Hilltop Sites of Eastern Guerrero: The Case Study of Chiepetlan-Quimimiteopan

Alicia Danielle Hernandez

University of Colorado Boulder, alicia.hernandez135@gmail.com

Follow this and additional works at: https://scholar.colorado.edu/anth_gradetds

Part of the Archaeological Anthropology Commons

Recommended Citation

https://scholar.colorado.edu/anth_gradetds/33
Hilltop Sites of Eastern Guerrero: The Case Study of Chiepetlan-Quimimiteopan

By

Alicia Danielle Hernandez

B.A., Brown University 2011

A thesis submitted to the
Faculty of the Graduate School of the
University of Colorado in partial fulfillment
of the requirement for the degree of
Master of Arts
Department of Anthropology
2014
This thesis entitled:
*Hilltop Sites of Eastern Guerrero: The Case Study of Chiepetlan-Quimimiteopan*
written by *Alicia Danielle Hernandez*
has been approved for the Department of Anthropology

______________________________
Gerardo Gutierrez

______________________________
Payson Sheets

______________________________
Arthur Joyce

______________________________
Catherine M. Cameron

Date ________________

*The final copy of this thesis has been examined by the signatories, and we Find that both the content and the form meet acceptable presentation standards Of scholarly work in the above mentioned discipline.*
This project conducts a preliminary investigation into the hilltop settlements of eastern Guerrero, Mexico. It provides a detailed discussion of excavations conducted at the site of Chiepetlan-Quimimiteopan with the goal of providing a basis of comparison for future archaeological work at hilltop sites in eastern Guerrero. Excavation results and specific artifact categories were examined in an effort to assess the function of the site and its placement in relation to other sites within eastern Guerrero and ultimately broader Mesoamerica. It was determined that the inhabitants of this hilltop site were not operating in isolation, but were interacting with other sites in the region, potentially as part of larger networks across multiple areas of Mesoamerica.
# TABLE OF CONTENTS

LIST OF FIGURES .................................................................................................................. V
LIST OF TABLES .................................................................................................................... VIII

LIST OF FIGURES ................................................................................................................. ERROR! BOOKMARK NOT DEFINED.
LIST OF TABLES ..................................................................................................................... ERROR! BOOKMARK NOT DEFINED.

INTRODUCTION ..................................................................................................................... 1
  Structure of this Thesis ......................................................................................................... 2

BACKGROUND: INTRODUCTION TO EASTERN GUERRERO AND CHIEPETLAN-
QUIMIMITEOPAN ...................................................................................................................... 3
  Eastern Guerrero: Physical Environment ............................................................................ 3
  Chiepetlan-Quimimiteopan: Site Location and Introduction ............................................. 12
  Objectives ............................................................................................................................ 25

CASE STUDY: CHIEPETLAN-QUIMIMITEOPAN ................................................................... 27
  Methodology ......................................................................................................................... 27
  Quimimiteopan .................................................................................................................... 27
  Terreno de Octaviano .......................................................................................................... 29
  Overall Excavation: Features and Construction Phases ......................................................... 35
  Quimimiteopan .................................................................................................................... 35
  Terreno de Octaviano .......................................................................................................... 39
  Ceramics ............................................................................................................................... 43
  Obsidian ............................................................................................................................... 50
  Shell ..................................................................................................................................... 57

PRELIMINARY ANALYSIS OF CHIEPETLAN-QUIMIMITEOPAN ........................................ 63
  Origins of Artifacts: Imports and Access ............................................................................ 63
  Agricultural Land and Potential Competition .................................................................... 67

CONCLUSIONS AND FUTURE RESEARCH ........................................................................ 70

BIBLIOGRAPHY ..................................................................................................................... 72

APPENDIX 1: PRELIMINARY SURVEY OF VESSEL FORMS .................................................. 78
  Figures .................................................................................................................................. 83

APPENDIX 2: CERAMIC TYPOLOGY ................................................................................... 89
List of Figures

