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UNIVERSITY OF CALIFORNIA RIVERSIDE

Identity, Ceramic Variability, and Sociopolitical Transformation at Early Formative Tlatilco, Mexico

A Dissertation submitted in partial satisfaction of the requirements for the degree of

Doctor of Philosophy

in

Anthropology

by

Catharina Eleonora Santasilia

September 2019

Dissertation Committee:

Dr. Karl A. Taube, Chairperson

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			Committee Chairperso

University of California, Riverside

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- * James Doyle and Joanne Pillsbury (Metropolitan Museum New York).
- * Erell Hubert and Christina Halperin (Montreal Museum of Fine Art).
- * Jorge Sánchez (Museo Amparo).
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- * Susana Reyes, Dennis Carr, and Dorie Reents-Budet (Museum of Fine Art, Boston).
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This Dissertation is dedicated to Monika Ittig and Doug Tilden, Thank you for everything.

ABSTRACT OF THE DISSERTATION

Identity, Ceramic Variability, and Sociopolitical Transformation at Early Formative Tlatilco, Mexico

by

Catharina Eleonora Santasilia

Doctor of Philosophy, Graduate Program in Anthropology University of California, Riverside, September 2019 Dr. Karl A. Taube, Chairperson

Archaeological methods extend beyond excavations and their analysis and interpretation. This dissertation uses an artifact-based approach to understand the culture of the Tlatilco community who lived in the Basin of Mexico 3000 years ago. I use the many collections of artifacts found in museums across the United States to better understand Tlatilco and relate my findings to the existing archaeological record where it exists. Wherever there are written records available from the archaeological field seasons, I have related museum artifact findings to the knowledge gained from these.

The ancient site of the Tlatilco was heavily looted prior to systematic archaeological excavation and has therefore, I assert, never received the academic attention it deserves. A chance encounter with Tlatilco artifacts that had been in storage and uncurated in a museum moved me to change the course of my Mesoamerican research and provided the foundation for this dissertation. Building on the objects in that collection and many other collections, I aim to understand the identities of the population of Tlatilco. Dating to the Early Formative period (1400-1100 BCE, calibrated), Tlatilco had extensive contact with its contemporaries, which is evident in its ceramic variability and other ritual traditions known from the burial records. The questions I address revolve around the sociopolitical transformation of the Early Formative period as experienced by Tlatilco as we start to see a rise in the civilizations in Mesoamerica and communities that develop to new levels as the complexity broadened.

Through comparative analysis of the mainly ceramic Tlatilco objects including figurines, vessels, masks, roller stamps and seals, as well musical instruments, I have identified local trends as well as unique occurrences. I relate these findings to the social dynamic of Early Formative Mesoamerica in relation to Tlatilco culture and what can be inferred about their customs and practices. This dissertation also addresses the ongoing debate about incorporation of objects without provenance, including the ethics behind excluding the material, as well as methods available to potentially establish provenance.

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LIST OF ACRONYMS AND ABBREVIATIONS USED IN THIS DISSERTATION

AIC Art Institute of Chicago

AMNH American Museum of Natural History, New York

AMAW Autry Museum of the American West

BACE Biblioteca: Archivos y Colecciones Especiales, UDLAP, Mexico

BOM Basin of Mexico

BMA Baltimore Museum of Art

BKM Brooklyn Museum
DMA Dallas Museum of Art
DBOM Dumbarton Oaks Museum

DYFAM De Young Fine Arts Museum of San Francisco

EMB Ethnologische Museum, Berlin

FMNH Field Museum of Natural History, Chicago

FMACLA Fowler Museum at University of California Los Angeles

HMUM Hudson Museum, at University of Maine

IMJ Israel Museum, Jerusalem

INAA Instrumental Neutron Activation Analysis
INAH Instituto Nacional de Antropologia e Historia

LACMA Los Angeles Museum County of Art

LMMA Louisiana Museum of Modern Art, Denmark

LOC Library of Congress, D.C.

MAP Museo Amparo, Puebla, Mexico

MMA Metropolitan Museum of Art, New York

MFAB Museum of Fine Arts, Boston

MMFA Montreal Museum of Fine Arts, Canada

MNA Museo Nacional de Antropología, Mexico City

MTN Museo Tlatilca, Naucalpan, Mexico City NGA National Gallery of Australia, Canberra

NMAI National Museum of the American Indian, Smithsonian Institution
NMNH National Museum of Natural History, Smithsonian Institution

NMMA National Museum of Mexican Art, Chicago NHM Natural History Museum of Los Angeles County

NFF Night Fire Films

PMAE Peabody Museum of Archaeology and Ethnology at Harvard University

PUAM Princeton University Art Museum RMM Riverside Metropolitan Museum SDD Santasilia Dissertation Database

SMA Snite Museum of Art, University of Notre Dame

SLAM St. Louis Art Museum

UPMAA University of Pennsylvania Museum of Archaeology and Anthropology

YUAG Yale University Art Gallery

YPMNH Yale Peabody Museum of Natural History

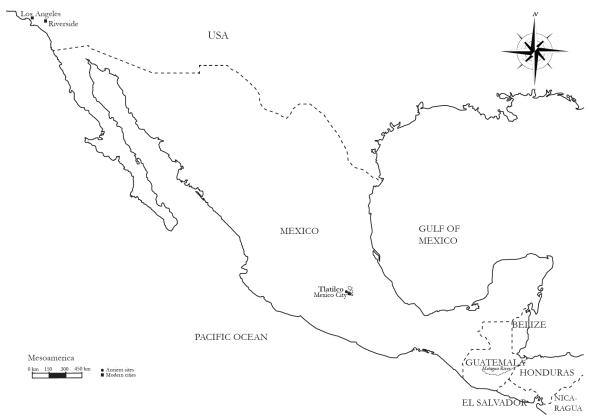
CHAPTER 1 INTRODUCTION

1.1. Introduction

This dissertation is a result of a serendipitous encounter with an uncurated collection of Early Formative objects, which were stored away in a small public city museum in the city of Riverside, California, known as Riverside Metropolitan Museum.¹ Upon discovering the collection that contained a significant number of artifacts from Tlatilco, a site that is today buried beneath the metropolitan area surrounding Mexico City (Figure 1.1), I started looking for publications and other museum collections on Tlatilco. I was soon to discover that access to published material was scarce, and although many museums house Tlatilco collections, little was understood about the culture and these collections. In reality, there were many collections in museums across the United States that had received little to no attention. These collections establish the parameters of my work while I demonstrate the story of Tlatilco and its discovery by both looters, collectors, and finally archaeologists. Through comparative research, building on archaeological as well as art historical methods, I draw conclusions concerning the critical aspects of the culture and its place in the Early Formative period of Mesoamerican civilization. I address the ongoing exploration of these collections and discuss the information still to be learned from further research within these collections.

¹ In 2017 RMM shuttered to undergo extensive renovations. As of 2019 I have been informed that once the museum reopens in approximately 2021-22, the name will henceforth be known as Museum of Riverside. RMM will remain the official name of the museum throughout this dissertation as much data has been processed under this name.

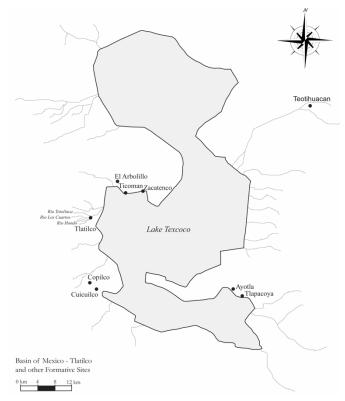
During the Early Formative period in Central Mexico, sedentary communities started to flourish. One of these communities was Tlatilco, dating approximately to 1200-900 BCE uncalibrated, and 1400-1100 BCE calibrated (see Section 3.3.6 for discussion of the chronology). Tlatilco was located along three rivers running west from ancient lake Texcoco in the Basin of Mexico (Figure 1.2).



Map 1.1 Central Mexico and Tlatilco.

Today Tlatilco is buried below urban Mexico City, with little chance of further excavations. Tlatilco was not a community that appears to have built monumental architecture, and the lack of structural evidence in the landscape resulted in difficulty identifying the layout of the site. It is indeed fitting that the name, Tlatilco, a name given to the site possibly by the Aztec prior to the arrival of the Spaniards and means where

things are hidden in Nahuatl. The clayish soil had attracted brickyard workers to the area, and that was how Tlatilco was discovered in the 1930s. As the brickyard workers began digging through the surface, objects were encountered. It did not take long for the brickyard workers to understand that the objects had value to collectors of Mesoamerican antiquities and a market developed. This activity drew new interest to the site from famous collectors such as Miguel Covarrubias and Diego Rivera and prices sky-rocketed. For the brickyard workers, selling antiquities became more profitable than making bricks (Covarrubias 1957:33).



Map 1.2 Ancient Lake Texcoco and Formative sites.

In 1936, Covarrubias discovered Olmec-style objects for sale at Tlatilco among the artifacts (see Figures 1.1 and 1.2. for images of Tlatilco as a brickyard factory). It was not

immediately apparent whether these Olmec-style artifacts were excavated at Tlatilco or were imported from other sites to be sold there. Covarrubias, therefore, decided to excavate at Tlatilco to see if Olmec-style material had in fact come out of the ground. The Olmec, who are believed to have originated from the Gulf Coast of Mexico, had developed a very characteristic style of art and ideological approaches. The art and ideologies appear to have spread to multiple areas outside of the Gulf Coast area during the Formative period where local communities imported as well as adopted these traditions, such as seen at Tlatilco. When Covarrubias discovered Olmec-style artifacts at Tlatilco, they were expected to have come from the Gulf Coast area. The Olmec sites of La Venta in the state of Tabasco and San Lorenzo in the state of Veracruz, were still in their early stages of excavation, but majority of the so-called Olmec-style objects encountered at Tlatilco are in San Lorenzo-style. San Lorenzo was the Early Formative site that was contemporaneous with Tlatilco, while La Venta was a Middle Formative site whose influence would have been subsequent to the Early Formative sites (see Section 3.2.3 for further introduction to the Olmec).

It would be another six years before excavations actually commenced in November 1942 when Covarrubias in collaboration with the Instituto Nacional de Antropologia e Historia (INAH) initiated a month-long season (Season I) which generated three more seasons terminating in the late 1960s (Covarrubias 1957; Piña Chan 1958; Romano 1962, 1963, 1965, 1967). While there were ongoing excavations, the brick working continued in other areas of Tlatilco, and the exploitation and art dealing appears to have continued throughout the 1960s. Since the 1930s, many objects have made it into both private and public museum collections, particularly in the United States. Evidence encountered for this

research indicates that the majority of these collections consisted of objects purchased by dealers and collectors between the 1930s and 1960s at Tlatilco.



Figure 1.1 Image by Gillett Griffin of the brick work manufacturing at Tlatilco in the 1960s (Courtesy of Princeton University Art Museum; GG90002811).

The collections are housed in museums across the United States and contain the objects that served as the primary source for my comparative research on Tlatilco. Collections and publications of artifacts that have established context are used for comparative research and to identify Tlatilco objects within the museum collections. This includes the data obtained from Instrumental Neutron Activation Analysis (INAA) on the RMM collection. The popularity of Tlatilco and the growing opportunity to purchase artifacts at the site caused non-Tlatilco objects to be sold under the label of Tlatilco complicating our understanding of ceramic variability from Tlatilco. The objects from Tlatilco included in this study are discussed and compared with artifacts and the archaeological records from other contemporary Early Formative cultures in Mesoamerica,

allowing for new interpretations of the socio-political dynamic among Tlatilco and its contemporaries.

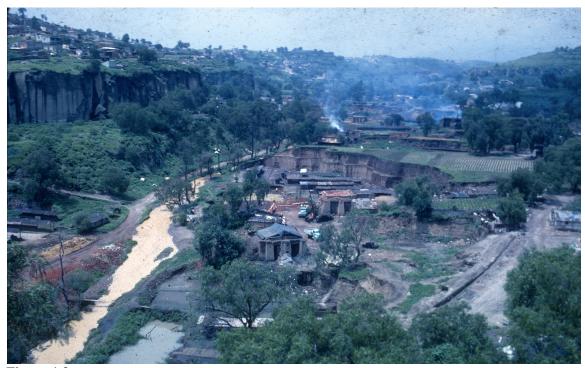


Figure 1.2 Tlatilco along one of the rivers running west from Lake Texcoco, amidst brick work and fields in the 1960s (photo by Gillett Griffin, Courtesy of Princeton University Art Museum; GG90002819).

1.2. Previous Scholarship

In the winter of 2015, while functioning as an intern at Riverside Metropolitan Museum (RMM) I located stored away boxes containing a collection of Mesoamerican objects. These objects were collected in the 1960s by the former senior curator, Christopher L. Moser, who bequeathed the objects to RMM upon his death in 2003. Moser never curated nor published on the Mesoamerican collection. Accepting the job at RMM, Moser was hired to work on Californian art and Southwest baskets and today RMM houses one of the best Southwest basket collections in the country. The only information available

about the Tlatilco collection were small 10 by 5 cm yellow artifact cards written by Moser documenting the location and date that he purchased them along with a brief description. I did a search for literature on Tlatilco, and I learned little was available. About half of the published material available on Tlatilco incorporated into this study was gathered from libraries and archives in Mexico, and not otherwise available through online sources and libraries in the United States. The lack of available written resources attested to a much-needed investigation of this ancient culture.

Tlatilco frequently appears in books discussing Formative Mexico, however, as Christine Niederberger (2000:173) described it; "...the recent data on the Early Formative, the belief that Formative sites of the basin, such as Tlatilco, were simple villages inhabited by relatively egalitarian villagers still persists in many recent publications." It is now apparent from the available data that Tlatilco was not just a "simple village" nor was it a necropolis even though more than 500 burials were uncovered. Clay-surfaced earthen platforms, terraces, and general trash middens inform us that Tlatilco was a flourishing community with public (perishable) structures. The ceramic artifacts, which will be discussed in depth in chapter 4, attest to a vibrant sociopolitical movement among the Early Formative communities. Unfortunately, as Niederberger (2000:173) stated; "one of the tragedies of Pre-Columbian archaeology has been the relatively recent, systematic destruction in the Basin of Mexico of Olmec-style horizon, regional centers such as Tlatilco and Tlapacoya." These ancient cultures now buried below freeways and factories in urban Mexico City will not be able to receive more archaeological fieldwork. What is still to be learned about Tlatilco will of necessity come from the many museum collections.

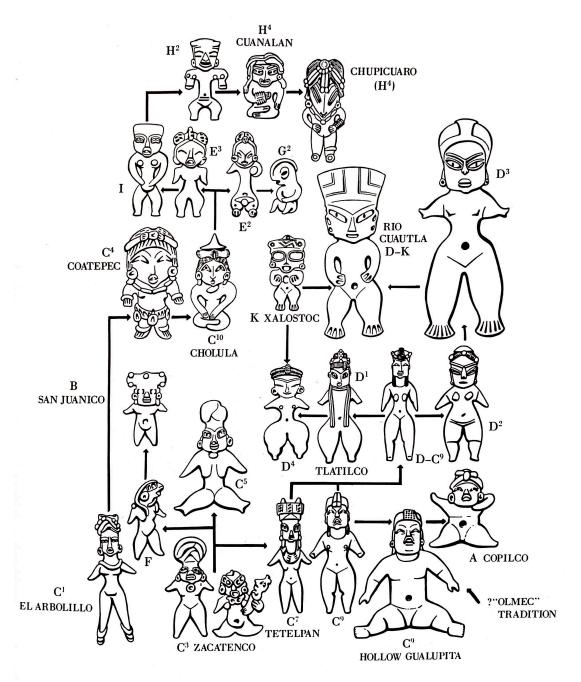


Figure 1.3 Typologies chart by Covarrubias (1957).

Covarrubias initiated and directed the first two formal excavational seasons at Tlatilco; an approximately four-week season in 1942 (Season I), and a following Season

II, which lasted from approximately 1947-1950. Posthumously, Covarrubias' book on ancient Mexican art (1957) was published, with the initial chapter devoted to the first agriculturists which encompassed Tlatilco and other Formative cultures in the Basin of Mexico. It is in this book that we get the well-known and invaluable figurine chart which he developed on the typologies in and around the Basin of Mexico (Figure 1.3). Prior to his book, two publications introduced his excavations, and his speculations about Tlatilco as well as its connections to the Olmec (Covarrubias 1943 & 1950). Both articles are condensed versions of what would later be publish in his book. Another early publication on Tlatilco is also one of the most insightful sources and was published by Muriel Porter Weaver (1953) who systematically introduced the culture, analyzing objects and establishing a context with contemporaneous cultures. Weaver was involved with the excavations of Season II, where she recorded information on the burials, particularly the grave goods. Significantly, an unpublished (somewhat incomplete) record of these burials and grave goods was located as a result of my research and was available for this study (see Appendix A).

In 1958 Romano Piña Chan, who directed Season III, a two-month season in 1955, published a two-volume set on Tlatilco in collaboration with INAH, although it appears that he mostly discussed material from Season II. A third volume was added by José Louis Lorenzo discussing the non-ceramic artifacts (1965). Arturo Romano, the director of Season IV, published only four short articles in the *Boletin*, published by INAH (1962; 1963; 1965; 1967). Romano, who was an osteologist, had primarily focused on recording the burials and had not paid much attention to otherwise archaeologically recording the

excavations. An abbreviated fifth season, which is a result of Paul Tolstoy excavating a few units at Tlatilco in the 1960s, yielded important information on the chronology, settlement patterns, and Olmec influences during the Early Formative period. Tolstoy (1975; 1979; 1989a) published several important articles, and also co-authored Tolstoy and Paradis (1970), and Tolstoy et al. (1977).

Piña Chan continued his ceramic typologies discussion in a chapter in the Handbook of Middle American Indians (1971) building on the work of Covarrubias and Weaver. The chart created by Covarrubias, was building on the early work of George C. Vaillant and particularly Vaillant's books on his excavations from Zacatenco (1930) and Gualupita (1934). The references to figurine types throughout this dissertation are to Covarrubias' typologies found in the chart (Figure 1.3). Hay-Vaillant had introduced a series of typologies that were developed on the many figurine types encountered in and around Middle Formative sites primarily in the Basin of Mexico. These include Covarrubias' type D figurines which are the most common type of figurines found at Tlatilco. These are commonly divided into types D1, D2, D3, D4, and DC9. Building on the work of Vaillant and Covarrubias, sequencing and typologies of both figurines and vessels were discussed by Lorenza Flores García (1968), Jean-Pierre Laporte (1973), and Patricia Ochoa Castillo (1982) who expanded on the variability from Tlatilco.

Only a few publications offer contextual information on objects. The publication by Robert García Moll and Marcela Salas Cuesta (1998) introduce the variation of figurines displayed through images of objects known from the Tlatilco excavations. Other works, such at the very important burial catalogue from Season IV, published by García Moll et

al. (1991) provides the reader with an account of each of the burials uncovered (213). Additionally, images of a large selection of the grave goods is incorporated. The catalogue on the Preclassic exhibition from Museo Nacional de Antropología (1994) by Patricia Ochoa Castillo and Oscar Orueta, offers images of objects with known context. However, upon cross referencing some of the objects with the two available burial catalogues (Moll et al. 1991; Weaver n.d.: Appendix A) there appear to be some contradictions. Finally, Edgar Nebot García (2004) applied a very technical approach and offers a thorough discussion of Tlatilco where he systematically introduces many of the objects from Mexico and their function. I refer to this publication as a great supplement to this dissertation study.

Museum catalogues range in size and how much information they supply their reader. Some of the catalogues used for this study have played a significant role in understanding museum collections and provided important interpretations of Tlatilco material. Most catalogues include images, usually measurements, and sometimes a (brief) description. Few go into as much depth as Michael Coe's *The Jaguar's Children* (1965) which is essentially the first exhibition and catalogue that focused on Formative Mexico including Tlatilco objects. Karl Taube's catalogue on the Albers collection (1988), today housed at Yale Peabody, takes the reader through a holistic introduction to the material record with a time and space approach covering Formative up through Postclassic periods in Mexico. Other more generic catalogues like the one on the SLAM collections (Parson 1980) offers a good overview of representation of artifacts.

Tlatilco is frequently mentioned in publications on Mexico, but the information presented does not usually extend beyond a general introduction to the site and its

intriguing figurines. More recent publications, within the last 20 years, include important works addressing the dynamics of Tlatilco and the sociopolitical setting of Early Formative cultures. As we entered a new theoretical age, topics on identity were finally asked and addressed. Publications included in this study discuss theoretical issues such as the importance of understanding ranked societies (Niederberger 2000), and interpretations on social identities based on the burial data from Season IV (Joyce 1999; 2001). Recent publications on Formative Mesoamerica draw substantially on a more theoretical approach towards understanding the movement of people and objects during the Formative period. The following publications have helped frame questions and answers when studying Tlatilco; particularly Nichols and Pool (2016) on ancient Mesoamerica, John Clark (2016) on identities, and Richard Lesure (2011) for interpretation of ancient figurines.

1.3. APPROACHING THE MUSEUM COLLECTIONS

Following my agreement with the Riverside Metropolitan Museum to guest curate an exhibition and focus my dissertation on Tlatilco, I traveled to Washington D.C. to visit the Smithsonian Institute, an affiliate museum to the RMM. The Smithsonian houses an extensive collection of Tlatilco artifacts at the National Museum of the American Indian (NMAI) and a visit was arranged to view some of these. I meet with Ronald Bishop of the National Museum of Natural History (NMNH), another Smithsonian museum, and Bishop agreed to travel to Riverside in the fall of 2015 to help evaluate the RMM collection. This initiated a collaboration between the museums which resulted in eighty selected artifacts

being sampled using Instrumental Neutron Activation Analysis (INAA) of which thirtyfive were from Tlatilco.

The affiliation between RMM and the Smithsonian provided me with the opportunity for a two-week research visit to analyze the collection at NMAI in September of 2016. This was a year after the INAA sampling at RMM, and Bishop and his wife, Erin Sears, generously invited me to stay with them, which allowed me to visit with NMAI during the day while working with Bishop on the INAA data during the evenings and weekends.

The collaboration with the Smithsonian was followed by a trip to the Museo Nacional de Antropología in Mexico City (MNA) in the summer of 2016. My plans to include museum collections in my research were still in the formative stages and the MNA, with its large Tlatilco collection of which many objects have known provenance and context, seemed to be the next logical step. I met with director Antonio Saborit, the museum's Preclassic curator, Patricia Ochoa C., and senior researcher Marcela Salas Cuesta. Cuesta is the last living member of the team who excavated the many burials during Season IV at Tlatilco in the 1960s, directed by Arturo Romano. Cuesta is also the widow of Roberto García Moll, who in 1991 published a catalogue containing the burial data from Season IV. The conversation between the four of us informed me that Ochoa C. and Cuesta are currently working on documenting the many objects from Tlatilco on display and in the vault at MNA. Considering that they were already working on the MNA material, we agreed it would be more beneficial if I focused on the collections in the United States.

1.4. RESEARCH INITIATIVES

Upon establishing that there was a need for analyzing and documenting collections outside of Mexico as well as realizing that written sources were scarce, the objective of my dissertation was shaped around the idea of doing a comparative study on the material record primarily from collections across the United States. Identifying common as well as unique artifacts within the large corpus of ceramic objects would provide new insights into the identities and ideologies of the inhabitants at Tlatilco and what can be inferred about their social customs and practices. Particularly vessels and figurines from Tlatilco's contemporaries were compared to understand the sociopolitical transformation and the ongoing complexity during the Early Formative period that shaped the identities of the people at Tlatilco.

To sum up, the primary data available for this study came from museum collections, a few archives, and publications. Full documentation of any of the four archaeological seasons is not available. Published material is scarce and inconsistent. There are several major issues, when studying Tlatilco from a museum perspective, that must be taken into consideration:

1.4.1. WHAT CONSTITUTES OBJECTS MANUFACTURED AT TLATILCO?

- a. Tlatilco artifacts have been thought to have been easily recognizable as many of the vessels and figurines are characteristically shaped and often are representative identifiers of the site.
- b. After having researched Early Formative material from the Basin of Mexico, and throughout Mesoamerica, it is clear that many sites share similar

characteristics to those at Tlatilco. Did these communities share a wider ideological perspective, or were they potential colonies or part of the same ethnic or cultural group?

c. This is one of the key areas of investigation for understanding the socio-political transformation of Tlatilco and its contemporaries. Thus, questions regarding the identity and cultural affiliation of the Tlatilcans come to the forefront.

1.4.2. REGARDING OBJECTS IN MUSEUMS LABELED AS TLATILCO: ARE THEY ACTUALLY FROM TLATILCO?

- a. The answer is: There is no way of knowing unless the objects have known context, which they rarely do. Only with help from scientific and chemical analysis can it be determined where an object was manufactured. This does not account for the objects traded or imported in antiquity and deposited at Tlatilco.
- b. Instrumental Neutron Activation Analysis (INAA) is one of the methods that can provide a place of manufacturing. However, the cost and the time it would take to sample all the objects makes it unrealistic to sample all of the objects with unknown provenance. Additionally, to obtain access to sample museum collections is difficult as this kind of analysis is by museums often considered "destructive". This is unfortunate as much can be learned even if the collection has little to no known context. As will be demonstrated later in this dissertation, INAA has been crucial for our understanding of Tlatilco and its social transformation.

1.4.3. OBJECTS PURCHASED LOCALLY AT TLATILCO MUST BE FROM TLATILCO?

- a. The popularity of the artifacts from Tlatilco increased the number of interregionally imported objects to be sold in the 20th century, even if that meant selling it as a Tlatilco object.
- b. I have repeatedly seen collections where objects were mislabeled. This particularly applies to objects from the Late Formative site of Chupícuaro, located some one hundred kilometers north west of Tlatilco. This was a site which suffered a similar fate as Tlatilco in terms of destruction from modern urbanization. At Chupícuaro, a dam project covered the site (Branif C. 1998). Other cultures and areas frequently encountered in the artifact record from Tlatilco are from Xochipala, Michoacán, Ticoman, Zacatenco, and presumably Las Bocas and San Pablo, among others.
- c. The notion of artifacts not from Tlatilco but sold there is supported by the labels written by Christopher L. Moser, who noted when, where, and for how much he had purchased them. All of the Chupícuaro artifacts in RMM's collection were purchased locally at Tlatilco in the early 1960s.

The above-mentioned issues create a significant challenge when studying Tlatilco, and only through comparative analysis with objects with known context, can some of these objects in museums be "identified" as either from Tlatilco or Tlatilco-style. The burial records have been the primary source for determining the origin of some of these museum objects with some accuracy. Unfortunately and on occasion, burial records and published data are conflicting, which complicates the interpretation of the objects. Moreover, from

Moll et al. (1991), we learn that from Season IV, only twenty percent of the objects uncovered came from burial contexts. As the season focused on burial work, the other eighty percent of the objects remain unpublished and I have not obtained access to these objects located at MNA for comparative analysis. The probability of any of the museum objects having been found within a burial is twenty percent. Without a record of these other eighty percent it is difficult to know what the trends in styles and materials were outside of funerary contexts. One can only speculate about the trends observed within the grave goods, such as if effigy vessels and large hollow figurines would commonly be found outside of burial context, or whether they were directly associated with burials or caches, which were frequently recorded by both Moll and Weaver.

1.5. UNESCO LAWS FOR REGULATION AND EXPORT OF ANCIENT OBJECTS

When looking at museum objects, one needs to consider the implications of working with potentially looted material of uncertain provenance. As part of this dissertation's research the movement of some of these objects was tracked, looking at records of how they went from Mexico to the museum's collections. Many museums today will not accept imported objects without proper documentation that comply with the UNESCO Convention and the individual countries' laws on export of their cultural heritage.

The UNESCO Convention on the Means of Prohibiting and Preventing the Illicit Import, Export and Transfer of Ownership of Cultural Property 1970 applied in time of peace and war. From the 1988 Handbook of National Regulations Concerning

the Export of Cultural Property Prepared for UNESCO by Lyndel V. Prott, (Reader in International Law and Jurisprudence, University of Sydney), and Patrick J. O'Keefe, (Associate Professor of Law University of Sydney), pp. vii, 144-145: "International arrangements UNESCO Convention 1970 in force since 4 January 1973. UNESCO Convention 1954 and Protocol in force since 7 August 1956. Treaty of Cooperation between the United Mexican States and the United States of America Providing for Recovery and Return of Stolen Archaeological, Historical and Cultural Properties." According to the UNESCO Convention, anything that had been imported into the United States prior to 1973 is considered legal. It is a different debate if this is ethical or not, and debates about repatriation are ongoing. The issue of repatriation will not be discussed further in this study.

1.6. Museum History

There are different ways the Tlatilco objects have made it into the museums. In most of the cases, the objects were donated or bequeathed to the museum. One of the incentives to donate objects to a museum was to get a tax-deduction. The history of the various dealers, donors, and collectors would be too large a project to discuss here. Trying to resolve the movement patterns of the objects and their departure from Mexico will not be discussed in depth except in general terms. In the 1940s-1960s there were a handful of dealers that had been involved with the majority of these transactions, such as Franz Feuchtwanger and Everett Rassiga (Michael Coe, pers. comm. 2017; see Feuchtwanger 1989; Parsons 1980), and there are fascinating accounts of how the objects were

legitimately purchased or exchanged. These accounts offer insight into resolving the issues of provenance and known context of the objects such as those seen at RMM, Peabody, and SLAM (see Section 4.1).

Looting has been a major problem at Tlatilco. Although the brickyard workers may have not initially intended on becoming looters, that is nonetheless how things unfolded. It is speculated that thousands of burials were uncovered by brickyard workers (Michael Coe, pers. comm. 2017). Under the UNESCO convention of 1970, museums will not accept objects for their collections without known context and documentation confirming legal importation. Only artifacts imported prior to 1973 are exempt. This is an ethical approach shared by many museums to avoid encouraging looting. Working with objects in general that have no known context, despite meeting the UNESCO regulations, is frowned upon in some circles. However, considering the large amount of information the unprovenanced artifacts can yield, as well as the sparse archaeological record of Tlatilco, I contend it would be just as unethical to omit them.

To sum up, this chapter introduces my approach to working with collections in museums, and the complications involved with studying them. It introduces the ethical and legal aspect of working with this kind of material. It is on this merit that I in the next chapter discuss the methodology I applied to learn from these collections necessary to obtain enough data for a comparative analysis (Chapter 4).

CHAPTER 2 METHODOLOGY AND CREATION OF THE DATABASE

2.1. Introduction

Archaeology is the study of material remains that have been manufactured or modified by humans, from the smallest beads to the largest of buildings (Wendy Ashmore, pers. comm. 2015). Archaeology involves a wide array of techniques and methods beyond excavation. Including analysis, documentation, research, conservation, and dissemination of results and data, usually in publications or public presentations. While much of this has not changed since Tlatilco was excavated between the early 1940s and late 1960s, modern archaeologists have access to a much wider array of technological and scientific tools than their predecessors to assist them in their work. Many years has passed since the final excavations at Tlatilco. Since the 1930s objects from Tlatilco have traveled across the globe and made it as far away from Mexico as Israel and Australia. In this chapter, I discuss the museums included in this study, how I approach the material and the scientific tools incorporated to learn more about the unprovenanced objects in these collections. I discuss the methods applied when conducting analysis in the museums along with how the resulting information was processed into a database. Finally, I describe the dissemination that has already been carried out as a result of this dissertation project.

2.2. Museums Included in Dissertation Research

Upon returning from Mexico in 2016, following a conversation with researchers from MNA, I began generating a list of museums with Tlatilco collections. Selecting

museums was done by a few criteria, primarily that they had a significant collection and that it was accessible. I did online searches, followed by an email to specific museums enquiring about their collections and if they would accommodate a visit. What made a collection significant was that it contained ten or more objects. Within the Los Angeles area alone, several museums house significant collections which became the first museums on the list following NMAI. The list quickly grew long as it turned out that many museums in the United States house Tlatilco collections. Upon being awarded a UCMexus dissertation grant, museums outside of the Los Angeles area were contacted. A few museums I had not yet considered were added by meeting professionals in museum and academic settings who informed me that the museum they were affiliated with also housed a Tlatilco collection. Within a two-year timeframe, with careful logistical organization, I visited more than thirty museums of which it was possible to visit the collections in storage for analytical research at twenty-two of them. A total of thirty-six collections have been included whether small or large. At museums where conflicting schedules prevented a full research visit, notes and photographs were prepared in the galleries or on the basis of online information. A total of 1740 artifacts were recorded into the database of which two thirds are figurines. Of the 1740 artifacts, several cultures are represented, in addition to Tlatilco material. Tlatilco-style objects labeled under a different name were included while objects from contemporaneous sites were incorporated if the objects shared significant traits or features. These include several Olmec-style and Las Bocas style objects. Furthermore, majority of the San Pablo material from the SLAM collection was recorded.

1	Art Institute of Chicago	AIC	12	National Museum of Mexican Art, Chicago	NMMA
2	Autry Museum of the American West	AMAW	13	Natural History Museum of Los Angeles County	NHM
3	De Young Fine Arts Museum of San Francisco	DYM	14	Peabody Museum of Archaeology and Ethnology at Harvard University	PMAE
4	Field Museum of Natural History, Chicago	FMNH	15	Princeton University Art Museum	PUAM
5	Fowler Museum at University of California, Los Angeles	FMUCLA	16	Riverside Metropolitan Museum	RMM
6	Hudson Museum, at University of Maine	HMUM	17	Snite Museum of Art, University of Notre Dame	SMA
7	Los Angeles County Museum of Art	LACMA	18	St. Louis Art Museum	SLAM
8	Metropolitan Museum of Art	MMA	19	University of Pennsylvania Museum of Archaeology and Anthropology	UPMAA
9	Museum of Fine Arts, Boston	MFAB	20	Yale University Art Gallery	YUAG
10	National Museum of the American Indian	NMAI	21	Yale Peabody Museum of Natural History	YPMNH
11	National Museum of Natural History	NMNH	22	Montreal Museum of Fine Arts, Canada	MMFA

Table 2.1

This table lists the museums in alphabetical order, where I conducted analytical research. Acronyms presented in the table are for references throughout the dissertation, and for the Santasilia Dissertation Database when referencing specific artifacts.

23	American Museum of Natural History, New York	AMNH	Exhibition & online	30	Israel Museum, Jerusalem	IMJ	Online & friend's image
24	Baltimore Museum of Art	BMA	Online	31	Louisiana Museum of Modern Art, Denmark	LMMA	PDF
25	Brooklyn Museum	BKM	From friend	32	Library of Congress	LOC	Exhibition
26	Dallas Museum of Art	DMA	Online & from friend	33	Museo Ampero, Puebla, Mexico	MAP	Exhibition & online
27	Denver Museum of Art	DAM	PDF	34	Museo Nacional de Antropología, Mexico City	MNA	Exhibition
28	Dumbarton Oaks Museum	DBOM	Online	35	Museo Tlatilca, Naucalpan, Mexico City	MTN	Exhibition
29	Ethnologische Museum, Berlin	EMB	Online	36	National Gallery of Australia, Canberra	NGA	PDF

Table 2.2

Artifacts from these museums were included based on their exhibited, online, or forwarded PDF collections, or a combination.

2.3. APPROACHING THE MATERIAL

I have, throughout this dissertation, aimed at maintaining a holistic approach when working with the material at hand. To identify the people of Tlatilco and their contemporaries I have relied on comparisons of their ceramic traditions. When visiting museums, data were recorded on all artifacts available from Tlatilco. These items include figurines, vessels, masks, stamps and seals, musical instruments, and miscellaneous fragments and whole objects alike. Fragmented artifacts were not included unless diagnostic. On occasion museums would house collections from other ancient sites of interest to this study. These objects either shared stylistic traditions or came from some of the contemporaneous cultures discussed in relation to Tlatilco (Chapter 3). These collections were incorporated into the database based on relevance and time considerations. Having collected data from as many as 1740 artifacts, not all could be included (Chapter 4). Instead, common tendencies and unique instances were observed, and only material significant to the understanding of Tlatilco is discussed in this study.

In the early-mid-20th century, when many of the sites in the Basin of Mexico were being explored, collecting these antiques became a hobby of many people. Some enthusiasts collected a few artifacts and others made a career out of collecting. Particularly the Tlatilco figurines were in high demand as they were so different from anything else known in Mexican art. In the beginning these objects were sold very cheaply as collecting was still not common, but that would soon change and prices sky-rocketed. Today artifacts are still for sale. Arte Primitivo, a gallery and auction house in New York has extensive catalogues of objects that can be purchased. Interestingly, in the latest addition of the

catalogues Tlatilco figurines and vessels are for sale, along with figurines wrongly labeled as from Tlatilco. The small west Mexican state of Colima, famous for both large, hollow figures and many animals such as dog sculptures, appears in abundance in this catalogue. Tlatilco figurines and vessels are also occasionally for sale on eBay (see Appendix G). This concerns me, as these artifacts should be registered before potentially ending up in private collections where they cannot be studied. It is also worrisome, that objects are still sold as a Tlatilco piece potentially to sell at a higher price.

As certain objects appear to have been more popular in the early-mid-20th century, a rather uniform dynamic was created within the collections studied. An issue I was confronted with was that most collectors, and thus inevitably the museums, seem to have had an idea of which figurine and vessel types were most interesting. This led to what could appear like "package-deals" of similar artifacts. There are instances where the collectors purchased the material themselves, such as Covarrubias, Rivera, and Christopher Moser from RMM. However, often collectors would hire people like Covarrubias to choose and buy for them. Based on the collections encountered, it appears that collectors had little to no interest in stone tools (e.g. obsidian and chert projectile points), nor bone tools. Jadeite and granite objects known from the burial records were neither represented in the museum collections. Also, daily-ware ceramic vessels, otherwise found in abundance at Tlatilco, were seldom included. It is difficult to know if ornaments such as pendants and earspools, as seen adorning the figurines, were made of perishable materials, as very few have been found and none have made it into any of the museum collections included in this study.

The artifacts found in museums and included in this study are figurines, vessels, masks, stamp and seals, and musical instruments, such as whistles and rattles. They will be discussed in Chapter 4. Outside of the three Mexican museums included on the basis of exhibited collections (Museo Nacional de Antropología, Museo Tlatilca Naucalpan, and Museo Amparo)², it is only from the RMM collection that one bone and one stone object were represented: a needle and an obsidian projectile point (SDD29, 30). Exhibited at MNA in Mexico City is a small display of obsidian projectile points (SDD1537), and at the Tlatilco museum in Naucalpan, another bone needle is on display (SDD1418).

2.4. LABORATORY WORK

Today much of an archaeologist's work takes place in laboratories, where cleaning, examination, testing, conservation, and research take place. Archaeologists use scientific methods and tools to help them understand the objects they find. Radiocarbon dating, isotope analysis, and Instrumental Neutron Activation Analysis (INAA) are all advanced technological processes that provide archaeologists with information regarding an object (or human)'s geographical origin and its age. These tools can be used to track the movement of people and objects, document environmental changes, and provide insight into ancient diets.

Conservation work is an important part of preserving cultural remains. Often objects are brought to a lab soon after having been uncovered in the field. There, ideally, a trained conservator will conserve the objects. This involves cleaning,

² Due to time restraints, Anahuacalli, the museum of Diego Rivera, was not included (see No Author 1960).

examining, and possibly reassembling. Occasionally objects rediscovered in museums also are in need of conservation, like most of the Tlatilco objects in the RMM's collection. These objects had not previously been analyzed nor exhibited and were in need of cleaning and repair as they were glued onto wooden blocks and framed canvases, which I removed. Having been trained in conservation work during my six years as an archaeologist in Belize, I took on the task of conserving the objects before I started my analysis. Acetone, Q-tips, a fine scalpel, and a lot of patience were required to remove glue from the objects without damaging them. This further prepared them for a later exhibition.





Figure 2.1 Ronald Bishop sampling a figurine and vessel at RMM for INAA.

2.4.1. Instrumental Neutron Activation Analysis

Instrumental Neutron Activation Analysis (INAA) was conducted on thirty-five Tlatilco objects from the RMM collection. INAA is a scientific method that involves taking a small sample (100-200 mg) from clay (or stone) with a tungstencarbide drill (Blackman and Bishop 2007). For more thorough information on INAA see: Bishop 1980; Bishop et al. 1982; Bishop and Neff 1989 Skowronek et al. 2014;

Stoner et al. 2014; Stoner et al. 2015. After the sample is obtained, it is dried and entered into a nuclear reactor for irradiation, producing a count of relatively short-lived isotopes of various elements such as sodium, potassium, and those with longer half-lives like lanthanum (see Blackman and Bishop 2007). The count is then compared with values from other samples with known origins and geographical distribution. The samples from RMM's collection were prepared and processed by Ronald Bishop of the National Museum of Natural History, Smithsonian Institution.

The samples were brought to the nuclear reactor at the National Center for Neutron Research in Gaithersburg, Maryland, where they were irradiated. Working with information about the isotopic half-lives of the different elements in each sample, Bishop created lists in which sixteen elements (depending on country or region) are compared (Abascal-M. et al. 1974: 86, 87, 97; Ronald Bishop, pers. comm. 2016). I compared the many numbers and was able to cluster objects together. Once we had clusters that looked reasonable, Bishop double-checked my results, and images were added to the clusters to see if they aligned and appeared plausible. The values of the elements were compared to known values from regions throughout Mesoamerica. This is when we were finally able to place the objects on the map and learn if the objects were locally manufactured or imported.

INAA sampling on objects from museum collections is rarely granted, as it is considered a "destructive" form of analysis. It is true that taking a sample will leave a mark, and there is a potential, but minimal, risk of damage. However, only highly trained professionals sample these objects. The majority of the objects in the RMM

collection are already fragmented, and sampling left minor marks. When conducting INAA or any kind of destructive analysis, one must weigh the importance of the data to be gathered against the risk of damage. Since much can be learned using this method, objects of unknown provenance can end up yielding extensive information useful to research on the specific community or culture and to the discipline as a whole. Ronald Bishop and Dorie Reents-Budet have sampled Maya vases in collections in and outside of the United States and have applied INAA with great success (see Reents-Budet 1994; Reents-Budet et al. 2010). For the RMM to allow INAA sampling on their ceramic objects is significant. The data generated will be incorporated into the larger database prepared by Bishop and other INAA institutions, such as University of Missouri Research Reactor (MURR), which will be accessible to any future researchers and is a contribution toward a greater understanding of ancient Mesoamerica.

2.5. ARCHIVAL RESOURCES

At the Biblioteca: Archivos y Colecciones Especiales, UDLAP, Mexico (BACE) a few notes, images and drawings from Miguel Covarrubias' two archaeological seasons are stored (see Appendix B). Archival research was not initially taken into consideration for this project, but upon encountering several archival records I decided they could not be ignored. Covarrubias' famous notebook on the Olmec, published by Michael Coe (2012), who had photographed it in the 1960s, was unfortunately not to be found and it remains unlocated, and was there was no sign of a notebook from his excavations at Tlatilco.

However, the archival documents of Covarrubias yielded significant documents and photographs, and the collection housed at BACE offered documents with scribbled notes commenting on equipment purchases, distribution of a few grave goods, drawings of select burials and caches, photographs of the burials and brickyard, as well as an interesting map of an area where several excavation units had been set up.

Whilst conducting research at some of the museums, occasionally additional data would be made available. Often, upon introducing my research to the curators and assistants with whom I was working, insights into other sources would be offered. Usually these sources consisted of photographs, letters and correspondence, and the exchange history of the objects. This material provided an extensive amount of extra data, offering invaluable information on the history of the movement of objects from Tlatilco in the 20th century. Some of these correspondences and exchanges will be discussed in Chapter 4 in relation to issues surrounding provenance.

2.5.1. CONTEXTUAL INFORMATION AND LABELS

The majority of the objects in the collections have bare to minimum amount of context, and in most cases, they went through multiple owners before making it to their current location in a museum. In some cases, we know that the collections that were purchased at Tlatilco were not necessarily from Tlatilco. The written record that does exist, mainly from Covarrubias (1957) and Moser (artifact labels), indicates that artifacts sold locally at Tlatilco as far back as the 1930 were sometimes from other locations. One can only expect that the amount of "imported objects" into Tlatilco increased over the years, as it gained a reputation of being accessible for purchases of antiquities, allowing for art

dealers and private enthusiasts to acquire. Without a trained eye, why would one question it? While analyzing objects in the many museums across the country, it has become clear that some so-called Tlatilco objects have definitely been mis-labeled. The extensive museum research during this project is helping remedy these erroneous labels.

The fact that there is an ever-lurking consciousness that many of these objects labeled as Tlatilco could in fact have come from many other places. This is unfortunate and obscures my research. Some hundred kilometers straight south of Tlatilco in the present-day state of Morelos is a site known as San Pablo, formerly called Santa Cruz. Objects from the site of San Pablo shows strong similarities to those of Tlatilco, and it cannot be excluded that not all objects representing Tlatilco-style are from Tlatilco. Instrumental Neutron Activation Analysis (INAA) is a method that can be applied to resolve the origin of production of these objects, but it is costly, and time consuming, and may not be allowed within museum settings and thus not something to rely on for resolving the issue with Tlatilco-style on a bigger scale.

When assessing objects that are on display at museums, labels sometimes have provided information about location, years, material, as well as interpretations of a possible design, incisions, poses and so forth. It is a hit or miss whether the labels are correct or not, and the information would later be verified where possible. The main reasons for mislabeling are threefold: 1. The labels are outdated, as new information has been learned since they were written; 2. Spending money to allow curators to update the galleries has not been prioritized; and 3. As little has been published on Tlatilco over the years, access

to information is limited, causing curators to be miss-informed. In particular, dates are frequently contradicting.

2.5.2. FAKES AND ANCIENT WORKSHOPS

Identifying fake objects was challenging. There are so many different Tlatilco-style figurines, that at this stage of its evolution knowing one potential workshop from another will be impossible without chemical analysis. The variations, as well as the approximately 300-year time span of Tlatilco, combined with the other cultures that seemed to share similar ceramic traditions (such as San Pablo and Gualupita, and to some extent Las Bocas and Tlapacoya) offers little consolation to the challenge. Considering how many objects the brickyard workers and looters had access to, the probability of many fakes, at least from the 1930s-1960s, seems less likely. Having said that, there are fakes (see Appendix C.25), and if museums would allow methods like thermoluminescence dating, it could be established when the objects had been fired, offering a relative date of manufacturing. Although not considered the most accurate method for dating, it would be close enough as it would essentially determine whether it was fired in the 20th century or three thousand years ago. Some of the fakes are obvious whereas others are a lot more elaborately made. On occasion some objects almost seem too "pretty" to be original, but without modern scientific procedures their authenticity will remain unknown.

2.5.3. CONDUCTING ANALYSIS – THE LOGISTICAL APPROACH

Many museums offered one to two days for a research visit. I, therefore, had to analyze approximately forty objects per day. Due to time constraints, some details have not been taken into consideration, such as color and ceramic paste. Rarely will comments be

offered on an object's actual color more than in an arbitrary designation of red, orange, black etc. To have included the Munsell chart would not only have been time consuming, but the varied settings offered very different lighting, and to attempt to understand the standardization of the colors would inevitably have been incorrect. I will also not comment on the paste, firing, temper etc. regarding the objects unless it has a specific importance to the research.

My on-the-go workspace unit consisted of notebook and pencil, and iPad pro and apple pencil, camera, measuring scale in centimeters placed in each photograph, black velveteen backcloth, measuring tape, and a caliper. Sometimes prints of the images were provided and offered by the museum, which resulted in notes sometimes being scribbled down on these in addition to the iPad notes. Gloves would be provided when needed, and it varied from museum to museum whether a curator or assistant would handle the objects, or if I was left to handle the objects myself.

