMNS is that they accept donations, but reserve the right to refuse objects if they do not fit into existing collections or do not meet the antiquities laws that went into effect in 1970.<sup>5</sup>

HMNS collection statistics		
Donor	Number of fragments	Description
Westheimer	58	41 heads, 10 torsos, 5 animals, 2 unidentified objects
Bruce	8	8 heads
Ley	17	15 heads, 1 puppet, 1 animal
Presidio	11	8 heads, 2 torsos, 1 unidentified object
Unknown donor	34	32 heads, 1 puppet, 1 unidentified object

Source: A. Baldwin, 2014

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<sup>5</sup> Dirk Van Tuerenhout, "Teotihuacan Figurines," e-mail message to author, September 25, 2013.

The collection contains 128 terracotta objects, including 104 heads, 12 torsos, six animal figures, two puppets and four unidentified objects. Of the 128 artifacts, 94 accessions are associated with four donors: Westheimer, Bruce, Ley, and Presidio. Thirty-four accessions have no associated donor information. A table listing the figurines associated with donors can be seen in Appendix C. In two instances a donor name is listed on the accession slip, but there do not appear to be any provenance records in the archives from this donor. The archives contain an interesting “catalogue” from the 1880’s associated with a donation by Sigmund Westheimer of Houston and there is a bill of sale dated 1921 made out to Mr. Orville Bruce from William Niven Antiquities. There are no documents in the archives providing further provenance for the Presidio and Ley donations. There is also some documentation on a collection donated by Charles Farrington and Lowell Collins. It is possible that the thirty-four artifacts that have no donor association might be part of that donation, but I was not able to make a connection between the two.

The set of documents associated with the Westheimer donation are by far the most extensive and contain clues to the origins of the HMNS Teotihuacán collection. Included in this section is a faded pamphlet that appears to be quite old. There is no date on the pamphlet, but the title page states that the contents are an “extensive collection of foreign birds, animals, reptiles, insects, relics, curios, fossils, minerals, shells, marine and other specimens gathered from all parts of the earth including many rare objects of UNUSUAL INTEREST AND GREAT VALUE” (Attwater n.d, 14). Titled the “Museum of Natural History and Other Specimens: the Collection of Prof. H.P. Attwater Houston, TX”, the pamphlet is a careful listing of hundreds of objects from all over the world. On page 13 there appears an entry of “fourteen idol heads (terracotta) Mexico (Ploughed up near the

pyramids of Teotihuacán).” We do not know how these heads came to be in Professor Attwater’s possession, but considering the time of his collecting (late 1800’s – early 1900’s) and his travels in Mexico at that time, it is probable that he acquired them from Mexican farmers at work in their fields.

Henry Philemon Attwater was a naturalist and avid collector of animal species and primitive artifacts. He lectured on Natural History around the state and organized exhibits for fairs and expositions (Castro 2013). Although he was educated in England I could find no evidence that he was ever affiliated with a university, so I assume the title “Professor” was a self-assigned honorific. His work and travels eventually led him to Texas, where, in 1900, he landed in Houston working for the Southern Pacific Railroad. According to the *Handbook of Texas*, when Attwater retired in 1913, he sold his collection to the Witte Museum in San Antonio, but the HMNS archival documents indicate that Sigmund Westheimer of Houston purchased many of his specimens and eventually donated them to Houston Public Library as a gift called the Westheimer collection.

These fourteen Teotihuacán “idol heads” included in the Attwater/Westheimer museum formed a small part of the collection that ultimately led to the core collection of the Houston Museum of Natural Science. The HMNS archives contain dozens of Houston Public Library Board minutes revealing the fate of the collection.

Sigmund Westheimer was the nephew of Mitchell Westheimer, the man who gave his name to one of the busiest streets in Houston. Sigmund and his brother joined their Uncle Mitchell in Houston around 1869, eventually setting up a moving and storage company. He married Hannah Fox and had 3 children (Weingarten, Schechter, et al. 1990, 34). Unfortunately, not much has been written about Sigmund. However, evidence indicates

that he was an avid collector of natural artifacts. The HMNS archives contain a letter from his nephew, novelist David Westheimer dated June 17, 1985. In the letter, his nephew remembers seeing the objects in his Uncle Sigmund's collection when he was a boy (Westheimer, 1985).

After purchasing the collection and combining it with his own personal collection of artifacts, Sigmund Westheimer decided to give his Museum to the City of Houston. Because there was no natural history museum at that time, he worked in the 1920's to have the collection displayed at the downtown branch of the Houston Public Library. Numerous references to this transaction are mentioned as he, and then later his estate executor and family, corresponded with head librarian Julia Ideson. Westheimer, who died in 1927 before the transaction was complete, gave the collection to the library with the understanding that if a museum were ever established in Houston, the collection would be moved to this facility. Called the Westheimer Museum, this collection presumably contained artifacts from both Westheimer's and Attwater's collections. The library agreed to call the collection the "Sigmund J. Westheimer Natural History Collection".<sup>6</sup>

It is interesting to note that in the minutes from April 13, 1926 a question was posed asking if Mr. Westheimer would agree **not** to make conditions that the collection "be kept intact". The minutes indicate, "Both art museums and natural history museums throughout the country have found this to be against their best interests".<sup>7</sup> If he had not agreed to this request, the collection of Teotihuacán heads now kept in storage might now be on display in the museum.

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<sup>6</sup> Minutes of the Houston Public Library Board (unpublished manuscript, Houston Museum of Natural Science, Houston, TX, June 2, 1922),

<sup>7</sup> Minutes of the Houston Public Library Board, April 13, 1926.



The collection does not appear to have ever made it into the library itself, or if it did, it did not stay there very long. In a letter dated May 16, 1929, Westheimer's daughter, Leona Liedecker, wrote to Miss Ideson that the family was in favor of moving the collection to the temporary museum in Herman Park because "they felt that more people would observe the collection there so it would be of more value to the city".<sup>8</sup> The minutes from the May 21, 1929 library board meeting note that the plaque that had been made to commemorate the Westheimer gift would remain on the walls of the library, where I presume it can still be seen today.<sup>9</sup>

Unfortunately the archives do not provide provenance for all of the heads and figurine fragments that make up the Westheimer collection. In 1984 the museum apparently performed an audit of the collection, which associated 58 figurine fragments with the Westheimer donation. There is no way to distinguish the 14 Attwater heads from the larger Westheimer donation so we have no real provenance for the donation other than that the artifacts were collected before 1927.

The second document related to the HMNS collection is a hand written bill of sale listing twenty Pre-Columbian artifacts (Appendix D). Dated November 21, 1921, the receipt was from Wm. Niven Antiques – San Juan de Letran. The Niven receipt was part of the provenance provided by Mr. Orville Bruce of Houston Texas when he donated the collection to the museum in 1973. Unfortunately, through the accession slips I can connect only 8 artifacts with the Bruce donation. It is uncertain what became of the other 12 objects; it is possible that they are among the artifacts that are unattributed. In any event, of the 20 items

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<sup>8</sup> Leona Liedecker to Julia Ideson, May 16, 1929, 1984.685, Houston Museum of Natural Science, Houston, TX.

<sup>9</sup> Minutes of the Houston Public Library Board, May 29, 1929.

in the donation, six are listed as “Aztec”, eleven are listed as “Pre-Aztec” and three are listed as “primitive” (Niven 1921). This confusing description brings up an interesting twist in the Teotihuacán story. As I mentioned earlier, before 1940 archaeologists and scholars believed that Teotihuacán was part of the Aztec empire. A reliable chronology had not yet been established that proved Teotihuacán and the Toltec civilizations were both racially and culturally separate from the Aztecs. (Nogura 1962, 129,) According to Dr. Van Tuerenhout, when Niven put together the provenance record in 1921 he noted that the artifacts were from Teotihuacán, but labeled them according to what were accepted naming conventions of the time.<sup>10</sup>

A similar (albeit re-typed) listing of artifacts accompanied by a picture of the referenced collection appears in the biography of William Niven. Apparently Niven was known to send photographs of collections to prospective buyers (Wicks 1991, 182-3). It is certainly possible that Mr. Bruce might have purchased his pre-selected collection in response to this marketing strategy. Like the Bruce receipt, the objects listed in the biography are arranged in chronological order, with Aztec heads at the top level, Pre-Aztec in the middle and Primitive heads at the bottom of both the list and the picture. It was Niven’s practice to organize and identify his objects in the order that they were dug up, making him an early adopter of the principle of scientific stratigraphic excavation (184 ).

The Bruce artifacts purchased from Niven were not actually excavated at Teotihuacán. Most of Niven’s excavations were done at San Miguel Amantla, also referred to as Azcapotzalco. Figurines from Azcapotzalco are identified as being Teotihuacán because Azcapotzalco is considered a Teotihuacán settlement (Pasztory 1997, 44).

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<sup>10</sup> Interview by the author, HMNS Storage Facility, Houston, TX, September 25, 2013.

There are other donors identified on accession labels, the Presidio and Ley families made donations, but if there was documentation present at one time, it has now been lost. These gaps highlight the issue of record keeping and accessioning of donated objects. The HMNS records are probably very typical of the documentation process associated with small, personal donations of objects with little or no provenance and, quite frankly, little monetary value. The UNESCO agreement of 1970 has had a positive effect on the retention of documentation because museums now must be able to prove that ancient artifacts in their collection were in the country before 1970 (International 2002). The Houston Museum of Natural Science now has a policy in place that attempts a more thorough documentation of provenance. A copy of the museum “Donor Questionnaire” appears in Appendix E.

Because many donations by small, amateur collectors come to museums with little or no provenance, it is a challenge for museum curators to reliably authenticate the gifts. If they choose to add these artifacts to the museum collections they must use various methodologies to be able to say, with some certainty, that the claims made on the museum descriptive labels are accurate. Because artifacts such as those in the HMNS figurine fragment collection have little provenance and no provenience, a way to establish their authenticity is to visually compare them to archaeologically excavated and provenienced collections. There are at least four collections that can provide the provenienced baseline for such a comparison: The Museo Nacional de Antropología in Mexico City, The American Museum of Natural History in New York, The National Museum of Ethnography in Stockholm and the Teotihuacán Archaeological Research Center in San Juan Teotihuacán.