Figure 1: Map of Eastern Guerrero (taken from Gutierrez 2002: 33, used with permission of Gerardo Gutierrez) ................................................................. 3

Figure 2: Costa Chica and Mountain Region (taken from Gutierrez 2002: 38, used with permission of Gerardo Gutierrez) ..................................................... 4

Figure 3: Elevations of Geographical Features (taken from Gutierrez 2002: 38, used with permission of Gerardo Gutierrez) ..................................................... 4

Figure 4: Ecological Tiers (taken from Gutierrez 2002: 54, used with permission of Gerardo Gutierrez) ................................................................. 6

Figure 5: Rainfall Distribution in Eastern Guerrero During the Rainy Season (taken from Gutierrez 2002: 58, used with permission of Gerardo Gutierrez) ..................................................... 8

Figure 6: Rainfall Distribution in Eastern Guerrero During the Dry (taken from Gutierrez 2002: 56, used with permission of Gerardo Gutierrez) ................. 9

Figure 7: Areas of High Maize Production in Eastern Guerrero, Total Production/Total Area of Municipality (taken from Gutierrez 2002: 78, used with permission of Gerardo Gutierrez) ...... 11

Figure 8: Location of Eastern Guerrero (taken from Gutierrez 2002: 5, used with permission of Gerardo Gutierrez) ................................................................. 13

Figure 9: Location of Case Study Sites (taken from Gutierrez & Hernandez 2013) ................................................................. 14

Figure 10: Distance Between Site Location and the Agricultural Valleys ................................................................. 16

Figure 11: Distance Between Site Location and the Zizintla River Valley ................................................................. 17

Figure 12: Location of Chiepetlan-Quimimiteopan and Surrounding Mountain Ridges ................................................................. 18

Figure 13: Topographical Map of Chiepetlan-Quimimiteopan (taken from Gutierrez 2013: 24, used with permission of Gerardo Gutierrez) ......................... 19

Figure 14: Four Sectors of Chiepetlan Quimimiteopan (taken from Gutierrez 2013: 10, used with permission of Gerardo Gutierrez) ................................................................. 20

Figure 15: Teteonomiquia Section of Chiepetlan-Quimimiteopan (taken from Gutierrez 2013: 9, used with permission of Gerardo Gutierrez) ................................................................. 21

Figure 16: Monumental Core Section of Chiepetlan-Quimimiteopan (taken from Gutierrez 2013: 9, used with permission of Gerardo Gutierrez) ............. 22

Figure 17: Location and Approximate Area of Terraces from Section Three of Chiepetlan-Quimimiteopan ................................................................. 24

Figure 18: Topography of Terreno de Octaviano (taken from Gutierrez 2013: 24, used with permission of Gerardo Gutierrez) ................................................................. 25

Figure 19: Early Mapping of Quimimiteopan Monumental Core with Location of the Mound Profile Marked in red (taken from Gutierrez 2010: 133, used with permission of Gerardo Gutierrez) .... 28

Figure 20: Location of Mound Profile (Saqueo) (Gutierrez 2013: 34, used with permission of Gerardo Gutierrez) ................................................................. 29

Figure 21: Terreno de Octaviano Terraces (taken from Gutierrez 2013: 24, used with permission of Gerardo Gutierrez) ................................................................. 30

Figure 22: Terreno de Octaviano Upper Terrace Excavation Key (taken from Gutierrez 2013: 32, used with permission of Gerardo Gutierrez) ................................................................. 30

Figure 23: Terreno de Octaviano Lower Terrace Excavation Key (taken from Gutierrez 2013: 32, used with permission of Gerardo Gutierrez) ................................................................. 31

Figure 24: Topographical Map of Terreno de Octaviano, Lower Terrace Excavation Area (taken from Gutierrez 2013: 31, used with permission of Gerardo Gutierrez) ................................................................. 32

Figure 25: Total Area Excavated from Lower Terrace of Terreno de Octaviano (taken from Gutierrez 2013: 21, used with permission of Gerardo Gutierrez) ................................................................. 33