The analysis concerning the documented details of the objects stayed consistent, although over time learned experience from having viewed more and more objects offered advantages in making additional notes about details and references to other collections. My standard for all objects was to measure height, width, depth, thickness, and diameter when applicable. For the greater Los Angeles area, which were the first objects to be analyzed, the weight was also measured, but upon travelling farther for museums, the scale was left at home.

Frequently, the collections could be viewed either on a pdf or online prior to the visit and spread sheets with additional information such as acquisition would be noted. For

this analysis acquisition information was not included except in unique situations. Viewing the collections on pdf or online beforehand also prepared me to possibly encounter artifacts that were not from Tlatilco and these would be corrected in the museum's databases. I would measure the artifacts during the analysis, even when measurements were provided. This was to assure the measurements stayed consistent.

Particular attention was paid to gathering frequency of various details in the figurines such as skull modification, representations of hair ribbons, holes or dents in the mouth and front hair locks. Attention was also focused on stylistic variations including identification of styles imported from other cultures and styles adopted by the Tlatilco culture and incorporated in their representative ceramics. Focus areas for this aspect of my research included examples from the Olmec culture regions of San Lorenzo and Las Bocas.

2.5.4. PHOTOGRAPHS

I am responsible for all photographs unless otherwise noted. Photographs were taken with a black velveteen backcloth and a metric scale. Unfortunately, several photographs are not in focus, which was the result of the lack of light and not having the use of a tripod in the storage area. Upon including images from collections online or from pdf's the quality is often regrettable, but the images have served their purpose.

From the St. Louis Art Museum (SLAM) collection, 133 images were taken by Night Fire Films (NFF), who were photographing the figurines for an animation, which would later be displayed at the Tlatilco exhibition I was in the process of curating (see Section 2.7. for discussion on dissemination). We collaborated to maximize our time, and

NFF generously provided me with their photographs of the figurines. Since SLAM had more than 800 objects of interest to me, being able to include the images by NFF was a huge help as five days to conduct research otherwise would not have been enough time. The only issue with the collaboration was that pictures of the back of the figurines were not needed for the animation, and only front photos were provided of the 133 figurines.



Figure 2.2 Example of Santasilia Dissertation Database page, here of object SDD 2 from RMM.

2.6. SANTASILIA DISSERTATION DATABASE

The Santasilia Dissertation Database (SDD) was created in Filemaker © (see Figure 2.2). Experience with objects analyzed and processed during my years in Belize helped generate the general idea of what to incorporate. As more objects were added to the database it was amended as needed. The more collections I accessed, the more I allowed myself to omit fragmented objects, which had initially been included. Once the database contained a representative number of objects, 1740 in total including some non-Tlatilco artifacts, the database was ready to be used as a search engine. Each object was labeled with consistent keywords and identifiers. This provided an optimal resource when identifying trends and patterns within the data. These patterns help clarify the social transformation and development, on a macro as well as micro scale. The database allows for an overview of the large corpus that represent Tlatilco as a culture and community, and the changes over time, as a result of movement and influx from other contemporaneous cultures. On a micro scale it provides an insight into objects that represent the social aspects of society, such as figurines with dogs or pregnant figurines. In addition to the SDD, the two burial reports were typed into similar databases (Moll et al. 1991 and Weaver n.d.: see Appendix A). This allowed for quick access to comparison of the material at hand, and to confirm or affirm if objects encountered in the SDD were also encountered in burial contexts to support the artifacts authenticity when discussing the its relevance for our understanding of Tlatilco.

Throughout this dissertation, references to artifacts will have an SDD number.

These are not to be confused with accession numbers assigned by the museum where the

object is housed. As can be seen in Figure 2.2, each entry, one for each object collected, contains information on museum location, location abbreviation, accession number (if provided), assigned culture (sometimes questioned), object type (figurine, vessel, mask, etc.), typology (when known), class (ceramic, stone, bone), condition (complete, glued, fragmented etc.), specific tags (words or lines that identify the object further for easy lookup for analysis, such as, but not limited to: standing or seated, incised, holding child or dog, having an abstract design, or remnants of red pigment, a tall-necked spout to mention a few), further description (if necessary), design (if applicable), where the artifact was accessed (in storage, on display, online, pdf, or a photograph from a friend) date accessed, responsible employee at the museum with whom I worked or established contact, possible references if the objects have been published, URL for the museum website, measurements (when available), followed by figurine features such as sex, eyebrows (unibrow, duobrow, or no brow), ears (elongated, tubed, ear spools, perforated or not), mouth detail (center hole or dent, row of teeth), ribbons (yes or no, hanging front or back), collar (yes or no), breasts (protruding, knobbed, or sacking.), navel (yes or no), digits (fingers and toes), photo credits and option for other information (for instance Instrumental Neutron Activation Analysis results).

2.7. DISSEMINATION

Preliminary data from this dissertation project have already been disseminated. This project on Tlatilco was initially proposed as an exhibition project, which instead became my dissertation research. This change resulted in a much better outcome for the

exhibition. The exhibition, *Uncovering Ancient Mexico: The Mystery of Tlatilco* was arranged in collaboration with Riverside Metropolitan Museum, and eventually opened at Riverside Art Museum (see Figure 2.3). Due to unforeseen events; RMM had to close for renovations, and space was instead rented at RAM. The exhibition was open from February through December 2018 and a catalogue *Tlatilco Uncovered* (Santasilia 2018) was prepared, introducing Tlatilco and with images of the objects on exhibit.



Figure 2.3
Exhibition display: *Uncovering Ancient Mexico: The Mystery of Tlatilco* (image courtesy of UCR Today magazine).

The exhibition allowed for ancient Mexico to be brought to the community of Riverside, which has a large Chicano population. Educational outreach to local schools was a priority and generous funding allowed for impact in the local curriculum. As a result

of guest curating an exhibition, I was invited to the local STEM³ academy where I both introduced the exhibition and discussed the many ways hard science is being applied to archaeology, such as the INAA results. Both prior to and following the opening of the exhibition, I was invited to do presentations and gallery tours to many groups of the community, who all showed an interest in Tlatilco and ancient Mexico. In conjunction with the opening of the exhibition, I collaborated with University of California, Riverside's Center for Ideas and Society and my advisor, Karl Taube, in arranging a conference, *The Rise of Civilization in Mesoamerica* in conjunction with the opening of the exhibition. This offered an opportunity to for scholars to come to Riverside and share their research with the Riverside Community at the Riverside Community Library.

To sum up, in Chapter 2 I discuss the methodological approaches to the collections, and I introduce the different ways I have extracted data from the artifacts to maximize my holistic understanding of Tlatilco and the complexity involved with working with collections without provenance. I have introduced the database(s). The Santasilia Dissertation Database has been crucial for me to extrapolate data on the collected material. Having additionally created databases for the two burial reports made the comparative research both faster and more efficient. I cannot imagine having done the analysis presented in Chapter 4 without these searchable databases. Finally, I introduce the dissemination that has already occurred as a result of this project and hopefully there will

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³ STEM is an acronym for "Science, Technology, Engineering and Mathematics." The STEM academy is a local school from kindergarten through high school teaching an emphasized STEM curriculum.

be more to come. Building on this chapter, before I introduce my analysis in Chapter 4, Chapter 3 will set the stage for where and when these artifacts from the many museums were manufactured, and the role they played in the communities of Tlatilco and its contemporaries.

CHAPTER 3 EXPLORING EARLY FORMATIVE CENTRAL MEXICO – TLATILCO AND ITS CONTEMPORARIES

3.1. EXPLORING TLATILCO AND THEIR SOCIAL TRANSFORMATION

An introduction to the Tlatilco community encompasses a variety of attributes that sets the stage for further understanding of the transformations and complexity of Early Formative Central Mexico and the rise of civilization in Mesoamerica. Tlatilco did not exist as an isolated entity, and the interregional cultures that played a central role for our understanding of Tlatilco have been introduced in this dissertation. Introducing and comparing the contemporaneous cultures of Tlatilco with which there is evidence of contact, is necessary to understand the sociopolitical situation emerging out of the many traditions they shared. Building upon the understanding of the regional dynamic in which the Tlatilcans lived and shaped their identities, I discuss the discovery of Tlatilco and the subsequent archaeological seasons and explore how this work, and the material record produced, expanded our knowledge of these cultures. Note that the so-called "seasons" more accurately would be referred to as projects, as two of them, Season II and IV, each lasted multiple years. To stay consistent with previous Spanish publications, I will continue with this terminology "season" as it is the appropriate translation of "temporada".

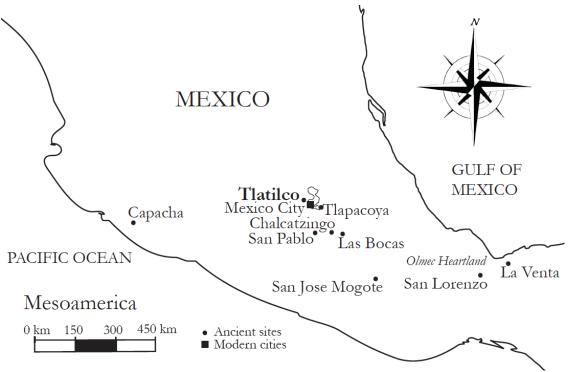
The first and third excavation seasons offered very little published material and were both relatively short seasons. Season II was the first extensive season from which information on burials and the first systematic analysis and interpretation is available, particularly on the ceramic vessels. The fourth season (Season IV) was directed by an

osteologist, or physical anthropologist, Arturo Romano, whose objective was to preserve the human remains. A catalogue (Moll et al. 1991) of the 213 individuals uncovered during Season IV provides a rich set of burial information. The focus on burials resulted in the exclusion of other attributes of the site and non-funerary artifacts but does offer an invaluable resource when studying the life and death of the Tlatilcans and will serve as foundation for my discussion about social stratification, identities, and potential rituals associated with the burials. A so-called unofficial fifth season will be discussed as well. This was not an official season like the previous four, but instead directed by Paul Tolstoy, who conducted extensive work in the Basin of Mexico including excavations at Tlatilco. His contributions to our understanding of Tlatilco and the chronology of Early Formative Central Mexico are invaluable. The chronology of Tlatilco and the Basin of Mexico changed repeatedly throughout the 20th century, as more reliable radiocarbon dates were established.

3.2. EARLY FORMATIVE MESOAMERICA

The Early Formative period saw the rise of "civilization" or complex societies across Mesoamerica. Prior to sedentism and the development of agricultural dependent communities, population groups had already initiated the process of domestication of plants during the Archaic period (7000-2000 BCE). With the developing dependence on domesticated crops as well as regional natural resources, new social arrangements were created and the concepts of social and political hierarchy emerged, often expressed in the art and grave goods (Pool 2016:170-171; Pye 2012:979). Many communities were spread

throughout Mesoamerica developing independently during the Late Archaic and Early Formative period. Eventually intra- and interregional relations became critical to the development of complex societies affecting the internal organization of interacting societies. This had a great impact on the social process and our understanding of the political nature of exchange among these early cultures; as well as on our understanding of how people separated by space, language and religion sought to exchange goods and ideas (Rosenswig 2010:3; Sugiyama 2016:216). Potentially as was seen with Olmec-style traditions shared throughout Mesoamerica.



Map 3.1
Map of Central Mexico with sites mentioned in this dissertation.

Artifacts, especially ceramics, have been the primary source to understand the sociopolitical dynamic between Tlatilco and its contemporaries. At the end of the Early

Formative period, throughout Mesoamerica, cultural complexity and populations had grown (Grove 1987:440). Some of these early cultures traded exotic objects and the archaeological records leave no doubt about extensive movement between the sites and exchange of goods and traditions. Particularly from the Olmec at San Lorenzo, the archaeological record supports the proposition that various traditions were exported such as the ballgame and ballplayers, use of red pigment in burials, and other aspects of religion and ideology (Pye 2016:799).

Things that appear to be specifically introduced from the San Lorenzo Olmec into Tlatilco are; the concept of hollow figurines, masculine figurines, including ballplayers, rocker-stamping decoration on vessels, kaolin (white) pottery, tooth mutilation, masks, clay stamps, and jadeite, among other things (Potter 1953:25; Karl Taube, pers. comm. 2019). Other Formative sites shared ceramic traditions with Tlatilco. The ones that seem to share extensive similarities are introduced below. Particularly vessels, figurines, and stamps seem to have moved around in vast quantities. As will be discussed in Section 4., INAA analysis of two Olmec-style figurine heads from RMM's collection show that they were made locally at Tlatilco. Some of these early iconographic depictions are believed to be of early deities (rain gods and possibly the maize god), depicted both on vessels and in figurines (Taube 1996:83-86). Hematite and other iron ores used for mirrors came from Oaxaca and are sometimes found on figurines from Tlatilco, worn as small pectoral "mirrors" on their chests. This is a tradition likely introduced from San Lorenzo where figurines with mirror pectorals have been found (Niederberger 1987:470; Taube 1992:178).

Most of the perishable products like fruits and other foods, unlike cacao beans and precious feathers, would probably not have lasted more than a few days of transport and would not likely have been preserved archaeologically (Tolstoy and Paradis 1970:350). The presence of ballplayer figurines would indicate that the ballgame may have been played in the Basin, even though evidence of ballcourts have not been detected. Additionally, this would imply that rubber balls, essential to playing, would have been traded from the Olmec. Rubber balls appear to have been first fashioned in the Gulf Coast region, and the earliest rubber balls date as far back as 1600 BCE, where at the Olmec site of El Manatí a ritual cache was found containing among other things, three rubber balls (Ortíz and Rodríguez 2000:79). Considering that the people of the Gulf Coast were known as the rubber people at the time of the conquest (Sahagun 1961:187-188), it is very likely all rubber balls, and thus the invention of the game, spread from here to the rest of Mesoamerica.

Tolstoy and Paradis (1970:350) suggest that some of the people in the Basin were tied ethnically with the Olmec of the Gulf Coast, and thus shared an interest in kinship, trade and markets. This could be one hypothesis to explain the Olmec presence. However, I do not believe that archaeological material points towards Tlatilco originally having been an Olmec outpost. It is more likely that as the Olmec expanded in pursuit of resources extending as far northwest from the heartland as Guerrero. Perhaps stopping in the Basin of Mexico was a natural location, where they encountered other people with whom they exchanged traditions and ideas. Traveling through the Basin to get to Guerrero would not have been the most direct route, and potentially there must have been another significant

reason for the Olmec to be at Tlatilco and Tlapacoya, such as a water pilgrimage to ancient Lake Texcoco. It is not unlikely that eventually the contact could have led to "marriage" ties between the Olmec and local populations and thus mixing ethnicities. This does not however, suggest that the elite of Tlatilco were necessarily Olmec, as the burial record from Season IV (Moll et al. 1991) shows that the individuals buried with Olmec objects were rich as well as poor.

Only a small percentage of the ceramics and figurines found at Tlatilco show Olmec influence and the majority of figurines and ceramics appear local in style. The change in the vessels and figurines at Tlatilco caused by Olmec influence created a hybrid culture. The figurines reflect this incorporation through depictions of clothing styles, mirrors of hematite placed on the chest, possibly tabular erect head modification, and shaven heads, in addition to the more traditional Olmec facial expressions, such as the slanting mouth. Originally, Coe (1989:70) argued that several of the Olmec-style objects from the Basin of Mexico were in fact locally made. This has been supported by the INAA data presented in next chapter. Some of the different ceramic types found at Tlatilco that bear evidence to Olmec influence are found in abundance at San Lorenzo. When San Lorenzo was abandoned around 900 BCE, these types of wares also disappeared from other cultures known for manufacturing and importing Olmec objects, such as Tlatilco and Tlapacoya (Taube 1988:20).

A few of the other communities that played a significant role during the Formative period in relation to Tlatilco reveal less sign of influence, and beyond the shared ceramic similarities, it is unknown which other resources maybe have traveled between these sites.

Our understanding of the Olmec from San Lorenzo is more comprehensive than that of other contemporaneous cultures. The sites of San Pablo and Las Bocas were both heavily looted, and archaeological documentation is scarce. Tlapacoya, located in much closer vicinity to Tlatilco, has a somewhat larger published record, but was a salvage project and is today covered by Southern Mexico City. Although Chalcatzingo appears to have existed around the same time as Tlatilco, it was not until the Middle Formative period that Chalcatzingo developed into the site we know today with monumental architecture and elaborate petroglyphs, which was subsequent to the decline of Tlatilco.

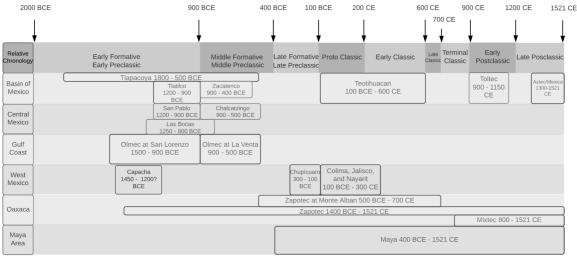


Table 3.1 The chronology of select Mesoamerican cultures (uncalibrated).

3.2.1. EARLY ARCHAEOLOGY IN THE BASIN OF MEXICO

During the late 19th century and early 20th century, the interest of archaeology and the different cultures of the past developed greatly in Mexico. Particularly, Central Mexico was heavily investigated, and archaeologists like George Vaillant, Jorge Acosta, and Manual Gamio set new standards for the interpretation of these cultures, introducing systematic exploration to get a better understanding of the chronology through stratification

in the Basin of Mexico. Around 1915, Alfred Tozzer and Herbert Spinden proposed that there seemed to be an archaic culture, much earlier than the Aztec and Teotihuacán, from where all ancient Mesoamerican civilizations evolved. Scholars pointed out that there appeared to be significant regional changes, and this woke Vaillant's interest (Vaillant 1930:9-10).

Vaillant created various typologies on different ceramics, which are still in use today. Vaillant worked at several different sites in the Basin of Mexico, particularly Formative sites ("archaic cultures") such as: Ticomán, El Arbolillo, and Zacatenco, from which he was able to distinguish between different periods and build up the chronology of the Basin. This resulted in the division of the Formative period sites into different phases, particularly based on the Zacatenco chronology, today outdated (see Section 3.3.6 for discussion on the chronology at Tlatilco). Vaillant excavated at Zacatenco for two seasons: 1927-1928 and 1928-1929 with the objective to create a chronology as well as map the site. For a long time, Tlatilco was believed to be associated with Zacatenco, but years of excavation results yielded that Tlatilco was older (Covarrubias 1957:14; Taube 1988:19; Tolstoy and Paradis 1970:345; Vaillant 1930:21).

The so-called Hay-Vaillant typologies paved the way for the typology still used today. Several scholars have built on it and developed it further. Covarrubias' famous chart (Figure 1.3) depicting figurines from various cultures both in the Basin of Mexico and in close proximity, has been key for many scholars researching the dynamic and development of Formative Central Mexico.

3.2.2. TLATILCO

In the Basin of Mexico, the ancient site of Tlatilco was a growing agricultural society around 1200 BCE (uncalibrated). Tlatilco is located 2274 meters above sea level on the western side of Lake Texcoco, along the two rivers: Río Totolica and Río de Los Cuartos, with Río Hondo to the north-east and the Atoto hill to the east of Tlatilco (see Map 1.2) (Piña Chan 1958:13, 116). Tlatilco is believed to have emerged from a homogeneous social landscape of independent farming villages to a more spread out kind of society with the ability to politically and economically control their surrounding territories where they cultivated crops such as maize, squash, and chili peppers. Meat was provided through domesticated deer, rabbits, ducks and other waterfowl, and surely, they caught fish and other water creatures in the lake. The climate was believed to have been more humid than today, and the vegetation much richer with very fertile soil (Covarrubias 1957:19; Niederberger 2000:169; Piña Chan 1958:16, Bk. 2).

In what seems to be an earlier draft of his later publications on Tlatilco (1950; 1957), Covarrubias named the site of Tlatilco after a small village close by. He pondered whether the etymological meaning of Tlatilco was "Place of Mounds" or "Where things are hidden." The root of Tlatilco, *tlatia*, means "to hide" and —co is a locative suffix. Or if the word came from *tlatilli* meaning "hill" or "mound" (unpublished document from BACE). Covarrubias must have come to an agreement with "Where things are hidden" as this was the name he would later publish without mentioning the other suggestion (Covarrubias 1857:17). A nearby village named Tlatilco was likely located on part of the ancient site and was named by the Nahua speaking Aztecs who later came to the area. The

name passed through the Spanish friars who were recording Mexican history. The original name is unknown, as is the language spoken there. The earliest written reference to "Tlatilco" is from 1612, in a note where Don Domingo de San Antón Muñon Chimalpahin Quauhtlehuanitzin mentions a chocolate seller, Maria Lopez, who had come to Tlatilco to make a home for herself there (de San Antón Muñon Chimalpahin Quauhtlehuanitzin 2006:195).

Initially Tlatilco was believed to have been a cemetery as the grounds seemed to yield endless burials, however, excavations uncovered evidence of residential household remains and earthen platforms, establishing it as a community site. It is through the archaeological record that we first learn about Tlatilco and its community, as there are no written records or ethnographical sources available. However, there is much that we do not learn from the archaeological record; we must assume that they had many perishable objects, not least their housing, which are believed to have been small huts of woven branches daubed with mud and roofed with thatch, built on clay surfaced earthen platforms (Ochoa C. 2003; Tolstoy 1989:101-102). The artifact record emerges as a primary source on which a more in depth understanding of Tlatilco can be build. Tlatilco is particularly noted for the quality, quantity, and imaginative variety of the human figurines found there. The majority of the figurines found at Tlatilco are female, and the presence of male figurines is usually limited to either figurines dressed as ballplayers or wearing loincloths. The figurines introduce a sense of the social transformation at Tlatilco, and emotions of nurturing, play, and ritual is expressed.

3.2.3. THE OLMEC AND SAN LORENZO

"Only an aristocracy obsessed with a rather fossilized religion and hunger for self-glorification and having unlimited resources of labor could have accomplished the carvings and erection of such great monuments" (Covarrubias 1957:77).

The Olmec were never a homogenous group located in one location, and little is known about the ethnicity and origin of the people who lived between 1500-500 BCE. The major cities of the Olmec were located on the Mexican Gulf coast in the modern-day states of Tabasco and Veracruz. It was at San Lorenzo in Veracruz where the Olmec developed the first known city of Mesoamerica, dating back further than 1500 BCE. By 1000 BCE San Lorenzo was believed to cover an area larger than 690 hectares, which is ten to twenty times larger than any other community known in Mesoamerica at this time, possibly with a population of more than 10,000 people. The Olmec played a major role in shaping the culture of the Formative period and the rise of civilization in Mesoamerica (Baizabal and Cyphers 2017:69; Clark 1997:216; Covarrubias 1957:49).

The Olmec are believed to have developed from horticultural and fishing societies, and the culture is considered to be the first stratified society in Mesoamerica (Clark 1997:215). Irrigation was crucial for the success and prosperity of the population, requiring organizational skills expected to be found in a complex stratified community rather than in a simple egalitarian society. This has led to many discussions about what kind of society the Olmec really were, an empire, theocracy, state, or chiefdom. There seems to be no archaeological evidence of an imperial society with political and economic control outside of the Gulf Coast, nor is there evidence of a theocracy. More evidence points in the direction of the chiefdom, which in Mesoamerica is defined as a hierarchically arranged

society, ranked internally with the chief as the highest ranked (Diehl 1989:23-28; Pool 2016:170,174). It has been suggested that the Olmec reached state level, however, Diehl (1989:27) argues that the characteristics that define states and chiefdoms overlap, and there simply is not enough archaeological evidence to support either hypothesis. He adds that whether or not the Olmec were the first civilization of Mesoamerica, they appear to have been the earliest complex society. According to Clark (1997:215), one possible way to know if the Olmec were a state or a chiefdom would be to find out if they had exercised coercive force over other societies. However, with the evidence available today, proving coercive force would be difficult, as manifestations of trade and exchange do not equal colonization and imperial power.

In contrast to the idea of coercive power, one could consider that the Olmec ideologies were attractive and convincing to the people across Mesoamerica. We know Olmec iconography is visible, stretching from the Gulf Coast to El Salvador, to Guerrero. One site of particular interest is Cantón Corralito, located near the Pacific Coast of Chiapas, that has been proposed as an Olmec colony (Cheetham 2007). This notion is supported by the large quantity of Olmec ceramic vessels found at Guerrero that were analyzed with INAA and shown to have been imported. Additionally, there are correlations between this site and San Lorenzo and the frequency of the ceramic vessels, the style and shape, are incredibly similar (Cheetham 2007:7,10,13). The majority of the figurines found at Cantón Corralito are in a typical Olmec-style (Cheetham 2007:43).

Evidence of Olmec(-style) portable artifacts attest to a different kind of contact than the more permanent iconographic depictions, such as the petroglyphs found at

Chalcatzingo and murals at Oxtotitlan Cave, Guerrero. The permanent art attests to an embedded Olmec ideology, and potentially an Olmec population, compared to objects that could easily have been traded among any ethnic group, which do not necessarily attest to sites becoming or developing as colonies.

Much archaeological evidence points to the Olmec heartland as the place where monumental architecture originated in Mesoamerica. According to Grove (1989:12) "the Early Formative Olmec were along with other societies part of a shared "international" ideology, and not the sole source of inspiration. Although they manipulated their ideology to a different, greater aesthetic height by executing it on stone monument, which is a sole Olmec achievement." There is extensive evidence of Olmec presence outside of the heartland between 1200-900 BCE. This evidence is seen throughout Mesoamerica including the Basin of Mexico, were societies contemporaneous with San Lorenzo incorporated Olmec ceramic traditions. However, there is still much controversy as to the to the extent of the influence of the Olmec.

The debate, initially referred to as "the Olmec problem," began in 1942 at a Mesa Redonda meeting in Chiapas and is still ongoing as to who may have influenced whom, and some archaeologists oppose the idea of the Olmec as an influential "mother culture." In any case, despite opposing opinions, there seems to be little doubt that recent research favors San Lorenzo and the Gulf Coast as the earliest complex society (Diehl 1989:20; Pye 2012:799, Rosenswig 2010:4). Many cultures developed contemporaneously in Mesoamerica and the Olmec on the Gulf Coast may, by no means, have been the earliest. In fact, there is evidence of occupation at Tlapacoya in the Basin of Mexico as far back as

the 6th millennium (Niederberger 2000:176). This represents the archaic people, and it has not been determined if people lived continuously at Tlapacoya for thousands of years. What is significant about the Gulf Coast Olmec is how they during the Early Formative period developed into a large population group, producing colossal stone monuments and clearly disseminated their traditions and ideologies wide and far while trading with other communities for precious resources.

Instrumental Neutron Activation Analysis (INAA) has been involved to support the idea of both sides of the "mother culture" vs. "sister culture" arguments. The mother culture theory describes the Olmec as having had a superior socio-political complexity which spread from the Gulf Coast and helped shape the rise of civilization in Mesoamerica. The academic group who prefer something less Olmec-dominated have previously advocated for a "sister culture" approach, meaning that the cultures developed side by side, and where the Olmec shared a similar sociopolitical complexity and development as other contemporaneous chiefdoms, engaging in equal competitive interaction. However, a third group of scholars argue that neither the mother culture nor the sister culture approach is useful (Blomster et al. 2005:1068; Neff et al. 2006:54-55).

INAA results have been useful in the discussion of the Olmec and how far and wide they may have been involved with social transformation during Early Formative period. Blomster et al. (2005:1070) demonstrated through INAA that Olmec-style pottery was locally manufactured from local clay in Oaxaca. Blomster et al. (2005) wanted to avoid the discussion about mother culture vs. sister culture and instead, tried to establish more evidence to support what should be a shared interest in understanding the sociopolitical

transformation of Formative Mesoamerica. Opponents of the mother culture theory reacted strongly to the data presented, and instead directed their focus to INAA, and whether it is a reliable method. One argument by Sharer et al. (2005:92) is that imported objects containing local foods and locally buried could obtain local chemical compositional values. However, the object being Olmec(-style) would still represent contact regardless of whether it was imported or locally manufactured. Neff et al. (2006:61) concluded that "the Olmec INAA study is a textbook example of how this approach can yield clear, strong compositional patterns in unambiguous implications about interregional moments of goods". The debate is still ongoing, but the more material that is allowed to be sampled for chemical analyses adds to our knowledge, and the more we collaborate, the better chance of possibly solving some of the many unanswered questions.

As discussed above, San Lorenzo was the major Early Formative Olmec center located in the Olmec Heartland in the state of Veracruz, and many ceramic vessels and other traditions were imported into Tlatilco. San Lorenzo was a powerful city with the means to provide fine goods for the elite population. La Venta, another important Olmec city, rose in importance around 1000 BCE, overlapping with the decline of San Lorenzo around 900 BCE and Olmec-style ceramics were present all over Mesoamerica during this period, including at Tlatilco. The Olmec elite used public art to express power and leadership presumably under the auspices of ancestors and supernatural spirits or deities (Clark 1997:212). Public art may not have been present at Tlatilco, at least not in the form of monumental stone sculptures as known from the Gulf Coast. It is possible that public manifestations were instead made through ritual traditions involving perishable materials

or using ceramic objects. It has been argued that one way to govern a population is through public ritual, in which the elite express their right to power by creating myths and thus promoting their ideology (Clark 1997:217-220). This very likely was how the elite at Tlatilco manifested their sovereignty, possibly through rituals introduced by the Olmec.

3.2.4. TLAPACOYA

Tlapacoya was located on what was once an island in Lake Chalco, one of five connected lakes that constituted what is commonly referred to as Lake Texcoco with Tlatilco located near its western shore (see Map 1.2). Tlapacoya had one of the longest occupancies in the Basin with a continuous cultural development between 1300-400 BCE, not considering the archaic remnants dating back as early as the 6th millennium (Niederberger 2000:176). After the arrival of the Spanish, Lake Texcoco was drained and dried up and does no longer exist. Like Tlatilco, Tlapacoya has endured extensive looting in modern times and is now covered by urban Mexico City. It was exploited as a quarry, and dynamite was used to blast rock loose. This did not cease until 1992, when Olmecstyle depictions were found on some of the cliffs. The images were simplistic and did not otherwise fully represent the splendor commonly known from the Olmec, but they included examples of a baby-face profile and an oval cartouche with cross-hatching (Niederberger 1987; 2000:185; Karl Taube, pers. comm. 2019). Christine Niederberger and INAH investigated Tlapacoya, where they uncovered more than 709 figurines, 130,000 potsherds, and nearly 6,000 lithic artifacts. Tlapacoya seems to have been one of the longest lasting communities in the Basin of Mexico, culminating with the erection of a large elaborate pyramid (400 BCE) (Niederberger 1987).

Tlatilco and Tlapacoya are considered major sites in the Basin of Mexico, as they were greater in size, and sustained larger and denser populations than others. Objects that indicated Olmec influence, such as flat-bottomed cylindrical dishes and decorated graypaste whiteware have been found in abundance at Tlapacoya. Many of the ballplayer figurines found in the Basin of Mexico come from Tlapacoya and were clearly inspired by Olmec traditions (Barba de Piña Chan 1956; Niederberger 2000:174-177; Tolstoy and Paradis 1970:345). According to Coe (1968:95), Tlapacoya might have been an Olmec village, as Olmec-style cleft-headed imagery has been found there in addition to other Olmec-style objects. Taube (1996a:71) has argued that the cleft-headed image is an early representation of the Olmec Maize God. These same white-ware vases dating to the Early Formative period have been found at Las Bocas, although little evidence points towards these having been found at Tlatilco (Paillés H. and Sánchez-Hildago 2008:65). This extensive evidence of Olmec presence at Tlapacoya both on portable objects and incised onto rock outcrops, potentially attests to more than trade and exchange. Possibly, Olmec people lived at Tlapacoya, maybe as a village as Coe suggested (1968:95), or maybe just a few individuals of importance and some familiar with the craftsmanship known from Veracruz. Tlapacoya was a somewhat central location between the Olmec heartland and Guerrero, although not the most direct route. Guerrero appears to be one of the sources from which the Olmec collected serpentine (Coe 1968: 92-94). Serpentine is another green stone in Mesoamerica, in addition to jadeite found in the Motagua River region in Guatemala. The strong Olmecs presence at Tlapacoya prompts speculation about the relation to Tlatilco and the evidence of Olmec material encountered in many of the burials.

3.2.5. LAS BOCAS AND CHALCATZINGO

Las Bocas is located in the state of Puebla about 140 kilometers southeast of Tlatilco and due east of Chalcatzingo in the state of Morelos. Coe (1968:94) has called Las Bocas a miniature Chalcatzingo, because of the many resemblances and connections to the Olmec, particularly with the San Lorenzo phase (1200-900), which has led Coe to suggest that Las Bocas could have been an Olmec outpost. Unfortunately, Las Bocas has suffered same fate as Tlatilco, and has been heavily looted and scarcely published. Only minor official archaeological excavations occurred in the late 1990s by INAH and Maria de La Cruz Paillés H. (2008). Las Bocas, like Tlatilco, appears to have been very much a community with strong emphasis on their burial traditions. Little is known about Las Bocas and the community besides that the grave goods from Las Bocas are some of the richest found in Early Formative Mesoamerica. According to Coe (1968:94-95), some of the grave goods contain ceramics that are so fine that no other society in Mesoamerica can compare to their beauty. Among these ceramics are large hollow figurines depicting babies which have been compared to the humanoid were-jaguar children often depicted in Olmec art (see Appendix C.17).

According to Grove (1987c:435; 1989:11), Las Bocas is located outside of what he has referred to as the "Tlatilco-culture-assemblage" sphere. Although there are shared similarities between Las Bocas and Tlatilco, Grove, claims that there are too many differences to support evidence of any connection between the two sites. Comparing the material records at hand, there appear to be many overlaps between Las Bocas, Tlapacoya and Tlatilco. The figurines, particularly the type D2 and K3 figurine types commonly found

at Tlatilco also appear at Las Bocas and Tlapacoya (see Appendix C for figurine variations). Seals and stamps from Las Bocas share a lot of similarities with Tlatilco which will be discussed in Section 4.5, and many of the white-ware kaolin vessels found in the Basin are likely imports from Las Bocas (Niederberger 1987:547; Paillés H. and Sánchez-Hildago 2008:75, 80).

Chalcatzingo was a Middle Formative site that potentially inherited traditions from Las Bocas, and thus potentially Tlatilco traditions. Chalcatzingo is located less than 150 kilometers south of Tlatilco, near the eastern border of the state of Morelos, and approximately 300 kilometers due west of the Olmec heartland, close to rivers that flow towards the Pacific Ocean and not the Gulf coast. Unlike Tlatilco which is located at a high altitude, Chalcatzingo has more of a subtropical climate (Coe 1968:91-92). Chalcatzingo is well preserved and was unlike the other mentioned sites, not heavily looted and proper field seasons have been conducted and published (Grove 1984; 1987). Chalcatzingo is located between two large single standing cliff formations or small mountains, almost creating a symbolic passageway (Figure 3.1). Many petroglyphs have been carved into the rock leaving behind an incredible legacy of iconographic depictions of Olmec ideology. At Chalcatzingo, burials are found to have been sub-floor interments, and usually related to residential areas, or near-residential areas, like patios; similar to those at Tlatilco. The grave goods were primarily ceramics, jadeite and serpentine objects, and stone tools including obsidian. The society was non-egalitarian with a complex social organization, indicating hierarchy and elites (De Morales 1987:95-96).





Figure 3.1 Chalcatzingo and a petroglyph of El Rey found on the left side of the right mountain.

In 1952, archaeologist Roman Piña Chan initiated archaeological work at Chalcatzingo, to establish the chronology. Piña Chan would go on to direct Season III at Tlatilco in 1955. At Chalcatzingo he came across many indications of Olmec presence, which he concluded was an Olmec group that had co-existed with the local farming population (Grove 1987:1). Figurine Type C9 has been found at Chalcatzingo, further testifying to the presence of the Olmec, but Grove adds that he sees more resemblance and similarities with Tlatilco than with the Olmec heartland. He suggests that the Chalcatzingo chiefs may have been the eastward link for the communities of the Tlatilco culture (Grove 1987:435). However, this is problematic as the two cultures did not exist contemporaneously. Perhaps, Tlatilcans and Las Bocans joined forces at Chalcatzingo following the Early Formative period. The many petroglyphs are clearly Olmec-style and if there is a direct connection between Tlatilco and Chalcatzingo, it would have been during the decline of Tlatilco. Figurines of type D commonly found at Tlatilco have however, not been found at Chalcatzingo. The quality of the artifacts found at Middle Formative Chalcatzingo cannot compare to the Early Formative figurines and vessels at Tlatilco, and generally later the ceramics were simpler and cruder.

3.2.6. SAN PABLO

San Pablo, formerly known as Santa Cruz in earlier literature, is located approximately 120 kilometers south of Tlatilco in the state of Morelos, and it endured the same fate as the above-mentioned sites. Excavations in the late 1960s strived to salvage what had not yet been looted. San Pablo was a large mound site estimated to once have contained somewhere between 150 and 250 burials. During the Formative period very few stone architectural structures were built, and the mound at San Pablo may represent the earliest known example of stone architecture in the highlands of Central Mexico as it contained retaining walls as well as small circular structures (Grove 1970:65-67). For more than ten years, before the commencement of the archaeological excavations in 1966, looters had "excavated" the mound looking for items to sell. The grave goods appear to be almost identical to those found at Tlatilco, although, very little Olmec-style material has been uncovered within the burials at San Pablo (Grove 1970:66).

As seen in Covarrubias' figurine chart, type DK is labeled as being from Río Cuautla, which is not far from San Pablo in Morelos. How and from where Covarrubias learned about this site and type DK is unclear, but he was aware of the ceramic tradition and the appropriate geographical location. Barely any Olmec material has been found at San Pablo, and figurine type DK (see Appendix C.9), found in abundance at San Pablo, has not been uncovered at Tlatilco (within burial contexts). Unlike Tlatilco, which was a thriving community, San Pablo was possibly only a burial site, as San Pablo was only one mound with hundreds of burials and no apparent evidence of households (Grove 1970:62). Considering the reasonably short time it would take for a deceased individual to decay,

assuming there were no specific mortuary practices of keeping the dead above ground for too long following death, I believe the community from where the buried came must have been somewhat close. Perhaps the community was nearby along the Río Cuautla. The community of Gualupita, approximately thirty-five kilometers north of San Pablo in direct route to Tlatilco is another site that shares ceramic similarities (see Vaillant and Vaillant 1935). There very well are other sites not yet discovered or perhaps some which have been plundered unnoticed and buried underneath modern-day towns.

3.2.7. WEST MEXICO AND SOUTH AMERICA

There are several indicators of movement between North- and South America during the second millennium BCE. How the people traveled between the two continents is an ongoing debate. Richard Callaghan (2003:801-2) has made a computer simulation of coastal voyages between Ecuador and West Mexico, which he argues began around 400 BCE. These trips would have taken approximately fifty days from the Manteño Coast in Ecuador to Colima in West Mexico. The return trip would have taken significantly longer depending on what time of the year due to the winds and currents. As Early Formative boats have not been uncovered from the archaeological record, what the boats were made of and what they looked like is uncertain, but in South America presumably they were made from reeds and other perishable material. The Olmec presumably had wooden canoes and one ceremonial jade pectoral from Cerros de las Mesas (Figure 3.2) was found in this shape and has jaguar faces incised on each end. Considering the Olmec lived along several rivers, canoes must have played a significant role (Benson and Fuentes eds. 1996:258). Additionally, there is one example of a ceramic vessel in the shape of a boat and a seafarer

from the Moche culture, northern Peru (Figure 3.2), which dates around the Late Formative and Proto-Classic period (100 BCE – 400 CE).





Figure 3.2 Olmec jade pectoral from Cerro de las Mesas with incised jaguar faces (left, MNA). Representation of a boat with a helmed seafarer; iconographically it appears to be a boat made out of reed and in the position of being on sea with waves striking the sides (right, AIC).

The presence of stirrup-spouted vessels at Tlatilco, a tradition usually associated with Andean cultures suggests that these ancient objects are the results of shared or exchanged ideas. Both Covarrubias (1957:5) and Weaver (1953:13-16) argue for these similarities, and more recent research builds on these early ideas but are still subject to investigation and debate (see Beekman 2010). However, it is more than just stirrup-spout vessels that support the argument for contact. Lathrap (1973), building on previous research, argued for the connection between the Olmec and Chavín, a Formative culture in Peru. Ceramics in the "new world" are believed to have been invented in Ecuador at the archaic site of Valdivia dating back to around 2000 BCE. Valdivian figurines are seen with two heads and two faces, just as seen at Tlatilco. When comparing Ecuadorian ceramics there are other striking similarities than duality and stirrup-spouts.









Figure 3.3From left to right: Contortionist from Puamape, South America (MALI), contortionist from Tlatilco (BACE), contortionist from Burial 154 at Tlatilco, San Lorenzo Monument 107.

The contortionists commonly found both at Tlatilco and among the Olmec, is also found in South America. There is an elaborately executed stirrup-spout vessel credited to the Cupisnique ceramic complex presumably from the site of Puamape on the northern coast of Peru. The contortionist effigy vessel is roughly contemporaneous with Tlatilco and is today housed at Lima Art Museum (MALI) (Castillo 2009:76-78; Julia Burtenshaw, pers. comm. 2019). This example shows such striking resemblance to contortionist found at Tlatilco, that it could practically have been made by the same artist. San Lorenzo Monument 107 shows some resemblance with the pose of the contortionists demonstrated in the three vessels (Figure 3.3; see Niederberger 1987:231, 452-53). There are different interpretations of this monument. It has been suggested that it represents a flying individual depicting a celestial war (Cyphers 2004:183-185). Another interpretation is that of human sacrifice. The feline, presumably a jaguar, is scratching the upside-down individual. A carved hole at the top allows for liquid to be dramatically covering the monument (Karl Taube, pers. comm. 2019). These interpretations cannot be projected simply from looking

at the vessels alone. Perhaps they were used to reenact rituals such as the celestial war or to pour or collect liquid associated with sacrificial rituals.



Figure 3.4 Duality: Stirrup-spout vessel from Cupisnique, Peru (left, from the Exhibition: Golden Kingdoms at the Getty, 2017). Photograph and drawing by Covarrubias of mask found at Tlatilco (center and right, BACE).

The concept of duality played a big part of social organization in the Andes, where opposing or contrasting concepts would be expressed; for instance, gold and silver, man and woman, night and day, dead or alive (Silverblatt 1987). Additionally, Cupisnique ceramic complex has stunning vessels symbolically displaying the ideology of duality. Duality was also expressed at Tlatilco in both masks and figurines (Figure 3.4). Whether the concept of duality is a result of diffusionism during the Early Formative period, or general human consciousness, or something that go further back essentially prior to the arrival in the Americas is difficult to know.

The Early Formative site of Capacha in West Mexico near Colima, located some 600 kilometers due west from Tlatilco, shared similar ceramic traditions and the archaeological data from Capacha comes primarily from burials (Kelly 1980:33). Both

vessels, particularly the double and triple tiered gourd-shaped vessels but also figurines share attributes. Interestingly, it is reported that the obsidian tools found at Capacha may originate from Tlatilco (Kelly 1980:32, 72). The triple tiered gourds from Tlatilco are not commonly found within the controlled excavations done at Tlatilco, one was found during Season IV (Burial 184; female 35-39 years old, buried face down, and had one green stone bead) while several have been found within museum collections (see Appendix E.12). The area excavated during Season IV appears to have been among the poorer parts of the site (Michael Coe, pers. comm. 2018) and could be one explanation for why few are recorded. It is difficult to determine based on the Weaver record, as not all artifacts are drawn, and would have been simply referred to as a bottle, which could include many designs. The tradition of the seated hollow figurines is not uncommon at Capacha and although the facial expression is not identical there do seem to be other similarities such as stump limbs, elongated head, and wearing incised headbands. One difference is the fact that they appear to depict teeth which is not commonly seen on figurines from Tlatilco (Kelly 1980:81). The burial record from Capacha furthermore attests to the people performing skull modification, as known from both Tlatilco and the Olmec (Kelly 1980:98-99).

Xochipala is an Early Formative site in the state of Guerrero, south-west of both Tlatilco and San Pablo. The art is very distinctive, particularly the figurines with elaborate hairdos, which are more expressive in their facial and anatomical features than commonly seen at Tlatilco. It is from Las Bocas that we otherwise see the larger, but not hollow, white somewhat anatomically correct figures, often seated. However, in addition to what must be their local ceramic tradition, there is evidence of Olmec-style figurines, along with

variations of the DK type from San Pablo, the D2 type from Tlatilco, and other ceramic similarities (Gay 1972:39, 41, 56). Gay (1972:11) proposed that the material at Xochipala was earlier than San Lorenzo, and that the Olmec originated in Guerrero, from where stone was quarried for the Gulf Coast sites. However, there seems to be no support for this notion. The only thing that is certain is that Xochipala, like the other sites mentioned above, shared extensive ceramic traditions with some of its contemporaries and potentially also their ideological beliefs.

To sum up, particularly the communities of San Lorenzo, Las Bocas, San Pablo, and Tlapacoya appear to have shared ceramic traditions and had some contact with Tlatilco considering the similarities in style. Other shared traditions were most likely introduced through these communities, such as potentially the Olmec bringing jadeite from Guatemala or hematite from Oaxaca. There is no evidence for the people of Tlatilco to have ventured out in pursuit of these resources and no workshops with these products have been reported from the archaeological seasons. Exotic products were most likely traded with groups that traveled through the Basin, of which some could have chosen to settle in the Basin for either personal or political reasons. The connections between West Mexico and South America require further study, but examples have been shown to attest to an almost certainty of contact.

3.3. MIGUEL COVARRUBIAS AND THE DISCOVERY OF TLATILCO

In 1936, Miguel Covarrubias discovered the site of Tlatilco when looking through the great pits caused as a result of the brickyard factories (see Figure 3.5). Covarrubias was an artist and author and at one point the director of the ballet in Mexico City. Following his discovery, Covarrubias and his colleague, the renowned artist Diego Rivera, would visit the brickyards two or three times a week, bringing home archaeological puzzles. The brickyard workers began to look forward to the visits by the two collectors, and gladly stopped shoveling to show off new finds. On occasion a brickyard worker would show up at Covarrubias' home to show him new artifacts. Covarrubias developed a fascination with the elegant small clay figurines of which he said thousands of figurine fragments had been uncovered by the brickyard workers, of which more than 200 were complete. Later on, Sunday visits to Tlatilco became a regular occupation for Covarrubias and Rivera (Williams 1994:92-94). In the years following 1936, Covarrubias observed how Tlatilco turned into a hunting ground for collectors such as the surrealist painter Wolfgang Paalen, French surrealist artist and writer, André Breton, French painter Jean Charlot, who was part of the Mexican muralist movement, and Henry Moore, an English sculptor, among others (Williams 1994:119).

By 1938, the brickyard workers had found so many treasures and looting had become so profitable, that by looting one burial they could make up towards sixty dollars for the grave goods and ten dollars for the skeleton⁴. This was a lot more money to be made

⁴ This is the only account that mentions that human skeletons were sold from Tlatilco. No skeletal material was encountered in any of the collections studied.

in a day than working as a brickyard worker who normally earned five dollars a day. This prompted Covarrubias to spend nights out at Tlatilco to prevent more looting. Of the 200 burials that he would go on to identify, sixty had already been looted (Williams 1994:119-120). This was how Covarrubias became an archaeologist. While spending time at Tlatilco, wanting to excavate the site, he began to do proper stratified archaeology, that is, peeling off layers, and slowly moving downwards through the layers whilst he drew detailed and meticulous drawings of the burials. Covarrubias frequently visited the Museo Nacional de Antropología in Mexico City, and this is where he befriended the director of the museum, Daniel Rubín de la Borbolla with whom he would co-direct Season II at Tlatilco.