## Visual Analysis

The collection of terracotta figurine heads at the Houston Museum of Natural Science at the present consists of a collection of 104 heads, 12 torsos, 6 animal figures, 2 puppets and 4 unidentified objects. Although we have provenance for the Westheimer and Bruce donations, their provenience cannot be established because they were not collected through documented archeological practices. Because of the lack of provenance we must rely on a process called seriation, which looks at the evolution of manufacturing techniques and stylistic devices. The goal of this project is to examine and categorize the collection using the system developed by Sue Scott's research on the Sigvald Linné excavations.

### Methodology:

In order to examine and study the HMNS collection of Teotihuacán heads I have used a visual organization system called VWire, which was developed by Professor Daniel Price at the University of Houston. The system is rather like a digital slide table on which you can lay out a collection of slides, moving them around, arranging and rearranging them into groups of images with similar traits. The system allows the researcher to import an unlimited number of images and it is Internet based so it is portable, making it exceptionally versatile.

I imported the images provided by the HMNS into VWire in order to manipulate the images. Using the editing tool built into the system I cropped the images to remove extraneous identification markers in order to better focus on the figurine facial features and named the images using the accession number assigned by the museum. Once on the virtual tabletop, I was able to enlarge the images, magnifying them so that their features could be carefully examined. The system also allowed me to create a lens – essentially another

tabletop, which enabled me to select figurines exhibiting the particular trait that I wanted to examine in more detail. I selected images that appeared to share a similar trait, moved them to the new lens and grouped these images to examine them more closely. For this reason I have decided to refer to my image collections as “lenses”, rather than “plates”, in order to emphasize the process of examining particular images from the broader collection through a narrower lens. I have selected representative images from the HMNS lenses to serve as in text examples for each section. The entire lenses referred to in the text appear as Appendix F. All images seen in this section, and the ones in Appendix F have been provided by the Houston Museum of Natural Science.

### Early Phase Figurines



Lens 1a Fig B



Lens 1b Fig C

The earliest figurines appearing at Teotihuacán are associated with the Patlachique Phase – from 100 BCE to 100 CE. Very few of the figurines in the HMNS collection appear to be from the early phases of figurine production at Teotihuacán. Lens 1a shows examples of figurines that appear to have the defining traits described by Scott as being from an early

ceramic tradition. According to Scott, Patlachique phase figurines have triangular shaped faces with an exaggerated prognathism<sup>11</sup>; slit eyes made by an incision into an applied coffee bean shape or incised directly onto the head, and stumpy, fin-like arms with simple incised fingers (Scott 2001, 40). Although the face has been eroded, the obvious prognathism and arm and finger treatment of Lens 1a Fig. A seem to place this figure as a Patlachique phase figurine.

Figure 1a.B could be from the Tzacualli phase because it has two of the Tzacualli markers: prognathism and the coffee bean applique eye. Figure 1.a.C may be Tzacualli as well. The hand modeled face exhibits prognathism and a close inspection indicates that there once might have been an applique surrounding the eyes (42).

Lens 1b shows other hand made figures from the collection with exaggerated prognathism. I hesitated to include them in the early figurine type lens because the eye treatment does not fit into the diagnostic established by Scott. These figurines have a punched hole rather than a slit for the eye, which does not appear on any of the Linné collection figurines. I have seen examples of this punched hole eye treatment in the images from the Albers Collection (Taube, 35, 1988) When I first examined these figures I supposed that they were animal figures, but on closer inspection the head dresses and ornamentation indicate that they could be human. Few of the animal figures in the Linné collection are ornamented. Figures 1.b.A-B are very similar. They have extreme prognathism, almost to the point of looking like a beak. Figure 1.b.C is adorned with a headdress and ear spools.

Most of the figurine types in the HMNS collection appear to come from the later

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<sup>11</sup> Prognathism refers to the exaggeratedly pointed faces of the early figurine heads - see Lens1a figure B

phases of the Teotihuacán chronology. These later figurine types belong to the Classic period from around 200 CE to 700 CE.

### **Bald Heads**



Lens 2a Fig D



Lens 2b Fig D



Lens 2b Fig F

By far the most common portrait head type appearing in both the Linné collection and the HMNS collection are what Scott calls the Bald Heads (Scott, Plates 53-60). These heads can be hand modeled, mold made or a combination of the two techniques and although some have ears, most do not. In some cases it is difficult to determine if the Bald Heads are hand modeled or mold made because it appears that they may have been produced from a mold and then altered after production.

The Bald Heads appear to have been created at the same time that the more elaborately molded heads bearing headdresses were being produced. It has been speculated that the heads may have been adorned with perishable materials (Scott 2001, 37). According to Scott, the Bald Heads at Teotihuacán have a triangular shape, being wider at the temple, tapering towards the chin area, although we will see that there are variations of this facial uniformity. The typical Teotihuacán Bald Head figurine has a broad nose and coffee bean like indentions surrounding the eyes and lips (ibid)

I have divided the HMNS group of Bald Heads into three lenses that share similar

traits. The figurine heads in Lens 2A appear to be hand modeled. They are more rounded, irregularly shaped and have slashed, rather than pressed eyes and mouths. Hand modeling does not necessarily indicate an earlier figurine type because both hand modeling and mold made heads appear to have been manufactured contemporaneously (Scott 2001, ??). The hand-modeled heads have slightly more realistic proportions than the extreme prognathism seen in the early figurine types, and are more individualized than the stylistically formal mold made heads seen in Lens 2B. The more naturally proportioned heads seen in Figures I, J, and K do not correspond to the triangular shaped head diagnostic of the Teotihuacán figurines.

The mold made heads seen in Lens 2b are all quite similar to each other. The head shape of figures A-F are virtually identical. Figures A and B, however, appear to fall into the category of heads that were produced in a mold and then altered afterwards. The color of the clay paste and head shapes are very similar to the other mold made heads, but the eyes and mouths appear to have been altered. Figures G – J have heads that are slightly different from the other mold made figures in this lens but are similar enough that they are probably related.

The heads in Lens 2c are unusual. I separate them from the other Bald Heads because they appear to be made of a different type of paste or look stylistically different from the heads in lens 2a and 2b. These heads are a good example of why the figurines were originally identified as portraits. Their facial features are quite different and you can imagine how they might appear to represent an individual. Figurine A is made of yellowish paste and his head is much rounder than the other mold made heads from the collection. Figure B has ears, which is unusual, and his eyes and mouth are very different



from the other mold made types. Figure C is very different from any of the other Bald Head figurines and may not be from Teotihuacán. His head shape, facial features and paste color do not match any that I have seen in either the HMNS or Linné collection. He may be an import from another area of Mexico. Figure D has the typical head shape and eye treatment of the mold made Teotihuacán Bald Heads, but the paste has a different tint and the jawline is much squarer than the mold made in lens 2b. Figure E is also atypical of the mold made heads. Although the eye treatment has the coffee bean indentions, his head is quite square and the top of his head is flattened in a way that suggests he might not have functioned as a figurine. His dark black color may be the result of fire. The last figure in this lens, Figure F, is highly eroded. His head is much longer and more oval than the typical Teotihuacán head. Although it is difficult to tell because of the erosion, the eye treatment and certainly the nose area are not typical of any of the other Bald Heads.

### Heart Shaped Heads



Lens 3 Fig B



Lens 3 Fig D

A variation of the Bald Head can be seen in the heart shaped or notched head. Several examples of the heart shaped heads can be found in the Linné collection (Scott Plates 61-66). According to Scott, these unnaturally shaped heads appear throughout the early and middle periods, but do not continue after the end of the classic period (Scott 2001, 30). The reason that these heads appear deformed is unknown. It has been suggested that perhaps the central cleft could be a stylized representation of parted hair (Barbour 1975, 19).

Lens 3 shows five examples of these Heart shaped heads from the HMNS collection. The depiction of the heart shape can be exaggerated, as in Figures A and B, or slight as in Figures C, D, and E. Figures A and B appear to be hand-modeled, or at least altered after production, as opposed to C, D and E, which appear to be mold made.

### **Old God and Wrinkled Faced Figurines**



Lens 4 Fig A



Lens 4 Fig F

The images from The HMNS collection illustrated in Lens 4 are very similar to several depicted in the Linné collection (Scott plates 153-155). Scott identifies these figurine as “Old God” or “Wrinkled faces”. This image, which is commonly found at Teotihuacán is often carved from stone and is associated with braziers. According to Scott, the wrinkled face alone is not an identifier of the Old God. She indicates that a diagnostic for the old god would be a figurine that has a bent torso, wears a bow-knot headband and is missing teeth. Often the top of their head bears a scar where they were broken away from the brazier. The “Old God” is one of the few gods of the later Aztec pantheon that appear to have originated at Teotihuacán ( Scott 2001, 46).

The HMNS collection of “Old Gods” or Wrinkled faces”, consists of both hand modeled and mold made figurines. Figures A, B and C are probably hand modeled. Figures E - I appear to be mold made. They all bear facial scarring which, in the case of the mold

made figures may have been applied with a sharp tool after the figure was removed from the mold. Figure D is heavily eroded and could possibly be hand modeled. It has an unusual groove on its forehead, almost as if a headpiece might have been tied above the eyebrow ridge. It has other unusual features that will be discussed later.

Using Scott's diagnostic, the HMNS figurine that is most likely to be the "old god" is Figure A. On close inspection his wrinkled face sports a snaggletooth smile. There also seems to be the telltale bow-knot headband. Figure I may also have a broken toothed grin and the top of its head appears to have the brazier scar mentioned as a diagnostic. The perforation in the head of Figure F is unusual because very few of the figurines in this collection or in the Linné collection have perforations in their heads. The forehead perforation suggests that the figure may have been suspended in some way or could have been for the insertion of an ornament.