Figure 26: Total Excavated Area from Terreno de Octaviano Upper Terrace (taken from Gutierrez 2013: 34, used with permission of Gerardo Gutierrez) ................................................................. 34

Figure 27: Quimimiteopan Mound Profile (taken from Gutierrez 2013: 33, used with permission of Gerardo Gutierrez) ................................................................. 35

Figure 28: Construction Phases of Quimimiteopan (taken from Gutierrez 2013: 32, used with permission of Gerardo Gutierrez) ................................................................. 36

Figure 29: Alignment of Stones in the Upper Terrace (taken from Gutierrez 2013: 29, used with permission of Gerardo Gutierrez) ................................................................. 37
Figure 30: Exposure of Stone Alignment Across the Upper Terrace (taken from Gutierrez 2013:31, used with permission of Gerardo Gutierrez) .................................................................40
Figure 31: Preserved Stucco from Unit T4 (taken from Gutierrez 2013:32, used with permission of Gerardo Gutierrez) .................................................................41
Figure 32: 40cm by 20cm Hearth from Unit T6 (taken from Gutierrez 2013:32, used with permission of Gerardo Gutierrez) .................................................................42
Figure 33: Type 3 Ceramic from Terreno de Octaviano, photo by author material from Proyecto “Arqueología y Etnohistoria en la Montaña de Guerrero: Patrones de Expansión Política-Territorial de un Señorío Postclásico en la Mixteca-Nahua-Tlapanae.” .......................................................45
Figure 34: Type 2S Ceramic from Terreno de Octaviano, photo by author material from Proyecto “Arqueología y Etnohistoria en la Montaña de Guerrero: Patrones de Expansión Política-Territorial de un Señorío Postclásico en la Mixteca-Nahua-Tlapanae.” .......................................................45
Figure 35: Type 2 Ceramic from Terreno de Octaviano, photo by author material from Proyecto “Arqueología y Etnohistoria en la Montaña de Guerrero: Patrones de Expansión Política-Territorial de un Señorío Postclásico en la Mixteca-Nahua-Tlapanae.” .......................................................46
Figure 36: Type 2 Handle from Terreno de Octaviano photo by author material from Proyecto “Arqueología y Etnohistoria en la Montaña de Guerrero: Patrones de Expansión Política-Territorial de un Señorío Postclásico en la Mixteca-Nahua-Tlapanae.” .......................................................47
Figure 37: Distribution of Ceramics at Terreno de Octaviano (taken from Gutierrez 2013:36, used with permission of Gerardo Gutierrez) .................................................................48
Figure 38: Debris from Terreno de Octaviano, photo by author. Material from Proyecto “Arqueología y Etnohistoria en la Montaña de Guerrero: Patrones de Expansión Política-Territorial de un Señorío Postclásico en la Mixteca-Nahua-Tlapanae.” .......................................................52
Figure 39: Broken Flake from Terreno de Octaviano, Material from Proyecto “Arqueología y Etnohistoria en la Montaña de Guerrero: Patrones de Expansión Política-Territorial de un Señorío Postclásico en la Mixteca-Nahua-Tlapanae.” .......................................................52
Figure 40: Reworked Obsidian from Terreno de Octaviano, Piece #1, photo by author. Material from Proyecto “Arqueología y Etnohistoria en la Montaña de Guerrero: Patrones de Expansión Política-Territorial de un Señorío Postclásico en la Mixteca-Nahua-Tlapanae.” .......................................................54
Figure 41: Reworked Obsidian from Terreno de Octaviano, Piece #2, photo by author. Material from Proyecto “Arqueología y Etnohistoria en la Montaña de Guerrero: Patrones de Expansión Política-Territorial de un Señorío Postclásico en la Mixteca-Nahua-Tlapanae.” .......................................................55
Figure 42: Green Obsidian from Terreno de Octaviano, photo by author. Material from Proyecto “Arqueología y Etnohistoria en la Montaña de Guerrero: Patrones de Expansión Política-Territorial de un Señorío Postclásico en la Mixteca-Nahua-Tlapanae.” .......................................................56
Figure 43: Bivalve, Oyster from Terreno de Octaviano photo by author. Material from Proyecto “Arqueología y Etnohistoria en la Montaña de Guerrero: Patrones de Expansión Política-Territorial de un Señorío Postclásico en la Mixteca-Nahua-Tlapanae.” .......................................................58
Figure 44: Gastropod, potentially pupura, from Terreno de Octaviano photo by author. Material from Proyecto “Arqueología y Etnohistoria en la Montaña de Guerrero: Patrones de Expansión Política-Territorial de un Señorío Postclásico en la Mixteca-Nahua-Tlapanae.” .......................................................59
Figure 45: Red Bivalve from Terreno de Octaviano Unit U4, photo by author Material from Proyecto “Arqueología y Etnohistoria en la Montaña de Guerrero: Patrones de Expansión Política-Territorial de un Señorío Postclásico en la Mixteca-Nahua-Tlapanae.” .......................................................59
Figure 46: Red Bivalve Piece Terreno de Octaviano Unit U6, photo by author Material from Proyecto “Arqueología y Etnohistoria en la Montaña de Guerrero: Patrones de Expansión Política-Territorial de un Señorío Postclásico en la Mixteca-Nahua-Tlapanae.” .......................................................60
Figure 47: Distribution of Shell across Terreno de Octaviano (taken from Gutierrez 2013:44, used with permission of Gerardo Gutierrez) .................................................................61
Figure 48: Type 2S Ceramic, Exterior (top), Interior (bottom), photo by author material from Proyecto “Arqueología y Etnohistoria en la Montaña de Guerrero: Patrones de Expansión Política-Territorial de un Señorío Postclásico en la Mixteca-Nahua-Tlapanae.” .......................................................83
Figure 49: Type 5 Ceramic, Exterior (top), Interior (bottom), photo by author material from Proyecto “Arqueología y Etnohistoria en la Montaña de Guerrero: Patrones de Expansión Política-Territorial de un Señorío Postclásico en la Mixteca-Nahua-Tlapanae.” .......................................................84
FIGURE 50: Type 3 Straining Vessel, Exterior (top), Interior (bottom), photo by author material from Proyecto "Arqueología y Etnohistoria en la Montaña de Guerrero: Patrones de Expansión Político-Territorial de un Señorío Postclásico en la Mixteca-Nahua-Tlapanaeca." .......................... 85