Muriel Porter Weaver⁵ was greatly involved with Season II. She was recording and cataloging the many artifacts Covarrubias had acquired prior to 1947. Weaver said in an interview at a conference on the Olmec presence in Mesoamerica at Princeton in 1987, that she had made complete card indices and glued a photograph of each figure on the appropriate card. She had worked upstairs in his house, where he kept his collection. She completed the cataloguing of the collection in 1948, but unfortunately, nobody knows what happened to the catalogue (Williams 1994:151-152).

Covarrubias went on an extended trip where encountered Matthew W. Stirling. Stirling had worked on various Olmec sites, and Covarrubias met up with him at Cerro de las Mesas. Covarrubias was present when Stirling's team uncovered a deposit containing no less than 782 pieces of Pre-Columbian jade. This was how Covarrubias' fascination

⁵ The publication (Porter 1953) referred to frequently throughout this dissertation was written before Porter got married, following when she would be known as Muriel Porter Weaver. Porter and Weaver are therefore the same. She created this publication, and later the Season II burial report (Appendix A).

with the Olmec grew and as he had discovered Olmec objects for sale at Tlatilco, he needed to know if they had come out of the ground at Tlatilco. This prompted his commitment to a future of many years spent excavating Tlatilco to learn about its connections with the Olmec of the Gulf Coast of Mexico. According to Stirling, Covarrubias was one of the best-informed men of Mexican archaeology and ethnology (Porter 1953:30; Williams 1994:144, 151).

Covarrubias set a new standard for stratified excavations, and his research at Tlatilco and his interest in the Olmec had a huge impact on future excavations and research developing around these two cultures. Covarrubias died prematurely in 1957. He left behind unpublished notes, photographs, and drawings from his work at Tlatilco and from other cultures that he studied. Much of this material is to be found at the Archive of Miguel Covarrubias, Libraries Division, University of the Americas, Puebla, Mexico. I have twice visited the archive to research his notes. These resources, most of which remain unpublished, are a treasure (Appendix B). Being a highly sought-after artist, collector, writer, designer and many other skills, Covarrubias was torn between his devotion to Tlatilco and other obligations from people wanting to pull him into various projects (Williams 1994:175). From some of the correspondence letters found in the library in Puebla, it is clear that people became angry with him for neglecting agreements he had previously committed to, leaving him with an enormous sense of remorse. His charismatic persona and devotion to life and adventures came at a high price.



Figure 3.5Tlatilco excavations Season II, with Covarrubias center looking up from his camera. On his left side is Roman Piña Chan, and the man in the foreground is Helmut de Terra, who would go on to discover the Tepexpan Man. Note the observing ladies in the background in front of rows of bricks (BACE).

3.3.1. SEASON I: MIGUEL COVARRUBIAS AND HUGO MOEDANO

As Covarrubias was struggling with leaving Tlatilco unattended, his concern about looting of the site grew. In 1942 he petitioned the National Institute of Archaeology and History (INAH) to commence systematic archaeological fieldwork at the site. This was granted, and he initiated his first season in November of 1942 (Williams 1994:120, 143-144). Season I, co-directed by Hugo Moedano, only lasted a few weeks and would focus

on stratigraphic trenches in order to establish a chronology of the site as well as to confirm the presence of Olmec-style material. Luckily, what appeared to be the center of Tlatilco had been left untouched by the brickyard workers. To Covarrubias' satisfaction, Olmec-style objects did in fact come out of the ground at Tlatilco. This contributed to the changing chronology of the Basin of Mexico, as well as the understanding of how far Olmec influence had reached (Covarrubias 1957:17-18; Weaver 1953:17-18).

3.3.2. SEASON II: MIGUEL COVARRUBIAS AND DANIEL RUBÍN DE LA BORBOLLA

Covarrubias returned to direct Season II at Tlatilco between 1947 and January of 1950, this time with Daniel Rubín de la Borbolla (Porter 1953:18). Among the archaeological team members, who joined Covarrubias for the second season, were both Román Piña Chan and Arturo Romano, who would later direct their own excavations at Tlatilco (Season III and IV respectively, see below). Daniel Rubín de la Borbolla played an important role during the second season. He is considered one of the first physical anthropologists in Mexico and he was one of the founding fathers of the Escuela Nacional de Antropolgía e Historia (ENAH) as well as the Museum University of Science and Arts of UNAM. Borbolla, with his experience as a physical anthropologist, was of great importance to have on the team, as during the second season more than 200 burials were encountered (See Appendix A for an unpublished, incomplete account of the grave goods of the majority of the burials recorded by Porter Weaver.

Although Weaver was in charge of recording burials, it seems highly unlikely that this is the only actual record, as she barely makes a note of the interred but instead focuses on the grave goods. With Borbolla involved, I would expect nothing less than meticulous notes on each individual as seen from Season IV (Moll et al. 1991). But if a full burial record existed, it was never published. Only few of the entries by Weaver mention individuals, and usually not to any more extent than the position the individual was interred in, and whether it was an adult or child, with no mention of sex, pathologies, or orientation. Despite the record being incomplete, Weaver's record provides the tool to understand which objects in fact came out of the excavations at Tlatilco. In addition, Weaver (Porter 1953) published an extensive analysis of the artifacts, and in particular the vessels. Tolstoy (1989), as discussed below, later obtained access to some field notes, and published important research incorporating data from some of the burials from Season II.

The burials revealed what Covarrubias had hoped for; more evidence of Olmec objects found in situ within the burials. This established a contemporaneity and contact between the two cultures. This meant that they now had to change Tlatilco from the chronological periods of Early and Middle Zacatenco, postulated by Vaillant, to somewhat earlier. Tlatilco seemed to be wealthier than Zacatenco, as well as being more elaborate, more cosmopolitan, and distinctly more important (Cacciani 2008:18, Covarrubias 1957:18).

3.3.3. SEASON III: ROMAN PIÑA CHAN

Season III at Tlatilco commenced in 1955 and lasted only a few months. It was directed by Roman Piña Chan, who had been involved with Season II. Piña Chan obtained his degree from ENAH in Mexico City, and later worked for INAH, as well as working as a professor at the Universidad Nacional Autónoma de México (UNAM). As an archaeologist, he worked all over Mexico at sites like: Chichen Itza, various Maya sites in

Campeche, and not least, Tlatilco (Cacciani 2008:17). The objectives for Season III were manifold. Primarily they wanted to establish and catalogue the ceramic typology of Tlatilco, map the site, and establish a proper stratigraphy of the Formative period. They aimed at reconstructing historic and cultural aspects while looking for evidence of interregional contact between Tlatilco and other sites (Piña Chan 1958:11, 17-18). It does, however, seem that the two-volume publication of Piña Chan (1958) instead discusses results from Season II. It is unclear exactly how much was excavated during Season III, and essentially, his typologies must have built on Weaver's records. With just two months of excavations, it seems ambitious to find the answers to all of the above objectives.

Piña Chan had collected more than 9960 ceramic vessel sherds of which c. 6750 were from Tlatilco and 3210 were from Atoto, a hill directly east of Tlatilco (whether these are from Season III or Seasons II and III combined is unknown). Based on his data, he was able to establish that there in fact was continuation in the different types of ceramics uncovered. The human remains were recorded systematically: orientation of the skeletons, the condition and preservation level, the length and width in situ, as well as the number of grave goods. Figurines were also recorded, and a sequence was created of when the different types occurred throughout the different vertical layers, however, the notes on the skeletal material are not available (Piña Chan 1958:30, 35-53). The data from the burials, were, like the burials from Season II, never published. Radiocarbon samples were collected, but the dates do not seem reliable (see 3.2.8. for discussion of the chronology at Tlatilco).

3.3.4. SEASON IV: ARTURO ROMANO

A fourth season commenced in 1962 and lasted until 1969, directed by Arturo Romano, with the objective to recover as much of the human remains as possible, before total destruction of the site by looters and urbanization (Cacciani 2008:16). Romano, who had worked on the Season II excavations expressed how Covarrubias as a mentor and teacher had changed ideas about ancient Mexican civilization. Covarrubias was engaging with his students, and he encouraged a "think tank" approach with roundtable discussions, which inspired the new generation of archaeologists and anthropologists (Williams 1994:152). Romano, when discussing his days as a student on the Season II project, stated that Covarrubias would always carry a notebook with him. If he ran out of pages in his notebook he would scribble on any scrap of paper or a napkin. The students eagerly lent him their notebooks in pursuit of owning an original Covarrubias sketch (Williams 1994:174).

Romano, like Borbolla, was trained as a physical anthropologist with an interest in fauna from the Pleistocene epoch, particularly mammoths. In 1947 he collaborated with Covarrubias on the excavations at Tlatilco, and in 1962 he directed the project at Tlatilco which lasted seven years, making it the longest season at Tlatilco. During Season IV, 213 burials were uncovered along with more than 6000 objects, of which only 1140 belonged to burials, which means more than 80% of the objects were from non-funerary contexts. The project additionally encountered much evidence of both flora and fauna which has been important for understanding of the sustenance of the people of Tlatilco (Cacciani 2008:18, Moll et al. 1991: 8-10).

Roberto García Moll et al. (1991), published a catalogue of the 213 burials. It has a brief description of every single individual: burial number, in which excavation trench the burial was uncovered, context, orientation, preservation level, sex, age, length, maximum width, if the skull has been deformed, pathologies, amount of grave goods and what they were, who excavated it, who drew it, the date it was uncovered, whether there were photographs of the grave goods, and finally if there were special observations, such as infant bones found near an individual. This was followed by a section with drawings of almost all the burials, and finally images of selected grave goods. Ten of the burials were cut out in blocks of the clayish soils (Burials # 151-160). The bones were covered in a kind of glue for preservation, and the blocks were then moved to MNA, where they are today on display along with their respective grave goods. Among them is Burial 154, with its famous contortionist effigy vessel. Besides the vessel, which has been removed and replaced with a replica, the other artifacts and bones are original (Patricia Ochoa C. pers. comm. 2017).

3.3.5. SEASON V (UNOFFICIAL): PAUL TOLSTOY

Paul Tolstoy was a professor of Archaeology at Queens College, New York. The archaeological project of Tolstoy may not be part of the official count of how many seasons were excavated at Tlatilco. However, his contributions to our understanding of Tlatilco have made an incredible impact. Tolstoy has since the 1960s worked in Mexico, particularly in the Basin, and focused on Formative sites. He has written multiple articles and chapters about settlement research and culture among the Early and Middle Formative sites, which of course include Tlatilco. His analysis of the burial material at Tlatilco

required extensive, careful and tedious work. Tolstoy compared more than 350 burials (from Seasons II and IV) (Tolstoy, Paul et al. 1977:94).

Tolstoy's "season" was during the 1960s where he carried out a series of stratigraphic investigations and surface collections in the Basin, which included test pits at Tlatilco, as well as on Atoto hill directly to the east of Tlatilco. Tolstoy also excavated two portions of the Late Formative site of El Arbolillo, as well as at Ayotla near Tlapacoya (Tolstoy and Paradis 1970:347). In 1963 Tolstoy set up a 4.5 by 3-meter unit, approximately 130 meters away from where Piña Chan had worked in the 1950s, with an objective to obtain more data that could help create a better chronology for Tlatilco as well as relations between the Formative sites in the Basin. The work of Tolstoy in the Basin has contributed to our understanding of the chronology of Tlatilco (Tolstoy and Paradis 1970:345-346). However, Tolstoy and Paradis state that it is complicated to establish chronology as well as relations between the different sites. Some sites appear to be contemporaneous, and geographically not that far apart, but surprisingly, few objects have been found to support the idea of contact between sites like Tlatilco and El Arbolillo and Zacatenco considering their close proximity, attesting to the latter being later in time. That there is practically no evidence of a mix of Tlatilco and Zacatenco sherds, would testify to the sites not being contemporaneous, only a few sherds from Zacatenco were found on the surface, indicating that Zacatenco was later in time than Tlatilco (Tolstoy and Paradis 1970:347-348, Porter 1953:21).

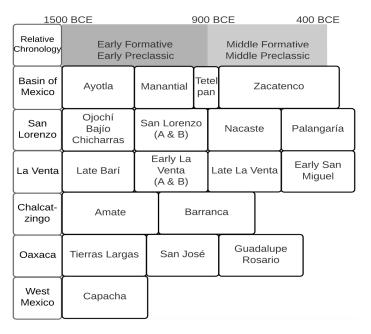


Table 3.2 Relative phases in Early-Middle Formative Central Mexico⁶.

3.3.6. CHRONOLOGY OF TLATILCO

The earliest records of the chronology of Tlatilco were inaccurate, as many sites were still to be investigated for comparison. According to Covarrubias (1957:33), most archaeological evidence pointed towards Tlatilco being a typical Zacatenco community, which is why the arrows on his chart point from Zacatenco to Tlatilco and not the other way around. However, as he learned that there was a connection between Tlatilco and the Olmec he realized Tlatilco had to be older. Yet Zacatenco remained in its initial position as the oldest and was not altered by Covarrubias prior to his death. Tolstoy worked extensively to understand the chronology of Tlatilco and asserted that Tlatilco and Tlapacoya were the two earliest communities in the Basin of Mexico based on their

⁶ Sources for phases: Basin of Mexico (Tolstoy & Paradis 1970; Niederberger 2000), San Lorenzo and La

Venta (Coe & Diehl 1980; Diehl & Coe 1996), Chalcatzingo (Grove 1984), Oaxaca (Flannery & Marcus 2005), West Mexico (Kelly 1980).

ceramics, moving away from the previous idea that Zacatenco had been one of the oldest cultures in the Basin (Tolstoy and Paradis 1970:351).

The early typologies cause some confusion, as in the research by Piña Chan (1958:53), who divided Tlatilco into three different subphases: Early, Transitional and Final Tlatilco. Here he claims that some of the earliest material are in fact the Zacatenco and El Arbolillo figurines. This would not physically be possible, and nowhere in the records from either Moll et al. (1991) or Weaver (Appendix A) do we see any evidence of these early figurine types (C1 and C3). According to Piña Chan, the Transitional phase is where the type D figurines occur, followed by Final Tlatilco where he returns to type C figurines. How Piña Chan (1971:159) made these assessments is unclear and does not seem to be supported by the archaeological record.

Instead, radiocarbon dating has helped provide a more absolute chronology of Tlatilco. Unfortunately, there are only a handful of samples, as fieldwork in Mexico often did not incorporate radiocarbon sampling at this time, nor was there developed an operating laboratory to conduct their own carbon dates until 2006 at UNAM (Universidad Nacional Autónoma de Mexico) (Michael Coe, pers. comm. 2017). It is important to stress that there is a big difference between calibrated and un-calibrated dates. The importance of calibrating the dates is that the proportion of radiocarbon in the atmosphere was never constant. To get accurate dates there are online sources such as OxCal which calibrates the radiocarbon data.

Despite the many years of excavation at Tlatilco, only a few samples were obtained for radiocarbon dating. The first samples were submitted by Daniel Rubin de la Borbolla

from Museo Nacional de Antropología and must be from Season II. The samples, referred to as C-198 and C-199 (Libby 1955:128-129), revealed a very large range which makes the samples unreliable for accurate dating, as both range around 1300 years. These samples are unfortunately a result of mixing carbon in order to scrape together a bigger sample. One sample revealed dates as far back as 5971 CalBCE (sample 198), however, this sample came from charcoal located in the so-called 'pre-ceramic' level and would testify to potential earlier activities at the grounds of Tlatilco, not related to the known Tlatilco culture, similar to the 6th millennium BCE activity known at Tlapacoya. Sample C-199 (Figure 3.6) on the other hand, appears to fit into the already relative uncalibrated dates usually established at 1200-900 BCE. Yet, with a date ranging from 2459-1127 CalBCE (95% probability), or 2115-1421 CalBCE (68% probability) it cannot be considered a terribly reliable date.



Figure 3.6 Calibrated dates from Libby (1955) via OxCal 4.3.

In 1969, from archaeological Season IV, Michael Coe brought samples to the Yale lab, along with samples from San Lorenzo Tenochtitlan. Provided and calibrated by Coe, the dates from Tlatilco come from known context: charcoal samples inside Burials 74 and 80 both dating to 1452+/-145 and 1320+/-124 CalBCE respectively (Michael Coe, pers. comm. 2017), samples: Y-2380 and Y-2381 respectively (Stuiver 1969:623). Interestingly,

Burial 80 contained a flat-bottomed bowl with the hand-paw-wing motif, which supports the idea of Tlatilco being contemporaneous with Olmec San Lorenzo. Seventeen carbon samples were submitted by Coe from San Lorenzo from various secure contexts primarily within archaeological zones: A, D, H, I, Q, and several hearths. The results consistently reflect dates of approximately 1182+/-159 - 1560+/-130 CalBCE (Michael Coe, pers. comm. 2017), samples: Y-1908 and Y-1933 respectively (Stuiver 1969:620). One corn cob from a bell-shaped pit, has been dated to 970 BCE, dates not adjusted for calibration (Moll et al. 1991:13). There are also a few dates from Season III based on carbon samples, which established a chronology dating Tlatilco to 1700-600 BCE, which would then make Tlatilco both earlier and contemporaneous with Zacatenco. These dates seem to be somewhat unreliable (Piña Chan 1958:17). These results place both Tlatilco and San Lorenzo within the Early Formative period. Tlatilco dates to c. 1400-1100 BCE calibrated, and uncalibrated 1200-900 BCE. With a bias of more than 130 years, the samples still yield a large range, however, being the most recent carbon samples available the results certainly are crucial. Ideally, data from the bones can be sampled in near future to yield more absolute dates.

3.4. THE BURIAL RECORDS FROM TLATILCO

The burial records provide a major insight into the complexity of the community and from where the identities of the individuals at Tlatilco are to be learned. These records inform us that Tlatilco was a stratified society with elites sometimes buried with exotic objects. There are patterns in distribution of grave goods. Some individuals were buried

without grave goods, other were buried with objects ranging between one object to more than one hundred. Within these distribution patterns differentiation between men and women, old and young, poor and rich was clearly distinct. Interestingly, the burials containing Olmec-style objects appear to have had no discrimination. In the published burial record from Season IV (Moll et al. 1991), photographs of many of the grave goods are included, attesting to the areas excavated seemingly having been a poorer part of Tlatilco. Not only were there few prestigious objects, additionally, many of the objects appear crude (Michael Coe, pers. comm. 2018). Fortunately, as mentioned earlier, what appears to have been the center of Tlatilco was one of the few areas left intact by the brickyard workers, and this was where Season II commenced (Porter 1953:18). Thus, the burial record of Weaver (Appendix A) reports on what can only be expected to have been a richer part of the site.

The mortuary practices of a society are important to understand the social relations shaped through mortuary rituals, possible rank and power relations, as well as to get an understanding of how individuals were distinguished within the society. As Joyce (1999:17) puts it: "no longer actively seeking their own advantage, the dead can become a powerful moral force guaranteeing claims of solidarity by the living," and she adds that the mortuary rituals were a space through which status was manipulated, concepts of value formed, and avenues opened for the assertion of legitimate individual distinction in Formative Mesoamerica (1999:15, 42).

3.4.1. THE BURIALS OF SEASON IV

Horizontal as well as vertical archaeological fieldwork at Tlatilco gives insight into their usage of space and place, time and distribution, such as where people are buried, and the relation between residential areas and the burials. It is significant that burials have been uncovered in situ, and particularly Season IV put extensive effort into recording any skeletal details, such as the different positions and orientations of the individual, age, sex, pathologies, dental or skull modification, grave goods etc. This record allows for extensive opportunities for comparative research such as patterns between sex, age, status, amount of grave goods, what kind of grave goods (prestige objects? Exotic objects?) or burials in clusters with other individuals. That the Tlatilcans buried their dead below the platforms that served as foundation for their houses, establishes the lineage ties to particular locations (Fitzsimmons 2012:779). The importance of having these burials with known context has contributed immensely to the knowledge we have of Tlatilco today and allowed for my analytical research of objects in museum collections where objects seldom have known place of origin.

While the archaeological record of burials is insightful, the overall record of the excavations at Tlatilco are sparse and incomplete. They offer little insight into the association between objects found in burials and those found outside of the many burials. The burial catalogue by Moll et al. (1991) is the most extensive account. Although incomplete, it offers a range of information about the internments and their grave good holdings. This catalogue along with the unpublished record of the grave goods from Season II by Weaver, were typed into a database similar to the one I created for the museum

objects. The incorporation of the catalogue has been an invaluable resource for my comparative research as it allows for easy search of grave goods. Unfortunately, the Weaver report is missing Burials 38-65 and have no entry with exception of Burial 60, which Covarrubias mentioned in his publication (1957).

There are different records related to how many burials have actually been found at Tlatilco and it can be confusing to know which burial is being discussed. When an article mentions a burial number, it does not necessarily refer to which season it was uncovered. We know that more than 200 burials were found during the second season; Weaver records 213 (Appendix A), while Piña Chan (1958:30) reports that 248 burials were found. It is possible that Piña Chan is including burials from both Seasons II and III. During the fourth season, interestingly, 213 burial were recorded as well. A more recent publication states that c. 500 burials were uncovered (Covarrubias 1957; Moll 1991; Tolstoy 1989:102). These are the official numbers, but Michael Coe (pers. comm. 2018) has speculated that more than a thousand burials were looted at Tlatilco over the decades following its discovery.

The burials were generally buried between 0.40 to 3 meters below the surface. This is true of both Seasons II and IV. Porter (1953:19) remarks that two thirds of the burials were buried at a depth of 1 to 2 meters from Season II. A similar number of approximately sixty percent fall within this range from Season IV. It was speculated by Porter (1953:19), that Tlatilco was just one phase, but also that at least twelve percent of the burials were disturbed in antiquity to bury new individuals from Tlatilco. Considering that Tlatilco existed for approximately 300 years, there is bound to have been some development and

change over time. And the disturbance of previously buried individuals could be either because it was forgotten where people had been buried, or it could be a so-called family lot, where they wanted to maintain household members. Unfortunately, the recording of the burials does not reveal how much time passed between the disturbance of the interred. Neither does it reveal which burials were uncovered below the earthen platforms to differentiate between potential household sub-floor burials and those found outside.

Tolstoy analyzed the grave goods of 208 burials from Season II, containing 232 individuals. The amount of grave goods range between one to 101. Sixty percent of the burials contained three or less objects, twenty percent contained none, and twenty percent contained more than three objects. Iron ore objects were only found in burials with more than three objects, and shell was only found within the burials that contained more than ten objects. Only one individual, whose age is more than twenty, had more than thirteen objects. More rare objects, not linked to any of the specific grave good counts, definitely represent rank. The grave goods distribution from Season IV is similar to Season II, which ranges from none to 109 objects. The distribution of goods is as follows: No grave goods, twenty-four percent; one to three objects, thirty-one percent; four to ten objects, twenty-nine percent; and more than ten objects sixteen percent. Additionally, fifteen percent of the burials have remnants of red paint on the bones, presumably associated with burial rituals. Through comparison of grave goods, it becomes possible to establish a record of which objects appear to be more prestigious than others, which are related to different ages or sexes, and which combinations of grave goods there are. The grave goods function as a window into

the social structure of the society. Rank depended on quality and quantity of the grave goods, the depth and preparation of the grave, and the position and orientation of the body. Some objects, such as ceramics, reflect the sex of the individual, and Olmec style ceramics appear to occur twice as often with females interred as with males interred. However, the internments with Olmec objects do not necessarily show any indication of high-status, as some of the richest burials as well as some of the poorest contained them. Possibly Olmec objects reflect kin and residence groups (Tolstoy 1989:102, 109, 119-120).

One of the most elaborate and richest burials at Tlatilco was that of a female uncovered during Season II, Burial 60. Unfortunately, her skeletal remains were poorly preserved, but her grave goods testify to enormous wealth. Among them are more than ten vessels in various shapes, of which several reflected the Olmec style, two small drops of bright green jade with traces of red at her right wrist, river stone with heavy patina, fragments of obsidian, twenty figurines of type D1 with yellow and red paint, a mirror of hematite with an incised design, a bone fragment with traces of paint, and various other objects. Mirrors found within burials have been associated with shamanism (Covarrubias 1957:23; Ochoa C. 2015; Karl Taube, pers. comm. 2016). Burials of infants with a rich amount of grave goods and exotic objects, indicate a system of inherited status (Niederberger 2000:173). Tolstoy (1989:115) echoes this notion as his analysis has proved that the burials containing the largest numbers of grave goods are those of children and juveniles, which he proposes could indicate that status at Tlatilco depended on both birth and accomplishment. Indeed, two of the

richest burials from Season IV belonged to a juvenile and a fetus, but many adults were also buried with extensive amounts of grave goods. Of the roughly thirty-five children (aged fetus to twelve) uncovered during Season IV, fourteen were buried with no grave goods, eight children had one or two objects, and nine children had between three and seven grave goods accompanying them. Burial 74, as seen in table 3.3, contained more than one hundred items, but this burial along with two others containing ten and twelve objects respectively, were secondary burials, and it can be difficult to determine the relation between the grave goods and the interred.

BU#	Sex	Age	G.G.	Position Interred	Orient.	Skull	Red P.	Depth
27	F	17-19	80	Dorsal Extended	260 (W)	UK	No	77-79 cm
45	M	25-28	26	Dorsal Extended	94 (E)	T.E.	Yes	166-181 cm
46	UK	Fetus	88	Lateral Extended	93 (E)	UK	No	71-89 cm
53	F	18-20	20	Dorsal Extended	280 (W)	T.E.	No	169-179 cm
62	M	35-39	53	Ventral Extended	88 (E)	T.E.	No	124-141 cm
74	UK	Juv.	109	N/A	N/A	UK	No	170-180 cm
86	UK	9	20	Dorsal Extended	309 (NW)	T.E.	No	108-118 cm
95	F	22-24	76	Dorsal Extended	84 (E)	T.E.	Yes	202-226 cm
104	F	Adult	37	Dorsal Extended	119 (SE)	UK	No	180-194 cm
106	M	22-24	24	Dorsal Extended	224 (SW)	T.E.	No	211-213 cm
108	UK	c. 1.5	50	Dorsal Extended	176 (S)	T.O.	No	198 cm
110	F	22-24	26	Dorsal Extended	88 (E)	UK	Yes	216-218 cm
121	M	27-30	20	Dorsal Flexed	121 (SE)	T.E.	No	192-207 cm
130	F	35-39	36	Dorsal Extended	260 (W)	T.E.	No	196-197 cm
144	UK	21-24	24	N/A	N/A	UK	Yes	211-215 cm
152	M	30-38	61	Dorsal Extended	281 (W)	T.E.	No	147-187 cm
154	M	40-45	31	Dorsal Extended	192 (S)	T.E.	No	163-249 cm
156	M	22-25	77	Dorsal Extended	238 (SW)	T.E.	No	139-270 cm
157	F	30-35	32	Dorsal Extended	157 (SE)	T.E.	No	79-193 cm
159	F	30-35	25	Dorsal Extended	272 (W)	UK	No	174-211 cm
179	M	30-35	26	Dorsal Extended	268 (W)	T.E.	No	137-142 cm

Table 3.3

The twenty-one individuals with twenty or more grave goods from Season IV. *152, 154, 156, 157, and 159 on display at MNA. Skull modification is recorded as either unknown, tabular erect (elongated), or in one case, tabular oblique (elongated, but through different technique). G.G. = grave goods. Red P. = pigment

Orientation of the interred at Tlatilco seems to be very consistent, at least from the two seasons (II & IV), with either E-W or N-S orientation, where E-W seems to be favored. Tolstoy (1989: 115-116) suggests that possibly this can be due to seasons that one orientation is favored over the other, but there is no archaeological evidence to back that hypothesis. However, there does seem to be a pattern between the amount of grave goods and orientation, with the N-S orientation having fewer grave goods, and no children under the age of twelve have been buried in N-S orientation. The number of vessels in any one grave ranges from zero to twenty-three, and other objects also occur in variable amounts (Tolstoy et al. 1977:103).

Further data to be extracted from the human remains are pathologies. Comparing the individuals from Season IV, we learn that the age of the individuals ranged from fifteen to fifty years, and that many show indication of serious health problems: fifty-one percent suffered from tooth decay, nineteen percent suffered from arthritic degenerations of the spine, and sixteen percent had other disease-related changes to the skeleton. Tooth decay was noted as early as the age of fifteen to nineteen years, and spinal arthritis was not uncommon in individuals in their late twenties. The bones of infants were included in ten percent of the burials of females in their early twenties, perhaps as a result of infant and maternal mortality from childbirth-related disease, indicating that there were high risks among young childbearing women (Joyce 2001:18-19; Moll et al. 1991).

From Season IV, 140 individuals are recorded with tabular erect head shape, which is one way of elongating the head up- and backwards (Figure 3.7). Another slightly different method, tabular oblique, was recorded in eight individuals. Both deformation

methods require that boards be strapped to the infant's head. Head deformation was not uncommon during this period, and the Olmec also practiced modification of the skull. The rest of the interred were recorded as unknown rather than no modification detected. Skull modification appears to have been a standard procedure for most if not all members of Tlatilco as it has been detected in at least seventy percent of the population. At Tlatilco it does not appear to be related to sex or class, as the individuals all have different quantities and qualities of grave goods. Tabular erect skull deformation needs to be done within the first year of life while the skull is still moldable. The newborn baby is placed on a cradleboard, and during the next year the boards will be progressively tightened. This is reflected in art from many early cultures, where ceramic figurines depict babies strapped in a cradle board including at Tlatilco (see Appendix C.18: Niederberger 1987:472). One can speculate about issues related to this practice, if the tightening occurred too soon or too intensively, what health consequences might manifest later in life.

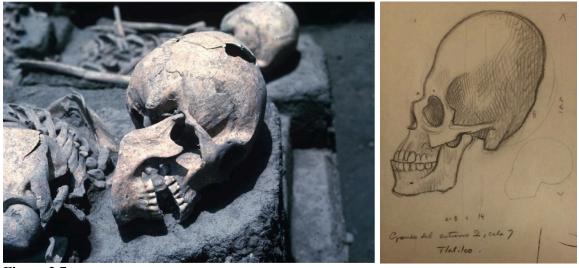


Figure 3.7 Skull modification (Photo credit: Coe and BACE; see Appendices B and D).

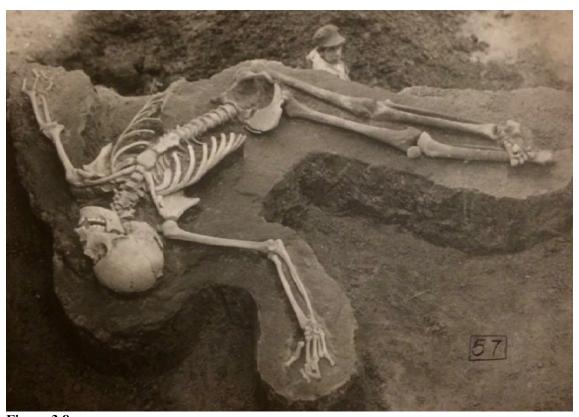


Figure 3.8Burial 57 from Season II. Possibly sacrificed individual (BACE, see Appendix B).

Skeletal evidence indicates evidence of decapitated individuals at Tlatilco, such as Burial 190 from Season II; an adult buried without any grave goods, or Burial 65 from Season IV, of a male 30-35 years old. His grave goods were incredibly scarce and crude, containing a pot sherd, one grinding stone, a type D2 figurine fragment, one unslipped and undecorated vessel, and one black slipped, but undecorated vessel. There are only a few instances pointing towards evidence of decapitation, and if this individual was sacrificially killed, it is impossible to know the reasons. Regardless of what he had done to deserve it, he was buried with grave goods, however, they are limited and do not represent something of high value. Another example of an

individual (Burial 57 Season II, see Figure 3.8) who appears to have been sacrificed or buried alive reminds us of hierarchical stratification within sedentary societies. There is no doubt that Tlatilco had elite individuals and ritual leaders.

Grave goods appear to have been evenly distributed among men and women, young and old (old being no more than fifty years old). Dental mutilation as well as teeth covered with black ink have been detected to be evenly distributed between men and women, but only in adults older than twenty years of age. It is evident from the burial record from Season IV, that life at Tlatilco was physically straining. The average ages of the interred are in the late twenties, with only 8.5 percent living past the age of forty years. The skeletal record shows evidence of one or more types of diseases, such as osteoarthritis and osteoporosis, particularly in the lumbar part of the spine, caries, and abscesses. It has been suggested by David Freidel (pers. comm. 2018) that the water around Tlatilco bred mosquitoes and probably contained parasites, which might in part account for the high mortality at an early age.

To sum up, this chapter gives an introduction to the contemporary sites and cultures of Tlatilco with whom there was a relationship. Some of these sites shared ceramic traditions sometimes is undistinguishable. The movement among the Early Formative cultures must have been great. I introduce the discovery of Tlatilco, the subsequent archaeological fields seasons, and the extensive burial material available which serves as foundation for my understanding of the many artifacts included in my analysis.

CHAPTER 4 ANALYSIS: ARCHIVES AND ARTIFACTS

4. Introduction

The majority of the objects found in museum collections from Tlatilco are ceramic, such as vessels in various shapes and forms, elaborate figurines, masks, seals and stamps, and musical instruments. Covarrubias (1957:21) stated that the people of Tlatilco were essentially ceramicists, as stone sculptures found at the site were insignificant, and any evidence of wood carving has not survived the passage of time. The analysis in this dissertation is centered around the corpus of artifacts researched in the museums visited for this study. This research builds on earlier scholarship and the classification and typologies already established. Artifacts have been grouped, and variations will be discussed in some depth. Appendices have been prepared to show the variation of the many artifacts found at Tlatilco encountered in the museum collections; figurines (Appendix C), vessels (Appendix E), masks, stamps, musical instruments and miscellaneous (Appendix F).

First, archival data from a few museums where records exist of the acquisition of the collections will be introduced. This will follow with an analysis of the figurines, vessels, sellos (stamps and seals), masks, instruments as well as miscellaneous objects encountered in the collections studied. I will end with a discussion of the results from the Instrumental Neutron Activation Analysis conducted specifically on the RMM collection, as it helps establish a secure foundation to understand the diversity as well

as the complexity of these artifacts, including looted and often unprovenanced material.

4.1. ACQUISITION AND PROVENANCE IN MUSEUMS

As mentioned in the introduction, working with museum collections is not straight forward and there are many obstacles that need to be taken into consideration. One of them is provenance. How do we know if these objects actually came from Tlatilco? Often, I found myself having to determine the likelihood that the objects originated in Tlatilco. Using discernment that I developed from observing thousands of objects and referencing artifacts that have an already established context (such as a result of INAA data), determining which were from Tlatilco became easier. Some museums do have records of how they acquired the objects, however these records often omit information about the original acquirer of the artifact(s). In some instances, we know that collectors went to Mexico themselves and collected the objects. The end of the 19th century marked the commencement of serious archaeology in the Basin of Mexico. Archaeologists such as George C. Vaillant who would go on to excavate Zacatenco, Ticoman and El Arbolillo, expressed their interest in Mesoamerican objects. However, collecting of Mesoamerican objects did not get the same broad-based exposure as Chinese and Egyptian objects until after the 1930s. Anni and Josef Albers were examples of the earliest collectors who frequently visited Mexico and brought home objects (Taube 1988:10). Their collection is today housed at the Yale Peabody Museum, and includes several figurines from Tlatilco (see Albers 1970). These objects lack any contextual information as to where at Tlatilco

they were discovered, but I believe with some certainty that these objects did originate at Tlatilco.

Riverside Metropolitan Museum

The collection at RMM was bequeathed to the museum upon the death of former senior curator, Christopher L. Moser. Moser had worked as an archaeologist in Oaxaca and at the site of San Jose Mogote with Kent Flannery in the early 1960s. What is intriguing from the notes left by Moser printed on his meticulously written artifact cards, is information providing where the objects were purchased, when, and for how much. The RMM collection contains more than 300 artifacts from ancient Mexico from Moser. In addition to Tlatilco, there is a significant collection of vessels from Chupícuaro. The majority of the artifacts from Tlatilco are fragmented, undiagnostic, and would under normal circumstances yield little information. However, approximately thirty-five Tlatilco objects from this collection were sampled for INAA offering new contextual data (see Section 4.8).

Significantly, all of the Chupícuaro objects were purchased at Tlatilco, attesting to the importance of Tlatilco as a center for selling antiquities developed by the brickyard workers. This helps clarify why so many Tlatilco collections across the United States have objects that, while they may have been purchased at Tlatilco, are in fact not originally from there. Unfortunately, it will not help distinguish the objects that would have been imported to the site if they are Tlatilco-style objects. This can only be resolved with the use of INAA, and still it would not reveal if these objects had been traded, exchanged or moved in

antiquity. During my research, the many diagnostic and easily identifiable objects from other known cultures have been re-labelled and removed from the Tlatilco collection with strong confidence that the objects were never exchanged or traded between the two ancient cultures. It is more likely that the artifacts entered Tlatilco in modern times as many of the other cultural items represented in the collections were from different time periods.

St. Louis Art Museum

From the archives at SLAM, extensive documentation exists from a purchase between Morton D. May and Everett Rassiga INC, transactioned on October 1st, 1966. May purchased from Rassiga what was believed to be the complete contents of a mound in the state of Morelos, Mexico, today known as San Pablo (see Map 3.1). Upon forwarding a check enclosed in a letter to Rassiga, May enquired assurance that the objects he was about to buy were the entire contents of the burial mound. Rassiga must have assured May, although this was nowhere written, as May otherwise would not have completed the purchase. Only 112 objects made it to May's collection, although between 125 and 150 objects had been promised by Rassiga. The objects were purchased for the sum of \$10,000 and donated by May to SLAM in 1978.

San Pablo was a burial mound and a salvage archaeology project was directed by David Grove (1970). Grove worked in the 1960s to recover what was left from the heavily looted site. Considering the known facts that Grove and his team were able to salvage and

⁷ According to USinflationcalculator.com, the inflation between 1966 and 2019 is 668.7%, which means the price today would be \$78,872.84.

uncover a lot more material from the mound, either Rassiga was lying or mis-informed when he sold the "complete contents" to May. Regardless, the collection at SLAM from San Pablo appears to be the most extensive and complete collection of objects.

What is intriguing about San Pablo, and why this collection is relevant when discussing Tlatilco, is that in some ways it represents a twin-city, with very similar styles, although the lack of Olmec material at San Pablo suggests the two sites had very different socio-political conditions. When reaching out to museums I always enquired if they could search for a few more sites than just Tlatilco, San Pablo being one of them. Nowhere but at SLAM did they have a San Pablo collection. That being said, as many objects from San Pablo appear as "Tlatilco-style", it is not unlikely that objects labeled as Tlatilco in other museums would come from San Pablo.

National Museum of the American Indian

At NMAI, labels indicate that they have several objects from Morelos. Upon being allowed to browse through the many shelves and see if there would be anything else of interest, I came across their Morelos collection, which with lack of other known context would easily have been mistaken as objects from Tlatilco. In the state of Morelos several other sites near San Pablo have been identified as sharing similar styles. The origin of these objects besides being from Morelos will most likely remain unknown, however, they have been included in the Santasilia Dissertation Database for comparative research.

Field Museum of Natural History, Chicago

At the FMNH, I was left with an unsolvable puzzle regarding provenance. It was a cryptic message written on some of the vessels, where several had *M.C.* written on them, while others had the year *1946* (figure 4.1). The M.C. would correspond with Miguel Covarrubias although 1946 is somewhat prior to the commencement of Season II. It could be that Covarrubias had simply purchased or collected the objects during the years between excavations, but that still does not explain how the objects made it to the Field Museum. The ones with the *M.C.* do not look particularly like the Tlatilco-style which adds to the confusion.



Figure 4.1 Example of text on vessels (FMNH, SDD # 641 and # 644).

Peabody Museum of Archaeology & Ethnology, Harvard University

From the Peabody Museum, Accession <u>File: 66-46</u>: Document 66-46 consists of ninety-two pages and contains the formal, polite and professional correspondence on the exchange of artifacts between the Peabody and the MNA, Mexico City. As the MNA was

about to open in the early 1960s, the Peabody returned artifacts of interest to be exhibited in the new museum. In return the Peabody asked for new items that would complement their then-current collection. Preferably top-grade objects from the Valley of Mexico and from Oaxaca which were to be exhibited. This is when the Peabody legally acquired their Tlatilco collections. Several of the artifacts came from the burials and thus provide one of the only collections I encountered with known context. Beatriz Barba de Piña Chan and a colleague went to the Peabody to decide which objects should be returned to Mexico for the new museum. Upon agreement on the objects, an estimated appraised value of \$17,000 was established. This was for insurance reasons, and not an actual cost that Mexico had to pay. Due to a mis-communication, the MNA forwarded a check for that amount to the Peabody, which was immediately returned.

A W. R. Bullard expressed that objects which represent Olmec-style were of special interest, as the Peabody would like these to exhibit. On July 20, 1964, Tatiana Proskouriakoff followed up with Bullard's request to the MNA, indicating they only had interest in whole vessels rather than fragments. The Peabody asked for material from cultures that the MNA could spare without being an imposition, but that the objects they would receive would preferably come from excavations in order to assure the provenance of the objects. They put in a request for three to four vessels representing the dominant types found at Tlatilco (preferably decorated), such as a gadrooned bottle and a dark brown incised bowl among others, adding that the Peabody already had two effigies and an incised flat-bottom vessel and a few small figurines.

In a letter to the Peabody, the MNA informed them that several objects from Tlatilco were available, as well as objects from Tlapacoya, El Arbolillo, Zacatenco, and Ticoman, all Formative sites in the Valley of Mexico. Dr. Brew, director of the Peabody, wrote to Gordon R. Willey in February 1965, suggesting that Willey should be in charge of bringing the objects back. In this correspondence the emphasis was on the importance of a proper legal exchange permitted by the Mexican government, who had requested an international treaty from UNESCO to allow international regulation and import and export of cultural objects. Eventually, six vessels and six figurines from the MNA were shipped to the Peabody. From my notes when analyzing the objects, eight of these twelve objects had texts written on the bottom of them indicating from which burial they came.

Beatriz Barba de Piña Chan had been in charge of choosing the objects at the Peabody to be returned, as well as the objects chosen at the MNA to be given to the Peabody. The agreement was made in September 1965. By mid-December Willey wrote to the director, Ignacio Bernal, and asked what was happening, as they had not heard anything in months. Bernal responded that bureaucracy had delayed the departure, as signatures from the Minister of Education, the President of the Republic, as well as from Institute authorities were required.

Finally, June 3, 1966, Bernal wrote to Brew to inform him that things were ready, and they needed to know if they should ship by air which would be costlier, or by land or sea which albeit cheaper also was less safe. Bernal added that he hoped they would meet up in Paris for the UNESCO meeting the next month. On June 7, 1966, Willey wrote Bernal requesting that they send the objects via Railway Express and on October 5, 1966, the

objects were shipped to the Peabody. Finally, on November 4, 1966, Brew wrote to Bernal informing him that the shipment had arrived, and that the objects had been unpacked the day before. The Peabody was very pleased with the fine collection received, which completed their collection. The staff were particularly enthusiastic about the Tlatilco material.

Understanding where the collections came from helps when analyzing the objects, as this information supports the assertion that the artifacts actually came from Tlatilco. This is an important feature when the archaeological fieldwork records that do exist are somewhat limited. It is alarming how many artifacts are wrongly labeled and, as will be discussed below. Furthermore, it will be evident from my analysis how museum collections are underrepresenting various types of artifacts from Tlatilco.

4.2. FIGURINES

"The ultimate refinement of the art of figurine-making in central Mexico is seen in the D1 and D4 types, which are among the most beautiful objects of their size in all of the New World" (Coe 1965:26).

Richard Lesure (2011) has discussed the role of figurines and how figurines have been interpreted throughout time by art historians and archaeologists. Both male and female biases have blurred the interpretations; such as assumptions that female figurines were expected to be company in the afterlife, despite the fact that female burials generally contain more figurines than male burials or that female presence represents egalitarian societies and peaceful times. Additionally, Lesure (2011:13-14) cautions against jumping to the conclusion that figurines expressing female attributes do not necessarily equate to a fertility cult related to reproduction. Although it seems that female figurines have been the

dominantly expressed sex, it is important to understand the different reasons why female figurines were made. Past theories suggest that female figurines could represent how the economy relied on female (re)productivity and labor. Another idea is that they could be related to stress, and they were made to ward off threats or that they were related to ideological struggles in the community, and they were meant to express a contest of power. Finally, female figurines may simply be female, because they were made by females. Lesure (2011:16-17) rejects these notions and writes it off as an approach in which scholars have tested these theories against one another and simply chose the one that best fits. Instead, he contends that we need to fully understand the context in which these figurines are found.

Ideally, any artifact needs to be interpreted within a context in order to offer the best position for any analysis. But what is meant by context? Lesure (2011:28) argues that the basic distinction between "archaeological context" and "social context" is that archaeological context is observed in order to be able to reconstruct social context. Ian Hodder (1999:47-48) proposes that context must be treated with some flexibility, as it covers large temporal and spatial scales. Thus, context is a broad concept and can be viewed on both micro- and macro scales. For this dissertation, context encompasses Early Formative Mesoamerica and the ceramic traditions, as well as the documented burials of Tlatilco from whence material comparisons can be made. However, a deeper understanding of the context of objects uncovered in the burials is problematic at Tlatilco. Records of the physical relationship between burials is scarce, and as Porter (1953:19) noted "the attempt

to discover a vertical stratigraphy is risky, since the Tlatilcqueños often disturbed one grave to make another at greater depth."

4.2.1. ANALYSIS OF THE ANATOMICAL VARIATIONS AND SIMILARITIES OF THE TLATILCO FIGURINES

Tlatilco is particularly known for its many figurines, often female and in various forms, most commonly between ten and fifteen centimeters tall. This section will introduce the variety of the many figurines from Tlatilco and, on occasion, other Early Formative period sites which share strong similarities with the iconic Tlatilco-style. Lesure (2011:29) urges scholars to refrain from methodologically dividing figurines into classifications of such as "female" and "male" and instead compare the primary and secondary sexual characteristics such as attributes of clothing, ornaments, posture, etc. This is the method applied when comparing the figurines in this study. The majority of the figurines do appear to be female, but within the female (and male) figurines there are many additional classifications and variations that will be discussed below (also see Appendix C).

From the archeological seasons at Tlatilco, hundreds of complete figurines were uncovered as well as thousands of fragments, of which most were women with small breasts, short arms, slim waists, and large bulbous legs. Most are standing, while some are seated, and some are carrying babies on their hips or a small dog held in their arms (see Niederberger 1987:473). The majority are nude and feminine adornment was limited to painting of the face and body. Their hair may be shaved off in areas or worn in buns on top of the head, often with long ribbons extending down to the waist in front. On occasion they wear elaborate headdresses, which come in a large variety. A few figurines wear garments,

such as skirts worn low on the hips, often by women in dance poses. The few depictions of males among the figurines are usually wearing loincloths as well as helmets, often representing ballplayers. Some figurines are represented as jaguar-beings, or persons wearing jaguar masks. Others are shamans, contortionists, or rounded figurines, possibly expressing obesity in contrast to a few examples that represent pregnancy.



Figure 4.2 The six most common figurine types found at Tlatilco: D1, D2, D3, D4, DC9, and K.

According to Covarrubias (1957:27), there are thirty-eight figurine types represented in the Basin of Mexico of which several can be assigned to Tlatilco (see Figures 1.3 and 4.2). Building on the Hay-Vaillant typologies, Covarrubias divided the major figurine types into sequenced groups:

Group 1: Types C3, C5 represent people with thick bodies and short extremities, wearing beads hanging from the septum of the nose, earplugs, turbans, and heavy necklaces. These have not been found at Tlatilco.