Figures D – I could possibly be the "Old God" because they bear facial striations, but, since they do not appear to have the broken toothed feature, they probably fit better into Scott's "wrinkled faces" category. Figure D has some of traits of the wrinkled faces, but the vertical lines that cover the bottom of the face suggest a beard rather than facial wrinkles. It does, however appear to have the curving lines on the cheeks so I have included it in this category. Figure B is heavily wrinkled and appears to have traces of red paint on its surface. The facial striations cover the forehead and are also present on the cheeks and chin. Figure E appears to have a flattened head, which could be a brazier mark. His face is deeply grooved in the cheek area and there are lines above his eyes that could be wrinkles. Figure C is unusual because the clay is much darker than the typical Teotihuacán figurines, and he has a deep eye ridge and coffee bean eye slits that might indicate he is

earlier than the other figurines in this lens. A close inspection of the image shows that although highly eroded, he may have some facial striations that place him in the wrinkled face lens. Figure G is also unusual because of the detail on his face and also because of his exaggeratedly pointed chin. This figure has deep grooves on his cheeks, but has an unusual headdress, or possibly hair ornamentation that is unlike any of the other wrinkled faces in this lens, or in any of Scott's examples. Although only a fragment, Figure H has the definitive cheek wrinkles seen on the old god or wrinkled face figurines.

### Scalloped foreheads



Lens 5 Fig A



Lens 5 Fig B



Lens 5 Fig C



Lens 5 Fig D

An excellent example of how mold made figurines were produced can be seen in Lens 5. You can see the similarities between figures A and B and figures C and D. Although small differences exist between the similar figures, it is clear that they were mass produced objects. I group these figures together because they all share a common stylistic trait – the scalloped forehead. An example of this type of figurine can be seen in plates 75 and 95 of the Linné collection. Scott identifies this feature as an abstraction of a headgear design that has been etched into the actual forehead of the figure. She notes that the scallops tend to follow the eyebrow arcs and seem to shortcut the cap it is meant to represent (Scott 2001, 37).

## Turbans, Caps and Headdresses

A large number of the figurines from the Linné collection and also the HMNS collection sport some type of head ornamentation. Scott breaks these head ornamentations into three separate categories: turbans, caps and headdresses. She defines turbans as head coverings that encircle the head, rather than those that are affixed to the flat front forehead. Scott speculates that the turbans were made to mimic a softer, more pliable fabric than the more rigid headdresses. Because the turbans wrap entirely around the head, true turbans appear almost exclusively on hand modeled figurines (Scott 2001, 37). Mold made figurines have headdresses that mimic the turban. The HMNS collection does not appear to have any figurines that fit into the hand modeled turban category with the possible exception of figure A in lens 6a. The hand-modeled figurine seems to have a band of clay encircling the headdress. The turban that figure A is wearing is very different from any in the Linné collection because the encircling band is decorated. The figurines in Linné collection plates 27-32 show little or no decorative markings.



Lens 6b Fig B Turban



Lens 7 Fig A Cap With Goggles



Lens 8b Fig B Segmented Headdress

## Turbans

The mold made figurines wear a wide variety of headdresses. The HMNS collection has numerous examples of head dressed figures. Lens 6b illustrates examples of the mold made headdresses that were made to mimic turbans. Unlike the hand-modeled

figures, these mold made turbans in figures A-C do not wrap around the head. These turbans are decorated, which makes them quite different from those depicted in the Linné collection. I have classified these figures as wearing turbans rather than caps because the simple design of the headdress seems to give the impression of wrapping around the head rather than simply sitting atop it.

### **Caps**

Figurines wearing caps are illustrated in the Linné collection on plates 73-79. Scott writes extensively about this style. She indicates that they often appear to imitate weaving or embroidery and occur with many variations. She speculates that, due to the variations in design, they may have had some symbolic meaning (Scott 2001, 38).

It should be noted that the examples in cap styles from the HMNS collection are quite different than the styles pictured in the Linné collection. This may be due to the sheer number of figurine heads with caps that were produced at Teotihuacán. It seems logical that the larger the volume of objects produced, the more variety in styles represented. Figure A from lens 7 is particularly interesting because of the goggles on the cap. The Linné collection had numerous examples of heads with goggles either on their eyes, or on their caps but this is one of only two examples in the HMNS collection with goggles. We will discuss the significance of the goggles later. All of the cap treatments in Lens 7 are incredibly varied. The attention to detail in the textures and ornamentation illustrate the skill and creativity of the Teotihuacán artisans.

### **Headdresses**

Unlike the caps, which usually appear on mold made figurines, headdresses can be found on both the hand modeled and mold made heads. According to Scott, there are

several variations of this headdress style on hand-modeled figures, but usually it appears as a wide band decoration with a central vertical strip or button appliqué (Scott 2001, 41). The Wide Band Headdress is different from the turban because the headdress is flatter and the turban more rounded. The hand-modeled figures A -C in in Lens 8a are examples of this wide band headdress on hand-modeled figurines. An example of similar heads can be seen in the Linné collection plate 26. Scott notes that these wide ban headdresses are usually associated with female figurines wearing the *quechquemitl* (37)<sup>12</sup>.

Segmented headdress can be found in both the HMNS and Linné collections. Lens 8b illustrates figurine heads from the HMNS collection that are examples of this style. Figures wearing similar segmented headdresses can be seen in the Linné collection on plates 132-133. Scott describes this headdress style as a helmet shape covered in small segments in vertical strips. Although most of the examples that Scott was working with have chinstraps, none of the HMNS figurines appear to have this feature.

The presence of these figures wearing segmented headdresses is significant. Scott notes that researchers VonWinning and Kristian-Graham have associated this segmented helmet/headdress style with the Mayan. The helmet style without the chinstraps, as in the HMNS collection, is possibly the emblem glyph for Palenque<sup>13</sup>. It appears in Mayan glyphs but very rarely at Teotihuacán except in the figurine corpus (Scott 2001, 46).

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<sup>12</sup> Quechquemitl were traditional garments worn by Pre-Columbian women resembling shawls or ponchos.

<sup>13</sup> According to Hasso von Winning, the segmented headdress is thought to be the emblem glyph for the Mayan city of Palenque and its presence at Teotihuacán indicates an association between these two cultures.

## Elaborate Headdresses



Lens 8c Fig A



Lens 8c Fig F

The elaborate headdresses found on later mold made figurines are incredibly ornate. This type of figurine can be found in the Linné collection plates 136-147 and in the HMNS collection Lens 8c. Scott relies heavily on museum collections to show examples of headdresses in plates 136-141. These museum examples show that the headdresses often represent animals such as the butterfly and jaguar (Scott 2001, 49). None of the figurines from the HMNS collection resemble these museum examples, so I hesitate to compare them to most of the examples in Scott's study. However, plate 142 from Scott's book depicts figurines found by Linné in his Teotihuacán excavations and these images are very similar to the ones in the HMNS collection. Scott refers to these images as having a Feather panache or Tassel headdress (48).

Figures A and B in Lens 8c have examples of feathers incorporated into the headdress. Scott indicates that feathers and tassels indicate social rank and notes that these types of headdresses, when depicted in Teotihuacán murals were associated with human figures who appear to be masquerading as gods (Scott 2001, 49). Figure A is wearing goggles, which could be an iconographic marker of the rain god Tlaloc. Figure C wears a wide banned headdress with a feathered panache (plume) and Figures D-F have a feathered



panache attached to fabric caps. It is obvious that the figures adorned with these elaborate headdresses are different from the simple Bald Head, capped and turbaned figures seen in Lenses 1-7.

The iconography represented in the Teotihuacán molded headdresses has significance for the larger study of Pre-Columbian iconography. The iconographic elements on the Teotihuacán figurine headdresses indicate a common pantheon between the Teotihuacán, Toltec and Aztec cultures. Because the Teotihuacán civilization preceded the Toltec and the Aztec civilizations, a look at the way the Teotihuacán represented their gods in these figurine headdresses could be used to enhance the system of iconographic markers used to identify these gods in later images. It is possible that the goggles present on the headdress of Figure 8cA could indicate a connection with the Aztec god Tlaloc and the scarred face of the “Old God” appear to be a precursor to the Aztec fire god, Xiuhtecuhtli. Noted Teotihuacán scholars such as Clara Million, George Kubler and Esther Pasztory have written extensively about Teotihuacán iconography, but a close visual examination of the iconographic references on figurine headdresses does not appear to have been attempted.

### **Fragments**

Lens 9 illustrates three fragments that were probably not figurine heads. Figures A and B appear to be either broken off of an incensario or vase. Figure C is quite different than any other object in the collection. It appears to be a head attached to a clay tube, which is similar to something Nuttall described in footnote six of her 1886 article. She describes a profusion of “little clay heads terminating in an appendage, and intended to be inserted into some object: perhaps the body of the dead consigned to the flames” (Nuttall 1886, 158).

Figures D and E, although unidentifiable, have obviously been hand manipulated.

### **Miscellaneous heads**

Lens 10 is a catchall for the heads that don't fit easily into the earlier categories. Scott describes some of the features seen on these head types, and when possible I use her naming conventions to identify the feature on the HMNS figurines. Figures A-C have unusual eye treatments that make them difficult to place with the other figures in the HMNS corpus. Figure A has an irregularly modified coffee bean eye applique and side fillet, which may represent hair. Figure B has bulging eyes and a side panache that seems to have holes in a vertical pattern protruding upward from the right side of the figure. The features on Figure B are unusual enough that it may not represent a human figure. Figure C also has unusual eyes, as if the figure were sleeping. The mouth appears to be open and teeth are evident which is not common, making him more expressive than many of the figurines. His smiling face is reminiscent of the Vera Cruz figurines from the Albers collection (Albers 1970, 27). I should interject here that Figure C is from the Bruce donation - one of the few figurine heads with provenance. Figures D-F are not strictly Bald Heads because they seem to have some kind of hair treatment either on top, or off to the side of their heads. They do not appear to be wearing caps. Figures G,H and I are all different from each other, but share the common trait in that the top of their head looks as if there should be some kind of headdress. In the case of Figure G, the headdress may have been broken off. The ridges on the top of Figure H may have served to hold a perishable headdress attached by string wound through the grooves. Figure I appears to be hand modeled with an unusually elongated forehead, which also might have functioned to attach a headdress that has perished. Figure J is highly eroded but appears to wear a kind of cap resembling a helmet.