Group 2: Types C9, D1, D2, D3, D4, and DC9 are the most abundant at Tlatilco representing people with delicate features, large slanting eyes, small turned-up noses,

and fine mouths. In particular, Types D1 and D2 are commonly known as "pretty ladies" in the literature.

Group 3: Types A, B, F, K and O were closer in time to the transition to the Middle Formative period and may not all have been present at Tlatilco. The exception is type K, which was common at Tlatilco. Type K1 has features such as exaggerated large square eyes, different from the narrower slanting eyes of the D-types. Note that there are big differences in the different type K figurines. It is unknown why they were grouped together under type K as this group does not fully justify the diversity and most likely time and regional differences encompassing the various figurines.

Within the different groups and types, there are additional variations that identify the figurines. Jean-Pierre Laporte (1971) took on an immense task to subcategorize the figurines, later discussed by Patricia Ochoa C. (1982). Laporte interpreted the variations within the groups encompassing Tlatilco and added new drawings of these sub-variations. However, there is so much variation within the figurines found at Tlatilco, that it is impossible to create successful sub-types unless one establishes the variation through images. But, including everything would still seem quite impossible. As can be seen in Appendix C, where I am building on Covarrubias and Laporte's typologies, the images show correlation with the drawings provided by the two authors. But "one-drawing fits all" is simply not a solution. What I try to demonstrate and offer to future scholars of Tlatilco and Early Formative figurines is the richness of the corpus available for interpretation. The different variations do not necessarily represent a larger sample, and in some cases I have only

one example. Possibly, some of the figurines did not come from Tlatilco, but the style resembles Tlatilco so closely, that either way, they bear evidence to the social transformation that was ongoing between the many sites that seem to have shared ceramic traditions.

To establish new variations and groups on the basis of museum collections is not ideal. In the Santasilia Dissertation Database there are almost 700 whole figurines labeled either as Tlatilco or "Tlatilco?" and an additional 200 figurine fragments from Tlatilco. As evident from the drawings and images in Appendix C, when making a comparison with data with known provenance, it becomes clearer how new forms transformed out of the merging of styles. In particular, the many sub-variations of type K look to me as a result of a merging of type K and D2 and D4. Laporte's D4 variation B, in many ways, resembles the many smaller figurines which Laporte labeled as "miniature." The miniature figurines are most certainly offspring of the larger D types, particularly D4 var. B, but other variations have been found as well, such as miniature versions of type K.

The figurines were all hand-modeled, and each of them has unique attributes and presumably all had post-fired decorations with red, white, and black pigments to imitate face and body painting (Coe 1965:25). The majority of the figurines are female and after Olmec contact, it appears that the concept of male figurines was introduced, as male figurines seem to dominate the figurines in Olman. Potentially, the Olmec introduced molds, as some of the ballplayer and jaguar-faced figurines appear, particularly in the faces, as if they were created from the impression of a mold. Even

after the potential introduction of molds, it seems that D-types remained handmodeled, and no molds have been uncovered at Tlatilco. This could be that the figurines with these attributes were imported and not locally made.

Potentially the figurines were meant to be female companions, or perhaps attendants for the dead, as some burials contained more than one hundred figurines. It has been argued that the narrow waist, large hips, and often down-turned peg-like arms of the figurines make them ideal for binding with twine around their waists, so they could be suspended freely or tied to an object (Covarrubias 1957:30; Taube 1988:20). Tolstoy (1989:114) proposed that the figurines represent spirits or ancestors that intervene in human affairs, and possibly signify a concern with the well-being of the deceased. The idea from Tolstoy seems to be inspired by Egyptian mortuary practices, where the pharaohs were buried with small mass-produced ushabti figures for the afterlife. However, as there are also both male and androgynous figurines, as well as figurines carrying babies and dogs, there must be another explanation. Unfortunately, the actual function of these figurines remains unknown (Coe 1965:25).

Before I individually introduce the various types of figurines commonly encountered at Tlatilco, I want to direct attention to certain characteristics that seem to have been consistent and not discriminatory, regardless of figurine type, particularly within the type D figurines. Not all type K figurines share these characteristics. Characteristics such as anatomical attributes will be compared, but there are also the less "obvious" characteristics.

As a rule, the majority of the figurines are standing and only a few are seated. The seated figurines are usually engaged in another activity in addition to being seated, such as having a cradle on the lap, sitting on a drum, being pregnant, or in the pose of a contortionist. Examples of other poses such as crawling or placed on the stomach is not recorded at Tlatilco but has been observed among figurines from Las Bocas. The eyes of the type D figurines are usually a narrow slit while type K has large open squared eyes.



Figure 4.3 Examples of figurines with mouth center holes, row of teeth and center dent.

One of the first details I noticed when analyzing the Tlatilco figurines, was that many of the figurines have a small hole in the middle of the mouth. Sometimes it would be a small dent rather than a hole, and other times there would be no indication of this trait. Due to erosion, an accurate number of figurines carrying this attribute cannot be determined as it often can be difficult to detect, particularly when it might have been a dent rather than hole (Figure 4.3). In rare instances there would be actual teeth, which I suspect is due to contact with other cultures rather than something representing any standards or ideological expression generally seen at Tlatilco. Such figurines could also have been imported from somewhere else, such as Xochipala.

But why this hole or dent? It was clearly something significant which they wanted to express. To my knowledge this is not something otherwise observed in figurines in Mesoamerica regardless of space and place. The bucked teeth figurines from the Late Formative period among the Maya could possibly spring from the same notion. As well as the center pointed (caiman or shark) tooth sometimes depicted in Olmec figures (Taube 1996:83). However, the first thing that comes to mind would be airways – either for them to appear alive and able to breath, or potentially even able to speak. This could have been for ritual use. Presumably, figurines were found outside of burial contexts as well, just as both utilitarian and fine quality vessels were found in the refuse pits (Porter 1953:22). This would support the idea that figurines were not simply manufactured for mortuary practices.



Figure 4.4 Front and side locks on the forehead, headbands and wreaths, an example of ribbons, an elongated head, and a baby in a cradle, presumably in the process of skull modification.

Some figurines have what has often been described as two locks of hair hanging down the front of the torso, extending all the way down to the waist. However, I believe that the locks are instead ribbons and have been used to tie up the hair, possibly made out

of cloth or fiber. Many of the figurines, unlike the bald babies of Las Bocas and Olman⁸, have elaborate hairstyles, tied up with many details and adornments. On occasion actual hair is represented, but not extending down the front. I think there is an association between the elongated heads on many of the individuals (usually caused by tabular erect skull modification as seen in the skeletal record), the elongated heads of the figurines, and the elaborate head attire, worn possibly to emphasize their heads. Headdresses, wreaths and headbands in various shapes and styles are also seen adorning the figurines. Generally, there was much emphasis on hair, hairdos and the various attributes applied to assure an "elegant" look (Figure 4.4). In addition to the long ribbons, there are D1's with shoulder length hair, resembling the DC9 figurines.

Figurines depicting children in cradles, appear to demonstrate just how the Tlatilcans modified the skulls, although not all babies in cradles represent the process of skull modification. The esthetics behind it is unknown but was probably introduced by the Olmec who also did skull modification, but it could also have been introduced much earlier, as it has been recorded at Capacha and San Pablo prior to Olmec contact. Even though it would be tempting to argue for maize as the main reasoning behind this modification, that it resembles the potential shape of an ear of corn, I do believe there could be other motives. I do not have any valid suggestions that would seem more feasible than to resemble an ear of corn, however, even though maize was arguably one of their staple crops, Philip Arnold (2016:194; pers. comm. 2019) has demonstrated that maize agriculture does not appear to have played a major role in the early development of the Olmec on the Gulf Coast and that

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⁸ Olman is generic term for the Gulf Coast Olmec

the emergence of the Maize God would not come about until the end of the Early Formative period, at least as depicted in the iconography. Considering the Middle Formative obsession with elongated green stone celts, supposedly representing an ear of corn, perhaps it was the early signs of a Maize God cult. But there is no conclusive evidence to support this.



Figure 4.5 Examples of the three types of eyebrows; cut unibrow, applied unibrow, and duo-brow. Type K without any eyebrow.

Figurines can also have a little front lock extending down onto the forehead, and attention was made as to whether the lock is on the left or right side, or center on the forehead, just as hair-buns have been recorded as to which side they appear. The left side appears to be predominant both for the front lock as well as the hair buns on top of the head. Occasionally, figurines are seen with incised hairlines rather than applied. Furthermore, eyebrows are almost always depicted (Figure 4.5). Eyebrows vary between three types: duo brow or unibrow, of which the latter is the most common, but further divided into whether the unibrow is applied onto or cut into the forehead of the figurine. There does seem to be a pattern between eyebrows and figurine types. D2 primarily has duo-brow, whereas D1 and D4 are seen with unibrow. Additionally, D1 can just as often

be seen with the cut unibrow as the applied version. Type K on the other hand is more difficult to trace, as the often-elaborate design incised onto the squared forehead has taken precedence over the depiction of eyebrows and a low hairline could potentially substitute for depicting eyebrows (see Appendix C.23; Niederberger 1987:463).

Collars, probably denoting necklaces are another somewhat common trait on female figurines, although not detected on D2. There are D4's and D1's with and without collars. On Covarrubias' chart (Figure 1.3) it appears as being a common trait of type D1, however, D1 figurines are more often depicted without the collar. A search in SDD informs me that the majority of the figurines wearing collars are D4 figurines and not D1. Presumably it is an adornment, and if it had any symbolic meaning it is not detectable. The later C1 figurines from El Arbolillo and C3 from Zacatenco are often seen with both necklaces and pectorals.



Figure 4.6 Hematite or pyrite mirror fragments (SDD593), and on the chest of two figurines (SDD1573, 1479).

Figurines on occasion have a pyrite or hematite mirror placed on the chest. The only two examples encountered were two D4 figurines (Figure 4.6) both were on display

at MNA and both came from Burial 162, Season II (Ochoa Castillo and Orueta 1994:140-141). Potentially a lot more figurines would have had these, as it seems they are applied later and could easily come off. The function of these mirrors is unknown, but later cultures in Mesoamerica would put a lot of emphasis on the use of mirrors when expressing their art (Taube 1992:178). The production itself does not seem to have been something that would have required extensive work, as they are usually crude and the shapes inconsistent. Presumably these are debris flakes of the iron ore from the production of larger mosaic mirrors. Production of mirrors is something that was costly as it required very specific material that needed to be imported, most likely from Oaxaca, and a skilled craftsperson who knew how to work the iron ore (Gallaga M. 2016:31-32). From Season IV, twelve burials contained hematite mirror fragments, six interred were male, three were women, and three were unknown. All burials were rich, containing either many grave goods, or in some cases less than ten objects. The grave goods were prestigious including items such as jade. Burial 179 contained fourteen fragments of hematite, which would have been enough for a small mosaic mirror, potentially attached onto something organic which has not preserved.

In my research anatomical features, such as ears, breasts, hands or fingers, feet or toes, thighs, and navel were recorded. There is great variation in the ears. They range from elongated, to round, to tubular, and something in between, and within those are the variations of whether they are pierced or perforated or not. Some appear to wear earspools, attesting to a tradition of wearing adornments which unfortunately have not been found in archaeological context. Presumably these earspools were made out of perishable material,

which explains why they have not been recovered. D2 appear to always be depicted with elongated ears, following along the commonly elongated flat head. D1 and D4 figurines usually have a more rounded head, giving the figurine more of a 3D effect, and these usually have round ears or simply punctured holes. K figurines share the trait of being flatter but are still seen with round ears, commonly with earspools.

Breasts are an important feature on the figurines, as they usually are the sole reason for identifying the figurines as female, as genitals, neither male nor female, were depicted on the Early Formative figurines. The breasts are often roundly shaped and molded into the clay, this is the most common way of attributing breasts, and is seen on the type D2, D3, and K figurines. Although type K is as frequently seen as flat chested or with both hands resting on or covering the breasts. Type D1 usually has ribbons extended down the front and the breasts are not visible. However, variations of D1 that do not have ribbons are usually seen with the round shaped breasts as seen on types D2. Type D4 has more unusual breasts as they are instead expressed as applied knobs. These differences cannot be ascribed just to ancient workshop or artistic variation, as it is consistent within the various types.

When comparing the limbs of the figurines there is also large variation. For some of the figurines, arms are simply expressed as stumps. Some have hands, sometimes palms up or palm folded, and some have fingers. The same is observed for legs, feet, and toes. However, there is not necessarily a correlation between having fingers and also having toes. The figurines can have fingers without having toes, although rarely the other way around.







Figure 4.7 Examples of exaggerated voluminous legs; left and center are bulbous, while right is smooth (SDD: 91, 1011, 1278).

The size of the thighs is also recorded in the instances where the thighs are exaggerated and voluminous. Within primarily type D4, figurines will appear both with and without voluminous thighs, D1 can be seen with voluminous thighs, whereas D2 never is seen with exaggerated thighs. There are two kinds of voluminous thighs, one is exaggerated and smooth while the other is exaggerated and bulbous (Figure 4.7). Possibly voluminous thighs could be a sign of a healthy and fertile woman, although there is no evidence to support this notion, and the function of the figurines cannot be determined. Perhaps by comparing the archaeological contexts from where examples of these figurines have been found could narrow down their usage. However, in the archaeological record from Season IV, less than ten burials actually contained D4 figurines with voluminous legs of which only three burials contained figurines with the bulbous variation (Burials 86, 95, and 121). Compared with the SDD, where approximately sixty figurines were analyzed with these so-called bulbous legs. Interestingly, in Burial 95 (female c. 22-24 years old) in addition to three D4 figurines with bulbous legs, there were two D2 wearing skirts, and one

D4 wearing a loincloth, presumably male. In Burial 86 (unknown sex, c. 9 years old), in addition to one D4 figurine with bulbous legs, there were fourteen other figurines. In Burial 121 (male c. 27-30 years old), there was a seated pregnant figurine with hands below stomach and on chest, as well as one figurine holding a dog. Therefore, the archaeological records do not in this case particularly help with our understanding of who were buried with these types of figurines as the distribution includes a child as well as a male and female adult. However, we do learn that all three had several grave goods and must have been considered among the richer or more important members of society.

Most of the figurines have a navel, although on a few occasions they do not, other times it is not visible or cannot be determined. On the larger D3 figurines it often serves the purpose of a firing hole and is a hole into the hollow body. To include the navel can represent invariably two things. One, that they simply wanted to include anatomical features (even though genitalia is omitted), two, that they recognize the navel as the source for nurturing and the tie between a mother and child during childbirth.

There are two types of bodily adornment observed on the figurines: First, incised lines most commonly observed on the back of the head or on the elongated modified skull, and secondly, painted lines commonly observed on the head, but in some cases also extending down onto the legs. As can be observed in Appendix C.23, for the variation in painted and incised designs there does seem to be a pattern of a combination of vertical lines or a triangle, although "butterfly" and "bowtie" motifs appear as well. The incised lines on the back of the head appear to be more abstract and could potentially be early representations of glyphs. These designs are seen on all the various types of figurines, D1,

D2, D4 and K, and a combination of incised and painted is not unusual. How many figurines only had painted lines we will never know as the paint has not preserved well. Bradley (n.d.) did experimental research and tried with x-ray to see if paint designs could be detected, but there seems to be little evidence of this being a successful method. Unfortunately, it appears that these designs are forever eroded away, and we have to rely on the few preserved examples. A large number of the figurines have remnants of red post-fired pigment, presumably hematite or cinnabar. This most likely attests to burial rituals, where the individual or the interment would have been covered in red pigment, leaving remnants on the figurines. The cinnabar detected at Tlatilco came from thirty-four of the burials from Season IV. These burials ranged between zero grave goods to seventy-six, with majority containing twelve or less. Sex does not seem to have been discriminated, while age appears to have been relevant as all but three of the interred were above the age of nineteen.

The variation within the figurines extends further than the anatomical details meticulously applied by the craftsperson at Tlatilco. Now that the anatomical and adornment attributes that many of the figurines share have been introduced, I will turn to individual figurines and introduce traits that are "type-specific." Following this introduction, I will return to a discussion of variations commonly seen among the figurines which extend beyond anatomy and adornment, and which include details such as pregnancy and children, holding a dog or object, double faced or headed, wearing ballplayer attire, and different poses.

4.2.2. Type D1 Figurines

Type D1 is the figurine type that has the most fairly realistic portrayals (Taube 1988:20; see Appendix C.1-3). Type D1 has been found in abundance, and there are so many variations, that barely two are alike. Typical for type D1 are the long ribbons extending from the hair downwards. These have always been referred to as strands of hair, but upon observing these figurines and as I asserted earlier in this work, I believe that the strands represent ribbons. This is primarily due to the extraordinary hairdos the people of Tlatilco appear to have mastered and the many ways they tied up their hair. Others are seen with shaven heads, but this is not something observed within the D1 figurines. Instead, besides the ribbons, wreaths and elaborate hairdos are common. The ribbons have variations, and usually each ribbon has a vertical line down the center, giving the impression of two lines on each side. Less frequently, the inner or outer side may have stipples or finely incised lines, and this has been observed for the lower half as well.

Groups of figurines are not common, and the only examples encountered in any collections or publications were type D1 figurines. Two different scenes are available (Figure 4.8, see Niederberger 1987:243). The first scene is of two figurines seated on a bench of sorts. It could appear as a man and a woman, with the woman wearing her ribbons down the front, and the man wearing a loincloth and a helmet or headgear. Potentially this could be a scene of a ritual union, such as marriage. The second scene represents four women in the act of either molding a vessel or interacting with something inside the vessel (see Coe 1965:69). Group scenes are not commonly found at Tlatilco, and none have been found within the burial records available. From Xochipala there are examples of elaborate

scenes of interaction between two individuals although not placed on a platform (see Gay 1972:22-23). Later, it is something that was very prominent in West Mexico at sites like Colima but not for another 500 years or more.





Figure 4.8 Tlatilco scene of two seated on chair-like device (left, SDD: 1457). Tlatilco scene with four females molding (center, SDD798). Dance scene from Colima (right, SDD923).

4.2.3. Type D2 Figurines

D2 appears to be as common as D1 and D4, and with just as much variation as seen among the other types (see Appendix C.5). D2 figurines were found outside of Tlatilco at sites such as Las Bocas, San Pablo, and Xochipala, which can explain some of the variation. Whether it originates from Tlatilco or was early on incorporated into being a steady choice of figurine at Tlatilco is difficult to say. Encountering D2 figurines in collections makes it difficult to know if they are all from Tlatilco. The variation within D2 is primarily observed around the head. Some have narrow thin heads, some wide, and others more rounded. Some have hats and others are wearing skirts. Often the skirted females also have the arms extended up over their heads, potentially in a pose of dancing or flying. All of the figurines in this pose are D2 figurines. The few male D2 figurines are wearing loin cloths. Whether

they are ballplayers or not is uncertain as usually no other regalia is encountered. In Figure 4.9 the male is additionally carrying an object under his arm which very likely is a ball.



Figure 4.9 D2 female, D2 male, and D2 in dancer or flying pose (SDD976, 1129, 276).

4.2.4. Type D4 Figurines

The type D4 figurines are more stylized than the above-mentioned types, and some of them appear to have an idealized abstraction (Taube 1988:20; see Appendix C.7-8). The variation within the D4 figurines is astounding, and the most noticeable difference are the different types of legs they come with. Their legs are either physically anatomically correct, smooth voluminous, or bulbous and exaggerated. But contrary to the idea that they all have these large legs, many of the figurines have thin, and even at times, scrawny looking legs. The head shape among the D4's is as varied as the D2's, although usually a lot rounder. Squared and flat heads can also occur. Whereas D2 heads are flatter and more elongated and appear to simply extend into the hairdo there is more of a distinction between facial area and head among D4 figurines. The rounded face usually extends into a narrowed and

tied up bun on top of the head, emphasizing the skull modification that was important for what seems to be most, if not all, of the population at Tlatilco. Some of these figurines have incisions on both the back and front of their head, allowing the elongation of the heads to serve as a canvas for abstract designs. Although red motifs appear on all of the various types of figurines as well as on the masks from Tlatilco, it is only the D4, and their miniature versions (see Section 4.2.4) that appear to be wearing red "suits". This red coloring is not a result of having been in a burial that was sprinkled with red pigment. This coloring is intentional and is usually applied only from the neck and downwards and sometimes on the hair, while the face remains yellow, and if there are other worn attributes such as a collar or a skirt or loincloth, these are commonly painted white. The change in usage of color may very well be something developed over time, as I believe the type D4 figurines and some of their many variations are later in time and developed as a result of previous merging ceramic ideas.

4.2.5. Type K Figurines

It has been speculated that type K was a later addition to the Tlatilco community. Although it has been found in abundance, it was possibly introduced from the state of Morelos (Gay 1972:58). The archaeological record cannot support or reject this notion as the stratigraphy at Tlatilco is poorly recorded as well as the depth at which individuals and objects were buried are very arbitrary. The two main Early Formative sites from Morelos and Guerrero on which something has been published are San Pablo and Xochipala. Type K has multiple established sub-types (see Appendix C.10-13) and there is great variation within them. It does not appear that type K was found at Xochipala, at least not represented

in the catalogue by Gay (1972). The type K figurines found at San Pablo (Grove 1970) appear to be only of the K2 variation, rather than the more common type K1. Particularly K2 appears to share attributes with the classic type D2 in terms of a result of merging. All the various types of K figurines have been found at Tlatilco, also within burial contexts. INAA sampling from the collection in Riverside, attests to type K1 also being locally made, and potentially, rather than an exchange of forms, it could be the result of another ethnic group that joined the people at Tlatilco at one point and brought with them new traditions. But ultimately the type K figurines are not to be presumed a unified group any more so than say, group D. The variation is too great and rather attests to changes over time and possibly regional differences.

4.2.6. Type D3 and DK Figurines

There are a fair number of D3 figures from Tlatilco and several have been found within burial contexts (see Season II: Burials 15, 112, 119, 161, and 201, or Season IV: Burials 104, 121, and 130). These large hollow figurines, usually standing more than forty centimeters tall, are almost as varied as the other D-types (see Appendix C.6). Most commonly they are standing, but examples of seated D3 figurines do occur. There is one example of a D3 wearing a hat, which is otherwise only seen in the D2 figurines (see Niederberger 1987:467). As mentioned already, type DK appears to have come from Morelos and is often attributed to Tlatilco due to stylistic resemblance but has in fact not been excavated at Tlatilco. D3 shares the attributes of the D2 figurines, whereas DK, as the designation indicates, is supposedly a merger of D3 and type K. While both type D3 and DK are often seen with large, open and somewhat slanted eyes, DK usually has a more

squared head often incised and decorated resembling the many incised designs seen on type K. Fingers and toes, commonly seen on type K are also commonly seen on type DK, although type D3 can be seen with or without. These anatomical features could potentially have been a trait of Xochipala, where the figurines in general appear more naturalistic, however, one thing to say about type K is that it does not appear to realistically depict the human form. There is one caveat however, while DK may or may not be a merger of D3 and type K. Type DK, which has not been found at Tlatilco but at San Pablo, does not appear to have been within the same time period. Type K1 appears to be a later addition to Tlatilco, while the K types seen at San Pablo are type K2, which do not actually resemble K1 and I do not think these should have been grouped together.

The fact that figurines and vessels from San Pablo resemble Tlatilco material in so many ways adds an intriguing layer of complexity when analyzing the Tlatilco-style material encountered in museums. Without proper context, the analysis will undoubtedly be compromised. INAA is one way to help solve the problem of unknown provenance, but it is much too expensive and time-consuming to be a realistic broad-based solution. As mentioned in the introduction, the Saint Louis Art Museum houses the only official collection of objects from San Pablo but knowing that the site was heavily looted prior to Rassiga (dealer) and Grove's (archaeologist) arrival, it is unknown how many objects were exported. From a search in SDD, I learn that I have encountered close to thirty DK figurines found in seven museums in addition to SLAM (AMAW, LACMA, MAP, MMFA, MNA, NMAI, SMA), of which most were labeled as being from Tlatilco.

The tradition of large hollow figurines is presumed to have been initiated by the Olmec, and from the Gulf of Mexico with the large babies. It then spread to other areas such as Las Bocas, Tlatilco as well as Xochipala. The tradition survived the Early Formative cultures and can particularly be seen in West Mexico during the Late Preclassic and Protoclassic periods at Jalisco, Nayarit and Colima, where many renditions of large hollow ceramic figures have been found.

Another important trait about type DK figurines is that they have also been transformed and utilized as vessels, with the head extending into one, two, or sometimes three spouts (see Appendix C.9). Type D3 usually does not appear as vessels although large anthropomorphic effigy vessels are common at Tlatilco usually in the shape of contortionists (see Section 4.3.3). The function and potential ritual use of these is unknown.

4.2.7. Type DC9 and C9 Figurines

In his chart, Covarrubias correctly (Figure 1.3) proposed that type DC9 is a merger of two types of figurines: C9 and type D, although he does not specify which type D figurine (see Appendix C.4). I agree with this assessment and propose D2 as the candidate for the merger. The arrows in Covarrubias' chart point from the C types to the D types, and besides C9, the other C types are younger than Tlatilco (see Section 3.3.6. for discussion on the chronology in the Basin). There is no longer a question about the Tlatilco material. Also, the Olmec material from San Lorenzo and La Venta, predates the C1, C3, and C7 figurines.

What is special about DC9 is that, in many ways, it resembles D1 but with a more downwards-slanting mouth usually characteristic of the Olmec. Through a search in the

various databases available for this study, I learned that only two burials (Burials 160 and 161 from Season II) contain C9 figurines, and those are the hollow variation. The C9 objects in the SDD are mostly the hollow variation as well, with just a few Olmec-style figurine fragments attesting to their presence at Tlatilco. Among these is a figurine head fragment from RMM (SDD #4) which INAA data reveals was locally made at Tlatilco (see my discussion in Section 4.8.1). Thus, it is complicated to understand how this tradition made it to the Basin as not too many Olmec looking figurines appear to have been found at Tlatilco, and the majority were made locally.

4.2.8. Type Miniature Figurines

This category is more challenging as there seems to be no rule as to what can be depicted in miniature and what cannot. Are these adolescent-becoming of age figurines? Some of them almost look like toddlers while others are simply smaller version of the larger versions (see Appendix C.16). Only a few have been found in archaeological context. From Season IV, Burials 6, 8, 95, and 144 contained miniature figurines while from Season II, only one burial contained one (Burial 172). The different distribution between the two seasons could potentially reflect that some of the miniature figurines during Season II were identified as D4 of K1 figurines, but perhaps just one was encountered. The two type K1 miniature figurines are either sitting on a drum or crouching, reflecting the regular type K1 figurines which are often occupied with the hands resting on hips, stomach, or chest. Perhaps they are amulets. Out of sixteen miniature figurines in the SDD, two have holes through the forehead implying they were used for hanging or as attachment, and Burial 144 (IV) contained seven miniature figurines of which it seems five

have a hole through the forehead. Conceivably, they had different functions, and some could have been amulets meant for hanging, while others could have been kept elsewhere. Interestingly, the four burials from Season IV belonged to individuals who were around twenty-two years of age; one identified as a male, one as a female, while two were unknown. All four burials were considered among the higher-ranking individuals, ranging between nine and seventy-six grave goods.

4.2.9. MISCELLANEOUS TYPES OF FIGURINES

There are other types of figurines present at Tlatilco than the nine described above. Type M also known as Cañitas (Appendix C.14), often looks horror stricken, and it appears to be the oldest figurine type in Central Mexico (Coe 1965:25). They remind me of the Valdivian figurines from Ecuador which are considered the earliest ceramic figurines in the Americas (see Figure 4.10). Although they were not contemporaneous, there is a possibility that the concept of duality was introduced into Mesoamerica from there. The figurines labeled as "unknown" by Laporte (1972; see Appendix C.15) could entail several kinds of figurines, and his drawings imply a few variations, but potentially, this category could contain even more figurines, as we have seen so far, labeling types from Tlatilco is not straight forward. I have encountered several figurines in the museum collections labeled as being from Tlatilco, and they do not appear typically Tlatilcan, nor have they been mentioned in the literature or in the burial reports. These have been omitted from this research.

The large white hollow seated Tlatilco babies typically attributed to Las Bocas are not recorded to have been found at Tlatilco, either in museum collections or from the burial

records (see Appendix C.17). Potentially they could have been found outside of the burials but there are no records to attest to this. Out of the fourteen Tlatilco babies represented in the SDD, one was labeled as from Tlapacoya, one from the Gualupita in the state of Tlatilco, three labeled as Tlatilco, and nine labeled as from Las Bocas. Who assigned the provenance of these objects and on which grounds is unknown to me, and it is likely that the context was not accurately designated. However, there does seem to be a correlation between these large white babies and the large D3 figures from Tlatilco.



Figure 4.10 Cañitas (left, SDD263), Valdivia (center and right, SDD501, 822).

4.2.10. DOUBLE HEADED OR DOUBLE FACED FIGURINES

Some figurines are depicted with two heads or double faces. These figurines, according to Covarrubias (1954:27) are only represented as female, and it has been said that they depict the frequently twinned maize cobs (Sejourné 1952:114). Duality is a concept well known in Latin America. Figurines with two heads date back to more

than 3000 BCE from the culture of Valdivia in Ecuador, long predating Tlatilco (Taube 1988:26). However, it may not have been from Valdivia or South America that Tlatilco got its inspiration for the concept of duality. Double heads or faces are associated with split representation and could potentially represent the juxtaposition of life and death (David Friedel, pers. comm. 2018).

Double headed figurines are seen among all the common types at Tlatilco, while double faces appear to only have been performed on D1 figurines (see Appendix C.24). Whether being a symbol of duality or not, there must have been a different function and a distinction between the two depictions. This would potentially put type D1 into a different category of function in general. The double headed are not more common and in SDD there are sixteen examples from Tlatilco while there are nineteen examples of double faced. Additionally, there are two examples of double figures which are both type D3, one housed today at the DMA (see Appendix C.6) and one in *The Jaguars Children* (1965:102).

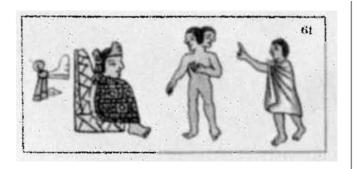




Figure 4.11 From Sahagun (left, Book 8, image 61). From Chupícuaro (right, SDD1229).

Other cultures have portrayed the notion of double headed or double-faced figures.

One example (Figure 4.11, right), from the Late Formative site of Chupícuaro in West

Mexico, portrays three individuals merged together. This scene may stray from the concept of duality as in addition to three heads it also displays three sets of legs. Potentially this figurine represents a growing tradition of group activities rather than the concept of duality. We assume duality as there are two faces or two heads, but what about direction? Could it potentially reflect choices and determination whether to go left, or right? Or were these individuals' representations of actual occurrences of the concept of Siamese twins? If they were, are they then representing something good, or something bad? From the chronicles of Friar Sahagun (Figure 4.11, left) we learn that it seems individuals with two heads were either bad, or that they needed to be released through forgiveness of the ruler:

"[As] eighth omen, often were discovered misshapen people. They had two heads, but only one body. They took them there to the Tlillan calmecac, where Moctezuma beheld them. When he had looked at them, then they vanished" (Sahagun et. al 1950:19).

The burial records from Season IV contain only two examples of these figurines; one with a double face (Burial 104, adult female, containing thirty-seven grave goods), and one with a double head (Burial 187, child, unknown sex, containing one vessel and three type K figurines). Season II does not seem to contain any figurines with either double heads or faces. In SDD, there are a total of thirty-five figurines with either double heads or faces. The majority are complete, but particularly the double faced are often just the head (nine head fragments). Could there have been another symbolic meaning in potential ritual activity of destroying the figurines? Unfortunately, it cannot be known if these were intentionally broken, and if it was part of a ritual, or if they accidentally broke and were thrown into the trash-pits. With so few having been found within burial contexts,

potentially the examples from the museums could have come from the material outside of burials just as well as being grave goods.

4.2.11. PREGNANCY, BABIES, CHILDREN AND DOGS

The circle of life must have been a reoccurring topic among the Tlatilcans, with an average life expectancy that did not exceed the mid-thirties, and with only a few making it to their forties and just one who made it to the age of fifty from Season IV. As already mentioned, there is a chance that Season II would have represented a site core while Season IV appears to have been poorer. Without a proper record of the individuals, the pathologies, and age of death from Season II it will be difficult to know if people at the site core lived as strenuous lives as they did in the surrounding areas. Even though the Tlatilcans did not build monumental architecture, considering that many of them, when they died, had extensive evidence of arthritis and osteoporosis, possibly physical labor was common. The fact that there are a few figurines that represent pregnancy and thus fertility, would attest to the rest of the figurines as not representing fertility per se. Interestingly, at Chalcatzingo, many of the figurines appeared to be pregnant (Cyphers 1993:218).

Depictions of children (see Appendix C.18), both in cradles as individual figurines but also as children on their mothers' hip, lap, or back, represent a sense of nurturing and playfulness. As discussed above, it appears that many of the figurines of babies in a cradle represent the ongoing process of modifying the skull. But this is just one example of the presence of children at Tlatilco. The toddlers hanging on their supposedly mothers attest to children playing a central role within the community. When searching through the two burial reports, figurines holding a child were not found, and there is just one example of a

burial containing a pregnant figurine (Burial 121, Season IV). Probably, these figurines were not supposed to be associated with burials, however, the SDD contains at least six pregnant figurines (Appendix C.18) but with unknown context. Maybe these figurines were instead good omens or amulets to secure a healthy pregnancy and that the children might live to adulthood. Childbirth has always been something that could be fatal to both mother and child, and it is not unreasonable to assume that any culture would have had some kind of protection-seeking helper. This is not to imply that this practice was on a religious level or that the Tlatilcans had gods. It may have been more a "superstitious" or practical assurance. Of the 213 burials from Season IV, eleven individuals were either fetuses or under the age of one. This is about five percent, and one individual was buried with the fetus in the uterus. Additionally, many children who made it past the first year may not have made it into adulthood, and twenty-three died between the age of one and twelve years old which is more than ten percent. There is no record of what caused the death, and it can be difficult to say.

Similar to the mothers and child figurines are female figurines holding dogs. These are depicted as being either tucked in under the arm, up on the shoulders or in the arms face to face (see Appendix C.19). Clearly there was an appreciation for their canine friends, and there are examples of these figurines having been found within the burials (Burial 162, Season II, and Burial 121, Season IV). Interestingly, Burial 121, Season IV also contained the pregnant figurine mentioned above, including bone fragments of a dog. Other burials contained canine bones, either the long bones or a skull, or the whole skeleton. Figurines of just dogs do not seem to have been something they made, neither are they seen among

the effigy vessels, although majority of the whistles appear to be dogs. At the Late Formative cultures in the state of Colima in West Mexico dogs played a very central role in their art. Despite the supposed interest in the rain god, sometimes depicted as a jaguar, there is only evidence of one example of something feline being buried at Tlatilco; Burial 50 from Season IV contained a perforated feline tusk.

4.2.12. HUMAN FORM AND ACTIVITY

The figurines that have specific characteristics and shapes that should be introduced to understand the diversity at Tlatilco but did not fit into any of the other categories, will be discussed here. There are both male and female figurines which represent the concept of musicians and music. Some figurines, that possibly represent obesity, in many ways resemble the round shape of the rattles. The contortionists already mentioned (see Section 3.2.7.) are compared with some of the other poses encountered. Typically, the figurines are standing with the arms extended out to the sides. However, by now it is not a surprise that there is a lot of variation to be found within the figurines who differ from the "norm."

Almost one hundred figurines and anthropomorphic effigy vessels from the SDD are seated (see Figure 4.12 for examples). The way they are seated can be flat on their behind with legs stretched out, while others have their legs tucked in in a somewhat nervous appearing pose, and still others appear to be relaxed. Some are even placed on a small stool, although this appears to primarily be among the type K figurines. Many of the pregnant figurines are seated or crouching, and almost all have their hands on below their belly (see Appendix C.18). Potentially, what is signified by expressing people in the process of

sitting, is a sense of resourcefulness and that not everything at Tlatilco had to be related to concerns, such as work and food production.



Figure 4.12 Seated figurines (D1, two D4, K3) (SDD1225, 1234, 1131, 837).

Some figurines appear rounded and could potentially represent obesity rather than pregnancy. This is difficult to determine as the round figurines are female. The question comes to mind whether obesity was a realistic condition at Tlatilco. Considering that the majority of the population at Tlatilco had caries and abscesses, perhaps they had a diet high in glucose or fructose such as from maize which is high in carbohydrates. The teeth were often very worn down, attesting to a crude and minimally processed diet. To my knowledge strontium isotope analysis to determine their diets has not yet been conducted on the many individuals uncovered. Some of the round figurines are similar in shape to the rattles, and anthropomorphic rattles have been found, but there are figurines that are simply round and without indication of being a musical instrument (see Figure 4.13 and Section 4.6). Interestingly, rattles are more commonly found in the burials of females than of males from Season IV. The navel on the figurines is often the firing hole and is too large for any rattle device to not have fallen out while being shaken. However, the very rounded shape of what

does appear to be females could potentially, as discussed in 4.2.11., serve as an amulet or ritual representative of protection during pregnancy.



Figure 4.13 Round individuals (SDD796, 1248, 797, 493).

Still, figurines representing music or musicians are not uncommon, and there are depictions of figurines sitting on a drum, holding rattles, and figurines with rattles on the legs. There are even vessels in the shape of a foot with rattles strapped onto it (Figure 4.14). These figurines with rattles on the legs were identified by Coe (1965:43, 54) and have been compared to the dancers and musicians of the Yaqui indigenous of the Sonora (see Section 4.5). Commonly the figurines with rattles on the legs are also wearing a skirt, and figurines wearing skirts can be seen in dance pose, with the arms above the head. There could be a correlation between skirts and music, dance and ritual although there are more figurines wearing skirts who are neither in a dance pose nor wearing rattles on the legs. Those figurines wearing skirts could still represent such rituals, as wearing garments is not something that is commonly represented among the figurines from Tlatilco. Interestingly, type D2 figurines, commonly seen wearing a skirt and often in dance pose, is never seen with rattles on the legs. Although the contortionist figurines are grouped with the dancers

(see Appendix C.20), there is no evidence to support that contortionists would have been involved with the same ritual or any ritual related to music.



Figure 4.14 Figurines with instruments and musicians; baby holding rattle ball; entertainer with rattle legs, rattle leg vessel, and seated on a drum (SDD199, 1106, 799, 835).

Contortionists are more commonly expressed in the anthropomorphic effigy vessels (see Sections 3.3 and 4.3.2). Reilly (1989:16) has proposed that the contortionists depicted on Monument 12 from Chalcatzingo could represent individuals in the act of flying. Possibly this has a religious symbolism and perhaps the figurines in the so-called "dance pose" are representing this. The type K figurine seated, and in the act of beating on what appears to be a drum, is the only example I have encountered (Figure 4.14, far right). But drumming may very well have played a significant role in some of these ritual events. Figurines have not been detected with whistles, which is the only other instrument commonly known from Tlatilco, perhaps because rattles were the favored instrument or sound. The shape of the rattles most likely represents the rubber ball, and the sound of music could have been associated with dance rituals centered around the ballgame.

4.2.13. BALLPLAYERS AND JAGUARS

Many ballplayer figurines and fragments have been found at Tlatilco. As there is no archaeological evidence of ballcourts at Tlatilco, it is difficult to interpret whether the game was in fact played there, or if the ball-playing attire and headdresses derived from Olmec traditions symbolically represented an introduced ideology. Niederberger (2000:179) argues that the presence of these figurines, both at Tlatilco and Tlapacoya, would testify to public architecture and that there must have been major public ceremonies. The game is believed to have been introduced to the Basin of Mexico by the Olmec. The ballgame was known as Ulama by the Aztec as ul or ol means rubber in Nahuatl, and "Olmec" is the name given to the people of Veracruz upon the arrival of the Spaniards as it is from here that rubber was obtained (Sahagun 1950:bk. 10). The Olmec presumably exported rubber balls and the earliest examples uncovered in Mesoamerica appear to be from El Manatí, near San Lorenzo (Diehl 2004:26; Ortíz and Rodríguez 1999:242-243). Known from later records, the game would have had at least two players on each team who would be wearing special regalia, and the players would play with a rubber ball to hit fixed markers (Miller 1989). Not all sites constructed permanent ballcourts, and ballcourts are not common until the Middle Formative period at sites like Chalcatzingo, but nonpermanent markers could easily have been produced. Straight walls at San Lorenzo have been suggested as potential evidence of an Early Formative ballcourt (Miller 1989:24).

The ballgame had religious connotations and is associated with the Olmec Rain God and it has been suggested that Olmec ballplayers represented rulers. Early leaders of the Basin of Mexico would most likely, after contact with the Olmec, depict their rulers as

ballplayers representing the Olmec Rain God (Taube 2000:69, 72; Taube 2018:267). Clark (1997:233) argues that if the Olmec had a creation myth similar to the Maya's Popol Vuh, it is likely that the ballplayers are portraits of individual leaders and would link them to the creation of the world. The Rain God played an immense role throughout Mesoamerica, all the way up through the Aztec. In the Basin of Mexico during the Classic and Postclassic period the Rain God is known as Tlaloc, in Oaxaca he went by the name Cocijo, and among the Maya as Chaak. Covarrubias created a diagram of the development of the rain gods, modified by Taube (1996:94). According to Miller (1989:22-23), the ballgame of Mesoamerica was more than simply a sport and would have represented the movement of the heavenly bodies such as the sun, moon, and Venus. Upon resurrection of the father of the Hero Twins known from the Popol Vuh, he ascended to the heavens to reign as the sun, and Venus was the representation of the cycle of maize and fertility. Miller (1989:25) adds that "The Veracruz nobles who carried ballgame imagery to the underworld may have been prepared to dispel and defeat death. Throughout Mesoamerica, offerings of ballgame paraphernalia in tombs provided imagery of resurrection."

The ballplayer figurines are usually depicted as human but there is a lot of variation in the regalia. They are often wearing headgear including vizors and masks and sometimes the whole head represented jaguar features (see Appendix C.21-22). Potentially the variations could spring from different uses, and what is commonly referred to as ballgame activities could entail other sports such as stickball or boxing (see Taube and Zender 2009; Taube 2016). A few figurines are holding what could represent either a ball or a club or both, without wearing full regalia. Loincloths have

also often been associated with determining if a figurine represents a ballplayer, but this must simply be on the basis that if the figurine wears a loincloth, we assume it must be male, and if it is male, he must have been involved with some physical activity such as playing a game. There is no indication of female attributes in the ballplayer figurines, and it is assumed that ballplaying was reserved for male players. However, as the figurines often are covered in full regalia, there is no indication that the ballplayers could not have been female. In rare instances female figurines are known to have worn a loincloth, unless it is a male with breasts.

The variation within the ballplayer figurines is as large as with the other types discussed. This is most likely a result of change over time and due to new inputs from other cultures. Particularly the figurines (Appendix C.21) which appear as to be covered in feathers is something that has been observed on figurines from Xochipala. It can be difficult to distinguish between ballplayer figurines from Tlapacoya and Tlatilco. Tlapacoya is famous for the full-body suit, also represented in Appendix C, but there are overlaps with Tlatilco, and presumably the tradition was introduced to both sites somewhat simultaneously (see Niederberger 1987: 438-41, 473).

Many ballplayer figurines wear masks, and the game has been interpreted as representative of an elite game with religious connotations. Ceramic masks found within the burials have been compared to the masks seen on figurines and they may have been ceramic replicas of wooden masks actually worn by the ballplayers (Coe 1989:79). The jaguar faced ballplayers represent the Olmec Rain God and usually have furrowed brows, heavily lidded eyes, and the central pointed tooth flanked by

outwardly curving fangs, which Taube (1996:97-98) argues shares remarkable similarities to Protoclassic Rain God Cocijo from San Jose Mogote.



Figure 4.15Ballplayer in yellow from MTN (SDD1346); drawing by Linda Schele of celt from Río Pequero (today known as Loma del Zapote); ballplayer with example of conical hat (SDD348).

Coe (1965:14) speculates that the Olmec may have had more than one rain god, and compares this with the Aztec rain god, Tlaloc who had a different color for each of the cardinal directions. Color is usually not preserved on the ballplayers and colors associated with cardinal directions may be a later invention. Two ballplayer figurines displayed at MTN are covered in yellow and white pigment, while other examples have been found with remnants of red and white pigment. Yellow, red, and white are the colors commonly found on figurines from Tlatilco and would most likely not constitute directional meaning. Even though the Early Formative rain god(s) may not have been designated directional colors, perhaps the yellow had a symbolic

meaning. Interestingly, ballplayer figurines are usually depicted as dark or black (Karl Taube, pers. comm. 2019) but this is not the case at Tlatilco.



Figure 4.16Tlatilco-Olmec jaguar-ballplayer figurine head with possible maize glyph on back of head (SDD778).

The ballplayer regalia often includes a helmet, and in the instances where the ballplayer is wearing a full body suit, the helmet usually extends into a conical hat (Figure 4.15). In many ways the ballplayers in this manifestation resemble the Olmec were-jaguar, which could explain why they sometimes are depicted with jaguar faces. Coe (1965c:757) has proposed that it is sprouting maize coming out of the cleft commonly seen in Olmec depictions. Perhaps this indicates that the were-jaguar was also connected with maize fertility. Karl Taube (pers. comm. 2019) identified the glyph for maize on the back of one of the jaguar head fragments from the SLAM collection (Figure 4.16). That these ballplayers, often depicted as jaguars, have been found with a maize glyph on the back supports the notion that essentially, the

ballplayer figurines from Tlatilco, viewed in profile, are meant to represent the concept of sprouting maize. As the Olmec Rain God is responsible for agriculture and fertility, this does not seem unlikely.

To sum up, the analysis and discussion of the figurines offered an introduction to the diversity of the social and creative aspects of Tlatilco. I have discussed the complications that arise with using museum collections as well as only having grave goods for comparative research. One by one I introduced the different types and I have discussed the variation encountered within the figurines in the SDD to establish a sense of identity of the people who made and what they may have represented for the population at Tlatilco. As will be seen in the next section, there are a lot of similarities between figurines and vessels, particularly the anthropomorphic ones.

4.3. VESSELS

I now move from figurines to a discussion of vessels, which teach us a great deal about the social environment at Tlatilco. The daily ware found in abundance supports Tlatilco as an established community, while the effigy vessels inform us of the importance of the many animals depicted and supposedly inspired by their surroundings. These attest to the skill, imagination, time and resources that went into creating such shapes and forms. Some of the most common themes seen in the effigy vessels are coatimundis, ducks, and fish, but also peccaries, monkeys, armadillos, and rabbits are not unusual. In addition to the animal effigy vessels are a large corpus of

anthropomorphic vessels either as seated hollow figures an extending spout, or bottles with the neck extending from a figure (see Niederberger 1987:232-241,489, 532-33).

It is from the analysis of the vessels that it becomes clearer how problematic it is to study any culture solely based on museum collections. For this study, there are a few other resources available, but these are limited to vessels within funerary contexts, and it cannot be assumed that they resemble the whole picture. One of the issues related to studying vessels from these collections is that they were often donated to the museum, and not something the museum was responsible for choosing. The repertoire of vessels is often limited, and certain types were simply not represented, unlike the figurines which seem to be covering the full spectrum. Weaver (Porter 1953) published an extended account of the vessels encountered during Season II (see Appendix E Part I and II). Combined with the grave good records from Season IV, it becomes clear just how many shapes and types I did not encounter in any of the museums. The number of vessels would vary a great deal from museum to museum. Some would have only daily-ware while others had effigy vessels, and others had both. While these titles may be miss-leading as I am not in a position to actually determine if a vessel is potentially a daily-ware vessel, as first and foremost, they all seem to come from funerary contexts. My intention is to distinguish between dailyware, imported ware, and effigy vessels, and one category does not eliminate the other.