Figure K has unusual appliques on both sides of the head, which may be hair because the applique seems too large to be ears. Figures L and M are highly eroded and the shape of these heads does not fit the typical Teotihuacán profile. Figure L shows the remnants of the heart shaped feature notched into its forehead, but the mouth is unusually large, taking up most of the lower part of the face, which is uncommon. Figure M has an especially bulbous forehead, which might indicate that it represents an animal rather than a human figure because there are no other heads with this feature.

### **Unidentified heads**

The final category of heads can be seen in Lens 11. These heads are very unusual and do not seem to fit into any of the categories described by Scott. I don't know that they are fakes, but they certainly do not resemble any of the other objects in the HMNS collection or anything in the Linné collection. It's possible that further research could place these objects in the Teotihuacán corpus. Figure A and B could be animal figurines, but their heads are attached to what appears to be a neck in the way a human head is shaped so they don't fit into the animal category. Figure C looks like the torso of an articulated figurine, but there appears to be a face formed into the surface. Figure D looks like a mold but seems to be convex rather than concave so it could be the back of a mold. It's impossible to tell without turning the figurine over and examining the other side. Figure E has the coffee bean eyes of a very early figurine head, but its flatness, parted turban and nose treatment don't fit any other figurine types that I have examined so it could possibly be a fake. Figure F is curious. It seems to be a mold made head that was not pushed into the mold properly and so the surrounding clay is still present around the edges of the mold. Figure G is also an oddity. The intricately woven cap, the facial features and the detailing surrounding the face

do not resemble any of the figurine heads from either the Linné or the HMNS collection.

### **Torsos**

The primary difference between the HMNS collection and most other collections is that the HMNS collection consists almost exclusively of disarticulated heads. There are no bodies attached that can help provide clues as to the function of the figurines. Without bodies it is also difficult to assign sex. Scott's study looked at dozens of torsos, both clothed and naked which helped add meaning to the heads that might have been associated with them. She examined seated and standing figurines, those with adornments and those wearing traditional clothing such as loincloths and *quechquemitl*. There are twelve human torsos illustrated in Lens 12 of the HMNS collection. Figures A – I appear to be unarticulated females. Their wide hips and tapered waists present a more feminine profile than a male figurine would present. The fact that these torsos are female and obviously not articulated negates Barbour's theory that the unarticulated figures were male and the articulated "puppets" were female (Barbour 1975, 19). Figures J and K could possibly be male, although Figure K might not even be a human torso. Figure L was also included in Lens 1 - the early figurine type, because the stumpy arms are a marker of very early figurines.

### **Animal figurines**

There is quite a bit of debate in the literature about how animal figurines are identified and organized. According to Scott, Eduardo Noguera classed all animal figures as simply zoomorphic representations. She indicates that Linné estimated that animals account for only 10% of the figurine corpus (Scott 2001, 47). Plates 165 -175 of the Linné collection illustrate a wide variety of animal figurines. Scott acknowledges the difficulty in identifying

the animal figures so focuses primarily on the technique of manufacture and then on the species if possible. There are six figurines in the HMNS collection that I believe might be representations of animals. In Lens 13, Figures A and B are probably birds. They are hand modeled, with applique eyes and what appear to be beaks in place of a nose. Figure A appears to have small wings instead of arms and Figure B appears to have a wide central open indentation surrounded by the sharp edges of a beak. Figure C could possibly be one of the early Patlachique Phase human figures except for the ears. The figure has the strong exaggerated prognathism but has round rather than slit eyes and the ears lay back in a way that does not appear to be human. This brings us to Figure D, which closely resembles Figure C except without the ears and limbs that make it appear non-human. Both figure C and D are made of similar white clay and both appear to wear a pendant of some kind on their chests. Figure E has both human and animal traits, indicating that it is possibly a monkey. Figure F also appears in Lens 1b as a possible early figurine. Figures C - F of Lens 13 and Figures D - F of Lens 1b could possibly be very early human figurines or animal figurines. As Scott mentioned, these figurines are difficult to interpret and classify.

### Chapter Three: Collection Practices

The provenance research has established that at least 66 of the fragments in this collection can be identified as having been acquired in Mexico during the early twentieth century and the visual analysis of the entire collection confirms that most of the heads bear markers consistent with those of the Linné collection. Some of the artifacts appear to be an exact match. However, I hesitate to claim that all of the artifacts definitely originated at Teotihuacán. There are three questions that the provenance research and visual analysis bring up:

1. How likely are there to be forgeries in the collection?
2. How can we establish authenticity when a collection lacks provenience?
3. When the visual analysis is inconclusive, what other factors can we consider?

A conversation with the HMNS Curator of Anthropology, Dirk Van Tuerenhout, addresses the issue of forgeries. He points out that figurine heads have been, over the centuries, found in the thousands in the fields and villages surrounding Teotihuacán. Farmers and villagers in the area are undoubtedly still unearthing them today. He notes that Teotihuacán figurine heads share stylistic similarities and that they appear to have been intentionally decapitated. Considering the ready availability and the fact that many of the objects were collected in the early part of the twentieth century, Dr. Van Tuerenhout is confident that the objects in the HMNS collection are authentic Teotihuacán figurine fragments.<sup>14</sup> As we will see, this rule of thumb may not apply to heads acquired later in the century.

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<sup>14</sup> Interview by the author, HMNS Storage Facility, Houston, TX, September 25, 2013

Because half of our collection lacks provenance, we are left to speculate how these objects might have made their way to the museum. If we take a broader look at how collections in general are formed, then perhaps we can understand the process of how our fragments made their way from the ground near Teotihuacán to the HMNS storage facility. The path that artifacts take on their journey into museum collections affects how we treat them once they have been received into the collection.

Museums acquire collections of archaeological artifacts by three means: by housing the artifacts collected through organized archaeological digs; by purchasing objects from reputable dealers; by accepting gifts from influential donors or from interested individuals who like to collect ancient artifacts. Obviously objects retrieved in situ from university or museum sponsored digs are assumed to be authentic. Specialized dealers in the art market are generally educated in their fields of expertise and expected to provide documentation tracing provenance which points to a “find spot” for the objects they sell. For the most part, influential donors usually purchase artifacts from these dealers. Collections donated by interested individuals can be quite problematic because sometimes their ability to authenticate objects is limited and, as we have seen in the HMNS collection, there is often little or no documentation of where, or how the artifacts were acquired. Most Pre-Columbian museum collections possess objects represented by all three types of collection practices. Although we know that the Bruce donation is associated with a dealer, the majority of the collection comes via the donations of interested individuals.

### Notes on terminology

The difference between the terms connoisseur and collector is an important distinction. For the purposes of this study, a connoisseur is someone who understands the details, techniques and practices of Teotihuacán figurines and therefore is competent to visually authenticate an object. I would put well-trained art historians and archaeologists who have worked with Teotihuacán figurines into this category. Dealers fall into a bit of a gray area. While they may have developed, through years of experience, an educated eye, their motives are inherently suspect because it is not always in their best financial interest to be completely forthcoming with their clients. Collectors are those with an interest in Teotihuacán figurines and, while they might have an educated eye, they lack the background to visually authenticate an object.

The distinction between these two terms is important for this study because it addresses the underlying issue in the way the HMNS collection, and many other museum collections of ancient artifacts were formed and exhibited. Curatorial connoisseurs must authenticate artifacts that come to museums as purchases from dealers or as donations from collectors.

### **An early history of Mesoamerican collection practices**

The collection practices of Pre-Columbian artifacts have evolved over the centuries. Long considered objects of curiosity in western art, these so-called “primitive” artifacts were originally relegated to small Cabinets of Curiosities in private collections. These cabinets eventually found their way into the museum collections that we see today. Although these early collections have no provenience, the age of the collection establishes a provenance,



lending veracity to their claim of authenticity. The Westheimer donation from the HMNS collection falls into this category.

It is known that people have visited Teotihuacán and other ancient Mesoamerican sites for thousands of years. The Aztecs were frequent visitors to the Teotihuacán ruins, taking inspiration, and sometimes artifacts, from the site. According to Dr. Van Tuerenhout, two bowls of Teotihuacán origin were found ceremonially buried in a temple at Tenochtitlan, indicating perhaps a “ceremonial gift across time” from one civilization to another.<sup>15</sup> Europeans began collecting Mesoamerican artifacts in the 1500’s with the discovery of the New World and the explorations led by Hernando Cortes and other Spanish conquistadors. After the initial interest in these cultures died down, there appears to have been a lull until the 1730’s when the Spanish ethnographer Lorenzo Boturini Benaduci cast his eye towards New Spain. (Graham 1993, 53). Although primarily a collector of codices, Benaduci can be credited with making everyone, including the indigenous creole population, aware of the rich Mesoamerican pre-colonial history.

By the early 1800’s Spain’s influence had waned and England’s colonial expansion was in full swing. Gentlemen travellers spread out world wide in search of primitive objects of curiosity and eventually their attention was drawn to Mexico. In the mid 1800’s William Bullock, a British collector, began a career of acquiring ancient artifacts. Primarily an entrepreneur, Bullock purchased “natural and artificial curiosities” from sailors arriving in Liverpool (Graham 1993, 55). He began exhibiting his collection in London and in 1882 he and his son spent six months traveling around Mexico, collecting curiosities and having plaster casts made of large-scale objects. Among his travels he visited Teotihuacán. His

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<sup>15</sup> Interview by the author, HMNS Storage Facility, Houston, TX, September 25, 2013

gleanings formed the first exhibition of Pre-Columbian artifacts anywhere in the world (62). The most notable of the artifacts were eventually purchased by the British museum and other items were auctioned to collectors. Although Bullock's artifacts have been authenticated by the curators at the British Museum, they are unprovenanced.

About fifty years later another British collector, Henry Philemon Attwater was forming a similar collection of natural curiosities in the southwestern United States and Mexico. His artifacts are of particular interest to our story because during the course of his explorations he acquired the fourteen terracotta heads that can now be found in the HMNS collection.

Artifacts from the ancient Mesoamericans have captivated the interest of collectors for centuries. Early collection practices were far from scientific, but these early collectors did attempt some form of documentation. At the very least we know from travel diaries and bills of sale when and where the artifacts originated. Although the collection practices were not done scientifically, these artifacts have the necessary provenance to strengthen their claim of authenticity.

### **1. Collections formed by provenanced artifacts**

European collectors and scholars have long been fascinated with the Mesoamerican past. For centuries treasure hunters fueled this market by mining archaeological sites in Mexico and Central America. Although treasure hunters have been actively digging up Mesoamerican artifacts for centuries, in the late 1800's scholars began to show an interest in not only collecting, but also in preserving and documenting their finds. An example of this archaeological approach appears in the publications of Zelia Nuttall and Eduard Seler. As field techniques evolved, the science of stratigraphy and carbon dating allowed

archaeologists to carefully document and date the artifacts uncovered in their digs. These trained archaeologists, affiliated with institutions such as the Museo Nacional and the American Museum of Natural history began to scientifically excavate artifacts from sites such as Teotihuacán, creating the corpus of provenienced artifacts we see in museums today. These provenienced artifacts are important because we can use them as the benchmark for the authentication of artifacts lacking provenance.

There are many well-known museum collections both within and outside of Mexico containing artifacts excavated by trained archaeologists working at Teotihuacán. These collections are known to be authentic because their provenience has been established through carefully documented excavation processes. Although these collections will probably continue to reside in their current locations, it is unlikely that there will be more international collections established through this means because antiquities laws now make this type of collecting more difficult. In 1970 the UNESCO Convention established international agreements to control the movement of cultural property across international boundaries. (International 2002)

Many of the collections housing materials excavated from Teotihuacán were legally collected by the archaeologists working at the site in the years before the UNESCO treaty came into effect. For visual analyses, these provenienced collections provide the corpus that should be used to authenticate unprovenienced artifacts. The following section is by no means a comprehensive inventory of museums containing archaeologically excavated artifacts from Teotihuacán. The museums described in this section contain artifacts excavated by the archaeologists mentioned in the literature review.

**Eduardo Noguera, Alfonso Caso, Laurette Séjourné and the Museo Nacional de Antropología – Mexico City, Mexico**

Rightfully, an impressive collection of Teotihuacán artifacts can be found at the Museo Nacional de Antropología in Mexico City. Originally conceived in 1790 as the Museo Nacional Mexicano, the museum was designed to be a place of public exhibition primarily aimed at highlighting the mineral, plant and animal specimens of New Spain (Florescano 1993, 81). A second aim was to preserve and study pictographic documents and archaeological monuments. The collection was originally housed at the Universidad de México until it was given its own building next to the National Palace in the 1860's. As a Mexican national identity emerged, its focus changed from natural history to ethnography and archaeology. In 1964 it moved to its present location.

As its emphasis shifted to archaeology, the museum became the driving force in the preservation of the Pre-Columbian past. Beginning in the late 1800's, the museum began to form collaborations with foreign universities such as Harvard, Columbia and University of Rochester. Under the leadership of various directors such as Franz Boas, Eduard Seler and Manuel Gamio, the focus of the museum shifted to one of scholarly research and international partnerships. By the early 1900's the museum had transformed itself from a "stateroom of curiosities into a scientific institution" (Florescano 1993, 94). Divided into spacious rooms housing the various ancient cultures of Mexico, the museum exists today in central Mexico City. Although numerous Teotihuacán figurines are represented in the museum collection, no catalogue of their images exists that can be used for the comparative purposes of this project.

### **George Vaillant and The American Museum of Natural History – New York, NY**

The Meso-American Archaeological Collection of the American Museum of Natural History (AMNH) houses one of the oldest, and best-documented collections of Pre-Columbian artifacts in the United States. Established in 1869, the museum's first Pre-Columbian collection was created from a donation by Adolphe Bandelier and E. G. Squier. Around the turn of the century, under the leadership of Frederic Putman, the practice of scientific excavation was adopted (Elson 2013, np). The museum implemented standardized field techniques that documented all the materials recovered *in situ*, keeping everything – not only the finest examples. Other researchers followed suit and it was this body of research that led Eduard Seler to suggest that Mexico and Central America shared cultural origins that were different from North or South America. This research in turn led to the coining of the term “Meso-america” by Paul Kirchhoff. (ibid)

During the early 1900's, the AMNH began to partner with Mexican institutions. Collaborations between AMNH assistant curator George Vaillant and Mexican archaeologists Alfonso Caso and Eduardo Noguera enabled the AMNH to acquire objects from numerous excavations in Central Mexico, including Teotihuacán. Although Vaillant did not do much of his work at the archaeological site of Teotihuacán, he was working in the strata chronologically associated with the Teotihuacán civilization (American 2013, np ). His research established the chronology still in use today. Similarly to the Museo Nacional, the AMNH has not published a catalogue of the Teotihuacán figurines in their collection.

### **Rene Million, Warren Barbour and the Teotihuacán Mapping Project – Teotihuacán Archaeological Research Center in San Juan Teotihuacán**

Perhaps in response to the tightening of international antiquities laws, the Teotihuacán Archaeological Research Center was created under the leadership of noted American archaeologist George Cowgill. This rather plain, industrial storage facility was constructed in the 1980's through the collaboration of Arizona State University's School of Human Evolution and Social Change and the National Science Foundation. Located in the present day village of San Juan Teotihuacán, Mexico, the research center houses hundreds of boxes of artifacts excavated from the archaeological zone at Teotihuacán. The artifacts catalogued in the 1960's by Warren Barbour as part of the Rene Million Teotihuacán Mapping Project are housed at this site (Howe 2012, np). Although the facility is not open to the public, researchers and graduate students are encouraged to access the collection. Because the facility is associated with Arizona State University, it is possible that one day a catalog of figurines might be published. This kind of a research project would be invaluable not only for studies such as mine, but for antiquities dealers and museum curators seeking to authenticate Teotihuacán figurines.

### **Sigvald Linné and the National Museum of Ethnography – Stockholm, Sweden**

The collections at the National Museum of Ethnography can be dated back to 1739 with the establishment of the Royal Swedish Academy of Sciences. Housing archaeological collections from all parts of the world, the Teotihuacán collection of Pre-Columbian artifacts was acquired in the 1930's through the excavations of Sigvald Linné (Scott 2001, ix). These artifacts were collected during two archaeological projects conducted between 1932-35; taking place in the area outside the central monuments of Teotihuacán. The structures

unearthed in Linné's meticulous excavations have been identified as multi-room residential complexes. Fortunately, Dr. Sue Scott undertook an examination of the figurines in this collection, publishing her research in the 2001 book, *The Terracotta Figurines from Sigvald Linne's Excavations*. This publication made the visual analysis of the HMNS collection possible.

We can say with certainty that the Teotihuacán figurines unearthed from the excavations described above have documented provenience. This means that these objects form the corpus of authenticated artifacts. Unprovenienced figurines should be compared to this corpus in order to establish visual authentication.

## **2. Collections formed through purchases via the art market**

Some of the best museum specimens have been acquired by purchase from reputable dealers or through donations of artifacts collected via this process. Although most of the Teotihuacán artifacts in the HMNS collection were donated by local collectors, at least one group of artifacts in the collection were donated by Orville Bruce, who purchased his artifacts from an antiquities dealer.

According to Michael D. Coe in his article "From Huaguero to Connoisseur: The Early Market in Pre-Columbian Art", serious collecting began after World War I (Coe 1993, 271). The interest in non-Western art traditions fueled by modern sculptors such as Brancusi and Moore led to a reevaluation of Pre-Columbian artifacts. Objects that had been seen as scientific curiosities were becoming recognized as legitimate artistic expressions of ancient cultures. The early art market for Pre-Columbian artifacts was mainly a European phenomenon due to the French Avant garde at the turn of the twentieth century with their

interest in primitive masks and figurines. Africa and the Cyclades served as the primary source for this market, but the Americas and Oceania also provided a wealth of the simplified geometric shapes that appealed to modernist taste (273).

Coe defines the Pre-Columbian art market as an economic system – one of manufacture, distribution and consumption. In his model you can trace the way Pre-Columbian artifacts moved from their point of origin to the museum or private collection where they now reside. Interestingly, Coe doesn't take the ancient Teotihuacán potter into his equation. He begins his economic model 2000 years after the original date of manufacture. At the bottom rung of Coe's model stands the "huaquero", poor peasants performing manual labor who, through the course of their work, make chance discoveries of Pre-Columbian artifacts. The huaquero's were "producers" in the sense that they obtained the goods that were then sold into the system. The "distributors" would be the various people involved in getting these objects to the dealers who would then sell the objects to the "consumers" – in this case the museums or private collectors (Coe 1993, 277). The distributors of Pre-Columbian artifacts are an interesting crew. The dealers explored in this section specialized in Pre-Columbian artifacts and developed, through years of study and consultation with experts, a degree of connoisseurship. There are many public and private collections housing artifacts purchased from these dealers. It must be noted that any artifacts acquired via the art market must be approached with a certain element of caution. Although dealers depend highly on their reputations, the artifacts they sell lack definitive provenience.