4.3.1. DAILY-WARE VESSELS

It is presumed that calabash gourds were used as daily ware and served as inspiration for bowls and bottles. The *tecomate* bowls (see Appendix E, Part 2.13), which are some of the finest executed in all of Mesoamerica, known only from the

Early Formative period, are the hallmark of these gourd-shaped vessels (Karl Taube, pers. comm. 2019). At Tlatilco, ceramic vessels have been found in a large variety of types and shapes and many do reflect gourds (see Appendix E). Typologies based on these vessels have been useful for relative dating, as well as to detect possible foreign influences. As can be seen in Appendix E, Weaver (Porter 1953) described how characteristic each of the thirteen vessel types from Tlatilco were as either common, uncommon, or just a few examples. Variations as well as new shapes were demonstrated in the subsequent pages although without information on the quantity. Effigy vessels were not prioritized in her publication.

Out of the thirteen types of vessels introduced by Weaver (Porter 1953), only seven were actually encountered in the museum collections, and often just one example (Appendix E; Part 1.a,c,d,f,k). In the SDD there are 396 vessels, of which 294 are labeled as being from Tlatilco. Eighty-eight of these are effigy vessels, the rest are presumed daily-ware. One third of the daily ware vessels are bottles in various shapes and sizes. It is somewhat surprising that with this many so-called daily-ware vessels, not all the types were encountered, especially considering that several of those omitted were commonly found at Tlatilco. This supports the idea that these "simpler" vessels were in fact not daily-ware material. Among the ten vessel shapes and variations she subsequently introduces (Appendix E, Part 2), the majority of those were in fact encountered. However, there are other forms and shapes that she did not mention, which are represented in the burial records to attest to their origin at Tlatilco. These included the triple tiered gourd-shaped vessels, as well as bottles that look like

a vase with a small vessel on top (Appendix E, Part 2.11). Just one vessel has been found with stucco paint on it from Burial 60 Season II (Porter 1953: 48; Patricia Ochoa C. pers. comm. 2017), today on display at the MNA (Appendix E, Part 2.12).

One of the most common daily-ware vessels from Tlatilco (see Appendix E, Part 1.a) is also fairly represented in museum collections. It is a brown-ware tecomate bowl with an incised geometric design, usually extending downward from the rim. There is variation in how the incised lines are executed, but ultimately, they are very similar. Within the museum collections, a few contained cinnabar (Figure 4.17). There is even one for sale in 2019 on eBay containing cinnabar (see Appendix G.IV). Cinnabar has been found on most of the burials from Season IV and must have played a significant role in the rituals surrounding their funerary practices.



Figure 4.17 Brown bowl with geometric design, and one including cinnabar, the one on the right is a variation of the tecomate bowls (left to right; SDD643, 335, 148).

The triple tiered gourd-shaped vessels introduced in Section 3.2.7. (see Appendix E, Part 2.12) appear to have been introduced from Capacha (Kelly 1980:72). Similar ones have been found at San Pablo (Grove 1970:66). Although only one such vessel was excavated within one of the burials at Tlatilco, several have been encountered in the museums. The same question arises repeatedly, whether they are

from Tlatilco or from another site. Eventually INAA could establish this, and since it appears that obsidian was traded from Tlatilco to Capacha (Kelly 1980:32), these vessels may in fact have been traded rather than been locally made.

In addition to tiered bottles and the more common long-necked bottles, there are a few other types of bottles represented (See Appendix E, Part 2.11). The large gourd-shaped type with concave sides is another of the bottles commonly found at San Pablo and has been uncovered in four burials from Season IV (Burials 99, 104, 184, and 197). Burial 184 additionally contained the one example of the triple tiered vessel. There are a few examples of what appear to be a bottle placed on top of a vase, which has been encountered in Burial 144 from Season IV. There is one example of a large gourd-shaped vessel with two long-neck spouts but no evidence of these from the burial records. The stirrup-spout vessels come in both a smaller variation as well as the generally larger versions, as do the majority of the gourd-shaped vessels.



Figure 4.18 Bottles from Tlatilco with elaborate designs.

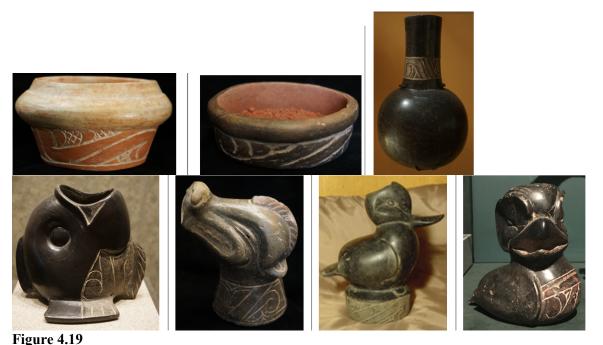
The design on the majority of the vessels in this category is geometric, whether incised or painted. Although the design does not appear abstract at first, there are a few bottles, where the design, when viewed from above, turns into a flower or star

(Figure 4.18). Commonly the vessels are dark brown or red-on-buff, but dark red or lighter orange also occur. In addition to incised and painted, other methods applied are fluted and cross-hatched.

4.3.2. IMPORTED VESSELS

Imported vessels, particularly from Olman, were present at Tlatilco. It appears that vessels, in contrast to figurines, were among the preferred imported goods, possibly because of their abstract designs, but presumably also the color and quality. The imported vessels are usually either black or white slipped, white (often referred to as kaolin), and sometimes orange and white. These are colors not otherwise seen among the Tlatilco material with exception of orange or red. However, it is a different hue of orange, and the imported vessels with orange are always combined with white slip. The common Olmecstyle vessels imported are particularly the black-ware bottles, often incised, which must be imports from San Lorenzo, whereas the white-ware, such as tecomates and spouted trays, probably funnels, most likely represent the Las Bocas area (Michael Coe, pers. comm. 2017; Coe 1965:13). In the state of Veracruz, at the Early Formative site of El Trapiche, two kilometers south of the Postclassic site of Cempoala, white ware has been found in abundance (Porter 1953: 48). Generally, ceramics from the Early Formative period have not preserved well in this region due to the acidity in the soil. This complicates our understanding of trade and exchange between these sites and regions. Whether these whiteware vessels from El Trapiche were imported from Las Bocas where white-ware is very common or if Las Bocas and Tlatilco imported them from Veracruz can be solved with future INAA data.

Possibly, the idea of zoomorphic vessels could have been introduced from the Olmec. Some of the finest effigy vessels found at Tlatilco are supposedly imports from San Lorenzo, such as a black fish and black ducks (Figure 4.19), all with the Limón-Carved incisions known from San Lorenzo (see Coe and Diehl 1980:172). These, along with the black bottles, often have the same Limón-Carved design varying between depictions of the skyband, cloud-scroll, or a manifestation of the avian serpent commonly depicted as the Olmec paw-wing motif (Taube 1995:84, 86). The preferred vessels for the (paw-)wing motif are bottles, either with flat bottoms with vertical sides, or bottles with wide cylindrical necks, or effigy vessels such as bird and fish. The cloud scroll, skyband and avian-wing motif has been found in several places outside the Olmec heartland, besides at Tlatilco, such as at Las Bocas, Tlapacoya, Chalcatzingo and at San Jose Mogote in Oaxaca.



Top row: Vessels with skyband: white-ware with orange from Las Bocas; bowl with red cinnabar from Tlatilco; black-ware bottle, Olmec (SDD 615, 1336, 881, and from PUAM, SLAM, AMNH). Bottom row: Fish, coatimundi, and two ducks (SDD 1433,794, 169, 214, from MNA, SLAM, NGA, MFAB).

Some archaeologists, who are less in favor of the idea of the Olmec as a "mother-culture," have argued that the presence of these objects do not imply Olmec influence, but rather evidence of trade and exchange of ritual items, and possibly a multiregional agreement on sacred propositions (Coe 1989:74-75; Flannery and Marcus 2005:10; Grove 1989: 11; Marcus 1989:192). However, INAA analysis conducted on selected Olmec-style potsherds from these cultures have attested that the ceramics were in fact locally made at these various sites (Blomster et al. 2005), and ultimately, I believe it is a combination of the Olmec ideology spreading as a result of trade and exchange of ritual items.

4.3.3. EFFIGY VESSELS

A large number of effigy vessels were analyzed, and these are for obvious reasons very attractive to collectors. Although favored for private collections and museums they provide a biased view of Tlatilco when assessing material in museums. Most effigy vessels are black or dark brown, and only a few are seen in kaolin and red-on-buff. Birds seems to be the favored animal to depict and they come in a large variety of shapes. Often, they are very naturalistically executed, but there are also more abstract versions (see appendix E, Part 3.1). Coe (1965:13, 58) has identified the ducks as the only Mexican duck with a long, spoon-shaped bill expanded at the end known as the *Spatula clypeata* species, or the Northern Shoveller. Fish are often depicted in brown-ware bowls from Tlatilco, whereas the larger black-ware fish-shaped vessels appear to come from San Lorenzo (see Figure 4.19 above, Appendix E, Part 2.14; Coe 1965:50-51). Some of these flat bowls could potentially also represent birds and not only fish, as there is slight variation in them, and it is difficult to distinguish stylized wings from fins. Symbolically, the fish are representative

of water, and probably the reason for their importance and frequent depiction. Why they are more frequently depicted on flat bowls potentially used for serving, unlike the actual fish-shaped versions, is unknown. Perhaps fish was served (during rituals) in these bowls (see Appendix E, Part 3.4). Coatimundis, often mistaken for opossums with the difference being in whether the snout is turned upwards as seen on the coatis (Karl Taube, pers. comm. 2019), is almost as common as the birds and fish. Peccaries, rabbits, armadillos, and monkeys are the other animals depicted. Jaguar and other felines were not detected in the corpus of material except from the Olmec-style ballplayers or as incised designs on bottles.

In addition to the animal effigies there is a category of miniature effigy vessels (see Appendix E, Part 3.6). These are often no more than five to ten centimeters tall and depict the same motifs as the larger vessels, including humans. The majority have two or three small holes close to the rim. I believe these serve as a way to attach a lid. The compartment is often very small and only very concentrated substances, such as pigment, would make sense to carry in these. They did not function as drinking vessels. Many of them have red pigment in the cracks and crevasses suggesting that either they contained pigment, or they were part of funerary goods and rituals where pigment was included.

Little is known about how the Tlatilcans lived. Earthen platforms have been recovered and are presumed the foundation for their houses. They would bury their dead below and around the houses (Coe 1965:10). Covarrubias sketched out what he envisioned a house at Tlatilco may have looked like based on the earthen platforms functioning as house foundations (Figure 4.20). There is one other record of a house which is to be found among the vessels. This was not encountered at any of the museums I visited but can be

found in *The Jaguar's Children* (1965:63). The style does not resemble anything known to me or visible at archaeological sites today. The scroll sign making up the second panel around an assumed "doorway or window" is seen on several of the vessels discussed above, but its connection to this house us unknown to me.



Figure 4.20Ceramic house effigy vessel from Tlatilco with scroll design around the doorway (Coe 1965:63) and Covarrubias' sketch of house (housed at BACE).

Human effigy vessels are another large group found at Tlatilco and come in any form imaginable. There are some that look like large hollow figurines, but with one or more spouts extending from the head. However, I have some reservations about whether these are in fact from Tlatilco. It does not appear that they have been encountered in any of the 400 burials from Season II and IV. Considering that they are essentially a variation of the DK type, which has not been encountered at Tlatilco (within burial contexts), I believe this is a type only seen in Morelos at such sites as Gualupita and San Pablo. Considering the close connection between San Pablo and Tlatilco, there is no logical explanation that comes to mind as to why this type was not traded with or was locally made in Tlatilco. There are,

however, other human effigy vessels, and there is no reason to believe that the DK effigy vessels could not also have been made at Tlatilco, considering the elaborateness and creativity of the other vessel types, as well as regular D3 figurines.



Figure 4.21 Three anthropomorphic effigy vessels (SDD1075, 652; Coe 1965:40) and a bird (SDD736).

There are a few vessels where the spout or handle extends into what appears to be a figurine. This is a rather ingenious technique where they combine the two forms and concepts, that is, vessel and figurine. There are several examples that build on the shape, style and designs as seen on the stirrup-spout vessel, where the stirrup-handle has instead been exchanged for a figurine spout, while others have circular or ring-shaped bodies (Figure 4.21). Coe (1965:40) introduced these ring-shaped vessels and I encountered two like it in the SLAM collection which were similar but instead had what looks like simplified or abstract bird heads. Other anthropomorphic vessels (Appendix E, Part 3.7), represent seated humans as large and rounded, or aged. There are generally not many representations of individuals besides young females, and aged figures are rarely depicted. These seated and rounded anthropomorphic vessels look as if they are pondering about something with their hands resting on the chest or face. There are several unique vessels that show just a few attributes of human features, such as a face or faces added to a vessel, or a handle

extending into a leg (see Niederberger 1987:445). Contortionist vessels are another interesting concept. They have already been mentioned a few times, and the there is little to add other than that they manifest in this corpus of humanoid depictions (se Niederberger 1987:231,452-53).

To sum up, these typologies of the ceramic vessels serve to provide an understanding of the complexity that surrounds Tlatilco and its relationships with its contemporaries. The technologies applied to create these objects is another testimony to the complexity and available resources that allowed the people of Early Formative Mesoamerica to express their artistic skills. It seems there were no limits as to what was depicted, although certain animals, features, and iconographic designs received more attention than others, supposedly because of their ideological connotation in society. The many iconographic details expressed in the vessel corpus, offer a clearer understanding of the usage of some of the other objects such as figurines as discussed previously, but also the sellos and instruments which are being introduced in the following sub-chapters.

4.4. SELLOS

There are two types of sellos found at Tlatilco: roller stamps, and flat stamps. Roller stamps, usually between five to twelve centimeters high, are cylindrical and either hollow or solid, which leave a motif upon being rolled out. Sometimes the motif is abstract or geometrical, other times it is an iconographic depiction, usually of something naturalistic, like an animal or flower. The flat stamps, usually between two and five centimeters long,

convey a much shorter message, such as darts or feet (see Figure 4.22), presumably used to indicate movement or direction. Field (1967:5) chose to refer to all of these as sellos to refrain from distinguishing them and I will continue this approach.



Figure 4.22 Two dart shaped stamps, and four foot-shaped stamps (SDD225, 278, 1604; Grove 1987b:275; SDD273, 572).

Field's (1967) research in the 1960s involved more than 300 sellos from Tlatilco at the MNA. Not having had access to the vault at the MNA, it is not known to me how many of these would be housed at the MNA, but only a handful are on display. Sixty-nine sellos are included in the SDD, of which the majority are not from Tlatilco. Sellos were introduced to Tlatilco from the Olmec (Porter 1953:25), and it is very likely that the majority of the sellos found at Tlatilco are imported rather than locally made.

The three sellos from RMM's collection were not sampled for INAA due to the risk of breakage. Sellos are usually small and can be easily carried and transported between sites. Many of the sellos encountered in the collections resemble one another. Grove (1987b:275) has compared roller stamps and flat stamps from Tlatilco, the Olmec area, as well as Chalcatzingo showing the resemblances of these. Not many roller stamps have been found in the Olmec area (one reason could be that they have not preserved in the acidy soil). Generally, they seem to share many similarities and sellos labeled as being from Tlatilco, Las Bocas, Chalcatzingo, or San Lorenzo could all be correct, or they could be

wrong. The designs are interchangeable, and without INAA or other sourcing method, it will be impossible to establish place of origin, unless there are records of archaeological context, and even with these methods, it will be impossible to determine if they were moved in antiquity or in the 20th century. To complicate matters, sellos from Cantón Corralito in the state of Chiapas share many attributes with the typical Olmec seals found both at Las Bocas and Tlatilco (Cheetham 2007: 62-65). There is one flat foot stamp from Chalcatzingo which is practically identical to a flat foot stamp from the collection at NMAI labeled as being from Tlatilco (Figure 4.22). This is very interesting as potentially there could be a few hundred years between manufacturing unless some of these would be heirlooms.

From Season IV, out of the 213 burials, five to six individuals (all within the age range of seventeen to thirty), are buried with sellos; Burials: 27 (female, one of the richest burials, flat stamp with scroll design), 74 (unknown, roller stamp with wavy design), 106 (male, flat stamp foot with unique imprint), 117 (female with black teeth, only three people recorded from Season IV had black teeth, roller stamp in odd conical shape with deep groves), 145 (male, possibly a sello, very fragmented), and 146 (male, roller stamp with star and circles).

Covarrubias (1957:26) was the first to compare the marks on figurines with the designs on roller stamps and seals and deduced that the seals and stamps were used for the decoration of human skin. Comparing the designs on the figurines which are often linear or geometrical, I believe this is a valid reasoning. Although many of the roller stamps also depict animals such as centipedes and ducks, which have not been detected on any of the

figurines. No textiles or paper have preserved from Tlatilco and it us unknown if these imprints would have adorned the clothing they wore, or messages they wrote. According to Coe (1965:54) footprints have been found on the faces of some of the figurines from Tlatilco, although none have been encountered in the SDD. Considering that several sellos have been found with the same, or almost the same depiction, it is difficult to determine if these could have been for specific individuals rather than concepts. However, I do not believe that all imprints from the sellos would have been reserved for human skin, and none of the designs on vessels indicate any resemblance to the sello imprints, perhaps with exception of the scroll sign seen on vessels from San Lorenzo. The flat stamp from Burial 27, Season IV could not actually have made the imprints seen on the vessels, but it bears resemblance.



Figure 4.23 Olmec roller stamp (NMAI).

That the sellos were introduced by the Olmec is very likely, as they seem to have introduced practically anything abstract. One specific roller stamp with Olmec design, supposedly found at Tlatilco in 1948 by brickyard workers, has depictions that have been suggested to be the earliest writing in Mesoamerica (Kelley 1966:744). Since nothing else has been found like it at Tlatilco it is safe to assume that if this is writing, it was not something that was generally practiced at Tlatilco. One other roller stamp ascribed to Tlatilco is pure Olmec (Figure 4.23). Unfortunately, neither were found within archaeological context. The Olmec art was widespread and presumably quickly adopted along with the ideological meaning it must have conveyed.



Figure 4.24Person from Altihuayan, Morelos (left, first image from mesoweb.com). Sellos (center) with star motif (SDD1243), star motif and rabbit (SDD1605), and one with a design that very much resembles the skin worn by the Person from Altihuyan. Bottle (right) with avian serpent (seal from Las Bocas, SDD1187).

There is one Middle Formative large hollow figurine from Altihuyan in the state of Morelos, who Taube (2018:42) has argued is wearing a fine animal pelt of a crocodile on his back with an elaborate incised design. This animal is very likely a representation of the avian serpent (see Garton & Taube 2017, Paradis 2017:142; Taube 1995:84). The pelt worn on the back additionally bears striking resemblance to a roller stamp reportedly found at

Las Bocas (Figure 4.24) and is a motif seen on bottles and Calzadas Carved vessels from San Lorenzo (Coe and Diehl 1980:167; Niederberger 1987:223). Additionally, among the some black-ware bottles are incised with the design of a star, which is a common design on roller stamps from both Tlatilco and Las Bocas, and one was found within Burial 146, Season IV. Sellos must have had a more significant function than simply body adornment, and the fact that they have traveled throughout Mesoamerica sharing designs, have been modified and presumably reinvented with new combinations, supports this.

4.5. MASKS

Masks have been found at Tlatilco in various forms, often depicted with somewhat horrific expressions. When analyzing the masks, certain details have been noted. There are various kinds of masks represented at Tlatilco. The predominant type tends to be thirteen to fifteen centimeters in diameter, and perfectly rounded with large round, sometimes slanting eyes, and open wide mouth with a tongue sticking out, eyebrows, usually unibrows, and with a crest on top of the head and one on the chin, resembling a beard. These masks are often painted in red and yellow colors, sometimes with red lines. This is not the same design commonly seen on the faces of figurines, which usually include more triangular. Other types of masks found at Tlatilco vary in size and expression and cannot be easily grouped. There are so many variations, of which often there exists only one example, and this makes comparison so much more difficult. Presumably, masks were introduced by the Olmec from San Lorenzo, where masks very early on depicted rain gods as related to the ballgame. The game is identified with fertility, sacrifice, water, and agriculture. Rain and agriculture were

tied to wealth and rulership, and the ballplayers at Tlatilco and San Lorenzo often wear the mask of the Olmec rain god (Taube 1995:87-88, 100, 102).

The most iconic mask is the half dead half live mask from the Covarrubias collection, but not from one of the excavated burials (see Appendix B). While the majority represent human faces, there are a few masks with wild and fierce animal features depicting animal heads such as ducks or jaguars (Figure 4.25). These are possibly associated with the animals' magical aspects and the duck faced could be an early rendition of the Wind God (Taube pers. comm, 2019). Even though they are small in size, perforations indicate that they would have been worn, and Coe (1965:54) compares the masks to those of the modern-day Yaqui of the Sonora, who would wear these masks during convivial ceremonies. The Yaqui entertainers would dance and wear leg rattles while performing moves similar to those seen in the Tlatilco figurines.



Figure 4.25
Masks of fierce animals (left and center, SDD1522, 1520), duck faced (SDD548).

There is one unique mask in particular from Tlatilco whose face possibly resembles that of a toad (Figure 4.26). In addition to its main face, two other faces are depicted; one on the chin which resemble Tlatilco figurine faces, and the second, which is centered around the mouth of the mask, resembles a toad in profile. Although toads are not

commonly depicted, there are a few examples of miniature frog vessels. Toads are representatives of water, and it does not seem unlikely that they were manifested in the art at Tlatilco as well. There is an example of an incised toad with a protruding tongue on a bald head of the "Shaman in Transformation" (Shaman) stone figure located at PUAM. F. Kent Reilly III (1989:9) argues that the motif is a symbolic verb indicating that the displayed individual is in an act of transformation. The toad has a protruding mouth with a tongue sticking out, which the majority of the masks found at Tlatilco have. Building on Reilly's example of toads, the general transformation from tadpole to toad is of importance symbolically, and potentially these masks were associated with rituals of transformation.



Figure 4.26 Three in one face with potential toad feature on mask (SDD193 from DYM).

The idea of masks being associated with transformation rituals is supported by another transformation figure, the Hauberg-Dumbarton Oaks figure of a kneeling were-jaguar. Unlike the Shaman, the chin of the kneeling were-jaguar is preserved, revealing a small beard (Furst 1968, 1995; Reilly 1989:12). Out of the eighteen conventional Tlatilco masks in the SDD, at least eleven have a chin beard, and seventeen have an either knob or crest on top of their heads, representing the transformation process, possibly symbolizing the emergence of maize. Travis Stanton (pers. comm. 2019) has suggested that these masks look like they are vomiting, which could support the idea of them being related to hallucinogenic and transformational rituals, and potentially, vomiting induced from consuming substances like toad venom.

From Weaver (Appendix A), eight burials from Season II contained masks, of which only two to three appear to have masks of the 'toad-style'. Unfortunately, the report yields no information about the individuals (e.g. sex, age), only what other grave goods the individual would additionally have been buried with, ranging between seven and twenty-seven objects. However, the burial containing only seven objects contained three masks (one fragment) (Burial 119). Other burials containing masks of the other variations also ranked high, with between sixteen and fifty-five grave goods accompanying. This clearly stresses the relationship between the mask-rituals and the elite or wealthier individuals.

4.6. Instruments

Musical instruments have been found in vast numbers. There are sphereshaped rattles, sometimes shaped like rounded human figures, and animal-shaped whistles. Instruments were found primarily, but not only, in female burials, suggesting that making music was not limited to either men or women, but that music might have been dominated by female musicians (Tolstoy 1989:30). This may correlate with the argument in 4.2.12 about female figurines wearing skirts who were involved in rituals, potentially related to music.



Figure 4.27 Human effigy whistle, bird whistle, and a baby with rattle or ball (SDD199, 680, 834).

Of the many rattles encountered, the majority have either incised or painted lines, along with firing holes. Presumably these lines are replicating the natural lines occurring while manufacturing rubber balls, which are made by layering thin layers of rubber (Manuel Aguilar pers. comm. 2018). An Olmec-style baby figure from Las Bocas (Figure 4.27, right), is seated holding a ball, which shares the same or similar lines as those seen on the rattles, and as discussed above. There could be a correlation between the ballgame and rattles potentially used in rituals, but Karl Taube (pers. comm. 2019) suggests that the rattles, which do not actually make much sound, most likely functioned as toys for children.









Figure 4.28 Variation of the anthropomorphic dog whistles (SDD1230, 1529, 294, 759).

The other type of instrument found at Tlatilco is whistles. In the SDD there are fifteen whistles. There is a representation of a bird and one of an anthropomorphic figurine whistle (Figure 4.27; see Niederberger 1987:466), while the other thirteen are anthropomorphic dogs (Coe 1965:55). The variation within these thirteen anthropomorphic dogs is remarkable but they appear to all be representing the same concept (Figure 4.28). Presumably, these are the ones Covarrubias (1957:19-21). mentioned when he was awed by the ingeniousness of an animal depicted wearing a human mask, as when liquid poured out of the funnel-shaped tail, the animal's ears make a whistling sound. Whether these were meant to whistle from liquid or air blown into them is uncertain to me. It seems Covarrubias tested them with water and that they actually whistled. The effect created by pouring liquid from these instruments must have created a dramatic illusion. Interestingly, the four-legged animal these whistles represent, which supposedly is a dog, are not otherwise depicted in the effigy vessels. However, dogs are known from several other contexts, such as skeletal remains within the burials, and figurines fondly holding dogs. Dogs, unlike any other

animal must have been held in high esteem as they are the only ones represented with the figurines, and these whistles are depicted as anthropomorphic dogs.

4.7. MISCELLANEOUS

Tools made of other materials than ceramics included sharp stone axes, celts of hard polished green stone, likely hafted onto wooden handles; knives, drills, and scrapers of flaked obsidian and flint; awls and needles of bone; and flaking tools of deer antler; granite mano and metates (grinding stones); and pyrite or hematite mirror fragments. Adornments include necklaces with beads of jade, other stone such as quartzite, or shell. Pectorals and pendants, some found in the shape of jaguar teeth made of jadeite, are believed to have been imported from or inspired by the Olmec (Covarrubias 1957:19; Moll et al. 1991; Porter 1953:27; Weaver report n.d.). As barely any of these objects have been found within the museum collections, I will not do a thorough analysis of these objects. However, from the burial records it is clear that individuals were buried with such artifacts, and potentially they play a central role in the rituals surrounding funerary practices, whether for the afterlife or a representation of part of the identity of the individual and their profession while living. Some of the objects attest to privilege, as they represent exotic goods that were imported into Tlatilco.

4.7.1. JADEITE

During the Early Formative period, it seems that a blue-green jadeite was the favored stone of choice for making pendants, as very few objects have been recorded made

of the bright green jadeite commonly used by the Classic Maya. This has caused some controversy regarding the source of the blue-green jadeite. Today the natural resource has been used up and is difficult to source, but everything points towards the Motugua river in Guatemala as the only ancient source for jadeite (Taube et al. 2004). Valuable green stone (jadeite and serpentine) was used in large quantities by the elite at La Venta but it was less frequently used at San Lorenzo. Jadeite has been transported as far as to the Basin of Mexico as well as Guerrero, introduced by the Olmec on the Gulf Coast. It signifies precious rain and water and has played a significant role for many cultures to express their ideologies (Coe and Diehl 1980:35; Griffin 1993; Taube 1995:99; Taube and Ishihara-Brito 2012:136; Taube et al. 2011: 143).

Jadeite was not common at Tlatilco, but it has been uncovered within several burials. From Season II, Burial 60 (two drops of bright green jadeite (beads?)) and Burial 153 (one jadeite bead). Season IV, Burials 46 (fetus; six jadeite beads (and sixty-three shell beads)), 95 (22-24 year old, female; one jadeite bead (and twenty-three shell beads)), 142 (20-24 year old, male; one jadeite bead), 144 (21-24 years old, unknown sex; eleven jadeite beads), 154 (40-45 year old, male; one jadeite earspool (and one acrobat vessel)), and 156 (22-25 year old, male; seventeen jadeite beads (and fifty-six bone beads, and two bone earspools)). Additionally, between Season I and II was a hiatus of several years where no archaeological excavations were being conducted at Tlatilco. Most likely, this was when dealers acquired the majority of the artifacts, we see in museums today. Reportedly, in November 1944, a twelve-year-old boy named Spencer MacCallum bought 806 jade beads from a brickyard worker who was in the process of straining them out of the clay. Most of

them were a smoky blue color and twenty bright green ones, all in a melon shape and are presumed to have come from one necklace (Griffin 1993:209; Niederberger 2000:174). This story was told to Griffin by MacCallum himself, and there is little reason to doubt it, although there is no record of what happened to the beads. However, that the beads would have all come from one necklace seems less plausible. Niederberger (2000:174) adds that these beads came from a burial that additionally contained a bowl of red ocher, pieces of iron ore, and twelve Manantial phase, fine pottery vessels. Unfortunately, she does not provide a reference to the source of the information.

Serpentine is another green stone encountered, but only two burials reportedly contained it. Burial 137, Season II, contained three serpentine celts. Burial 27, Season IV (17-19 year-old, female), which is one of the richest burials found at Tlatilco, contained fifty-four serpentine beads (flat and slender), along with four shell beads, a conch-shell pendant, eight figurines (D4 and D2) and seven vessels. According to Arturo Romano, while he was a student of Covarrubias, went to Covarrubias' house and was shown a jadeite piece from his collection reportedly from Tlatilco. This was a crocodile consisting of three connected links carved from one piece of jadeite (Williams 1994:174). We may never know how many jadeite artifacts came from Tlatilco as none of these, so far, have made it into museum collections.

4.8. Instrumental Neutron Activation Analysis

Having isolated and grouped the results from the Instrumental Neutron Activation Analysis (INAA), the Tlatilco data were compared to compositional reference groups previously reported for the Basin of Mexico (BOM). These groups provide a glimpse into the compositional variation that exists within the valley region (Figure 4.29, left). Previous sampling strategies and derivation of nine groups is given in Stoner et al. (2014) where their separation has been discussed. Compositional differences in the BOM groups has been illustrated using discriminant analysis. As these reference groups pertained to a later time period, largely Postclassic, it is reasonable to expect that some changes occurred in paste preparation recipes since Preclassic times. The individual Tlatilco compositional profiles were compared against the BOM individual groups. None of the Tlatilco samples were found to lie within a 90% confidence interval of any of the BOM groups given the sample's Mahalanobis distance from the BOM group's multi-variate centroid (Bishop and Neff 1989).

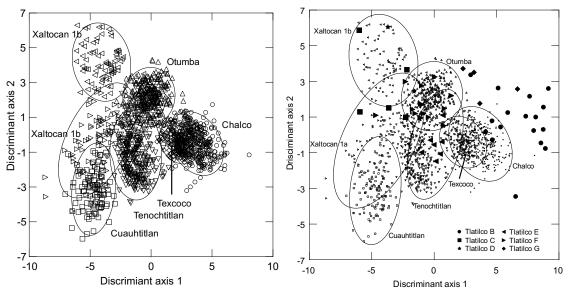


Figure 4.29Basin of Mexico Compositional Reference groups (left). Reduced size of the Basin of Mexico reference group symbols (right).

Divergence of Tlatilco pottery from the established BOM groups can be illustrated by projecting the Tlatilco paste data onto the axes previously used. The individual BOM group symbols have been reduced in size (Figure 4.29, left) while retaining the ninety percent confidence ellipse, thus allowing the Tlatilco symbols to be more readily seen. Especially notable in the discriminant space represented by axes 1 and 2 is the divergence of Tlatilco Group B. Although some of the other Tlatilco ceramics show overlap with BOM groups in the two discriminant dimensions shown in Figure 4.29 (right), there is no overlap at the ninety percent confidence level in the full discriminant space.

4.8.1. DISCUSSION

Multiple groups and clusters were detected upon analyzing the sampled material from Riverside Metropolitan Museum. Originally eighty objects were sampled, of which half were from the Late Formative culture of Chupícuaro. Chupícuaro will not be discussed here but can be viewed in Figure 4.30 (left), in relation to the Tlatilco material. Chupícuaro has been grouped together as Group A and has been omitted from the other charts. The groups and clusters from B-G will be discussed below. Figure 4.29 (right) shows the relationship between the four groups known from Tlatilco, and does not include Clusters D and G, which are clusters of unidentifiable objects. The groups, unlike the clusters, share a mean of standard deviation which allows for statistical evaluation. Based on these groups and the comparative analysis discussed above, I discuss the patterns that I see with the data I have at hand.

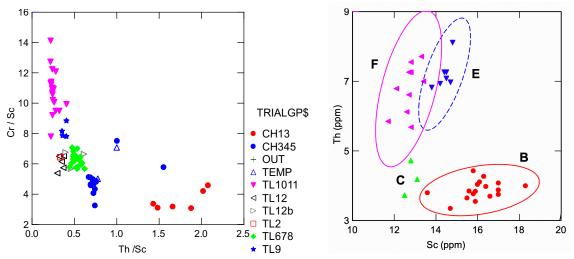


Figure 4.30

The first graph (left) represents the first approximation of the groups based on a dendrogram. Depending on which elements are emphasized, the graphs will change. This figure offers a good view of the distribution of the different clusters and groups, including Chupícuaro. The second graph (right) shows Group B and F, which are the two main Tlatilco groups. Group E is the so-called fakes, and Group C, representing a few key Tlatilco objects, is evaluated using their thorium and scandium elements.

Group A: From Chupícuaro, the red and blue dots, have not been reported on but can be viewed in Figure 4.30 (left). The graph clearly expresses the different composition between Chupícuaro and Tlatilco when comparing their values of Chromium/Scandium against Thorium/Scandium, attesting to different locations for manufacturing.

Group B: This group, along with Group F (see Figure 4.30, right) are the two main groups from Tlatilco containing nineteen and fourteen objects respectively (see Figure 4.31, left). Following the analysis of Tlatilco material, it is my assessment that majority of the objects in Group B represent artifacts commonly found at Tlatilco, with the exception of RCM 60 and RCM 85, which both appear to be outliers. As these groups are based on specific chemical compositions where there was the greatest match when compared, outliers can occur as certain compositional traits are shared. Group B contains all of the D2

figurines from the RMM collection. This is a significant observation as potentially this could mean that D2 were either manufactured elsewhere on site or are earlier or later in time attesting to possible different phases. Afterall, Tlatilco existed for approximately 300 years.

The vessels from Group B represent some of the daily-ware types commonly found at Tlatilco. RCM 116 is the shape commonly found at San Pablo. As D2 figurines are known to have been found in Morelos, including at San Pablo, it is interesting that there is a correlation between the vessels and figurines in this group and what appear to be a shared ceramic tradition. As these objects are locally made, it prompts the notion of extensive contact. As very little Olmec material has been associated with San Pablo (Grove 1970), it is likely that D2 and these large gourd-shaped vessels are among the earlier stages of the Early Formative, and potentially San Pablo declined before the Olmec fully spread to the Basin and Morelos.



Group B (left). Group C (right).

Group C: Even though Group C only contains five objects (Figure 4.31, right), it is possible to group them as stylistically, two of the vessels (RCM 52, RCM 124, and possibly RCM 117) and one figurine (RCM 54) allow us to recognize them as being from Tlatilco. The composition determines that these objects originate from the general Tlatilco area. The other one or two objects in Group C are outliers, and as described in Group B, share some compositional traits. It is significant to establish that the stirrup-spout vessel and double faced D1 figurine head were locally made. The stirrup-spouts are a tradition possibly introduced from South America, and there are many examples of these having been found both at Tlatilco and San Pablo.

Cluster D: This group contains two objects which have no statistical evaluation, as the sample size is too small to understand any group behavior. The objects are not typologically identifiable as being from Tlatilco (see Figure 4.32, left).



Figure 4.32 Group D (left). Group E (right).

Group E: Group E is very interesting, as I am convinced that they are all fake (see Figure 4.32, right). This sample, unlike the other analyzed objects, does not come from the RMM collection. Instead, a collection of six Tlatilco figurines and one leg belonging to the Brookhaven National Laboratory were sampled as part of a larger study on figurines in the Basin of Mexico. The INAA results attested that they came from Tlatilco (area) (Abascal-

M. et al. 1974:81). Abascal-M. had reportedly purchased the objects in Mexico around 1970 and brought them back to the United States. Having analyzed more than a thousand figurines from Tlatilco and Early Formative central Mexico, there is little doubt in my mind that these figurines and one leg are fake. When analyzing these objects, I found that they have odd shapes. They do not resemble the "standard" figurine nor are they of the quality of the figurines encountered from the Formative period. Although plenty of the attributes at first glance would look like Tlatilco, holding them and getting a feel of the clay informs me that they were very differently fired, as it is much finer and lighter, attesting to a different temper (fill) and different temperatures used when manufactured. The way the attributed features, such as skirts, rattle legs, ribbons, and hair have been applied are also very crudely done, and do not resemble the otherwise fine techniques usually embodying the manufacturing of Tlatilco figurines. Particularly RAT001 (Figure 4.32, right) strikes me as most erroneous as the supposed legs ending in bulbs simply do not represent anything encountered elsewhere, but rather an attempt at imitating and combining various attributes into one.

Essentially, this could be confirmed or refuted by using thermoluminescence analysis, which provides a relative date of firing, however, this type of analysis has not been conducted to support this argument. Considering that the objects were purchased right after the termination of the fourth and final archaeological season, one speculates that the objects were manufactured around this time as a last attempt for dealers to earn money off of the previously fertile business that was to sell original Tlatilco objects to collectors.

Group F: This group contains fourteen of the Tlatilco objects and allows for a nice sample to establish a group (see Figure 4.33, left). In Group F we see the two Olmec-style figurine fragments, the one D1, and all of the type K figurines. Building on my hypothesis discussed in Group B above, I think this group supports that D2 and some of the large gourd vessels at Tlatilco and San Pablo could be pre-Olmec. The one ballplayer figurine head fragment from the collection along with an Olmec head fragment (RCM 55 and RCM 62) were also found within this group and were both made locally. That Tlatilco adopted Olmec ceramic traditions following a phase of Group B-style objects is very likely what is represented here.



Figure 4.33 Group F (left). Group G (right).

Cluster G: Cluster G contains four objects, and the reasoning is the same as Group D, there is not enough evidence for any statistical evaluation (see Figure 4.33, right). However, figurines RCM 86 and RCM 88 appear to be a potential cluster of objects from a site known as San Juanico and which is not included in this study. San Juanico is in Covarrubias' chart labeled as type B figurines (see Chart 1.3.), and is not geographically too far from Tlatilco, but it is not an Early Formative site. This is another community on which little has been documented.

To sum up, the INAA analysis has been significant as it contributes to several levels of data. Sampling museum collections is a significant contribution, particularly as many of these objects are unprovenanced. As shown in the data above, the place of manufacturing can be established, offering these objects some context, which they often lack. Additionally, with the established context, assertions can be made based on comparative analysis, such as that perhaps figurine type D2 represent an earlier phase at Tlatilco correlating with San Pablo representing a pre-Olmec presence in the Basin of Mexico. These observations offer a better understanding of the shifting identities at Tlatilco based on social and possibly political transformations as new methods and practices were adopted.

CHAPTER 5 DISCUSSING TLATILCO AND CONCLUDING REMARKS

5. Understanding the Material Record

This chapter is a discussion of what is to be learned from the material record analyzed and discussed in the previous chapters. The analysis of these artifacts, which serve as a foundation for this study, depended greatly on the available archaeological records of some of the many burials excavated between 1942 and 1969. The burial records provide much needed context and enhance the understanding of funerary traditions through observation of rituals, grave goods trends and distribution, and the varied iconographic depictions of figurines, vessels, masks, stamps and seals, and also instruments.

5.1. LIFE, IDENTITY AND IDEOLOGY

Tlatilco was a thriving community at a time when civilization was on the rise in Mesoamerica. Tlatilco had extensive contact with the Olmec of San Lorenzo, a site that is considered the earliest city in Mesoamerica. Although Tlatilco did not rise to the same measures as the Olmec, they left a significant mark. Tlatilco appears to have been a functioning community for about 300 years before the site was abandoned. Why they left will most likely never be known. Perhaps the resources were exhausted, or they ran out of space for new burial lots. A people never just disappear, they move on and evolve, and disperse to be embedded into new cultures, building the foundation for new sites. But traditions may have been lost while the priority of their focus shifted to the importance of finding a new location. What is particularly remarkable is the decline of elaborateness in

the ceramics in the immediate cultures following Tlatilco in the Basin. The similarities between Tlatilco and Las Bocas and the later Middle Formative site of Chalcatzingo, makes me wonder if the people from one of these or both Early Formative sites eventually moved to the area where two large hills most likely symbolize a sacred landscape, resembling an oversized ballcourt.



Figure 5.1 Aged (SDD1519, 1165, 504, 1245).

5.1.1. CERAMIC VARIABILITY

It is not necessary to do an extensive analysis of figurines from Tlatilco to realize that the majority are expressing young and stylistically ideal females. As discussed in the previous chapter, there are variations within these females, whether they wear skirts or are pregnant or seated. There are a few male figurines, but compared to their Olmec counterparts, who primarily depicted male figurines, Tlatilco seems to have stuck to female depictions with few exceptions. One of the reasons that there is a lack of depiction of old age seems to arise from life expectancy. Burials records indicate that few Tlatilcans made it past thirty-five years of age with just one example from excavated and documented burials from Season IV of an individual making it to the age of fifty. There are only a few

artifacts depicting aging (Figure 5.1) encountered in the museums surveyed including one vessel, one figurine, and two masks, similar to two masks reported by Weaver (Appendix A, Burial 195).

Why does it seem that Tlatilco primarily imported vessels and not figurines, particularly the many so-called San Lorenzo black-ware vessels? Were they brought to the Basin containing important goods or is the shape the important factor? The tradition of the slanting Olmec mouth on figurines made it to Tlatilco, but overall it does not seem that the figurines were imported, rather local variations of these iconic figurines were made. The large hollow seated Olmec babies, typically known from Las Bocas, were not uncovered at Tlatilco. There are none in the burial records and similarly for the few records of artifacts from non-burial contexts. Seated solid white-ware figurines have, however, been found at Tlatilco, such as in Burial 162 from Season II. But none of the fourteen Olmec babies represented in the SDD are labeled as coming from Tlatilco. Instead, one was from Tlapacoya, one from the Gualupita, three simply labeled as Olmec, and nine came from Las Bocas. Several of these have incised iconographic depictions on their back or head, sometimes resembling the imprints found on the sellos from Tlatilco.

Animals played a big role in the artistic depictions from Tlatilco. In particular, ducks, fish, and coatimundis are seen in many variations of the vessels. Dogs seem to be the only animal depicted with the figurines, whether displayed in the affectionate moment of being face to face, tucked under the arm, or over the shoulder. Dogs further appear to be the only animal recorded in the skeletal record, with the exception of possibly two felines reported by Covarrubias (see Appendix B). Dogs, and the occasional bird, seem to be the

only animals depicted as whistles, attesting to dogs having had a special status within the household. Birds and fish may be related to a larger ideological belief associated with water (see Section 5.3). The development of the many figurines and the variations is a result of the social transformation that occurred due to the extensive contact with their contemporaries. This corpus of ceramic material which serve as the foundation for this dissertation has, despite being unprovenanced, offered a better understanding of Tlatilco and data has generated new interpretations (see Section 5.2).

5.1.2. POLITICAL AND ECONOMIC IDEOLOGY

The archaeological records, including the burial reports and accounts of grave goods, provide data for understanding the complexity of Tlatilco. This complexity needs to be compared with contemporaneous cultures, and as established above, the Olmec were not only the largest community in Mesoamerica at this time, but also the first to establish actual cities. Even though there was extensive contact between San Lorenzo and Tlatilco, it does not appear that Tlatilco developed into the level of a city. According to Niederberger, there are certain markers that must be present in a community to indicate status as a city (Niederberger 2001:169):

- a) Some form of elaborate political and religious power
- b) Clear social ranking
- c) Planned public architecture
- d) Groups of highly specialized craftworkers
- e) Control and active participation in interregional trade networks
- f) Complex intellectual achievements such as a codified iconography for the permanent recording of certain concepts or events

These six criteria used to assign the status of city to a given society are reasonable, however I believe it would be difficult on the basis of the current archaeological record to designate such a status to Tlatilco. It could be argued that there is evidence of religious and political activity, as seen in the funerary traditions as well as in the many figurines, particularly the ballplayers (which possibly represent the rulers of society), and are a result of the social transformation that transpired as a result of contact between Tlatilco and San Lorenzo. The vessels and figurines shaped as contortionists possibly represent shamans, and would attest to religious rituals, although whether these were public or not cannot be determined.

Social ranking is evident from the distribution of grave goods. There are clear differences in the number of objects each individual was buried with, in addition to the quality, uniqueness, and prestige of the grave goods. As discussed in the previous chapter, there is extensive evidence of exotic materials having been imported into Tlatilco such as iron ore, jadeite, and shell, as well as ceramics, such as the vessels from San Lorenzo and Las Bocas.

No archaeological evidence attests to planned public architecture. Earthen platforms have been uncovered and presumably functioned as foundations for huts made with a perishable and non-preserved material such as wood and thatch. Whether some of these were central places for the ruler or shaman to perform public rituals is unknown. Although ballcourts have not been found at Tlatilco, presumably activities such as ballgame events occurred. Monumental architecture, to indicate where the game should be played, was not a requirement and instead moveable markers could

have been placed where and when needed. Whether the ballgame was a public event or if it was reserved for certain members of society is unknown. From Season IV, only six burials contained figurines possibly related to the ballgame. These were wearing loincloths, and in one case a simple head-gear helmet, but none were found resembling the fully equipped, or masked figurines otherwise known from Tlatilco and Tlapacoya. Other artifacts could indicate association with the ballgame in addition to ballplayer figurines, such as masks and spherical rattles. None of the five burials from Season IV found with masks contained figurines wearing loincloths, nor did any of the nine burials containing rattles. Similarly, from Season II, there was only one example of a burial that contained a ballplayer figurine (Burial 129), and none of the other possible ballgame related artifacts were found. From the existing record it is difficult to interpret and determine based on the grave goods if the individual depicted would have been a ballplayer.

Known for its specific ceramic figurine style, Tlatilco possibly had a group of specialized craftspeople who executed ceramic objects of the highest quality, both prior to and post-Olmec contact. In addition to the imported vessels, it is evident that the Olmec caused a social transformation and introduced new ideas, concepts and ideologies to Tlatilco, such as ballplayers and masks, and possibly contortionists and shamanism, and perhaps the fascination with ducks and fish. The local variations of the foreign traditional figurine and vessel styles as well as the many exotic objects testify to active participation in interregional trade networks and sociopolitical inclusion.

Complex intellectual achievements, such as a codified iconography for the permanent recording of certain concepts or events, have not been found at Tlatilco. There is a cylindrical seal which is suggested to have been from Tlatilco and which might attest to the possibility of writing, but the iconographic displays are typically Olmec-style designs, and are most likely imported into Tlatilco along with many other San Lorenzo objects decorated with the cloud scroll and skyband designs. F. Kent Reilley III (1989:6) has suggested that the influence of Olmec-style art throughout Mesoamerica represented an ideological belief expressed iconographically via a symbol system, allowing Mesoamerican cultures, regardless of their specific languages, to read public proclamations of the rulers. He suggests that perhaps this functioned as motivation for the rulers or elite to participate in specific ways to publicly display and manipulate the iconographic system. But there is not much evidence of the Tlatilcans producing or displaying these designs, and if they did, that they fully knew the meaning of them.

Possibly there were Olmec people living at Tlatilco, and perhaps they were the ones buried with Olmec grave goods. As some of the richest burials contained Olmec objects these could have been some of the rulers, and as some of the poorest burials also contained Olmec objects, it is unknown if these were ethnically Olmec. The poorer burials were, however, not low ranking, as the presence of grave goods attest to some status, as many individuals at Tlatilco were buried without anything, with the exception of perhaps perishable objects.

Four out of six partially fulfilled criteria would prevent Tlatilco qualifying as being a city, however, there is no denying the social, political and economic complexity. The extensive data of shared ceramic traditions at sites that do not necessarily show evidence Olmec intervention, also attests to the established complexity at Tlatilco prior to the arrival of the Olmec. Particularly at sites like San Pablo, with similarly limited archaeological records, particularly of the material found outside of burial contexts, and with Tlatilco now being beneath urban Mexico City, it will be difficult to uncover new evidence.

5.1.3. IDENTITY AND FUNERARY TRADITIONS

An understanding of the individuality, and potentially the identities, of the inhabitants at Tlatilco is achieved through a thorough examination of the material record with the greatest insight derived from the intersection of the material record and the available information from burial records. Data on age of death, pathologies, and what kind of grave goods or funerary rituals were associated with the individual, allow for interpretation of a shared aspect of identity. The role the individual played in society cannot be determined beyond the indication of status or rank interpreted from the grave goods. The roles of the elite or ruler versus the commoners, and potentially individuals ranking in between, is difficult to differentiate, as it seems rich as well as poor suffered from the same pathologies, and physical labor may not have been limited to the working-class. Although some of the diseases seem to have come from diet and potentially malnutrition, as well as other pests in society, most likely these would not have discriminated. The burial record, in addition to providing information on the high mortality rate, offers insight into a sense of nurturing, as some people lived for many years with these diseases, such as arthritis, and presumably somebody looked after them. The individuals who had the most grave goods

seem to be of no particular age or sex (introduced in table 3.3). There does seem to be a slight indication of favored burial orientation towards either east or west, while being buried with the head towards the north was the least favored, at least among the individuals with high grave good numbers.

According to Grove (1987:95, 113) excavations at Chalcatzingo suggest that burials containing cinnabar are commonly reserved for elite individuals. Red pigment in burials at Tlatilco does not seem to be reserved for the elites, as some of the burials containing the most grave goods had no remnants of red pigment, while some of the burials with remnants of red pigment did not contain any grave goods. On that note, does that imply that the artifacts encountered with remnants of post-fired red pigment, usually cinnabar or hematite, is enough to assume that objects came from burials? Perhaps red pigment could have been important in rituals, but after ritual objects had been utilized, they were being discarded or buried in a cache, but not in places related to funerary practices. According to Reilly (1989:16), the Olmec utilized bloodletting to open a portal leading to the otherworld, and not to summon ancestors. If this is true of Tlatilco, potentially the rituals could be strictly associated with the journey of death, perhaps reserved for certain individuals.

The many burials encountered at Tlatilco prompted early archaeologists to believe it was simply a cemetery, however, this hypothesis has subsequently been refuted. Earthen platforms that functioned as foundations for houses, and bell-shaped trash-pits have been identified, establishing Tlatilco as a thriving community, inhabited for approximately 300 years. The burials that appear to have been located below house floors, outside of houses,

and in general everywhere, do not indicate communal burial grounds. Further, it does not seem that there was an overall distinction as to where people of different grouped identities were buried, such as women, men, children, rich and poor. This could be explained by household burials and a tradition of preserving the "spirits" of the dead in some form of ancestor worship. There does seem to have been a site core, which was potentially richer than the periphery of the site. This was evident when comparing the grave good material from Season II and IV.

5.2. INAA AND CHRONOLOGY

The chronology at Tlatilco has steadily changed since its discovery, and some accounts will say Tlatilco existed in just one phase (Porter 1953), while others suggest four phases (Tolstoy 1989). As I have not had access to information that could help me determine these phases, it is difficult to take a position. However, I think it is feasible to believe that what could be a pre-Olmec phase with some correlating artifacts has been established at Tlatilco. This was done through the analysis of the data from the INAA, which yielded the chemical composition of where objects were manufactured. Although this does not provide a sense of chronology, it does tell us that these otherwise stylistically identifiable objects from Tlatilco were not manufactured from the same source of clay, which can be a result of geography or a change in the soil over time.

Groups B and F are the two large groups from Tlatilco from the RMM collection, but they do not share their compositional chemistry. When comparing them, I noticed that Group B contains all of the D2 figurines and the large vessels commonly found at San

Pablo and Tlatilco, while Group F contains none of these, but has the two Olmec objects, as well as the one D1 and all the type K figurines. Since there is no Olmec material at San Pablo (Grove 1970:69), the explanation seems to be that San Pablo existed and declined prior to Olmec expansion. Considering the extensive correlation between Tlatilco and San Pablo vessels, as well as the vessels from Capacha, these sites must have had an early communication. For Tlatilco this would change upon the exposure to Olmec traditions, but until that point, it seems that potentially figurines of type D2 were the only type available at Tlatilco. Later, the Olmec would introduce the type C9, and when comparing the figurines, it does not seem like an unlikely transformation that these two types merged into the DC9 type figurine. Building on these types, D1, and then later D4 would follow. Tolstoy (1989:105) also observed that types D4 and K appeared to be among the younger burials, which supports this hypothesis. That is not to say that the other forms vanished as the new emerged. D2 was probably still made but time allowed for new forms. This is why we see so much variation in this type in addition to D2 appearing to have been one of the few types shared outside of Tlatilco at sites like Las Bocas. There is also the possibility of heirloom artifacts, and we know that at least twelve percent of the burials from Season II were disturbed by making space for new burials. Potentially, grave goods got disturbed and were reused or simply shifted.

Figurines at Tlatilco changed through time and space, as new traditions were adopted from the ongoing socio-political interaction. Potentially type K was introduced later, and then type D4-K occurred, which is evident from the D4 figurines with squared heads labeled as type K3. I cannot explain the DK type, which was common in the Río

Cuautla region in Morelos but not detected at Tlatilco. Most likely type DK bears more resemblance to the D3 figurines than the K figurines, and the large eye attributes seen on type K developed from this tradition in the state of Morelos.

5.3. THE OLMEC AND THE SYMBOLISM OF WATER

There is little doubt about the extensive contact among many of the Early Formative sites. The material record attests to many shared ceramic traditions, whether vessels, figurines, sellos, or ideological tendencies such as elongated skulls (tabular erect skull modification). These similarities were shared between San Lorenzo on the Gulf Coast and Capacha on the Pacific Coast, and many sites in between, including Las Bocas and Tlatilco. Considering the extensive expansion of Olmec traditions across Mesoamerica during the Early Formative period, it may not seem unusual that the Olmec were in the Basin of Mexico. However, two issues remain, first, the Basin was not a direct route to sites like Capacha between Olman and the Pacific Ocean. It seems that to cross through Las Bocas towards the coast and avoid the mountains would have been a more direct route. Second, it is not clear what potentially was traded from the Basin back to Olman. Even though evidence points towards obsidian being traded from Tlatilco to Capacha, this obsidian commonly found in the Basin, has not been found at San Lorenzo.

There seems to be a correlation between the Early Formative sites and their location. Besides being located along water, usually rivers, like most communities, these sites additionally seem to have been located on the best clay deposits. In almost all instances of the sites mentioned in this dissertation, the area in modern times turned into a

brickyard. Apparently, the Early Formative communities, renowned for their excellent ceramics, not only chose location due to water access, but potentially also due to the best quality of clay, as for most cultures it was the preferred material to work with. The exception is the Olmec who worked extensively with both clay and stone to express their art.

I find it intriguing that what appears to be the most important objects that were imported and adopted from San Lorenzo to Tlatilco, are all related to the concepts of the ballgame, the Rain God, most likely symbolizing ideologies representing agriculture and fertility. Examples of this are the ballplayer figurines, masks, green-stone, sellos with stars and cloud scrolls, and vessels shaped like ducks or fish, commonly with the skyband or avian serpent incisions (Limón Carved). As vessels with cloud scrolls or skyband have been found containing cinnabar possibly rituals associated with water and the red substance refer to fertility. Burials at Tlatilco have been recorded with red pigment, and potentially this is related to the rite of passage and resurrection in the afterlife.

Why did the Olmec venture to Tlatilco? What did Tlatilco have that was of interest to the Olmec? Perhaps it was a pilgrimage. Both Tlatilco and Tlapacoya are located within close proximity to the shores of the big lake Texcoco. Symbolically the lake could have been of importance to both the Olmec and the Tlatilcans, as it seems the favored imported objects were ducks, fish, and cloud scroll signs as well as ballplayer figurines and masks (although some were locally made). Coe (1965:13) has proposed that the Olmec possibly were interested in the duck because of its association with water. Perhaps it was all centered around a rain (water) god ideology. Presumably the Tlatilcans had their own water ideology

prior to Olmec contact, but perhaps the Olmec brought with them a different approach which allowed for common ground between the two communities, as it seems Tlatilco embraced and adopted many of the aspects of water ideology introduced by the people of San Lorenzo.

The Olmec from San Lorenzo seem to have introduced significant abstract ceramic variability into Tlatilco: vessels with incisions, as well as black, white, and white and orange, which were colors probably not available in the Basin. Masks are another example of something introduced by the Olmec and potentially related to the ballgame, and none of these were detected in any of the twelve burials from Season IV containing D2 figurines, which appear to be pre-Olmec. However, skull modification may not have been introduced by the Olmec, as the early Early Formative site of Capacha, as well as San Pablo also modified skulls. As there seems to have been extensive contact between Capacha, San Pablo, and Tlatilco prior to Olmec expansion to these sites, it would seem to have been introduced from elsewhere. Skull modification was detected in a majority of the individuals uncovered during Season IV. That is, in more than sixty percent. Since many are too eroded to detect modification, the number is probably higher. If this tradition was not introduced by the Olmec, then my hypothesis of the D2 figurines predating the Olmec presence at Tlatilco still stands.

5.4. INAA AND THE FUTURE

A concluding remark on INAA: It is immensely important for our understanding of Tlatilco that these kinds of scientific methods are applied. As in the case of Tlatilco where

so many objects have been removed from their original place of discovery without documentation, many remain questionable about place of manufacturing. That RMM allowed us to sample and analyze their collection has changed everything in terms of understanding movement between Tlatilco and its contemporaries.

Applying INAA is an invaluable tool for determining a probable place of origin. It could be interesting to conduct thermoluminescence data on the same objects to tie the objects into the right chronology, however this method is costly. Many cultures flourished for hundreds of years, and their styles invariably changed, whether due to improved skills, new resources or foreign influences. To determine that an object came from a specific location is still only one step in the right direction if little to no other known data is available on the objects. In the case of Tlatilco, some information is known, although a lot of it is biased as the so-called Tlatilco objects seen in catalogues from museums published over the last 50-60 years contains objects erroneously labeled as Tlatilco. Without known typologies and seriations establishing cultures' identities and developments, a lot of information is lost. Vaillant, in the first half of the 20th century, established solid typologies for the Basin of Mexico, but little has developed since then, and many new sites and cultures have been discovered over the last 100 years which need to be tied into the history. In the future it would be beneficial for figurine experts to come together and stitch together a map composed of figurines and their development over time. This is no simple task, as there is still much debate ongoing about movement of influences in Mesoamerica. The much valued but somewhat outdated chart by Covarrubias (Figure 1.3), that lists twentysix Formative figurines from various cultures in Central Mexico, unfortunately remains the

only go-to source for many students and scholars of ancient Mexico who thus inevitably are destined to repeat the erroneous typology.

5.5. CONCLUSION

This dissertation research sought to gather information on what is known about the ancient community of Tlatilco and its 20th century discovery which resulted in the dispersing of its artifacts. Initially questions were asked regarding interpretations of the material found within museum collections, and whether it could be inferred that artifacts in museums labeled as being from Tlatilco actually came from Tlatilco. As the research progressed new questions developed leading to new speculation about Tlatilco. I have looked at archival material to learn about how some of these collections came into the hands of museums. I am fortunate to have obtained access to several sources of material not previously published or otherwise shared. Appendix A is an unpublished report of the Season II grave goods and has been valuable for this study. Appendices B and D have offered images of what Tlatilco looked like in the 1940s through 1960s, including close up photographs of the burials and their accompanying grave goods. Additionally, there are photographs of Tlatilco where the excavation units are seen in front of the brickyard factory among rows of bricks. Photographs of the Tlatilco village also provide an interesting view of what urban Mexico City looked like during the years of excavations. Finally, I have used modern scientific techniques to demonstrate how these collections can yield more information when applying the array of methods available for a more comprehensive

comparative analysis. I have also, not least of all, addressed the ethical reasoning for why these artifacts must not be omitted from our discussions about ancient cultures.

Tlatilco suffered a terrible fate in the 20th century. The main reason was that the Tlatilcans had mastered ceramic craftsmanship beyond anything else seen in the Basin of Mexico (at least during the Formative period), and that these fine figurines stood out. Tlatilco was also unfortunately located near an expanding metropolis, and collectors like Miguel Covarrubias and Diego Rivera had easy access to the site. Covarrubias became the rescuer of the site, as his passion developed what would become the first proper archaeological field seasons at Tlatilco. Collectors across the globe marveled at the figurines, particularly between the 1930s and 1960s. It seems there is not an art museum, national museum, or natural history museum, that does not display at least a few examples of Tlatilco figurines. Even as far away from Mexico as Denmark, Israel, and Australia, collections are to be found. Louisiana Museum of Modern Art, a modern contemporary art museum in Denmark, houses two figurines among other Pre-Columbian material.

That most museums have Tlatilco figurines itself says something about the underrepresentation of Tlatilco vessels. Several vessel types introduced by Porter (1953), and supposed to be commonly found at Tlatilco, were not encountered in any collection. It needs to be said of the artifact record and the comparative analysis, that it truly is a challenge to determine any "trends". The best record available is the catalogue by Moll et al. (1991), and this publication focusing on the burial records omits a more general description of the vast material found within the rest of the units uncovered during Season IV. It seems that the area excavated during Season IV was a considerably poorer area than

where Covarrubias excavated during Season II, which possibly was the center of the site. In many cases, I only had access to one copy of a given object, which then supposedly becomes a representative of a whole community. With the aid of the databases created, it has been possible to do quick searches to learn if there were any examples that came out of the ground. With almost 400 burial entries, the burial sample size is deemed fair. Regardless of the sample size, the presence of a single distinctive artifact is enough to establish that a ceramic trend had been incorporated into the Tlatilco culture.

To this day Tlatilco objects are for sale. As can be seen in Appendix G, there are a variety of figurines and a few vessels. These are objects recorded between 2016 and 2019, and from just two sources, Ebay and the Arte Primitivo auction house. The quality and authenticity are two things I would be very wary of before even considering purchasing any of these objects. Clearly, several of them are being sold under false pretenses and are in fact not Tlatilco artifacts.

The ethical approach I use when working with unprovenanced artifacts is to consider how much information can be extracted from the object. With the many modern-day scientific and laboratory methods available, one has to weigh the question of possible but minimal damage, against the wealth of information to be learned. It was not illegal to remove the objects until after the early 1970s, so working with these collections should not be considered unethical. It is a different debate if the museums and the country of origin want to discuss repatriation. But that is a longer process. Until then, it is our responsibility to tidy up all of these "lost" collections and make data available so that the most possible information can be learned on a collaborative level. One thought that does cross my mind

is what would have happened to the material from many of these ancient sites, which were often turned into brickyards, had people like Covarrubias not shown an interest? It makes me ponder how many Tlatilco fragments are inside the bricks made at the site during the four decades it seems manufacturing was ongoing.

As the title of this dissertation indicates, I set out to learn about the identities of the inhabitants of Tlatilco through a comparison of their ceramics. It was through the ceramic variability encountered in museums and in funerary contexts that comparative analysis offered a window into the lives of the Tlatilcans and the diversity of the stratified community they lived in. Their specialized and skilled craft production attests to a surplus of social and economic resources. The interaction with some of their contemporaries manifested in social transformations of the ceramic production and of ideological traditions which were adopted, shared, and modified during the Early Formative period.

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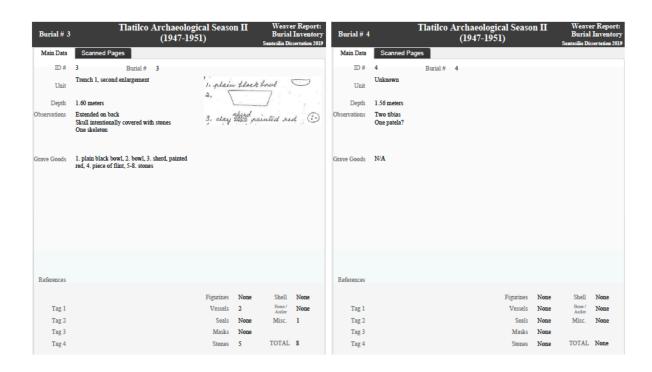
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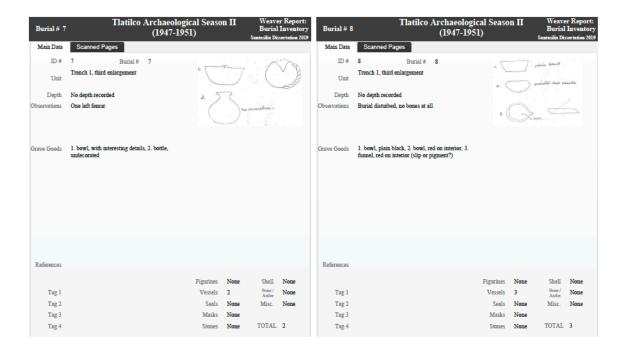
APPENDIX A WEAVER BURIAL RECORD FROM SEASON II

Unpublished, and incomplete, burial report from Season II by Muriel Weaver.

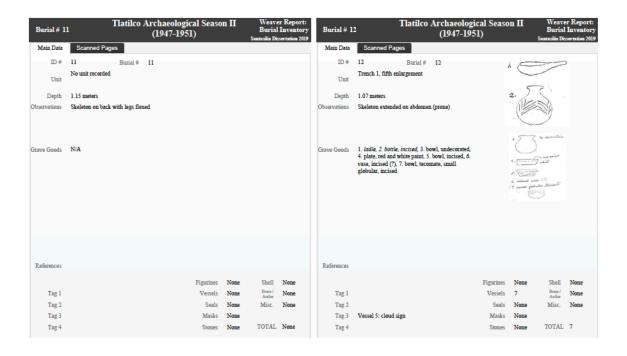
Burial # 1	Tlatilco Archaeologic (1947-195)				r Report: Inventory sertation 2019	Burial # 2	Tlatilco Archaeologio (1947-195			Burial	r Report: Inventory tertation 2019
Main Data	Scanned Pages					Main Data	Scanned Pages				
ID#	1 Burial # 1	-		10000		ID#	2 Burial # 2		Tree .		
Unit	Trench 1, second enlargement	5	1	1	7	Unit	Trench 1, second enlargement	2 90	duseri atay ratt	4	-3
Depth	1.20 meters	STE	45			Depth	1.55 meters	. /	7.5	1	
Observations	Two skulls		#. E			Observations	Extended on back One skeleton		3	Janes de la constante de la co	e)
Grave Goods	vessel, bird rim, 2. plain bowl, 3. figurine, 4. small bowl with exterior rim groove, 5. fragments of shell, 6. plain vessel, 7. potsherds of large black-ware vessel, 8. fragment of bone tool					Grave Goods	black incised bowl, 2. bowl, red, 3. globular clay rattle, 4-5. smooth black stones, grooved on upper sides only (polisher stones), 6. funnel /spouted tray, red, 7. vessel? feet broken off, red on interior		× ×		
References						References					
		Figurines	1	Shell	1			Figurines	None	Shell	None
Tag 1	Figurine (UK)	Vessels	5	Bone /	1	Tag 1		Vessels	4	Bone /	None
Tag 2	Bird/fish bowl	Seals	None	Misc.	None	Tag 2	Rattle	Seals	None		1
Tag 3		Masks	None			Tag 3		Masks	None		
Tag 4		Stones	None	TOTAL	8	Tag 4		Stones	2	TOTAL	7

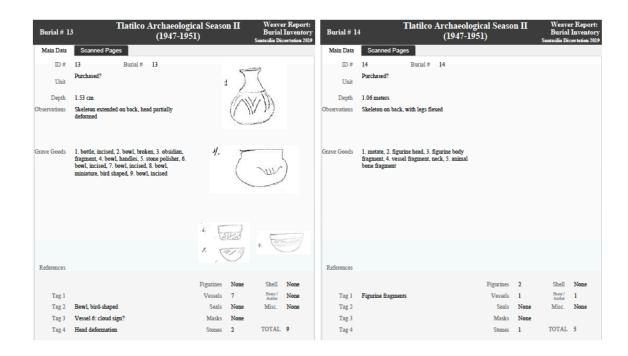


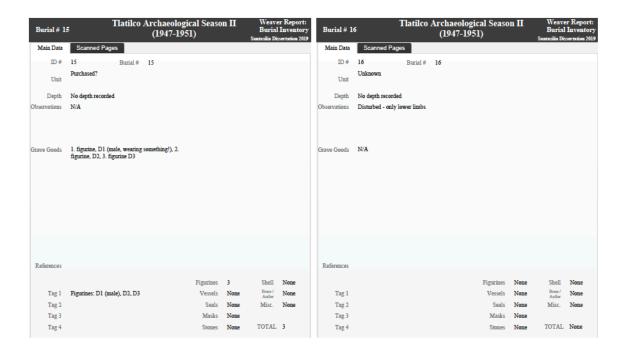
Burial # 5	Tlatilco Archaeological S (1947-1951)	easoi	ı II	Burial	er Report: Inventory sertation 2019	Burial # 6	•	Flatilco	Archaeolo (1947-1	ogical Seaso 951)	n II		er Report: Inventory sertation 2019
Main Data	Scanned Pages					Main Data	Scanned Page	.s					
ID#	5 Burial # 5			y of specime		ID#	6	Burial#	6				
Unit	Trench 1, third enlargement		* (S	Heat home		Unit	No unit recorded						
Depth	No depth recorded			2		Depth	No depth recorded						
Observations	Skeleton extended on back, right arm flexed		S. housed de	Zow (graphtha)		Observations	Skull fragment						
Grave Goods	1. figurine fragment, 2. bowl, black, incised, 3. bottle, black-brown, incised, 4. vessels support, 5. stone, round, guijarro (?), 6. bowl, incised, 7. bowl, incised, 8. bowl, incised (limon carved?), 9. bowl, tripod		. 6			Grave Goods	N/A						
References						References							
	Figu	rines	1	Shell	None					Figurines	None	Shell	None
Tag 1	Ve	ssels	7	Bone / Antler	None	Tag 1				Vessels	None	Bone / Antier	None
Tag 2	5	Seals	None	Misc.	None	Tag 2				Seals	None	Misc.	None
Tag 3	M	fasks	None			Tag 3				Masks	None		
Tag 4	St	tones	1	TOTAL	9	Tag 4				Stones	None	TOTAL	None



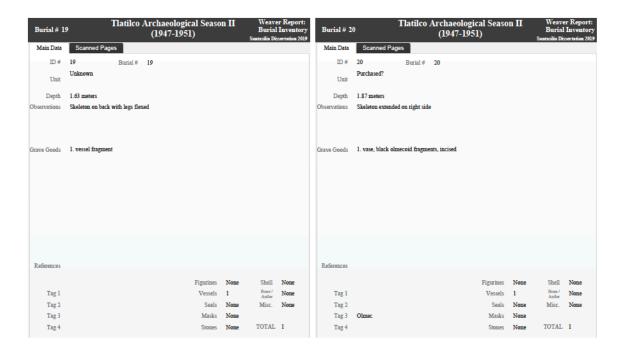
Burial # 9	Tlatilco Archaeologic (1947-195)			Burial	er Report: Inventory sectation 2019	Burial # 1	0	Tlatile		ological Sea 7-1951)	son II	Burial	er Report: Inventory sertation 2019
Main Data	Scanned Pages					Main Data	Scanned	Pages					
ID#	9 Burial # 9		* 2			ID#	10	Burial #	f 10				
Unit	No unit recorded					Unit	Trench 1, thi	rd enlargement		2.	(·] black	
Depth	1.22 meters			indistries appropriate		Depth	1.50 meters			3. Lon	nunah	TOTAL MARKET	stamping
Observations	Skeleton flexed on left side		s. (1)	3.		Observations	Extended on	the back			MISSE		
Grave Goods	1. figurine head, 2. bowl, red on interior and exterior, 3. figurine head, D1, 4. whistle. ceramic, bird, 5. bowl, plate?, broken, 6. bowl, white and red paint, 7. bowl, black, undecorated	1 S		antity white of the same of th	ngil Tark	Grave Goods	punch, 4. box fragment, 6.	ead fragment, 2. wl, rocker-stam; shell fragment, oed, suspension	ped, 5. obsidia 7. bowl, tecom	n 7. Ann	40.00	ed thermate	mins toles
References						References							
		Figurines	2	Shell	None					Figurin	es 1	Shell	1
Tag 1	Figurines: D1	Vessels	4	Bone / Antler	None	Tag 1	Figurine head	d fragment		Vesse	ls 3	Bone / Antler	1
Tag 2	Whistle, bird	Seals	None	Misc.	1	Tag 2				Sea	ls None	Misc.	None
Tag 3		Masks	None			Tag 3				Masi	s None		
Tag 4		Stones	None	TOTAL	7	Tag 4				Ston	es 1	TOTAL	7

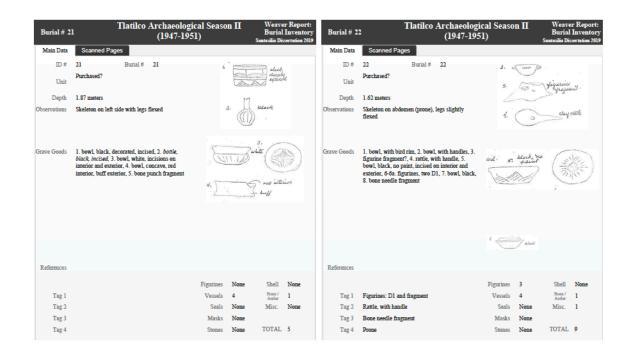


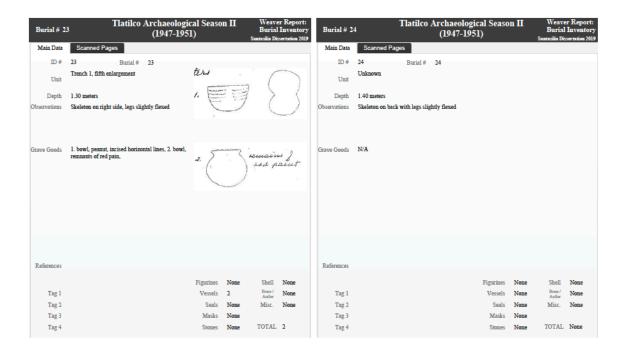




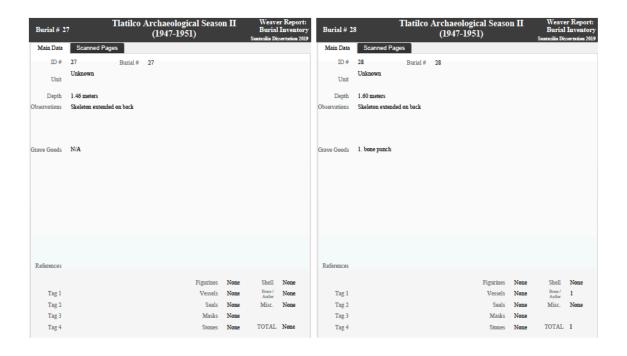
Burial # 1	7 Tlatilco Archaeological Seaso 7 (1947-1951)		Burial	r Report: Inventory sertation 2019	Burial # 1	Tlatilco Archaeological Season II Weaver Report: 18 (1947-1951) Burial Inventory Sautella Discretion 2019
Main Data	Scanned Pages				Main Data	Scanned Pages
ID#	17 Burial # 17				ID#	18 Burial # 18
Unit	Unknown				Unit	Unknown (a) despressing
Depth	1.17 meters				Depth	1.12 cm
Observations	Secondary burial Disturbed? Complete disorder				Observations	Skeleton extended on abdomen (prone)
Grave Goods	1. clay arrow point?, 2. arrow point, 3. arrow head fragment				Grave Goods	1. cantas rodado?, 2. bowl, tecomate, fragment, white-ware, incised, 3. stone animal figure (?)
References					References	
	Figurines	None	Shell	None		Figurines None Shell None
Tag 1	Vessels	None	Bone / Antler	None	Tag 1	Vessels 1 Bone / None
Tag 2	Seals	None		3	Tag 2	Seals None Misc. 1
Tag 3	Masks	None			Tag 3	Masks None
Tag 4	Stones	None	TOTAL	3	Tag 4	Stones 1 TOTAL 3



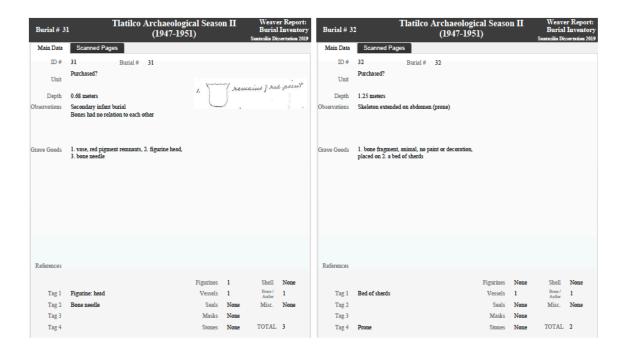


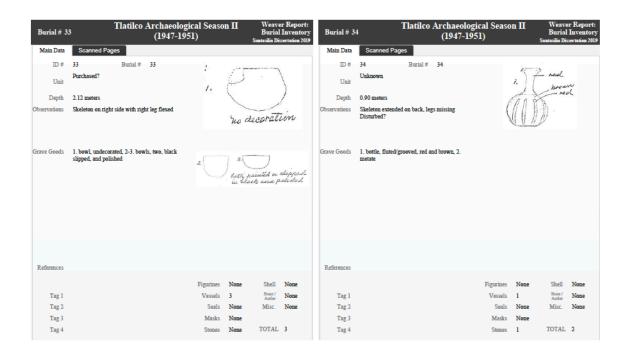


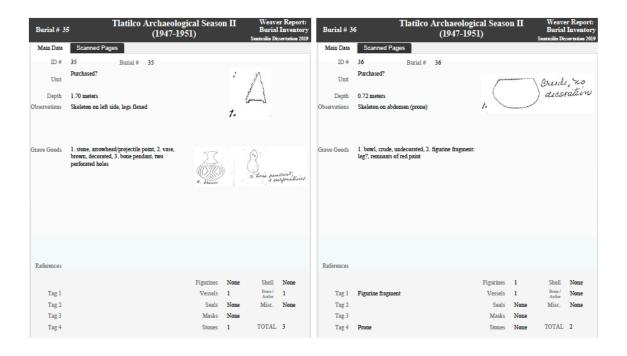
Burial # 2		neological Seaso 47-1951)	n II	Burial	r Report: Inventory sertation 2019	Burial # 2	6	Tlatilco	Archaeolog (1947-19		n II	Weave Burial Santasilia Dis	r Report: Inventory sertation 2019
Main Data	Scanned Pages					Main Data	Scanned Pag	ges					
ID#	25 Burial # 25					ID#	26	Burial#	26				
Unit	Unknown					Unit	Unknown				Winn	t in thirt i	okete sizent-
Depth	2.95-3.04 meters					Depth	1.26 meters			Α .	Quita	ou = exteriors)	
Observations	Skeleton extended on back					Observations	Infant grave, few	bones		-			
Grave Goods	N/A					Grave Goods	1. bowl, slipped exterior,	in thick white	paint, interior an	d			
References						References							
ancadelices		Figurines	None	Shell	None	acadences				Figurines	None	Shell	None
Tag 1		Vessels	None	Bone / Antler	None	Tag 1				Vessels	1	Bone / Antler	None
Tag 2		Seals	None	Misc.	None	Tag 2				Seals	None	Misc.	None
Tag 3		Masks	None			Tag 3				Masks	None		
Tag 4		Stones	None	TOTAL	None	Tag 4				Stones	None	TOTAL	1

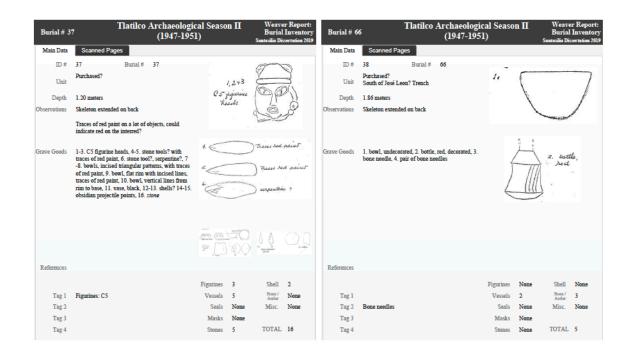


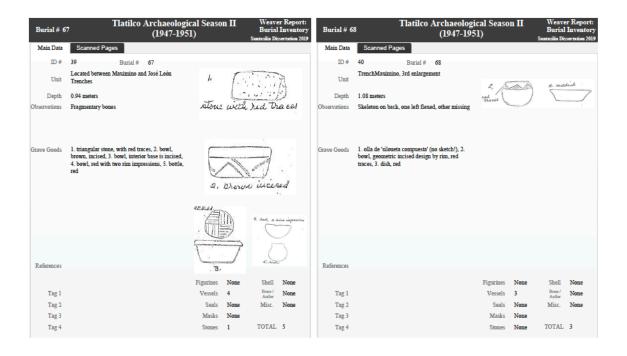
Burial # 2	9 Tlat		ological Seaso '-1951)	n II	Burial	r Report: Inventory sertation 2019	Burial # 3	0	Tlatilco	Archaeo (1947-	logical Seaso 1951)	n II		r Report: Inventory ertation 2019
Main Data	Scanned Pages						Main Data	Scanned Pa	ges					
ID#	29 Bu	rial # 29					ID#	30	Burial#	30				
Unit	Unknown						Unit	Purchased?						
Depth	0.50 meters						Depth	2.32 meters						
Observations	Skeleton on right side, l Disturbed grave	legs flexed					Observations	Skeleton extend	ed on back					
Grave Goods	1. sherds (a few)						Grave Goods	1. bone punch						
References							References							
			Figurines	None	Shell	None					Figurines	None	Shell	None
Tag 1			Vessels	1	Bone / Antler	None	Tag 1				Vessels	None	Bone / Antler	1
Tag 2			Seals	None	Misc.	None	Tag 2				Seals	None	Misc.	None
Tag 3			Masks	None			Tag 3				Masks	None		
Tag 4			Stones	None	TOTAL	1	Tag 4				Stones	None	TOTAL	1



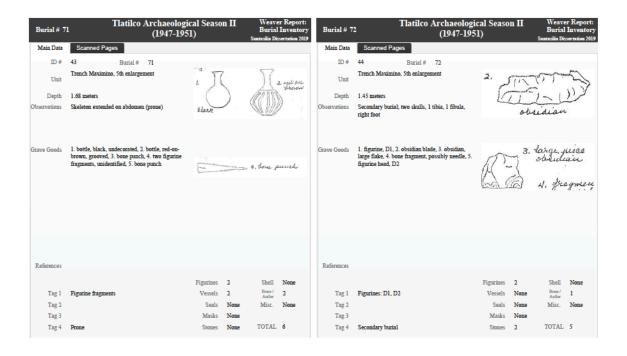




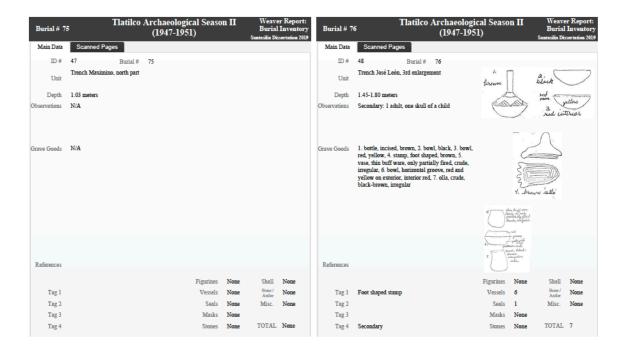


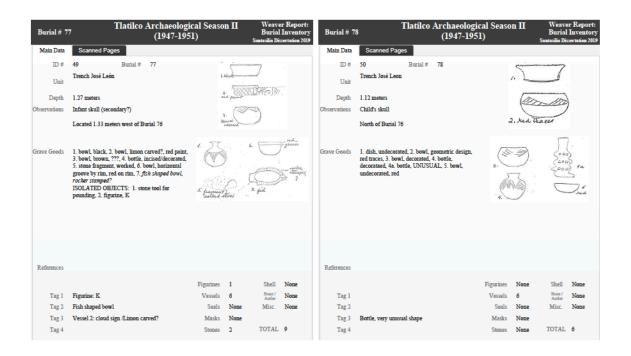


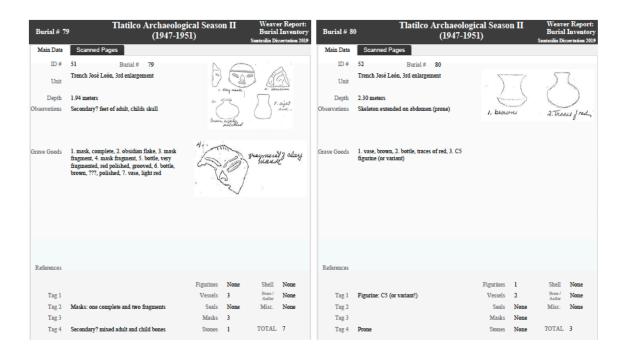
Burial # 69	Tlatilco Archaeological (1947-1951)		n II	Burial	r Report: Inventory sertation 2019	Burial # 7	70 Tlatilco Archaeological Season II Weaver Report: Burial Inventory Santila Discretion 2019
Main Data	Scanned Pages					Main Data	Scanned Pages
ID#	41 Burial # 69					ID#	42 Burial # 70
Unit	Trench Dr. Julián		Freem			Unit	Trench Maximino, 5th enlargement
Depth	1.59 meters	4,	100	177	7	Depth	1.00 meters
Observations	Skeleton on left side, legs flexed		Jaca .	Carried Sal	120	Observations	Skeleton on back, fetal position (contradicting?)
Grave Goods	1. bowl, with geometric incised design by rim					Grave Goods	1. obsidian flake
References						References	
	F	igurines	None	Shell	None		Figurines None Shell None
Tag 1		Vessels	1	Bone / Antler	None	Tag 1	Vessels None Bone / None
Tag 2		Seals	None	Misc.	None	Tag 2	Seals None Misc. None
Tag 3		Masks	None			Tag 3	Masks None
Tag 4		Stones	None	TOTAL	1	Tag 4	Stones 1 TOTAL 1



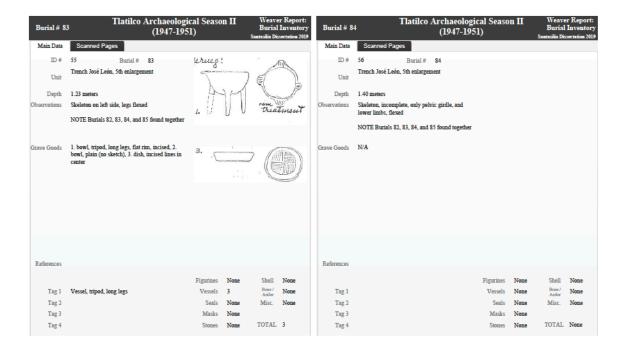
Burial # 7	Tlatilco Archaeological Seaso (1947-1951)	n II	Burial	r Report: Inventory sertation 2019	Burial # 7	Tlatilco Archaeologi 4 (1947-195		Weaver Report: Burial Inventory Santacilia Dissertation 2019
Main Data	Scanned Pages				Main Data	Scanned Pages		
ID#	45 Burial # 73				ID#	46 Burial # 74		
Unit	Porferio (?) Trench				Unit	Cotarro (?) Trench	ja	
Depth	No depth recorded				Depth	0.90 meters	São	red fraint
Observations	Skeleton extended on back				Observations	Skeleton extended on abdomen (prone)	1.) rea pains
						Upper incisors mutilated		
Grave Goods	N/A				Grave Goods	1. zoomorphic vessel, possibly opossum?, with traces of red paint		
References					References			
	Figurines	None	Shell	None			Figurines None	Shell None
Tag 1	Vessels	None	Bone / Antler	None	Tag 1	Zoomorphic vessel	Vessels 1	Bone / None
Tag 2	Seals	None	Misc.	None	Tag 2		Seals None	Misc. None
Tag 3	Masks	None			Tag 3	Dental mutilation	Masks None	
Tag 4	Stones	None	TOTAL	None	Tag 4	Prone	Stones None	TOTAL 1

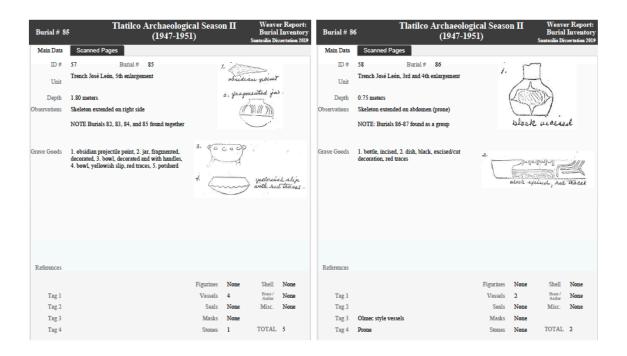


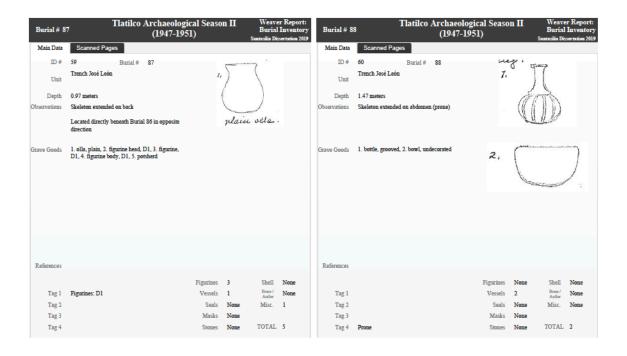




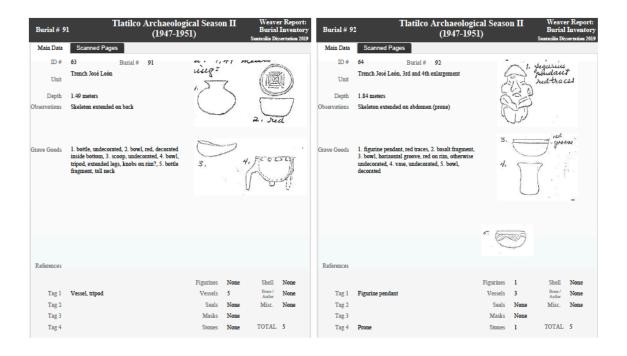
Burial # 8	Tlatilco Archaeological Seaso (1947-1951)		Burial	er Report: Inventory ssertation 2019	Burial # 8	Tlatilco Archaeologi (1947-195	
Main Data	Scanned Pages				Main Data	Scanned Pages	
ID#	53 Burial # 81				ID#	54 Burial # 82	ASSESSED AND ADDRESSED AND ADDRESSED AND ADDRESSED AND ADDRESSED AND ADDRESSED ADDRESSED AND ADDRESSED ADD
Unit	Trench José Leon, 3rd enlargement				Unit	Trench José León, 5th enlargement	three 3 red and
Depth	0.85 meters				Depth	1.00 meters	X Soften
Observations	Skeleton extended on abdomen (prone)				Observations	Skeleton: only legs found	6 Brain V. red
						NOTE Burials 82, 83, 84, and 85 found together	nek drokin
Grave Goods	N/A				Grave Goods	vase, black, undecorated, 2. metate fragment, obsidian blade, 4. stone fragment, possibly mano, 5. bowl, decorated, 6. bottle, brown, neck broken, 7. bowl, traces of red and yellow, 8. bowl, red	3. Julian blade
References					References		t. Black
	Figurines	None	Shell	None			Figurines None Shell None
Tag 1	Vessels	None	Bone /	None	Tag 1		Vessels 5 Bone / None
Tag 2	Seals	None	Misc.	None	Tag 2		Seals None Misc. None
Tag 3	Masks	None			Tag 3		Masks None
Tag 4	Prone Stones	None	TOTAL	None	Tag 4		Stones 3 TOTAL 8



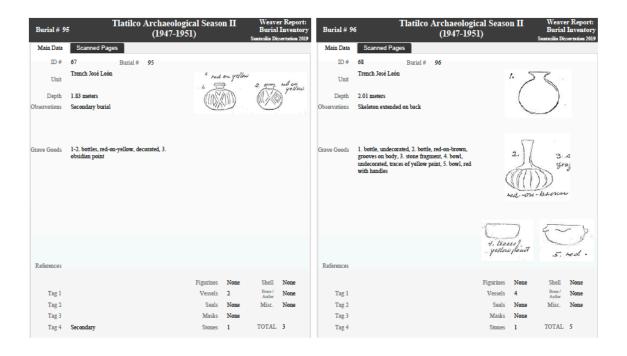




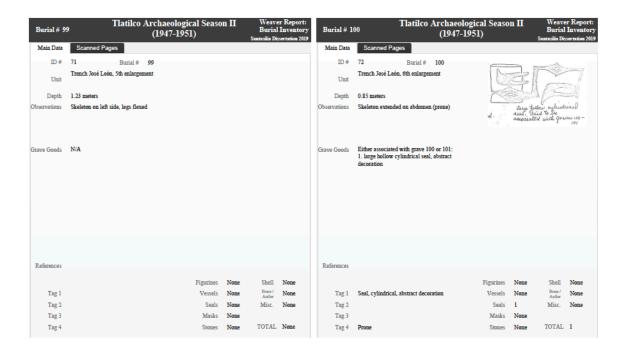
Burial # 89	7 Tlatilco Archaeologio (1947-195)		Weaver Report: Burial Inventory Santasilis Dissertation 2019		Tlatilco Archaeolog (1947-19	
Main Data	Scanned Pages			Main Data	Scanned Pages	
ID#	61 Burial # 89	1.	(red	ID#	62 Burial # 90	1.5%
Unit	Trench José León, 3rd and 4th enlargement	(Unit	Trench José León	*
Depth	1.36 meters			Depth	1.47 meters	3. Shooking from
Observations	Skeleton extended on abdomen (prone)	iles tras	is with red	Observations	Skeleton extended on back, skull deformed	4.00
Grave Goods	bortle, red, undecorated, 2 bowl, black, undecorated, red traces, 3 bottle, undecorated, red, 4 vase, way rim, undecorated, 5 mano, 6 bottle, brown, incised, 7, dish, rectangular, testapod, decorated, 8, bowl, two norches on rim, undecorated, 9, stamp, roller, cylindrical, abstract motif, 10, vase, red-on-buff, incised	3 nd	-S	Grave Goods	bottle, undecorated, 2. bowl, red, undecorated 3. obsidian point, 4 vase, red, decorated, 5. figurine fragment, body, flat, wearing skirt, 6. bottle, red-on-brown, decorated, 7, projectile point, flint/oblidian?, 8. stirrup spout vessel, black, decorated, 9. bottle, red paint, decorated, 10. bottle, reddish-brown, unusual design, 11. bottle, undecorated	to I relative
		6. Brown			ISOLATED OBJECT: bone needle fragment	The state of them
References		7. Saugular	on the first authors, and the said	References		a Said 11. yelanin ballis
		Figurines None	Shell None			Figurines 1 Shell None
Tag 1		Vessels 8	Bone / None	Tag 1	Figurine fragment: flat wearing skirt	Vessels 8 Bone / 1
Tag 2	Roller stamp - abstract motif	Seals 1	Misc. None	Tag 2	Stirrup-spout vessel (decorated)	Seals None Misc. None
Tag 3	Vessel 6, 10: Olmec	Masks None		Tag 3		Masks None
Tag 4	Prone	Stones 1	TOTAL 10	Tag 4	Skull deformed	Stones 2 TOTAL 12