### **Josef Brummer**

One of the most influential antiquities dealers in the early half of the 20<sup>th</sup> century was Yugoslavian-born art dealer Josef Brummer (Coe 1993, 278). A former student of



Rodin and Matisse, Brummer began his career as a dealer in 1909. He and his brother Ernst set up shop in Paris, eventually moving their operation to New York in 1914 (Biro 2011).

Brummer sold Robert Woods Bliss his first Pre-Columbian object – a small Olmec standing figurine. (Benson 1993, 15) The Brummer Gallery operated from 1914-1949, offering ancient artifacts from various cultures to the discerning art collector. He has been credited with transforming “what was until then considered mere ethnographic objects into works of art” (Biro 2011). A large portion of his private collection was purchased in 1947 by the Metropolitan Museum of Art but many pieces went into the private art market. Robert Woods Bliss acquired several pieces for his personal collection. (Coe 1993, 279).

### **Earl Stendahl**

As early as 1935, Earl Stendahl began promoting pre-Columbian artifacts from Mexico and Central America at his Stendahl Gallery in Los Angeles, California. Stendahl was a “colorful and controversial dealer” who dabbled in many enterprises before establishing his reputation as a dealer of Pre-Columbian art (Coe 1993, 279). The proximity to Hollywood also helped him establish himself as a dealer to the stars. Vincent Price, John Huston, Charles Laughton, and Kirk Douglas are among the collectors of Pre-Columbian art that frequented his gallery. Stendahl also sold to early collectors such as Robert Woods Bliss, Morton May and Walter Arensberg. Many of the pieces in these collections came through his gallery and have ended up in well-known museum collections (Damman 2011,12). Stendahl’s reputation as an expert in the field was cemented by his frequent visits to Mexico and Central America in search of objects for his gallery. By today’s standards Stendahl’s methods were shocking. He was not adverse to forging excavation permits and lining the pockets of local officials in his pursuit of Pre-Columbian

treasures (130). He did value his reputation however, and if an object that he handled later proved questionable, he would refund the purchase price (137).

### **William Niven**

A dealer with close connections to our HMNS collection was William Niven. Born in Scotland in 1850, he became a well-known and controversial dealer in Pre-Columbian artifacts in the early 1900's. Interestingly Niven began his career in mineralogy, scouting the plains of Texas and Mexico as an agent for the Jasperized Wood and Mineral Company of New York (Wicks 1999, 15). He eventually established his own firm and became an important mineralogist in the latter part of the 19<sup>th</sup> century. Eventually his search for mineral specimens in Mexico led him, in 1910, to uncover the Placeres del Oro sepulcher (17). He is best known for his explorations near Azcapotzalco. This village, along with others such as San Miguel Amantla and Santiago Ahuixotia and Santa Lucia were on what was then the outskirts of modern Mexico City. These villages are thought to have been closely associated with the Teotihuacán Empire (Historia 2003). Through an agreement with the Mexican government Niven was able to fund his explorations through sales of the artifacts he uncovered. Artifacts sold by Niven appear in the Peabody Museum, the American Museum of Natural History and the Houston Museum of Natural Science (Wicks 1999, 156).

I include a story here to help illustrate my point that objects purchased through the art market lack provenience and therefore must be authenticated by experts. Artifacts sold by William Niven appear in many Pre-Columbian art collections, including the HMNS figurine fragment collection. Sue Scott details a story in which his name was associated with a Teotihuacán figurine forgery charge instigated in 1920 by Manuel Gamio (Scott 2001,

66). Ramon Mena, the curator of the Mexican Museum of Archaeology published a pamphlet identifying a new type of Teotihuacán figurine and citing his good friend William Niven as being the source of the find. Gamio challenged the find, saying that it was an obvious falsification. Barbs flew back and forth, and although the situation calmed, the charge was never disproven. Although he continued to deal in Teotihuacán antiquities for many more years, the incident tarnished Niven's reputation.

The HMNS archives contain a research file on William Niven. This archival collection contains an interesting letter dated October 22, 1920. The signature of the author is unintelligible, but the recipient was J.E. Pierce, who appeared to be affiliated with U.T. Austin. Pierce was probably considering making a purchase from Niven and had written to someone with personal knowledge of the man. The writer acknowledges to Pierce that Niven has a questionable reputation, but that he is respected and well liked. He reports that he has personally witnessed Niven at work unearthing objects from San Miguel de Amantla and that Niven has "a bunch of men who dig all the time".<sup>16</sup>

Another letter in the file, written much later, theorizes about why Niven's goods might have been questioned. The letter's author, Roland Harrison was writing a book about Niven (Wicks 1999, 156). On March 28, 1994, Harrison wrote to a Dr. Lehert discussing Niven's reputation. He states that he "thinks that some individuals degraded his findings because Niven was not a member of "the club" since he didn't have a college degree".<sup>17</sup> This statement indicates that Niven, in archaeological circles at least, might have

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<sup>16</sup> Letter to J. E. Pierce, October 22, 1920, Houston Museum of Natural Science, Houston, TX.

<sup>17</sup> Roland Harrison to Dr. Lehert, March 28, 1994, William Niven, Houston Museum of Natural Science, Houston, TX.

been a connoisseur, but he lacked the credentials to be considered an expert.

Unfortunately it is not possible to look in greater depth at these individuals, and the others who worked to get Pre-Columbian objects into private and museum collections. The stories of how the men acquired the objects and moved them through the market make fascinating reading.

### 3. Museum collections formed by personal gifts

Because the HMNS collection is composed entirely of artifacts that were donated to the museum between 1927 and the present, it seems appropriate that we examine the history of museum collections that have been assembled through donations. According to Lee Parsons in his Preface to the book *PreColumbian Art*, in the first part of the twentieth century, most art museums were not interested in establishing large collections of Pre-Columbian artifacts. Large collections of these objects, with the exception of the Brooklyn Art Museum, were generally housed in science or anthropology museums. Although the Boston Museum of Fine Arts held a Pre-Columbian exhibition in the 1930's, it was not until the MOMA exhibit in the early 1950's that Pre-Columbian artifacts began to be treated as "art" on a national level (Parsons 1980, xii).

While museums might not have been interested in collecting Pre-Columbian art, the same cannot be said of personal collectors. These collectors, although aware of the antiquity of the objects, were probably drawn to their stylistic beauty. Because the personal taste of the collector is what drove the early acquisition of these objects, there is an inherent bias in the way these collections were formed. Also, because they were purchased from the dealers mentioned earlier, the artifacts in these collections lack provenience.

This section examines museum collections housing artifacts donated by some well

know collectors. We can hope that museum curators of Pre-Columbian art have carefully scrutinized these donations and, if displayed, that they are labeled correctly. Without the provenience established through the trowel of the archaeologist, it falls to the eye of the well-trained expert to establish authenticity based on “form, manufacture, theme and analogy” through comparative research (Scott 2001, 65).

### **Robert Woods Bliss and Dumbarton Oaks**

The Dumbarton Oaks Collection in Washington D.C is a well-known Pre-Columbian art collection amassed through purchases from reputable dealers. The collection, open to the public, presents Robert Woods Bliss’ personal collection of Pre-Columbian artifacts. Bliss was a man of wealth whose international travels enabled him to acquire an extensive collection of Pre-Columbian artifacts. According to Coe, “Bliss had an almost unerring eye for quality and paid very high prices for the best objects on the market.” (Coe 1993, 277)

Bliss began his collection in 1914 with a small Olmec figurine purchased in Paris (Boone 1993, 19). His collection is of unusual quality because not only did he have a discerning eye, he also had the means to consult with experts in the field when making his purchases. He often relied on the advice of Pre-Columbian scholars such as Harvard’s Samuel Lothrop and Matthew Stirling of the Smithsonian Institute. (Dumbarton 2013). He also trusted the connoisseurship of dealers such as John Wise and Earl Stendahl, but consulted with the experts before finalizing any deals. (Boone 1993, 21) Housed at the National Gallery of Art from 1947-1960, objects from the collection were loaned to art museums abroad. Eventually the collection was relocated to a wing of the Dumbarton Oaks Museum specially designed by Philip Johnson in 1962. (Dumbarton 2013)

### **Nelson Rockefeller and the Metropolitan Museum of Art**

Nelson Rockefeller, former U.S. Vice-President and Governor of New York, was an avid collector of Pre-Columbian art. As an heir to the extensive Rockefeller fortune, he travelled extensively and was very active in the New York art scene. As early as 1954 he advocated for the inclusion of Pre-Columbian art in the Metropolitan Museum of Art collection, but was stymied by the Met's director, Herbert Winlock (Boone 1993, 315). Not to be dissuaded, he installed his collection in a townhouse across from MOMA. The Nelson Rockefeller collection, which was originally called the Museum of Primitive art, is now housed in the Rockefeller wing of the Metropolitan Museum of Art. Rockefeller was accumulating his collection at the same time as Robert Woods Bliss and records indicate that occasionally they competed with each other for objects (328). Not all of his collection resides in New York. In 1998 some of his Pre-Columbian objects were installed at The Nelson A. Rockefeller Center for Latin American Art in San Antonio (Latin 2013).

### **Morton May and the St. Louis Art Museum**

Morton May became interested in Pre-Columbian art in the early 1930's. Although not as wealthy as Rockefeller or Bliss, he was a man of some means. As heir to a large family owned department store chain he was easily able to purchase items for his collection. He did not consider himself a connoisseur. In the preface to the book dedicated to his collection, he refers to himself as a collector. He claims his "goal in collecting was to acquire objects of aesthetic quality that could some day be at home in the St. Louis Art Museum" (Parsons 1980, x). His obituary in the New York Times notes that he "donated thousands of works to the St. Louis Art Museum". (Gruson 1983).