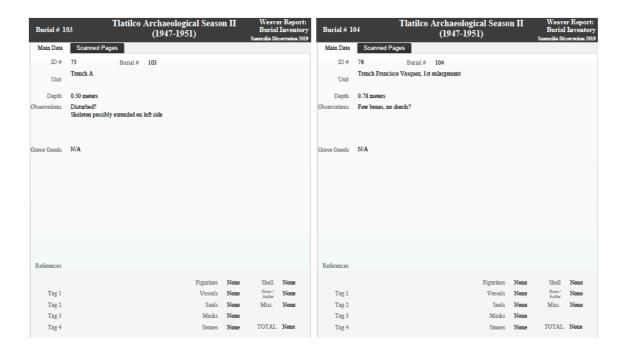
Burial # 9	Tlatilco Archaeologi 3 (1947-195			Burial	r Report: Inventory sertation 2019	Burial # 9	Tlatilco Archaeologi 4 (1947-195		Burial	er Report: Inventory Sectation 2019
Main Data	Scanned Pages					Main Data	Scanned Pages			
ID#	65 Burial # 93					ID#	66 Burial # 94			
Unit	Trench José León	2.	T	traces	aint	Unit	Trench José León	5. 1	- ha	idiaie ?
Depth	1.85 meters	(,)	,		Depth	1.97 meters	(39)	1	aume ;
Observations	Skeleton extended on back, no lower limbs	0	الن			Observations	Skeleton extended on left side	(Car		
Grave Goods	1. bone bead, 2. bottle, traces of red paint					Grave Goods	1-2. bone beads, 3. bottle, black, undecorated, 4. stone, flat and rectangular, 5. stone, obsidian?, 6. bowl, undecorated	з.	olack)	
References						References				
		Figurines	None	Shell	None			Figurines Non	e Shell	None
Tag 1		Vessels	1	Bone / Antler	1	Tag 1		Vessels 2	Bone / Antler	2
Tag 2		Seals	None	Misc.	None	Tag 2		Seals Non	e Misc.	None
Tag 3		Masks	None			Tag 3		Masks Non	e	
Tag 4		Stones	None	TOTAL	2	Tag 4		Stones 2	TOTAL	6



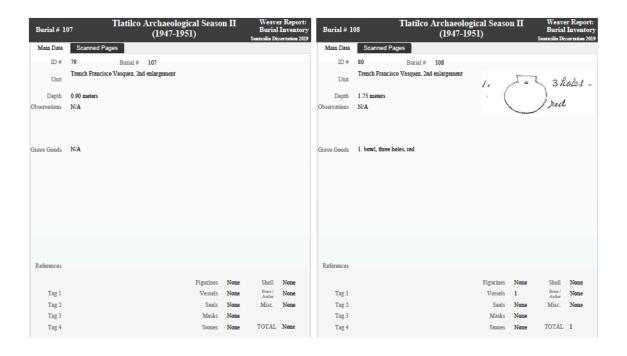
Burial # 97	Tlatilco Archaeologio (1947-195			Burial	er Report: Inventory sertation 2019	Burial # 9	8	Tlatilco	Archaeo (1947-	logical Seaso 1951)	on II	Burial	er Report: Inventory Sectation 2019
Main Data	Scanned Pages					Main Data	Scanned	ages					
ID#	69 Burial # 97					ID#	70	Burial#	98				
Unit	Trench José León	a. [.]	4.0040 1	urgulat		Unit	Trench José I	eón, 6th enlarg	ement				
Depth	1.93 meters	. 5.1	versel a	ich z sus	printer !	Depth	0.87 meters						
Observations	Skeleton extended on back		,			Observations	Skeleton exte	nded on abdom	en (prone)				
Grave Goods	Found beneath Burials 88 & 90 1. bone bead necklace (13), 2. olla, irregular,		7.			Grave Goods	N/A						
	undecorated, with two suspension holes, 3. bottle, undecorated, traces of red paint	3.	5	red go	amt.								
References						References							
		Tii	None	Shell	None					Tii	None	Shell	None
Tag 1		_	None 2	Bone / Antler	None	Tag 1				Figurines Vessels	None	Bone / Ander	None
Tag 1			None	Antler Misc.	None	Tag 1				Vessels	None	Antler Misc.	None
Tag 3			None	MISC.	11011	Tag 3				Masks	None	MISC.	11000
Tag 4			None	TOTAL	3	Tag 4	Prone			Stones	None	TOTAL	None



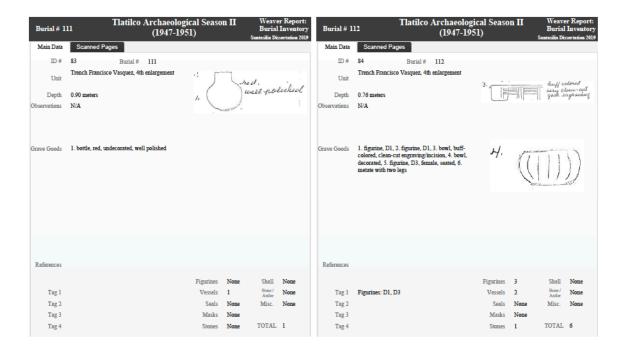
Burial # 10	Tlatilco A	Archaeological Seaso (1947-1951)	n II	Burial	er Report: Inventory sertation 2019	Burial # 1	02	Tlatilco	Archaeolog (1947-19				er Report: Inventor; Sertation 201
Main Data	Scanned Pages					Main Data	Scanned Pa	ages					
ID#	73 Burial #	101				ID#	74	Burial#	102				
Unit	Trench José León, 6th enlargeme	ent				Unit	Trench A			pan o		red p	aux
Depth	1.45 meters					Depth	0.65 meters			7.	1	brown	pacies -
Observations	Skeleton extended on back, legs	flexed				Observations	Skeleton exten	ded on abdome	n (prone)			MAGRETA	2
Grave Goods	N/A See #100					Grave Goods	vase, decora polished, fragn		th red paint, brow	n			
References						References							
		Figurines	None	Shell	None					Figurines	None	Shell	None
Tag 1		Vessels	None	Bone /	None	Tag 1				Vessels	1	Bone / Antler	None
Tag 2		Seals	None	Misc.	None	Tag 2				Seals	None	Misc.	None
Tag 3		Masks	None			Tag 3				Masks	None		
_		Stones	None	TOTAL		Tag 4	Prone				None	TOTAL	



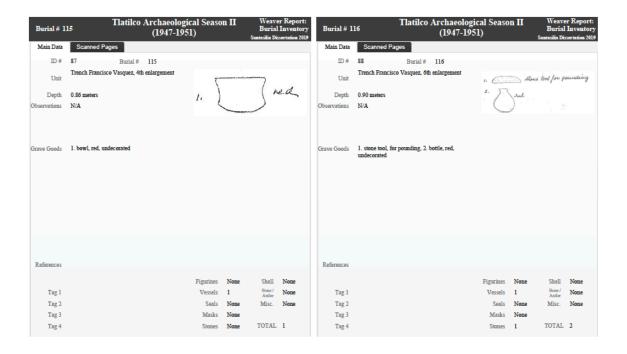
Burial # 10	Tlatilco Archaeological Seaso (1947-1951)		Burial	r Report: Inventory sertation 2019	Burial # 1	(1047-1051) E	Veaver Report: Jurial Inventory Lilia Dissertation 2019
Main Data	Scanned Pages				Main Data	Scanned Pages	
ID#	77 Burial # 105				ID#	78 Burial # 106	
Unit	Trench Francisco Vasquez, 1st enlargement				Unit	Trench Creseaciano?	
Depth	0.97 meters				Depth	1.85 meters	
Observations	Skeleton on back, legs flexed to left				Observations	Secondary burial consisting of 7 skulls	
Grave Goods	N/A				Grave Goods	figurine, seated, D.I., 2. unidentifiable fragment, possibly stamp or figurine, 3. mano fragment, 4-5. stone, worked, fragment, 6. shell fragment (??)	
References					References		
	Figurines	None	Shell	None		Figurines 1	Shell 1
Tag 1	Vessels	None	Bone / Antler	None	Tag 1	Figurine: D1 (seated) Vessels None	Bone / None
Tag 2	Seals	None	Misc.	None	Tag 2		fisc. 1
Tag 3	Masks	None			Tag 3	Masks None	
Tag 4	Stones	None	TOTAL	None	Tag 4	Secondary burial consisting of 7 skulls Stones 3 TO	OTAL 6



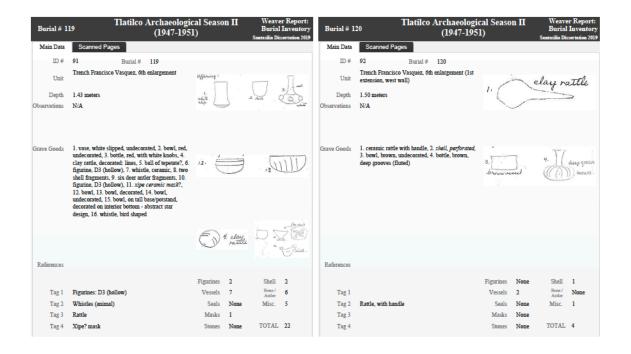
Main Data Scanned Pages Main Data Scanned Pages	(1947-1951) Burial Inventory Santacilia Dissertation 2019
Manual Pages	
ID# \$1 Burial# 109 ID# \$2 Burial#	110
Trench Francisco Vasquez, 3rd enlargement Unit Unit Trench Francisco Vasquez, 4th e	enlargement Just de d
Depth 0.66 meters Depth 0.75 meters	" Vied versel
Observations N/A Observations N/A	
Grave Goods 1. stone fragment Grave Goods 1. bowl, red, undecorated, 2. slat bone object, with perforation, po worked at one end	
References	
Figurines None Shell None	Figurines None Shell None
Tag 1 Vessels None Bone / None Tag 1	Vessels 1 Bone / 1
Tag 2 Seals None Misc. None Tag 2	Seals None Misc. None
Tag 3 Masks None Tag 3	Masks None
Tag 4 Stones 1 TOTAL 1 Tag 4	Stones 1 TOTAL 3



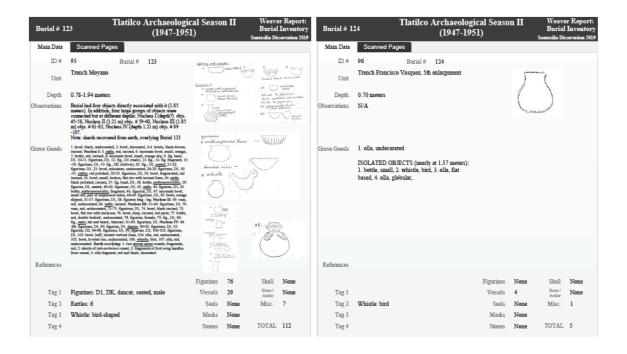
Main Data Scanned Pages	Burial # 1	Tlatilco Archaeological Seaso (1947-1951)	n II	Burial	er Report: Inventory sertation 2019	Burial # 1	Tlatilco Archaeological Season II Weaver Report: 114 (1947-1951) Weaver Report: Burial Inventory 5ucción Discretion 2019
Trench Francisco Vasquez, 4th enlargement Unit Depth 0.50 meters Observations N/A Grave Goods N/A References Figurines Tench Francisco Vasquez, 4th enlargement Unit Depth 0.46 meters Observations N/A Grave Goods N/A References References References Tag 1 Vessels None Andrer None Tag 2 Seals None Masks None Masks None Masks None Masks None Masks None Tag 3 Masks None Tag 3 Masks None Masks None Tag 3 Masks None Masks None Tag 3 Masks None Tag 3 Masks None Masks None Tag 3 Masks None Masks None Tag 3 Masks None Tag 3 Masks None	Main Data	Scanned Pages				Main Data	Scanned Pages
Unit	ID#	85 Burial # 113				ID#	# 86 Burial # 114
Crave Goods N/A Crave Goods N/A Crave Goods N/A Crave Goods N/A Crave Goods N/A Crave Goods N/A Crave Goods N/A Crave Goods N/A Crave Goods N/A Crave Goods N/A Crave Goods N/A Crave Goods N/A Crave Goods N/A Crave Goods N/A Crave Goods N/A Crave Goods N/A Crave Goods N/A Crave Goods Crave Goods N/A Crave Goods N/A Crave Goods Crave Good	Unit	Trench Francisco Vasquez, 4th enlargement				Unit	Trench Francisco Vasquez, 4th enlargement
References Ref	Depth	0.60 meters				Depth	h 0.46 meters
References References	Observations	N/A				Observations	s N/A
Figurines None Shell None		N/A					
Tag 1 Vessels None Renard Aufter None Tag 1 Vessels None Renard Aufter None	References					References	5
Tag 2 Seals None Misc. None Tag 2 Seals None Misc. None Tag 3 Masks None Tag 3 Masks None Mone Tag 3 Masks None		Figurines	None	Shell	None		Figurines None Shell None
Tag 2 Seals None Misc. None Tag 2 Seals None Misc. None Tag 3 Masks None Tag 3 Masks None Mone Tag 3 Masks None	Tag 1	Vessels	None	Bone / Antler	None	Tag 1	l Vessels None Bone / None
	Tag 2	Seals	None		None	Tag 2	
	Tag 3	Masks	None			Tag 3	3 Masks None
Tag 4 Stones None TOTAL None Tag 4 Stones None TOTAL None	Tag 4	Stones	None	TOTAL	None	Tag 4	4 Stones None TOTAL None



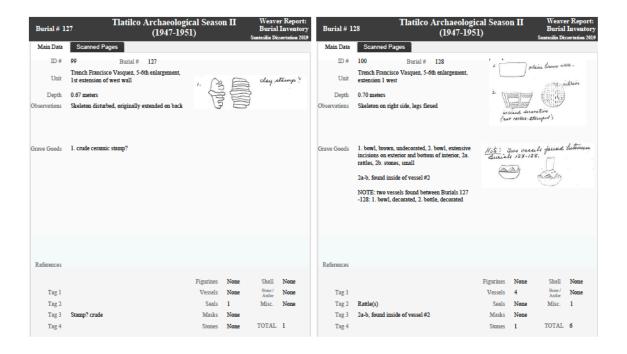
	bridien
Unit Trench Francisco Vasquez, between 5-6th enlargement Depth 1.00 meters Observations N/A Trench Francisco Vasquez, between 5-6th unit Juli First extension, west wall, Trench Francisco Vasquez, 5-6th enlargement Depth 0.30 meters Observations N/A	bridish
Unit Vasquez, 5-6th enlargement Depth 1.00 meters Observations N/A Unit Vasquez, 5-6th enlargement Depth 0.80 meters Observations N/A	budien
Observations N/A Observations N/A Observations N/A	bridish
Observations N/A Observations N/A	bridish
18 4183	
Grave Goods 1. bottle, red, undecorated, 2. bowl, reddish, undecorated, 3. ratelevessel/figurine? 3. hand Grave Goods 1. obsidian flake, 2. bowl, miniature, concave, red rim, poorly made and propomorphic - red, 4. two bone fragments SISOLATED FRAGMENTS NEARBY 1. caramic whistle fragment, 2. cylindrical stamp fragment, 3. figurine head, D1	et miniature cet, sed rine - éy maste-
References References	
Figurines None Shell None Figurines 2	Shell None
Tag 1 Vessels 2 Bloom 2 Tag 1 Figurine fragments (D1) Vessels 1	Bone / None
Tag 2 Seals None Misc. 1 Tag 2 Cylindrical stamp fragment (no image) Seals 1	Misc. 1
Tag 3 Anthropomorphic rattle or vessel Masks None Tag 3 Masks None	ne
Tag 4 Stones None TOTAL 5 Tag 4 Stones 1	TOTAL 6



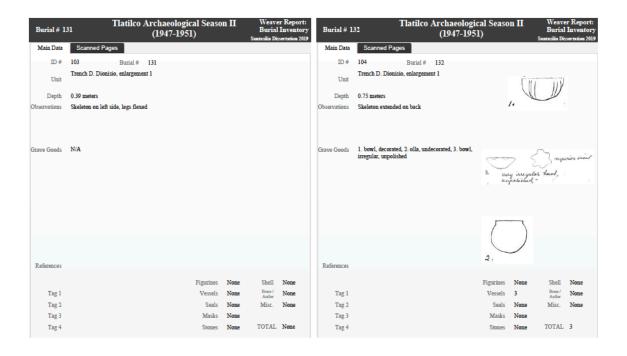
Burial # 1	Tlatilco Archaeologic 21 (1947-195)			Burial	er Report: Inventory certation 2019	Burial # 1	Tlatilco Archaeolog (1947-19:		Weaver Report: Burial Inventory Santasilia Dissertation 2019
Main Data	Scanned Pages					Main Data	Scanned Pages		
ID#	93 Burial # 121					ID#	94 Burial # 122		
Unit	Trench Moyano	2.4	ragmen	ted		Unit	Trench Moyano	= = 5	1
Depth	0.75 meters	1		λ		Depth	1.90 meters	1.),
Observations	N/A		Zoned	heel or par	i veno	Observations	Cubo II-E4 offering found above feet - 1.29 meters depth Cubo II-E5 offering found above head - 1.02 meters depth	red, authorin	d'by grooves
Grave Goods	stone pendant (green) in form of tusk, 2. bowl, fragmented, red-on-brown, decorated, 3. figurine, hollow, type?, 4. bowl, undecorated, 5. figurine head (UR), 6. olla, miniature, decorated		6	0		Grave Goods	1. bowl, red-on-brown, decorated, grooves, 2. olla fragment, 3. bowl, black, crude, undecorated 4.72, 5 wase, black polished, excising filled with red paint, 6. bowl, brown, grooved, red paint in grooves, 7. dish, probably with white slip, 8. bottle, red-on-yellow, 9. figurine fragment, body (UK)		2 policiful block executing filled with the garner
							Cubo II-E5: 1. black bottle, deep excised design, containing red paint: Olmec hand-paw-claw motif	better geography	
References						References	Cubo II-E4: 1. bowl, flat-bottomed, incised, 2. bowl, undecorated, 3. bottle, spiral decoration	that bend perfusely back white being an wallow	Shat Site, on spirit drawn and part of the
Releiences						References			
		_	2	Shell	None			Figurines 1	Shell None
Tag 1	Figurines: uk	Vessels	3 None	Bone / Antler Misc.	None None	Tag 1	Olmec-style vessels	Vessels 11 Seals None	Bone / None Misc. 1
Tag 2		Seals Masks	None	MISC.	None	Tag 2 Tag 3	vessels 1, 5, 6, Cubo II-E5:1 Olmec-style	Seals None Masks None	MISC. 1
Tag 4		Stones	1	TOTAL	6	Tag 4	vessess 1, 3, 0, 0400 II-E3.1 Offinet-style	Stones None	TOTAL 13
Tug 4		Siones				I ug 1		JOHN THURE	

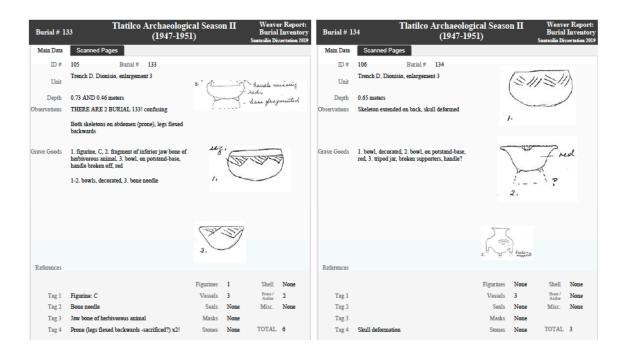


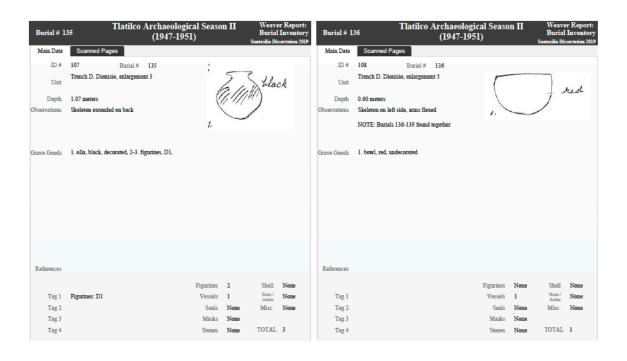
Burial # 1	Tlatilco Archaeological Seaso (1947-1951)	- I	Burial I	r Report: Inventory sertation 2019	Burial # 1	Tlatilco Archaeologi 26 (1947-195		Weaver Report: Burial Inventory Santasilia Dissertation 2019
Main Data	Scanned Pages				Main Data	Scanned Pages		
ID#	97 Burial # 125				ID#	98 Burial # 126		
Unit	Trench Francisco Vasquez, 5th enlargement	2			Unit	$\label{thm:condition} Trench\ Francisco\ Vasquez,\ 6th\ enlargement,\ 1st\ extension\ of\ west\ wall$	1.)	
Depth	1.56 meters	()		Depth	1.44 meters	É) .
Observations	N/A		,		Observations	N/A	yellow	paint
Grave Goods	1. bottle, undecorated				Grave Goods	1. olla resmants of yellow paint, undecorated, 2. figurine, D1, 3. misc. ceramic object, 4. figurine, male, with?, 5. figurine, D1, 6. figurine, with ha??, 7. shell, 8. figurine head, unusual 9. figurine D1, 10. bottle, red, crude incisions, 11. olla, red traces, undecorated, 12. sherd of a large vessel, 13. ceramic mask, brown (holes for suspension?)	oral boul build	must figurine
References					References	NOT directly associated: 1. bowl. oval, undecorated, 2. vase, reddish clay, decorated, 3. figurine fragment, head, eroded, 4. dog skull	Supplied Plant Supplied Suppli	3. clay squet ?
			en 11					
Tag 1	Figurines Vessels		Shell Bone / Antler	None None	Tag 1	Figurines: 7	Figurines 7 Vessels 6	Shell 1 Bone / 1
Tag 2	Vessels Seals			None	Tag 1	Mask	Seals None	Ander 1 Misc. 1
Tag 3	Masks	None			Tag 3	Dog skull	Masks 1	
Tag 4	Stones	_	OTAL	1	Tag 4		Stones None	TOTAL 17

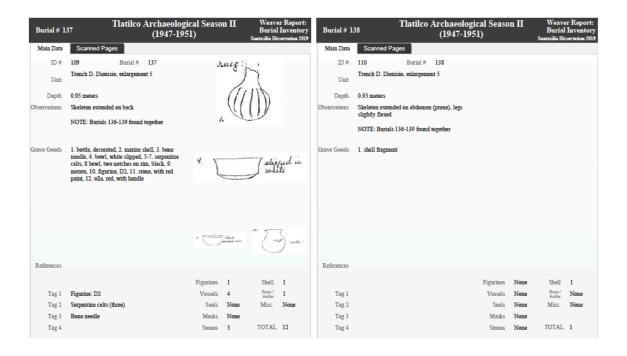


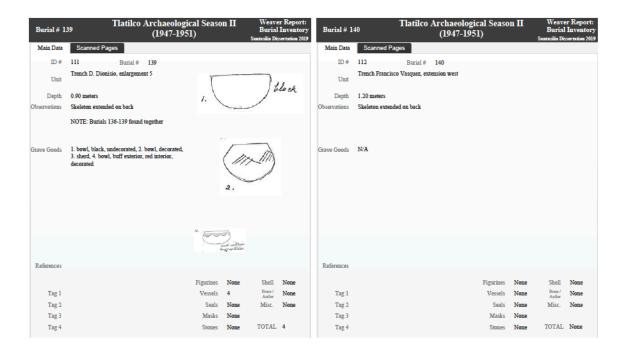
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y
None
None
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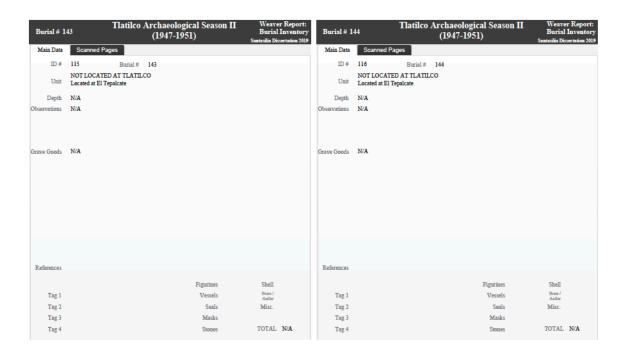


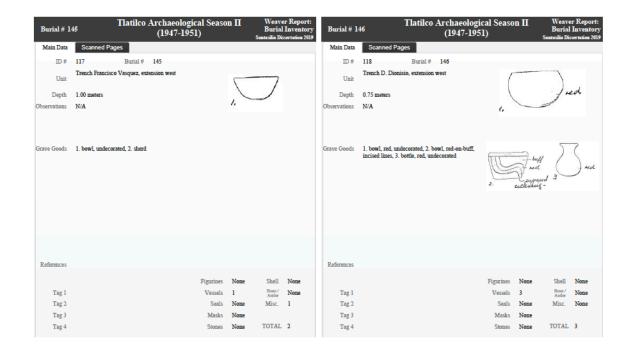


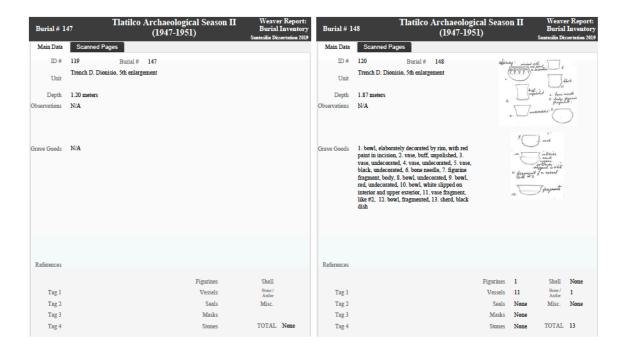




Burial # 1	Tlatilco Archaeological Season (1947-1951)	II Weaver Report: Burial Inventory Santasilis Dissertation 2019	Burial # 1	Tla	ntilco Archaeol (1947-	logical Season II 1951)	Weaver Report: Burial Inventory Santasilia Dissertation 2019
Main Data	Scanned Pages		Main Data	Scanned Pages			
ID#	113 Burial # 141		ID#	114 B	turial # 142		
Unit	NOT LOCATED AT TLATILCO Located at El Tepalcate		Unit	NOT LOCATED AT Located at El Tepalcat			
Depth	N/A		Depth	N/A			
Observations	N/A		Observations	N/A			
Grave Goods	N/A		Grave Goods	N/A			
References			References				
	Figurines	Shell				Figurines	Shell
Tag 1	Vessels	Bone / Antler	Tag 1			Vessels	Bone / Antler
Tag 2	Seals	Misc.	Tag 2			Seals	Misc.
Tag 3	Masks		Tag 3			Masks	
Tag 4	Stones	TOTAL N/A	Tag 4			Stones	TOTAL N/A

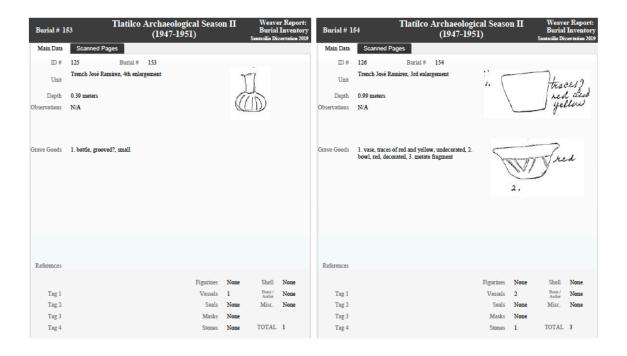


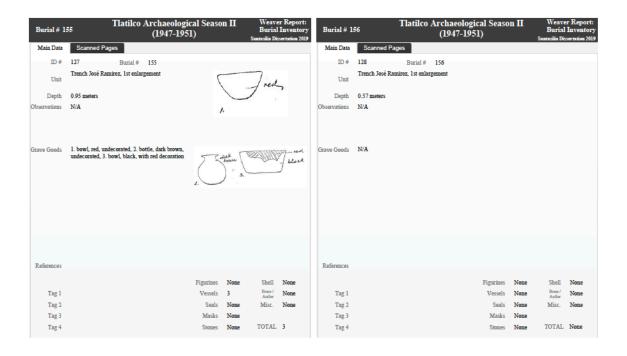




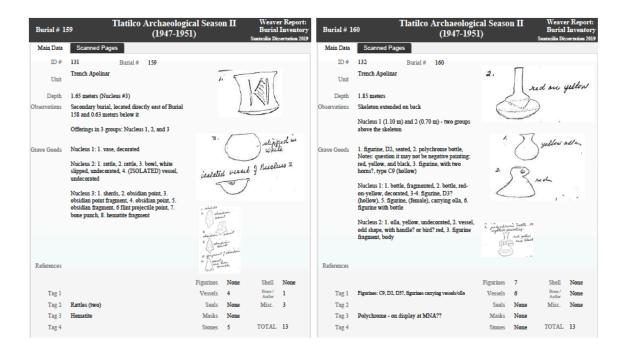
Burial # 1	Tlatilco Archaeologic 49 (1947-195)			Burial	r Report: Inventory sertation 2019	Burial # 1	50	Tlatilco	Archaeolog (1947-19			Burial	r Report: Inventory sertation 2019
Main Data	Scanned Pages					Main Data	Scanned Pag	ges					
ID#	121 Burial # 149					ID#	122	Burial#	150				
Unit	Trench José Ramirez, 3rd enlargement		otas	uge ou o	ue side	Unit	Trench José Ran	nirez, 3rd enla	rgement				
Depth	0.57 metrs			(firing	9)	Depth	1.08 meters						
Observations	N/A	2.	mention bearing	and a		Observations	NOTE: Burials l	150 and 151 w	ere found togethe	r			
Grave Goods	1. unworked stone fragment, 2. Olmecoid vessel, orange on one side, nearly black on the other (firing)					Grave Goods	1. fragment of la	arge olla, 2. un	worked stone				
References						References							
		Figurines	None	Shell	None					Figurines	None	Shell	None
Tag 1		Vessels	1	Bone / Antler	None	Tag 1				Vessels	None 1	Bone / Antler	None
Tag 2	Olmecoid vessel	Seals	None	Misc.	None	Tag 2				Seals	None	Misc.	None
Tag 3		Masks	None			Tag 3				Masks	None		
Tag 4		Stones	1	TOTAL	2	Tag 4				Stones	1	TOTAL	2

Burial# 1	Tlatilco Archaeological Season II (1947-1951)	Weaver Report: Burial Inventory Santasilia Dissertation 2019	Burial#1	Tlatilco Archaeolog (1947-19		Weaver Report Burial Inventor Santasilia Dissertation 201
Main Data	Scanned Pages		Main Data	Scanned Pages		
ID#	123 Burial # 151		ID#	124 Burial # 152		
Unit	Trench José Ramirez, 3rd enlargement		Unit	Trench José Ramirez, 3rd enlargement		
Depth	1.04 meters		Depth	1.50 meters		
Observations	NOTE: Burials 150 and 151 were found together		Observations	N/A		
Grave Goods	Possibly shared the ones from Burial 150		Grave Goods	figurine fragment, body, 2 canine, animal tooth, 3, stone, chopper tool, fragment, 4. figurine head, large, solid, Olmecond (Olmecondult), 5. stone, chopper tool, fragment, 6. pottherd, plain		
References			References			
	Figurines	Shell			Figurines 2	Shell None
Tag 1	Vessels	Bone / Antler	Tag 1	Figurine: Olmecoid head	Vessels 1	Bone / 1 Antler
Tag 2	Seals	Misc.	Tag 2	Canine: animal tooth	Seals Nor	e Misc. None
Tag 3	Masks		Tag 3		Masks Nor	e
Tag 4	Stones	TOTAL N/A	Tag 4		Stones 2	TOTAL 6

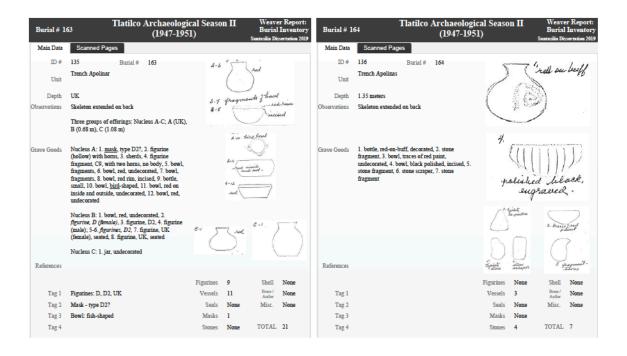




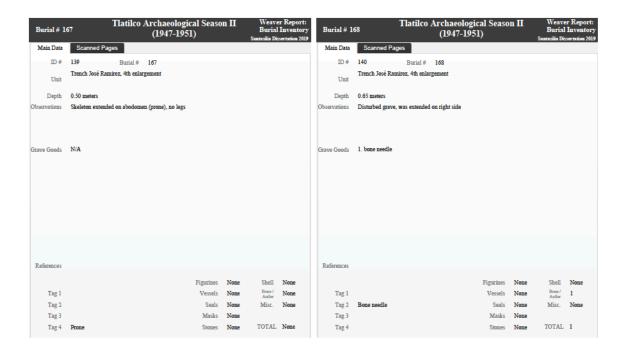
Burial # 1	57	Natilco Archaeolo (1947-1		n II	Burial	r Report: Inventory sertation 2019	Burial # 1	58	Tlatilco	Archaeolog (1947-19				er Report: Inventor Inventor
Main Data	Scanned Page	5					Main Data	Scanned Pag	ges					
ID#	129	Burial # 157					ID#	130	Burial#	158				
Unit	Trench José Ramir	ez, 1st enlargement					Unit	Trench Apolinar	:					, direct
Depth	0.30 meters						Depth	1.15 meters			7	XX	incised	, union
Observations	N/A						Observations	N/A			1.			
	[not Tlatilco - Zaca	tenco - close to surface]												
Grave Goods	1. bowl, crude, flat	2. figurine, C5					Grave Goods	1. vase, incised l	ines					
References							References							
			Figurines	1	Shell	None					Figurines	None	Shell	None
Tag 1	Figurine: C5		Vessels	1	Bone / Antler	None	Tag 1				Vessels	1	Bone / Antler	None
Tag 2			Seals	None	Misc.	None	Tag 2				Seals	None	Misc.	None
Tag 3			Masks	None			Tag 3				Masks	None		
Tag 4			Stones	None	TOTAL	2	Tag 4				Stones	None	TOTAL	1



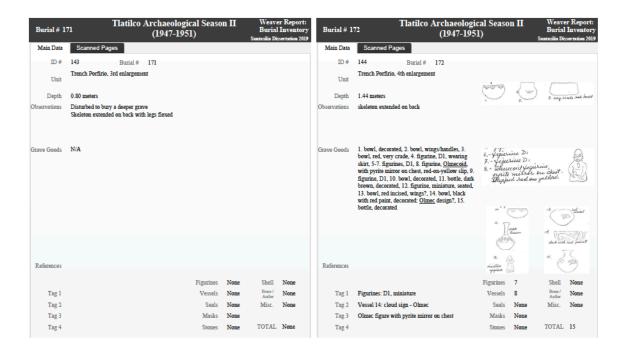
Burial # 1	Tlatilco Archaeologi 61 (1947-195	١	Weaver Report: Burial Inventory Santasilia Dissertation 2019	Burial # 1	Tlatilco Archaeolo (1947-19	
Main Data	Scanned Pages			Main Data	Scanned Pages	
ID#	133 Burial # 161			ID#	134 Burial # 162	LINES? The The Thing was
Unit	Trench Apolinar	let grane, though about the manner of the same of the	Min years of	Unit	Trench Apolinar	The Care
Depth	2.05 meters		sound have containing	Depth	1.70 meters	284
Observations	Childs grave, bones almost disintegrated	and ut	James Sand Start John J	Observations	Skeleton extended on back, Adult	***************************************
		/A	76		Nucleus A-C are groups of offerings: A (0.45 m above skeleton: pelvic and chest area), B (associate directly with skeleton on right upper arm and betwe legs), C (0.70 m above head of skeleton)	
Grave Goods	I bord, with incides and handles, contained: In bord; small plain, and rimmed. It be botted in fragence: 2 voes, yellow-on-red, dipped polithed, continued 2a bord; small, containing and prignence; 2b bord, until, bord, shaped, 3 bord, shaborate shapes, incised. 4 bords, rad-enfantise, 7 bord, shaborate shapes, incised. 4 bords, rad-enfantise, 7 bords, primes Pr. (20 bord), 10 bord, unadocrated, 11 prifes 12 shall bead machines, 31s two humatic fragmans, 1–41 be bords, summisses, 8 bords, unadocrated, 17 voes, unadocrated, 18 bords, unadocrated, 18		orientation occasiles (Edux)	Grave Goods	Nucleon A. 1. betfe, but [missed, 2-bend, howen, underconted, 3. bend, underconted, 4. bend, underconted, 4. bend, underconted, 5. bend, under	1
References	osenskaj, 13. des-endpsko destinis, verbalgistis inter sins solitoris, produce de la companio de la companio de la companio de 10. (Ganala), vastal. 26 figuinta, Dural, 27-26. figurinos, taick lag (1947) (famila), 29-30. figurinos, Di ((famila), satest 3, 17, 39-73. figurinos, tumil 38-39. figurinos (famila), 49. figurinos, fi- variant, 41-50. figurinos (famila), ingrano (famila), unal, 20. figurinos, unit marka and boxed, 53. figurinos, firmala	16. Johan	3. Juneary	References	opinshop (1) ik bette, nel-op-politics, denomatel; 10: figurits, 101 (curred); 23) figurits (limited); 23; figurits; 102; figu	2 8-7.
		Figurines 37	Shell 1			Figurines 27 Shell 1
Tag 1	Figurines: D1, D3, D, D47, K, small, male, masked	Vessels 14	Bone / None	Tag 1	Figurines: C9, D, D2, K, seated, male	Vessels 17 Bone / 1
Tag 2	Two vessels containing other objects!	Seals None	Misc. 5	Tag 2	Olmec figurines	Seals 1 Misc. 2
Tag 3	Rattle	Masks None		Tag 3		Masks 1
Tag 4		Stones 1	TOTAL 58	Tag 4		Stones 6 TOTAL 55



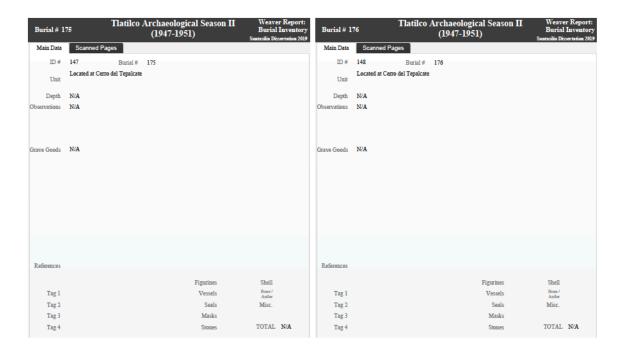
Burial # 10	Tlatilco Archaeological Seas (1947-1951)	on II	Burial	er Report: Inventory sertation 2019	Burial # 1	Tlatilco Archaeological Season II Weaver Repoi (1947-1951) Weaver Repoi Burial Invento Santezila Dissertation 2
Main Data	Scanned Pages				Main Data	Scanned Pages
ID#	137 Burial# 165				ID#	# 138 Burial # 166
Unit	Trench Tejabon Apolinas, 1st extension				Unit	Trench José Ramirez, 4th enlargement
Depth	1.60 meters				Depth	0.72 meters
Observations	Secondary burial				Observations	Secondary grave Bones of child, adult and animal
Grave Goods	1. metate fragment, 2. mano, 3. metate fragment, 4. shell				Grave Goods	s N/A
References					References	5
	Figurine	None	Shell	1		Figurines None Shell None
Tag 1	Vessels	None	Bone / Antler	None	Tag 1	Vessels None Bone / None
Tag 2	Seals	None	Misc.	None	Tag 2	
Tag 3	Mask	None			Tag 3	Masks None
Tag 4	Stones	3	TOTAL	4	Tag 4	Stones None TOTAL None



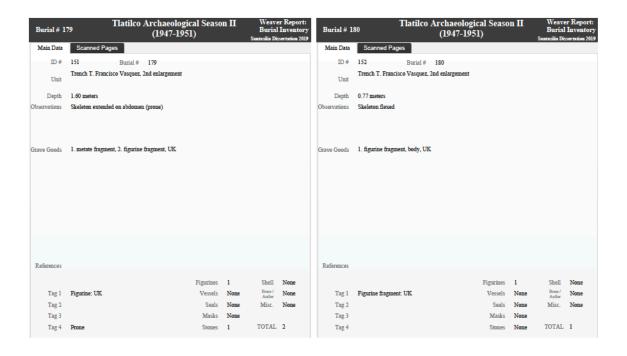
Burial # 16	Tlatilco Archaeo (1947-		n II	Burial	er Report: Inventory sertation 2019	Burial # 1	70 Tlatilco A	rchaeological Seas (1947-1951)	On II Weaver Re Burial Inve Santscilia Dissertati	entory
Main Data	Scanned Pages					Main Data	Scanned Pages			
ID#	141 Burial # 169					ID#	142 Burial # 1		-	
Unit	Trench José Ramirez, 4th enlargement					Unit	Trench Porfirio, 3rd enlargement	-	. 5	
Depth	1.68 meters					Depth	1.10 meters		(1/1/	1
Observations	Skeleton extended on abdomen (prone)					Observations	Skeleton extended on abdomen (p	orone)	\ // /	
Grave Goods	1. figurine, D1					Grave Goods	long bone, animal, 2. bottle, de figurine, D1?. 4. figurine body fir duck vessel, polished black, 6. fig	ngment, D1?, 5.	Constituted the	lack
References						References				
		Figurines	1	Shell	None			Figurines	3 Shell Non	ine
Tag 1	Figurine: D1	Vessels	None	Bone /	None	Tag 1	Figurine: D1?, UK	Vessels		
Tag 2	•	Seals	None	Misc.	None	Tag 2	Duck-shaped vessel	Seals	None Misc. Non	ne
Tag 3		Masks	None			Tag 3		Masks	None	
Tag 4	Prone	Stones	None	TOTAL	1	Tag 4	Prone	Stones	None TOTAL 6	

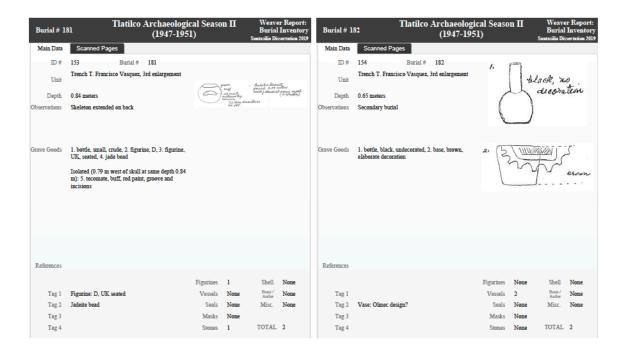


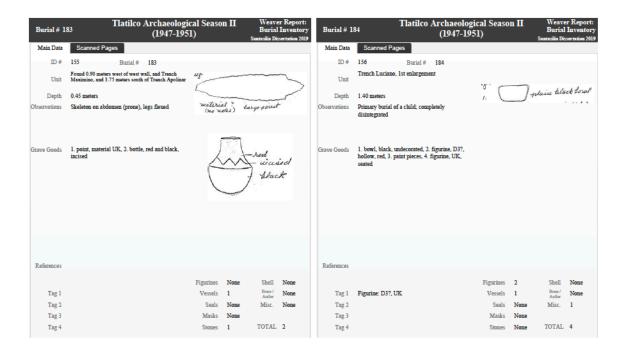
Burial # 1	73 Tlatilco Archaeological S (1947-1951)	easo	n II	Burial	er Report: Inventory ssertation 2019	Burial # 1	74	Tlatilco	Archaeologica (1947-1951)	l Season II	Weaver Rej Burial Inve Santasilia Dissertati	entory
Main Data	Scanned Pages					Main Data	Scanned P	ages				
ID#	145 Burial # 173					ID#	146	Burial#	174			
Unit	Trench Tziabain?? Francisco Vasquez					Unit	Located at Cer	ro del Tepalcate	•			
Depth	2.30 meters					Depth	N/A					
Observations	Multiple grave: three individuals					Observations	N/A					
	Skeletons extended on abdomen (prone), legs flexed backwards											
Grave Goods	1-2. large metates					Grave Goods	N/A					
References						References						
	Figu	rines	None	Shell	None					Figurines	Shell	
Tag 1	Ve	ssels	None	Bone / Antler	None	Tag 1				Vessels	Bone / Antler	
Tag 2		Seals	None	Misc.	None	Tag 2				Seals	Misc.	
Tag 3	N	lasks	None			Tag 3				Masks		
Tag 4	Si	tones	2	TOTAL	2	Tag 4				Stones	TOTAL N/A	L



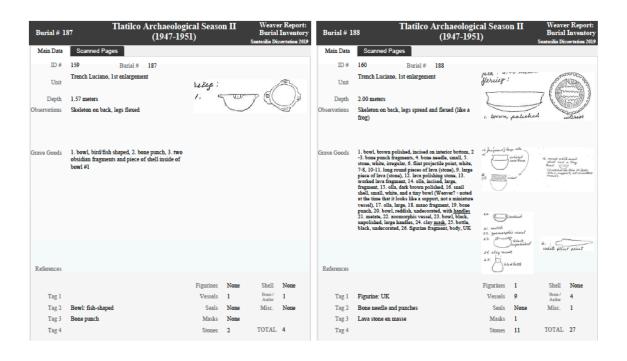
Burial # 1	Tlatilco Archaeological Season I (1947-1951)	Weaver Report: Burial Inventory Santasilis Dissertation 2019	Burial # 1	78 Tlatilco	Archaeological Season II (1947-1951)	Weaver Report: Burial Inventory Santazilia Dissertation 2019
Main Data	Scanned Pages		Main Data	Scanned Pages		
ID#	149 Burial # 177		ID#	150 Burial #	178	
Unit	Located at Cerro del Tepalcate		Unit	Located at Cerro del Tepalcat	ie	
Depth	N/A		Depth	N/A		
Observations	N/A		Observations	N/A		
Grave Goods	N/A		Grave Goods	N/A		
References			References			
	Figurines	Shell			Figurines	Shell
Tag 1	Vessels	Bone / Antler	Tag 1		Vessels	Bone / Antler
Tag 2	Seals	Misc.	Tag 2		Seals	Misc.
Tag 3	Masks		Tag 3		Masks	
Tag 4	Stones	TOTAL N/A	Tag 4		Stones	TOTAL N/A