May's first exposure to Pre-Columbian art was in the late 1930's at the Chicago

apartment of Mr. and Mrs. Samuel Marx, where he saw two large Nayarit figures from Western Mexico. After World War II, May began collecting Pre-Columbian art in earnest. Most of his purchases came through both East Coast and West Coast galleries. He also was able to purchase important collections such as the Pepper Precalssic collection. The Morton May Collection forms the core of the St. Louis Museum of Art. Due to his generous donations, in 1980, the museum dedicated a permanent display in his honor (Parsons 1980, x).

Most notable museum collections contain specimens that have been accumulated by donations from wealthy collectors. These collections are usually assembled through purchases from the dealers mentioned earlier. However, some collections found in Pre-Columbian museum exhibits are those that were assembled not by wealthy collectors, but by avid, knowledgeable “amateurs” in the field. There are two levels within this category: amateur collectors with academic backgrounds or connections to connoisseurs and amateur collectors who have a general interest in Pre-Columbian art.

### **Gillett Griffin and The Princeton University Art Museum**

A collection created by an amateur collector with an art history background resides at the Princeton University Art Museum’s Pre-Columbian art collection. Developed by Gillett Griffin in the 1950’s and 1960’s the collection is a testament to his personal interest and extensive study in the field. Griffin, an art historian working at Princeton University, was intrigued by the ancient artifacts he encountered on his frequent visits to Mexico. At the time of his travels there were no legal restrictions on the import of Pre-Columbian artifacts obtained through the art market; in fact there were no import taxes at that time on anything over one hundred years of age (Colburn 2005, 38). These lax laws enabled Griffin

to amass an extensive collection, which he eventually donated to Princeton's University Art Museum. After leaving Princeton for an extended stay in Mexico, he was called back in 1967 to act as the curator of his own collection. When the import restrictions on Pre-Columbian artifacts were imposed in the early 1970's, Griffin began to depend upon the art markets in New York and on gifts from Princeton alumni to continue build the Princeton collection (39). It could be argued that Griffin began as a collector and ended up as a connoisseur. I would imagine that some of the Teotihuacán artifacts in the Princeton University Art Museum share similar provenance stories to the HMNS artifacts.

### **Josef and Anni Albers Collection and the Peabody Museum**

Another interesting example of this type of collecting comes from the Pre-Columbian figurine collection at the Yale University Peabody Museum. In the introduction to the book, *Pre-Columbian Mexican Miniatures: the Josef and Anni Albers Collection*, Anni describes how many of the objects in their collection were acquired. The Albers were regular travellers to Mexico over the course of 34 years. Often, as they approached archaeological sites, women or young boys would come up to their car window to offer fragments of ancient clay. These fragments often proved to be the broken heads of Pre-Columbian figurines (Albers 1970).

As their interest in Pre-Columbian figurines grew, the Albers became more adventurous in their explorations, travelling down dusty back roads to visit remote archaeological sites. Here they were met by villagers happy to sell what to them were offerings from the earth – insignificant objects discovered through mundane activities such as plowing fields or digging foundations for homes. Anni tells of visits to Teotihuacán in which indigenous vendors were selling cheap replicas along side of ancient figurines (Albers



1970). Because of the ban on the sale of antiquities, on my visit to Teotihuacán in 2012, the only figurine heads on sale were replicas. Like Griffin, the Albers were not without artistic training. Both Josef and Anni Albers were successful artists. The Albers were also lucky in that they had connections to connoisseurs. Anni tells of showing their “little treasures” to George Valliant, who confirmed their authenticity (ibid).

Anni Alber’s story about cheap replicas being sold next to ancient figurines certainly raises a red flag. If, in the 1930’s cheap replicas were being manufactured, then it calls into question some of the figurines in the HMNS collection – especially those that are unprovenanced. The only observation that I can personally make on this issue is that the replicas that I purchased at Teotihuacán appear to be pale imitations of the figurine heads in the HMSN collection. They clearly lack the patina of age.

We’ve examined the different ways that Pre-Columbian artifacts have come to be on exhibit today. Many museum collections of these artifacts have been formed by way of the three paths mentioned above. I would imagine that for every object on display, most museums have dozens, if not hundreds of Pre-Columbian objects in storage. Many are held in limbo due to the lack of authentication.

The problem of authentication lies in the collection process. We have established that dealers might have a very well educated eye, but, because they have a financial interest in the process, their analysis of an object could be compromised. That said, many of the dealers examined in this study appear to have made regular trips into Mexico, forming relationships with “huaqueros” to ensure that the artifacts they purchased were authentic and could be traced to a point of origin. I contend that their educated eye, coupled with their professional connections adds a level of authenticity lacking in the collections of amateurs. Collections

donated by any means other than from a documented archaeological site require curatorial scrutiny.

The question about provenience asked in the introduction to Part Three implies that there are two ways to authenticate artifacts with no provenience - either through a careful visual analysis or by scientific testing. Authenticating through visual analysis is problematic. If beauty (or in this case authenticity) lies in the eye of the beholder, then the “eye” becomes critical to the process. To become an expert in any field takes years of study and experience, and even then, mistakes are made. Dr. Van Tuerenhout admits that if someone were to find one of the Teotihuacán molds they would be able to manufacture figurine heads that could easily pass as authentic. So, what happens when a visual analysis is inconclusive?

Dr. Van Tuerenhout, with the expert eye of a connoisseur, believes that based on his visual analysis, it is probable that most of the figurines in the HMNS collection are from Teotihuacán, but concedes that the figurines in the collection have not been scientifically dated nor has the clay composition been analyzed to establish their point of manufacture. Realistically it is impractical to perform testing such as the techniques described below. The clay sample needed to perform these tests would not only be damaging to the artifacts, but would be cost prohibitive for a collection such as this.<sup>18</sup> I include this information simply as a way to address the question of scientific authentication.

A scientific technique that is frequently used to date clay or terracotta objects is called thermoluminescence (TL). This technique is used to date inorganic materials that have been heated and can be used for dating the terracotta figurines baked in pre-Columbian kilns. TL is based on the idea that when clay is heated, electrons are trapped within the

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<sup>18</sup> Interview by the author, HMNS Storage Facility, Houston, TX, September 25, 2013

terracotta. When re-heated in the laboratory these electrons emit a light that can be used to determine when the clay was fired (Hirst 2013). The problem with this dating technique as applied to the terracotta figurines at Teotihuacán emerge when objects are unearthed in fields that may have been burned by farmers over the centuries. There is no way to determine if the date recorded is from the initial firing, or the product of a later heating event. A much more recent date may not necessarily indicate that the artifact is more ancient than the report suggests.

There are other tools in the scientific tool chest to date inorganic materials. A new technique, Rehydroxylation, appears promising for the dating of ancient ceramics. The process involves the measurement of chemically bonded water through a process of heating and cooling a sample of the artifact (Goodrich 2011). If a date of creation can be established there are also scientific tests that can determine where the clay used to make a terracotta object originated. Researchers at Kansas State University have been using a technique called Neutron Activation Analysis (NAA) to help identify the origin of Central Plains Pottery (Roper, Hoard, et al. 2007, 325). NAA uses a technique that bombards inorganic samples with neutrons, enabling scientists to measure and compare compositional elements. This technique could help determine if the terracotta figurines in the HMNS collection were in fact manufactured from clay in the area around Teotihuacán.

I contend that because a visual analysis is subjective, the only way to truly authenticate an artifact without provenience is to perform scientific testing. Because this is both cost prohibitive and potentially damaging for small artifacts, it seems at this time to be an impractical solution. A simpler solution would be to take care with museum display signage. Most museums currently identify unprovenienced objects using terms like

“purported to be” or “associated with” or “attributed to”. As tempting as it is to make definitive statements, the safer route would be to identify this collection as a group of objects attributed to the Teotihuacán culture.

### **Conclusion**

The HMNS collection of figurine fragments will make an interesting addition to the Teotihuacán figurine corpus. The provenance of the Westheimer and Bruce artifacts indicate that they were probably collected in or around Teotihuacán. The visual comparison of the HMNS artifacts with the provenienced Linné fragments indicates that the HMNS artifacts share a number of stylistic markers that associate them with Teotihuacán. The figurine heads that bear closer scrutiny are those without provenance and those that did not match any of the figurines in the Linné collection. They well may be authentic Teotihuacán figurines, but require further comparison to the broader provenienced figurine corpus.

Unfortunately my research was not able to authenticate the artifacts in the HMNS Teotihuacán collection. The documentation available in the archives indicates that only eight heads, those identified as having come from the Bruce donation, have a documented association with a point of origin. Their bill of sale and my research into the dealer who sold them indicate that although they were not taken from the Teotihuacán archaeological site, they were probably excavated from a stratigraphic level associated with the Teotihuacán Era. There are 12 more heads mentioned on this receipt, but there were no accession tags identifying them in the collection. The archives also indicate that the collection of 41 heads from the Westheimer donation contains a reference indicating that 14 of these figurine heads were collected from Teotihuacán in the 1800's, but again, I was not able to identify them in the Westheimer collection. None of the other figurine fragments have provenance records linking them specifically to Teotihuacán.

The visual analysis, while not definitive, does seem to indicate that many of the figurine fragments in the HMNS collection could have originated at Teotihuacán. The facial

features, head shapes and headdress details of the HMNS figurines exhibit the many of diagnostic markers identified by Scott in her work with the Linné figurine heads. It is possible that all of the fragments in the HMNS are from Teotihuacán, but without direct comparison to the larger provenienced figurine corpus contained in other collections, I am not confident in making this claim. Visual comparisons are about making connections. Hopefully the connections made in this study will help future scholarship in this area.

There are two avenues of study that would result in a more comprehensive review of this collection. A broader corpus of figurines for comparison would help identify some of the unclassified figurines. George Vaillant's work at Zacatenco contains numerous images that would serve this purpose. Although a monumental task, the digitization of provenienced artifacts such as those catalogued by Sue Scott and Vaillant, would be invaluable for a project such as this. Also, if funding were available, scientific testing could establish the authenticity of the figurines by establishing a chronological or geological claim. A scientific analysis would certainly be more definitive than this visual study.