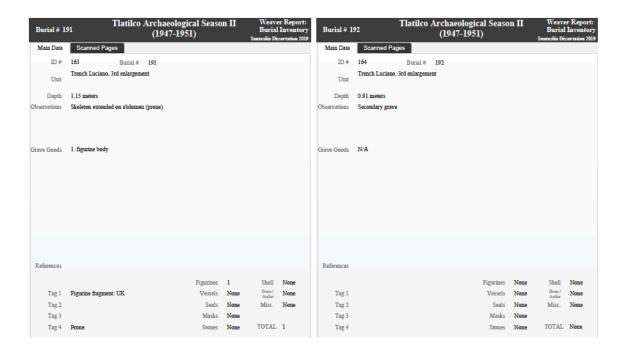




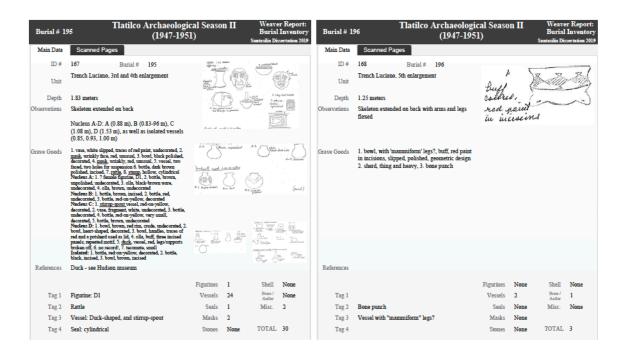
Burial # 1	Tlatilco Archaeologio 85 (1947-195)		Ш	Burial	er Report: Inventory ssertation 2019	Burial # 1	86	Tlatilco	Archaeolog (1947-19			Burial	er Report: Inventory sertation 2019
Main Data	Scanned Pages					Main Data	Scanned	Pages					
D#	157 Burial # 185					ID#	158	Burial#	186				
Unit	Trench Luciano, 1st enlargement	/. · · ·	Varia 7	T. SIMP	7	Unit	Trench Lucia	ano, 1st enlargeme	ent				
Depth	1.20 meters		Pill	auren	1	Depth	1.18 meters (head) - 1.33 mete	rs (feet)				
Observations	Skeleton on left side, legs flexed	.ro	ches-	stane	uiig	Observations	Skeleton on r	right side, legs fle	sed				
		5.0	u cur s		1		Skull deform	ation					
Grave Goods	1. bowl, rocker-stamped, 2. bowl, rocker-					Grave Goods	NT/A						
Grave Goods	stamped	2. 1077 100				Grave Goods	NA						
		COTT AN		ocker-sta	wa seem								
				beken-seras	urceus								
References						References							
		_	None	Shell	None					Figurines	None	Shell	None
Tag 1			2	Antler	None	Tag 1	Skull deform	ation		Vessels	None	Bone / Antier	None
Tag 2			None	Misc.	None	Tag 2				Seals	None	Misc.	None
Tag 3			None	TOTAL		Tag 3				Masks	None	TOTAL	V
Tag 4		Stones	None	TOTAL	2	Tag 4				Stones	None	TOTAL	None



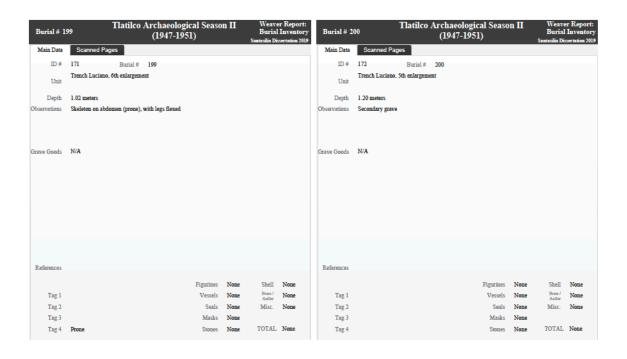
Burial # 1	Tlatilco Archaeological Seaso (1947-1951)	n II	Burial	er Report: Inventory sertation 2019	Burial # 1	Tlatilco Archaeologio (1947-195			Burial	r Report: Inventory sertation 2019
Main Data	Scanned Pages				Main Data	Scanned Pages				
ID#	161 Burial # 189				ID#	162 Burial # 190				
Unit	Trench Luciano, 3rd enlargement				Unit	Trench Luciano, 3rd enlargement				
Depth	1.77 meters				Depth	1.90 meters				
Observations	Skeleton extended on back				Observations	Secondary, brain cave? - and skull intentionally cut off				
						Adult				
Grave Goods	N/A				Grave Goods	N/A				
References					References					
	Figurines	None	Shell	None			Figurines	None	Shell	None
Tag 1	Vessels	None	Bone / Antler	None	Tag 1		Vessels	None	Bone / Antler	None
Tag 2	Seals	None	Misc.	None	Tag 2		Seals	None	Misc.	None
Tag 3	Masks	None			Tag 3		Masks	None		
Tag 4	Stones	None	TOTAL	None	Tag 4	Head intentionally cut off	Stones	None	TOTAL	None



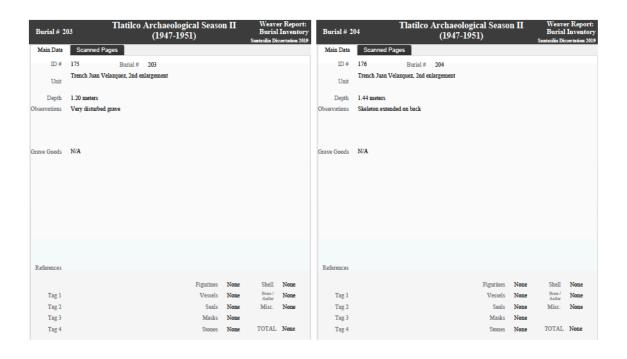
Burial # 1	71 Tlatilco Archaeologio 93 (1947-195)	N.	Weaver Report: Burial Inventory Santacilia Discretation 2019	Burial # 1	94 Tlatilco Archaeolog (1947-19:	51)	Weaver Report: Burial Inventory santasilia Dissertation 2019
Main Data	Scanned Pages			Main Data	Scanned Pages		
ID#	165 Burial # 193			ID#	166 Burial # 194		
Unit	Trench Luciano, 3rd and 4th enlargement	Offering	a. Just on yellow	Unit	Trench Luciano, 3rd and 4th enlargement	5	
Depth	1.66 meters	Brown .	600	Depth	1.88 meters	red interior	
Observations	Skeleton extended on back	tempolesked)	Observations	Skeleton on right side, legs slightly flexed	1 Wayteres	trocas fred.
Grave Goods	bottle, brown, unpolished, undecorated, 2. bottle, red-on-yellow, with indexts on body, 3. tecomate, white slipped, undecorated, 4. bowl, dark brown, grooved, 5. bowl, incised, fragmented, 6. bowl, red nin, buff on body, tripod, solid legs broken off, 7. bone punch, 8. bowl, black polished, decorated, 9. bowl, dark brown, decorated	shipped in a solution	s. clark Einem Since	Grave Goods	1. bowl, red inside and out, undecorated, 2. bowl, dark brown, traces of red, undecorated, 3. bowl, buff with red interior, 4. rattle, red and yellow paint, 5. bowl, elongated, red exterior and rim, undecorated, 6. ladle, brown polithed, undecorated, 6. ladle, brown polithed, undecorated, 7. stone scraper, rectangular, 8. ollo black, undecorated, red cinnaby paint, 9. bowl, black, red and yellow traces on exterior, 10. effigy vessel, opossum/coati	* 14d-	Consequence or server
References		had have traff	State generalist to dead States	References		In the state of th	of description white
		Figurines None	Shell None			Figurines None	Shell None
Tag 1		Vessels 8	Bone/	Tag 1		Vessels 9	Bone/ None
Tag 2	Bone punch	Seals None	Antler None	Tag 2		Seals None	Misc. None
Tag 3	Tripod vessel	Masks None		Tag 3	Effigy vessel: opossum?	Masks None	
Tag 4		Stones None	TOTAL 9	Tag 4		Stones 1	TOTAL 10



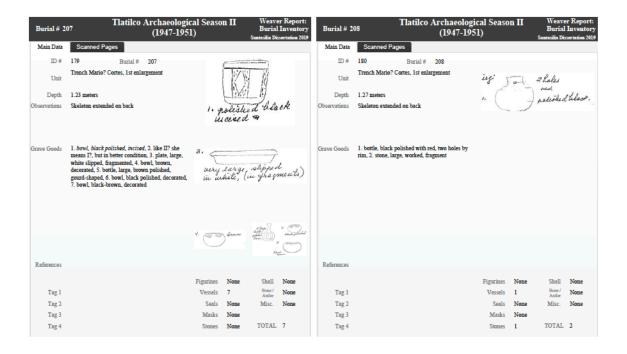
Burial # 1	71 Tlatilco Archaeologic 97 (1947-195)		Burial	er Report: Inventory secretation 2019	Burial # 1	71 Tlatilco Archaeolog 98 (1947-19	ST)	Weaver Report: Burial Inventory Santasilia Dissertation 2019
Main Data	Scanned Pages				Main Data	Scanned Pages		
ID # Unit Depth Observations	169 Burial # 197 Trench Luciano, 6th enlargement 1.60 meters Skeleton extended on back	I. Carlinda	To Cack	brown	ID # Unit Depth Observations	170 Burial # 198 Trench Luciano, 4-5th enlargement 1.29 meters Skeleton on right side, legs flexed		skeet area.
Grave Goods	bowl, black-brown polished, incised, 2. guaje, dark brown, 3. bowl, black, incised	poliched incis	ed black		Grave Goods	bowl, located on chest area, black, with wide incised designs, with red paint (Olimec?), 2. bowl black, decorated (Olimec?). Isolated (0.29 m above grave): 1. figurine, D1 (female), 2. bowl, black, decorated, 3. figurine, D1 (female), 4. bowl, buff polished red paint, 5. bowl, brown, decorated, 6. figurine, D1, male, wearing martial??, 7. finnel, anall, undecorated 8. bottle, black-brown, decorated	deriges, sech	paux
References					References		2. Salan	a plyinin 2, took maring mother. I many soil will word. I shallow.
Tag 1 Tag 2 Tag 3 Tag 4		Figurines None Vessels 2 Seals None Masks None Stones None	Shell Bone / Antier Misc. TOTAL	None None 1	Tag 1 Tag 2 Tag 3 Tag 4	Figurines: D1, male Vessel: Olmec	Figurines 3 Vessels 7 Seals None Masks None Stones None	Shell None Bone / None Misc. None TOTAL 10



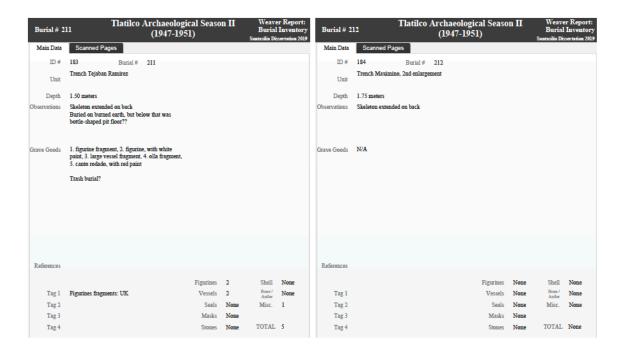
Burial # 201 Tlatilco Archaeological Season II Weaver Report: Burial Inventory (1947-1951) Burial Inventory Santralia Dispertation 2019												Inventory	
Main Data	Scanned Pages					Main Data	Scanned	Pages					
ID#	173 Burial # 201					ID#	174	Burial#	202				
Unit	Trench Juan Velazquez, 4th enlargement	2. 56	Later	un resed		Unit	Trench Juan	Velazquez, 4th e	enlargement	a, pla	an a	ela,-	5
Depth	1.68 meters	6 10	y me			Depth	0.68 meters			21 9000		1	
Observations	Skeleton extended on back	3.		clay sty	el black	Observations	Skeleton pro	bably secondary				-	The same of
Grave Goods	1. bead necklace (no notes on material, presumably stone), 2. bottle, trown, incised, 3. long black polished clay object, 4. bowd, black, decorated, 5. bowl, finish brid-shaped, small, white paint on interior, 6. bowl, cream, red rim, 7. freeco paint fragments, 8. figurine, D3, hollow, red, with white paint	5. 70	ァ《) su wh	ist pseut	Grave Goods		odd, female, blaci , 3. whistle or ve		2. 50 8	ctiles call whise at 2	tsira whichle to be a vessel	зицерет.
		4.	127										
		Elack	9										
References						References							
		Figurines	1	Shell	None					Figurines	1	Shell	None
Tag 1	Figurine: D3	Vessels	4	Bone /	None	Tag 1	Figurine: dif	ferent: black, fen	nale	Vessels	1	Bone /	None
Tag 2		Seals	None	Misc.	3	Tag 2	J			Seals	None	Misc.	1
Tag 3	Bowl: bird/fish-shaped	Masks	None			Tag 3	Whistle - or	vessel support!		Masks	None		
Tag 4	-	Stones	None	TOTAL	8	Tag 4				Stones	None	TOTAL	2



Burial # 2	Tlatilco Archaeological Season I (1947-1951)	[Weaver Report: Burial Inventory Santasilis Dissertation 2019	Burial # 2	Tlatilco Archaeologi 06 (1947-195		Weaver I Burial In Santazilia Disser	ventory
Main Data	Scanned Pages		Main Data	Scanned Pages			
ID#	177 Burial # 205		ID#	178 Burial # 206			
Unit	Located at Cerro del Tepalcate		Unit	Trench Mario? Cortes, 1st enlargement	4 1	7 .	/ .
Depth	N/A		Depth	1.23 meters	" ministers boul	2. plain bra	ese prod
Observations	N/A		Observations	Skeleton on abdomen (prone), with legs flexed	the first and soul		
Grave Goods	N/A		Grave Goods	bowl, miniature, buff, undecorated, 2. bowl, brown, undecorated			
References			References				
	Figurines	Shell			Figurines None	Shell 1	None
Tag 1	Vessels	Bone /	Tag 1		Vessels 2		None
Tag 2	Seals	Antler Misc.	Tag 2		Seals None		Vone
Tag 3	Masks		Tag 3		Masks None		
Tag 4	Stones	TOTAL N/A	Tag 4	Prone	Stones None	TOTAL 2	



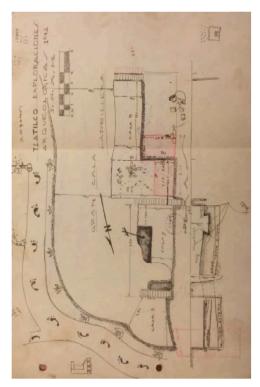
Burial # 209 Tatilco Archaeological Season II Wesver Report: Burial Inventors (1947-1951) Wesver Report: Burial Inventors (1998) Samplin Discretion (1998)					Burial # 210 (1047 1051)					n II	Weaver Report: Burial Inventory Santasilia Dissertation 2019			
Main Data	Scanned Pages				Main Data	Scanned Pages	5							
ID#	181 Burial # 209				ID#	182	Burial#	210						
Unit	3rd stratigraphic pit				Unit	3rd stratigraphic pit	t							
Depth	1.50 meters				Depth	1.69 meters								
Observations	Skeleton extended on back, legs slightly flexed				Observations	Skeleton on left sid	e, with legs	flexed						
Grave Goods	N/A				Grave Goods	N/A								
References					References									
	Figurines	None	Shell	None					Figurines	None	Shell	None		
Tag 1	Vessels	None	Bone /	None	Tag 1				Vessels	None	Bone / Antler	None		
Tag 2	Seals	None	Antler Misc.	None	Tag 2				Seals	None	Misc.	None		
Tag 3	Masks	None			Tag 3				Masks	None				
Tag 4	Stones	None	TOTAL	None	Tag 4				Stones	None	TOTAL	None		



Burial # 213		Tlatilco Archaeological Season II (1947-1951)		n II	Weaver Report: Burial Inventory Santasilia Dissertation 2019		Burial # 6	Tlatile	Tlatilco Archaeologica (1947-1951)			Burial	r Report: Inventory sertation 2019
Main Data	Scanned Pa	ges					Main Data	Scanned Pages					
ID#	185	Burial # 213					ID#	186 Burial #	60				
Unit	Trench Maximi	no, 3rd and 4th enlargement					Unit	Unknown		I	9	AND AND	
Depth	1.00 meters						Depth	Unknown				800	10.4
Observations	N/A						Observations	Skeleton extended on back Female Poorly preserved			2	(0)	ড় প্
Grave Goods	N/A						Grave Goods	1. was cylindrical black breken incision. 5 finned white, with sed like #3, placed right undensent #1 drops of tright gross, with traces incised. 7 rive traces with heavy bushess, 9 obstillate financial production. 9 obstillate financial production with traces of afference paint, placed waster with incised design; placed under with traces of afference paint, place was Quince-visto, until incised, and containing the obstillate of the pointed 2.1 obstillate financial production of the pointed 2.1 obstillate financial production of the pointed 2.5 bond, incised, ordering the production of the pointed 2.5 bond, incised, ordering the production of the pointed 2.5 bond, incised of the pointed 2.5 bond, incised the pointed production of the production	poin, 4, finned, untill, 5, jaideits, two untill of red paint, 6, bowd, flat, string, 8, bords, brown, 3, figurines, Dl., with crystalline hamatish skull, 15, bone fragment, skull, 15, bone fragment, line did not paint, 20, basalt 17, vase, small, incised, four holes for with red paint, 20, basalt 12, 22, bowl, small, 23, suth/rim? painted red, paint, 27-43, sixtsom paint, 27-43, sixtsom paint, 27-43, sixtsom	CV		7	
References							References	feline?), 44. sherd, 45. crystalline. Page 23 in Covarrubias' bool	hematite, small fragment				
			Figurines	None	Shell	None		Mexico and Central America	1957	Figurines	20	Shell	None
Tag 1			Vessels	None	Bone /	None	Tag 1	Figurines: D1 (20)		Vessels	16	Bone /	2
Tag 2			Seals	None	Misc.	None	Tag 2	Hematite		Seals	None	Misc.	2
Tag 3			Masks	None			Tag 3	Olmec vase		Masks	None		
Tag 4			Stones	None	TOTAL	None	Tag 4	Jadeite		Stones	5	TOTAL	45

APPENDIX B COVARRUBIAS SCANS FROM BACE

Documents and photographs from Biblioteca: Archivos y Colecciones Especiales, UDLAP, Mexico.







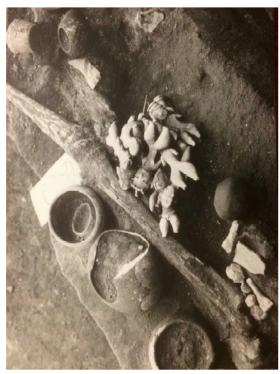








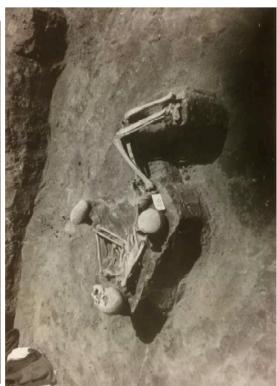


























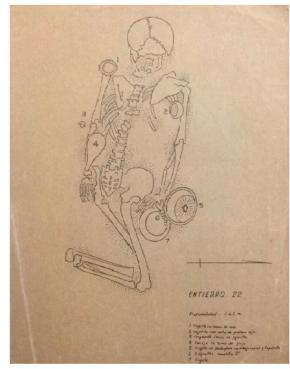


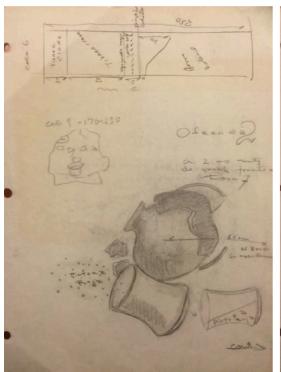


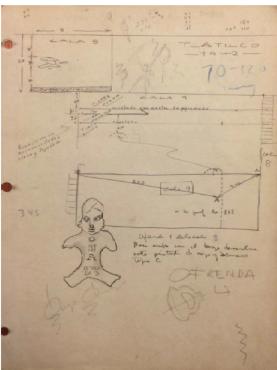


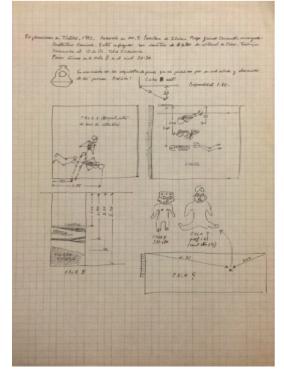


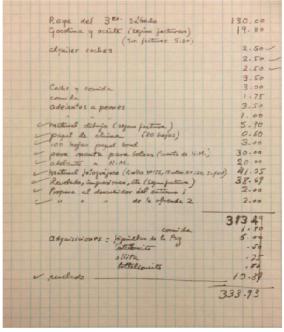


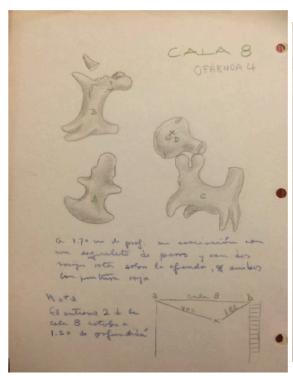


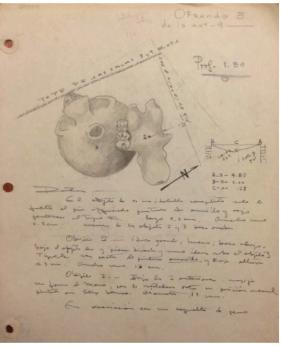




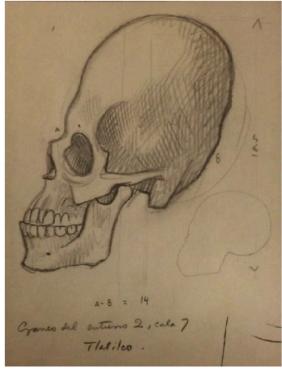


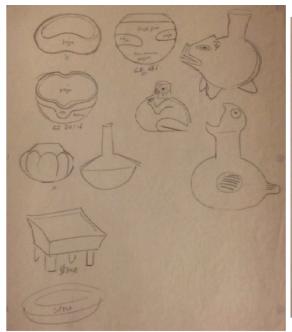


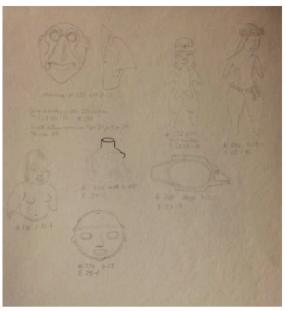




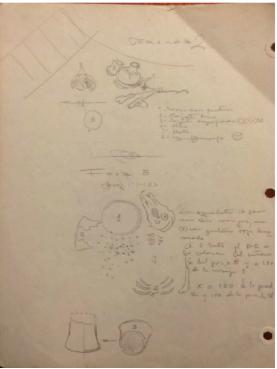






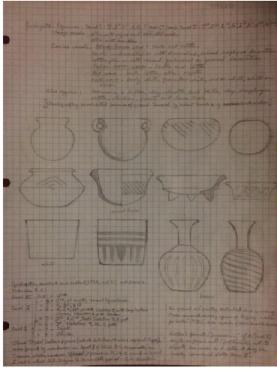


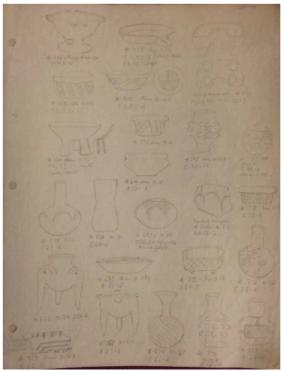


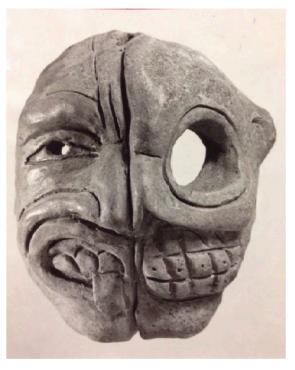
















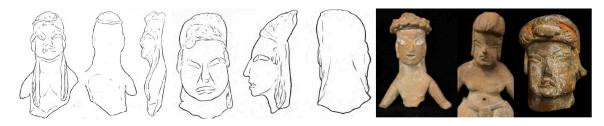


APPENDIX C FIGURINE TYPOLOGIES AND VARIATIONS

Figurine typologies and variations building on Miguel Covarrubias (1957) and Jean-Pierre P. Laporte Molina (1971) with figurines from most of the museum collections included in this research. Includes three drawings by Megan James from the RMM collection.



1. Type D1Variation A.



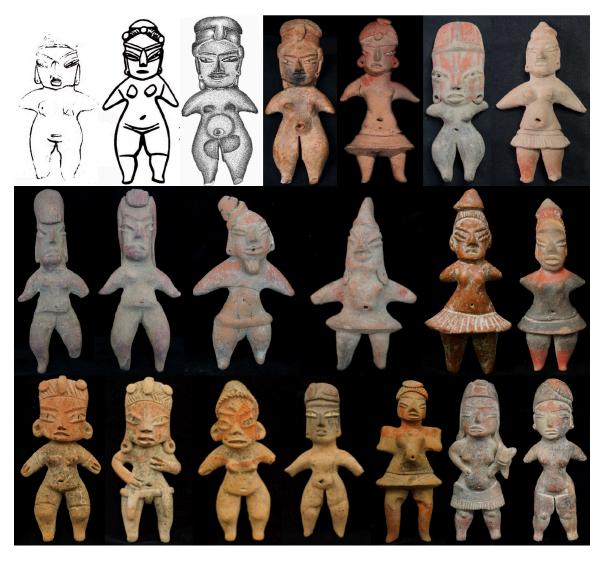
2. Type D1 Variation B.



3. Type D1 Variation C.



4. Type DC9.



5. Type D2, including variations from other Early Formative sites.



6. Type D3.



7. Type D4 Variation A.



8. Type D4 Variation B.



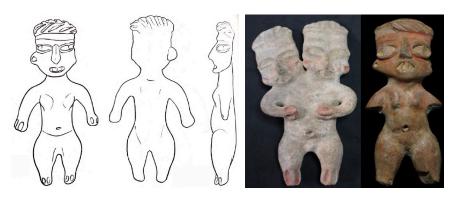
9. Type DK, not from Tlatilco, but Río Cuautla region in Morelos.



10. Type K1 Variation A.



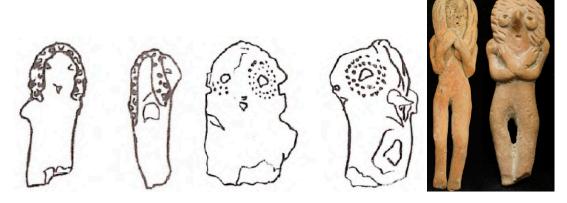
11. Type K1 Variation B.



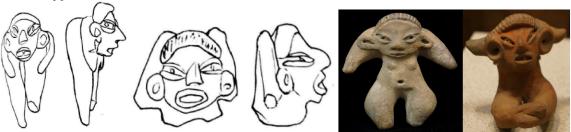
12. Type K2.



13. Type K3. This type resembles a merge of Type D4 and K.



14. Type M or Cañitas.



15. Type "Unknown" (2).



16. Type Miniature.



17. Olmec and Olmec-style figurines. The majority are probably from Las Bocas.



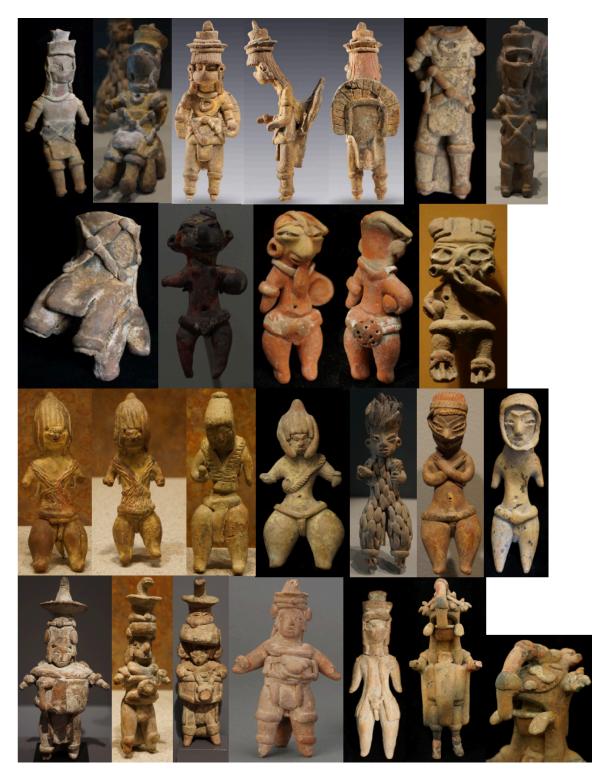
18. Pregnancy, Babies, and Children.



19. Figurines with Dogs.



20. Contortionists, Dancers, and perhaps "Flyers".



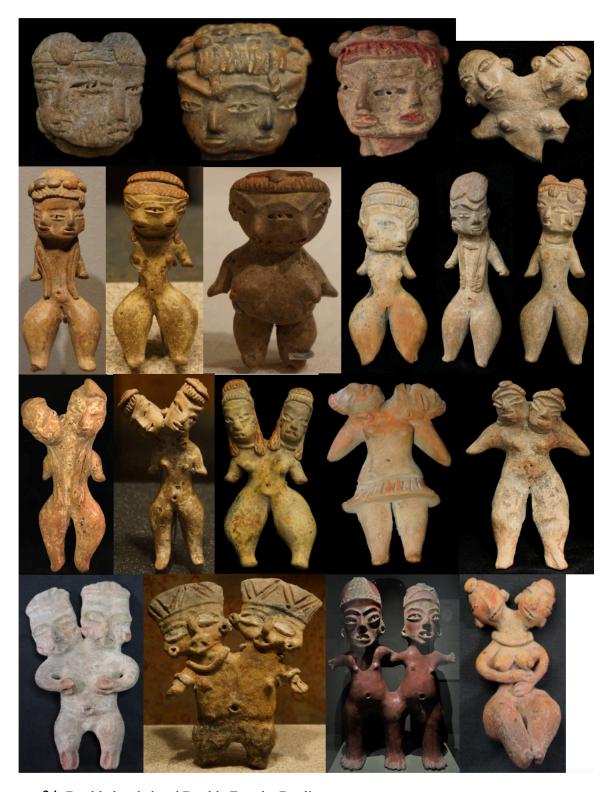
21. Ballplayers.



22. Ballplayer Heads, with Jaguar variations.



23. Designs; Painted and Incised.



24. Double headed and Double Faced – Duality.



25. Fakes?

APPENDIX D PHOTOGRAPHS FROM TLATILCO

The photographs in this appendix are available through the generosity of Princeton University Art Museum, where photographs by Gillett G. Griffin and Muriel Porter Weaver are housed, and from Michael D. Coe who offered his photographs for my dissertation. The first set of images are from Gillett G. Griffin, from either 1950s or 1960s. These photographs provide an excellent view of what the surrounding community looked like, including brick houses which very likely was built with bricks from the local brick yard, and could contain Tlatilco objects.⁹







⁹ Princeton University Art Museum references for photographs: GG90002812, GG90002813, GG90002814, GG90002815, GG90002816, GG90002817, GG90002818, GG90002819, GG90002820, GG90002821, GG90002822, GG90002823, GG90002824, GG90002825, GG90002826, GG90002827, GG90002828, GG90002846, and GG90002880

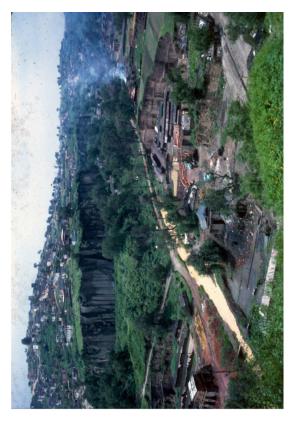














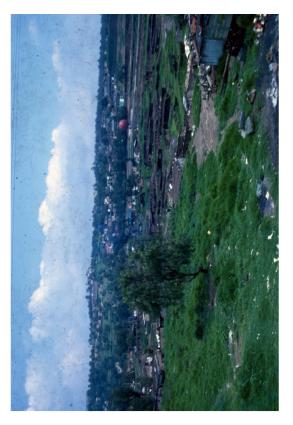














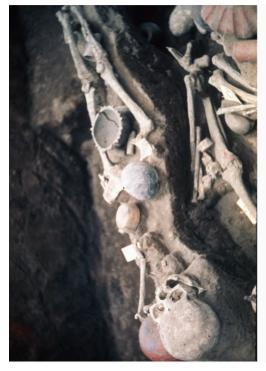




The second set of images are from Muriel Porter Weaver from approximately 1951. These photographs¹⁰ offer a close-up view of the excavations and some of the burials. Weaver was part of the team that excavated Season II, and from whom an unpublished report of these burials has been included (see Appendix A).

Note the red jeep; "The Red Bedbug" which was the field vehicle during Season II (Williams 1994:173).







¹⁰ Princeton University Art Museum references for photographs: GG90002810, GG90002811, GG90002835, GG900041, GG90002847, GG90002848, GG90002849, GG90002850, GG90002851, GG90002852, GG90002853, GG90002855, GG90002856, GG90002857, and GG90002858









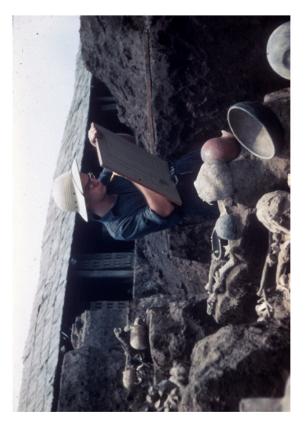
















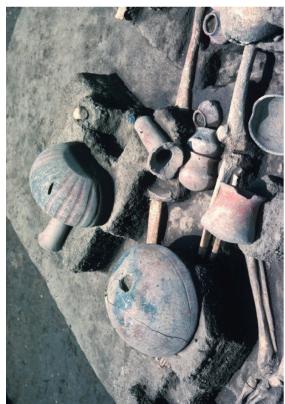
The third, and final set of images are from Michael D. Coe, who visited Tlatilco in 1962 during the excavations of Season IV. These photographs offer an excellent close up of some of the burials in a very high resolution. Including a tabular erect (modified) skull with very worn out teeth. Another shows a type D1 figurine in situ placed along the ribs.





























APPENDIX E VESSEL TYPOLOGIES AND VARIATIONS

From Weaver (Porter 1953): Part I and II are building on the vessels found at Tlatilco during Season II and these are the variations referred to in the analysis. Part III shows the variation of the effigy vessels.

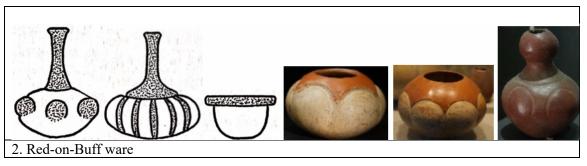
Part I
The thirteen daily ware vessels recognized by Weaver

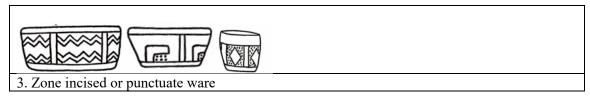
a. Incised bowl Characteristic of	b. Tripod vessel with long solid	c. Long necked bottle Characteristic of Tlatilco	d. Spouted tray Common at Tlatilco
Tlatilco	supports Most characteristic Tlatilco support	Characteristic of Tratheo	Common at Tratheo
		3	A
e. Ovate bowl	f. Plain cylindrical	g. Bowl with incised tabs	h. Tall annular base
Common at Tlatilco	dark-brown vase. Common at Tlatilco	on body Common at Tlatilco	Common at Tlatilco
		2	
i, "Grater" bowl	j. Punctate	k. Stirrup-spouted vessel	1. Tripod bowl with
Common at Tlatilco	decoration in zones Few examples at	Not uncommon at Tlatilco	incised decoration. Not common at
Tiatrico	Tlatilco	Tiatrico	Tlatilco
m. Vessel with Tall annular base and han Not common at Tlati	dle		

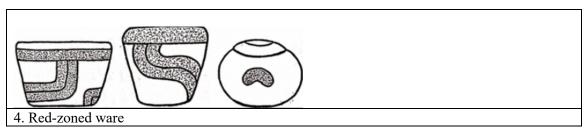
Part II

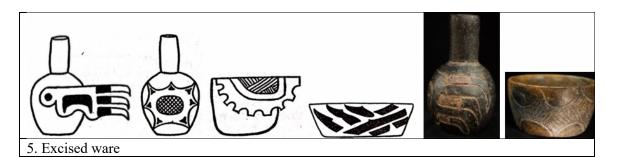
Variations and additional shapes to Part 1. Photographs are the closest museum collection representations of the drawings. Some vessels were not encountered.

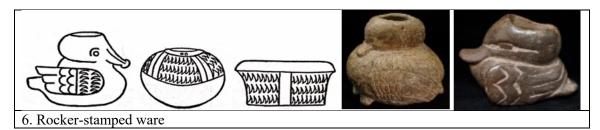


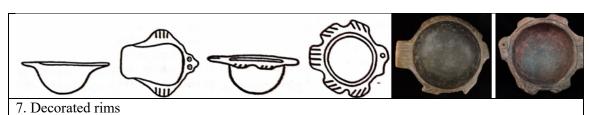




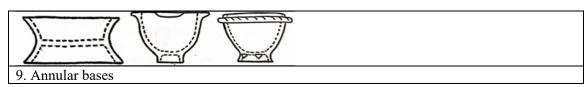


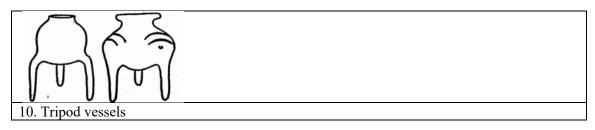














11. Bottles: other variations



12. Triple tiered gourd-shaped bottles and one with stucco







14. Olmec, from San Lorenzo; various excised and incised designs, and Limón Carved.

Part III Effigy vessels – Zoomorphic and Anthropomorphic.



1. Birds. Many variations, primarily ducks, both naturalistic and abstract.



2. Peccaries



3. Coatimundis.



4. Fish (perhaps the first one is a bird).



5. Various animals: rabbits, monkey, armadillo, possibly toad, and abstract or unknown.



6. Miniature effigy vessels with holes near rim to attach lid.



7. Anthropomorphic vessels

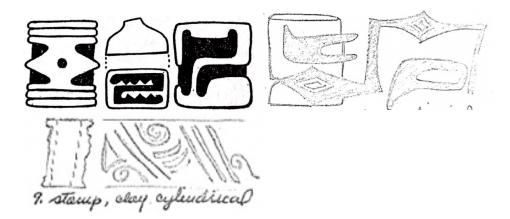
APPENDIX F SELLOS, MASKS, INSTRUMENTS, AND MISCELLANEOUS

This appendix contains the objects that are discussed in addition to the figurines and vessels and include Part I: sellos (flat and roller), Part II: masks, Part III: instruments (whistles and rattles), and Part IV: miscellaneous (obsidian points and bone needles).

Part I: Sellos



1. Flat stamps: feet, darts, abstract, and perhaps birds – the bottom row is not necessarily from Tlatilco.



2. Roller stamps from Weaver (Appendix A and Porter 1953).



3. Roller stamps. Designs: monkey, Olmec, duck, rabbit, centipedes, star, and abstract.

Part II: Masks



1. The most common kind of mask, with variations.

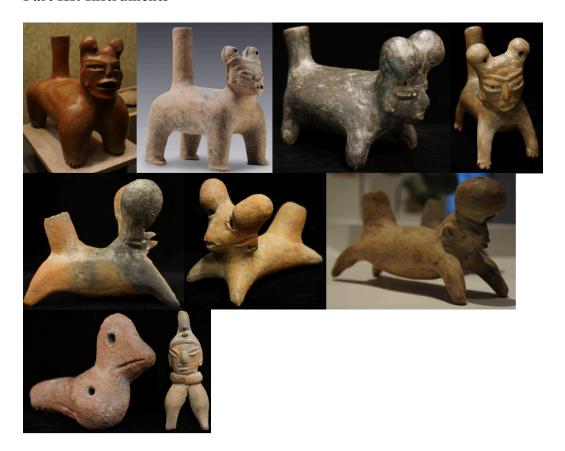


2. Fierce animals, a duck-billed, and a pig(?).



3. Death, aged, scared (?), and other expressions.

Part III: Instruments

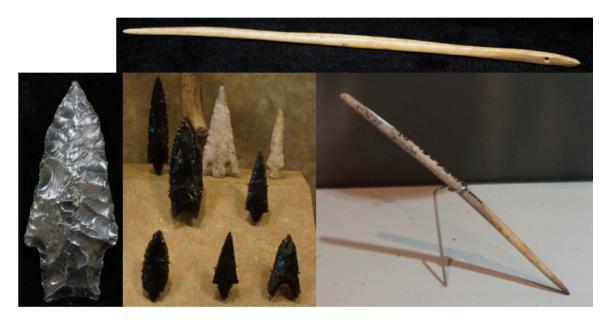


1. Whistles. Many variations of anthropomorphic dogs, one example of a bird and a human.



2. Rattles: spherical and one anthropomorphic.

Part IV: Miscellaneous



1. Obsidian and flint projectile points and bone needles.

APPENDIX G ARTIFACTS FOR SALE 2016-2019

These are some examples of some of the objects that have been for sale labeled as being Tlatilco artifacts over the last three years. Text is copied from the seller. Personal comments are in square brackets [example].

I. Pre-Columbian, Olmec, Tlatilco, Tlapacoya; mother & child:





For sale on eBay February 29th, 2016 for \$395 dollars. [Not from Tlatilco]

II. Art 100 BCE - 250 CE, fragmentary Tlatilco bust:





For sale on eBay February 29th, 2016, for \$249.00, still for sale, February 20, 2019. Private California collection, acquired in the 1960s, to present owner by descent. [Poor fragment but very likely from Tlatilco].

III. Antique Pre-Columbian, Mexico, Olmecoid terracotta pregnant woman figure:





For sale on eBay on February 29th, 2016 for \$3.598 dollars. "stunning! Museum piece, Tlatilco, Puebla, full provenance." [Not from Tlatilco]

IV. Pre-Columbian, Tlatilco silhouette vessel 800 BCE. Ex-Richard Bellak collection:







For sale on eBay on February 20th, 2019 for \$275.00.

"For your consideration is an extremely fine Tlatilco redware vessel with a silhouette design. This piece was collected in the 1960's by former dealer/collector Richard Bellak of New York. A similar example can be found in the book "The Jaguar's Children" by Michael Coe. This fine ancient pottery is also very unique because the inside has a thick coating of ancient red pigment it is either

cinnabar or red ochre. The vessel was likely used for storage of this pigment and has remained intact for nearly 3,000 years. This piece would be a fine addition to any collection and is top quality.

Dimensions: 2.75 inches high, 11 inches in circumference, 4 inches wide

Provenance: Richard Bellak New York acquired in the 1960's, a private San Diego collection.

Condition: Fine. A small chip the size of a pencil eraser was professionally restored otherwise intact.

I guarantee the above to be correct. All items legal to buy/sell under U.S. Statute covering cultural patrimony code 2600, chapter 14, and are guaranteed to be as described." [Very common Tlatilco vessel containing red cinnabar].

V. Large Tlatilco standing female figure, Early Preclassic, 1200-900 BCE, rare:



For sale on February 20th, 2019 for \$13,500.00

Early Preclassic, 1200-900 BCE. Height 15 1/2in (39.5cm) with diminutive arms and wearing a hat; brown painted slip with red buff highlights on the hat. Rare!

Provenance: private collection, California, 1970's ex. Bonhams. A gorgeous piece of Pre-Columbian history. Condition: intact.

[I am not convinced that this is from Tlatilco, but very likely Early Formative].

VI. Pre-Columbian Tlatilco standing female figure



For sale on eBay on February 20th, 2019 for \$800.00.

Pre-Columbian Tlatilco standing female figure, red slip, remnants of black slip. Almond eyes, open mouth, with navel. 1lb. Approx. Measurements: 7.5" height.

Condition: condition commensurate with age, restoration to arm.

[This one resembles one of the large D3 figures from NMAI. It is most likely from Tlatilco, although the style, including the one from NMAI, is somewhat unusual].

VII. Pre-Columbian ancient artifact clay statute juggler. Tlatilco, Aztec, Mayan antique.



For sale on eBay February 20th, 2019 for \$1,500.00.

"One-of-a-kind! This is for a mega rare gorgeous authentic original Pre-Colombian Tlatilco juggler carved clay figure artifact. It is in excellent condition with minor damaged as seen. There are tiny portions missing but for the most part is in great condition despite its age. This piece comes with the best pictures possible I will let you make up your own mind of its condition. Please see the pictures for the best description and condition. Please ask all questions thanks. There are no cracks that compromise the piece however there are tiny pieces missing like the taparrabos (underwear small strip missing) if any ... Super rare and in miraculous conditions really!"

[This very much looks like some of the other anthropomorphic effigy vessels from Tlatilco].

VIII. Large head woman glazed stoneware figure, Pre-Columbian, Tlatilco-style.



For sale on Ebay for \$670.00 on February 20th, 2019.

Pre-Columbian Tlatilco-style. 1900s. height 40 cm. In perfect condition. [1900s? Height 40 cm? Something wrong with the logistics or it is fake! The dark manganese stains are also wrong]

IX. Tlatilco Pottery Figural Busts (2) Tlatilco, Mexico. Ca. 1150-550 BCE:



For sale on Arte Primitivo. Est. \$1,000-\$1,500 Closing: Monday July 15th, 2019, 10:02 A.M

Private Nevada collection, ex. Dr. David Harner collection, Arkansas, 1950s-1960s, collection #M160 &M161. Height: 4-1/4" & 4-1/8".

[These slightly resemble type A figurines, and have a somewhat distinct Tlatilco face, but they do not otherwise resemble Tlatilco figurines].

X. Olmecoid Figure, Tlatilco Pretty Lady & Miniature Altar. Mexico. Ca. 1000-500 BCE:



For sale on Arte Primitivo. Est. \$800-\$1,200 Closing: Monday, July 15th, 2019, 10:08 A.M

Ex. Robert and Marianne Huber, NYC and ILL., acquired 1960s - 1990s. Height: 2-3/4" to 5-1/2". [Possibly the center one is from Tlatilco. The right one is a D2 variation, but not from Tlatilco].

XI. Tlatilco Type K Pretty Lady Figure Tlatilco, Mexico. Ca. 1150-550 BCE:



For sale on Arte Primitivo. Est. \$500-\$800 Closing: Monday July 15th, 2019, 10:11 A.M

Private Nevada collection. Ex. Harmer Rooke Galleries, NYC., 1980s. Exhibited at the Marjorie Barrick Museum, UNLV., early 2000s. Height: 3-3/4". Width: 2-1/2". [This is a small K1 figurine].

XII. Tlatilco Heads, Mexico. Ca. 1200-800 BCE:



For sale on Arte Primitivo. Est. \$200-\$300 Closing: Monday, July 15th, 2019, 10:12 A.M.

Collection of Swanhild Castle, Brooklyn, NY., acquired 1960s. Height: 1-1/4" to 2-3/8". [the center head is not from Tlatilco, the other two are scrawny D1 heads].

XIII. Pottery Bottles Tlatilco, Mexico. Ca. 1000-700 BCE:



For sale on Arte Primitivo. Est. \$1,000-\$1,500 Closing: Monday July 15th, 2019, 10:30 A.M

Ex. Robert and Marianne Huber, NYC and ILL., acquired 1960s - 1990s. Height: 9-3/8" to 11-1/4". [The first bottle could be from Tlatilco, but unusual shape, the other two could be from Tlatilco].