## Appendix A

<b>Teotihuacán excavation chronology</b>	
<b>Nuttall</b>	<b>1886</b>
<b>Batres</b>	<b>1889-1917</b>
<b>Gamio,</b>	<b>1909-67</b>
<b>Beyer</b>	<b>1921-79</b>
<b>Noguera</b>	<b>1930-75</b>
<b>Vaillant</b>	<b>1930-44</b>
<b>Caso</b>	<b>1931-67</b>
<b>Linne</b>	<b>1934-56</b>
<b>Armillas</b>	<b>1944-65</b>
<b>Von Winning</b>	<b>1955-91</b>
<b>Sejourne</b>	<b>1959-84</b>
<b>Bernal</b>	<b>1962-80</b>
<b>Marquina</b>	<b>1964-79</b>
<b>Paddock</b>	<b>1966-83</b>
<b>Rattray</b>	<b>1966-93</b>
<b>Kubler</b>	<b>1967-86</b>
<b>Million, R</b>	<b>1967-95</b>
<b>Sanders</b>	<b>1967-96</b>
<b>Spence</b>	<b>1967-92</b>
<b>Kolb</b>	<b>1970-95</b>
<b>Serra Puche</b>	<b>1971-93</b>
<b>Million, C</b>	<b>1973-88</b>
<b>Pasztory</b>	<b>1973-97</b>
<b>Cowgill</b>	<b>1974-96</b>
<b>Hodik</b>	<b>1974-96</b>
<b>Barbour</b>	<b>1975</b>
<b>Langley</b>	<b>1982-93</b>
<b>Berlo</b>	<b>1983-92</b>
<b>Scott</b>	<b>1983-2001</b>
<b>Taube</b>	<b>1986-2000</b>
<b>Storey</b>	<b>1987-92</b>
<b>Sugiyama</b>	<b>1989-92</b>

Source: Baldwin 2014.

## Appendix B

General Teotihuacán Figurine Chronology			
		Phase Numbers	Phase Names
Classic Period	700	Teotihuacán IV Ahuitzotla-Amantla	Metepec
	600	Teotihuacán IIIA Teotihuacán III	Xolalpan
	500		
	400	Teotihuacán IIA - III Xolalpa-Tlamimilolpa Teotihuacán IIA	Tlamimilolpa
	300		
Late Pre-Classic Period	200	Teotihuacán II Miccaotli	Miccaotli
	100 CE	Teotihuacán IA Teotihuacán I	Tzacualli
	100 -500 BCE	ProtoTeotihuacán I	Patlachique

Source: Kubler 1967, 43.




## Appendix C

## Figurines associated with specific donors

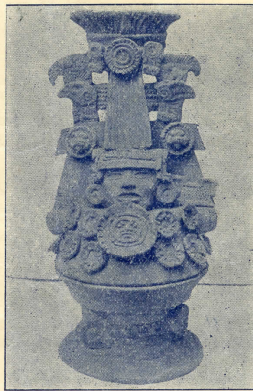
Westheimer	Ley	Precidio	Bruce
Image DSC02529	Image DSC02515	Image DSC02482	Image DSC02550
Image DSC02544	Image DSC02513	Image DSC02524	Image DSC02552
Image DSC02527	Image DSC02525	Image DSC02451	Image DSC02484
Image DSC02543	Image DSC02511	Image DSC02485	Image DSC02554
Image DSC02548	Image DSC02516	Image DSC02483	Image DSC02555
Image DSC02558	Image DSC02460	Image DSC02450	Image DSC02551
Image DSC02521	Image DSC02461	Image DSC02448	Image DSC02553
Image DSC02540	Image DSC02539	Image DSC02509	Image DSC02556
Image DSC02534	Image DSC02535	Image DSC02452	
Image DSC02517	Image DSC02536	Image DSC02447	
Image DSC02545	Image DSC02458	Image DSC02449	
Image DSC02463	Image DSC02459		
Image DSC02542	Image DSC02512		
Image DSC02519			
Image DSC02523			
Image DSC02560			
Image DSC02518			
Image DSC02532			
Image DSC02541			
Image DSC02456			
Image DSC02491			
Image DSC02546			
Image DSC02473			
Image DSC02480			
Image DSC02488			
Image DSC02455			
Image DSC02454			
Image DSC02478			
Image DSC02477			
Image DSC02457			
Image DSC02475			
Image DSC02547			
Image DSC02490			
Image DSC02471			
Image DSC02476			
Image DSC02465			
Image DSC02470			
Image DSC02474			
Image DSC02486			
Image DSC02530			
Image DSC02464			
Image DSC02462			
Image DSC02479			
Image DSC02481			
Image DSC02487			
Image DSC02559			
Image DSC02528			
Image DSC02533			
Image DSC02549			

Source: Baldwin 2104.

## Appendix D



**WM. NIVEN.**  
 ANTIQUES.  
 SAN JUAN DE LETRAN 5.  
 INTERIOR 12.  
 MEXICO, D. F.  
 CABLE ADDRESS: NIVENITE.  
 ERIC. 61-98.



*Nov 21<sup>st</sup> 1921*  
*Explorations of Wm Niven*  
*Mexican Archaeological Collection*

INCENSE BURNER-TLACATECOLTL  
 FOUND BY WILLIAM NIVEN NEAR AZCAPOTZALCO.  
 AUG. 1919 AND DONATED TO THE NATIONAL MUSEUM OF MEXICO.

INCENSE BURNER-MACUILKOCHITL  
 FOUND BY WILLIAM NIVEN NEAR AZCAPOTZALCO.  
 MAY 1914.

Civilization	No	Object	Material	Height	Locality
Aztec	1	Head	Terracotta	1 1/2 inches	San Miguel Amantla, Azcapotzalco
	2	"	"	"	"
	3	"	"	"	"
	4	"	"	"	"
	5	Mould of head	"	"	"
	6	Spindle whorl	"	"	"
Pre Aztec	7	Head	<del>2 1/2</del> 3 inches	"	"
	8	"	"	"	"
	9	"	"	"	"
	10	(true face tooth)	"	"	"
	11	"	"	"	"
	12	"	"	"	"
	13	"	"	"	"
	14	" (showing besote)	"	"	"
	15	" (lip ornament)	"	"	"
	16	"	"	"	"
	17	"	"	"	"
Primitive	18	"	"	4 1/2 inches	"
	19	"	"	"	"
	20	"	"	"	"

## Appendix E

## Donor questionnaire

Please complete the following questionnaire to the best of your ability. It is important that the museum have a complete history of the ownership of works of art offered as gifts. To that end, it would also be helpful if you will forward any additional information or documentation which you may have with respect to your ownership, the exhibition or publication history of the object, and any known prior ownership information.

Donor(s) name(s): \_\_\_\_\_

Objects (or group of objects, if acquired at the same time from the same source)

How long have you owned this object? \_\_\_\_\_

How did you acquire it?

Purchase: \_\_\_\_\_ Date: \_\_\_\_\_ Found: \_\_\_\_\_ Date: \_\_\_\_\_

Inheritance: \_\_\_\_\_ Date: \_\_\_\_\_ Other: \_\_\_\_\_ Date: \_\_\_\_\_

Gift: \_\_\_\_\_ Date: \_\_\_\_\_

If this object was purchased, do you have a bill of sale, certificate or any items relating to the transaction or authenticity? If yes, please attach a copy to this questionnaire.

Were there any previous owners? \_\_\_\_\_

Please list all known previous owners and their relationship to the donor(s)

Do you have any published information or press clippings about the object? If yes, please attach a copy to this questionnaire.

Do you know the exhibition history of the object? If yes, please list

Have you performed any repairs, made changes or contracted a conservator to perform cleaning or repairs while this object was in your care? If yes, please list names, dates, cleanings, changes, etc. and attach copies of any pertinent paper work.

Appendix F<sup>19</sup>



A



B



C

Lens 1a

Early figurine types – Hand modeled



A



B



C

Lens 1b

Possible Early Figurine type – Hand modeled

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<sup>19</sup> All images provided by Houston Museum of Natural Science



A



B



C



D



E



F



G



H



I



J



K

Lens 2a

Bald Heads – Hand modeled





A



B



C



D



E



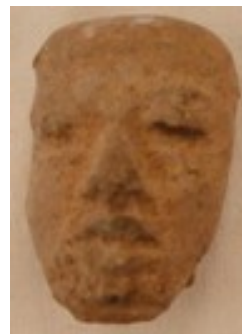
F



G



H



I



J

Lens 2b

Bald Heads – Mold made



A



B



C



D



E



F

Lens 2c

Bald Heads – Mold made - atypical



A



B



C



D



E

Lens 3

Heart shaped or notched heads – Hand modeled and Mold made



A



B



C



D



E



F



G



H



I

Lens 4

Old Gods and Wrinkled Face Figurines – Hand modeled and Mold made





A



B



C



D

Lens 5

Scalloped Foreheads – Mold made



Lens 6a Turban – Hand modeled



A



B



C

Lens 6b Turban - Mold made



A



B



C



D



E



F



G



H



I



J



Lens 7  
Caps – Hand modeled and Mold made



A



B



C

Lens 8a  
Wide Band Headdress – Hand Modeled



A



B



C

Lens 8b  
Segmented Headdresses – Mold made



A



B



C



D



E



F

Lens 8c  
Tassel and Feathered Panache Headdresses – Mold Made



A



B



C



D



E

Lens 9  
Fragments



A



B



C



D



E



F



G



H



I



J



K



L



M

Lens 10  
Miscellaneous Heads – Hand modeled and Mold made





A



B



C



D



E



F



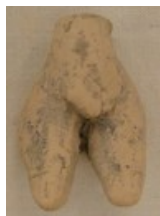
G

Lens 11

Unidentified heads – Hand modeled and Mold made



A



B



C



D



E



F



G



H



I



J



K



L

Lens 12  
Human Torsos – Hand modeled



A



B



C



D



E



F

Lens 13  
Animal Figurines – Hand modeled



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