FIGURE 51: Type 19 Ceramic, photo by author material from Proyecto "Arqueología y Etnohistoria en la Montaña de Guerrero: Patrones de Expansión Político-Territorial de un Señorío Postclásico en la Mixteca-Nahua-Tlapanaeca." ............................................................................................................. 86

FIGURE 52: Type 7 Ceramic, Exterior (top), Interior (below), photo by author material from Proyecto "Arqueología y Etnohistoria en la Montaña de Guerrero: Patrones de Expansión Político-Territorial de un Señorío Postclásico en la Mixteca-Nahua-Tlapanaeca." ...................................................... 87
List of Tables

Table 1: Distances between Chiepetlan-Quirimiteopan and Neighboring Areas................................. 14
Table 2: Approximate Area of Residential Terraces from only the Third Section of the Site.................. 23
Table 3: Percentage of Ceramic Types from Case Study Site............................................................... 44
Table 4: Count of Ceramic Types Found at the Monumental Core..................................................... 49
Table 5: Obsidian Type Counts and Averages from Chiepetlan-Quirimiteopan.................................... 50
Table 6: Key for Distinction of Data in Excel....................................................................................... 88
Table 7: Vessel Forms from Gutierrez 2002 Survey, Attached.................................................................. 88
Table 8: Ceramic Analysis from Chiepetlan/Quirimiteopan, Attached................................................... 88
Introduction

Eastern Guerrero is an area of Mesoamerica that has yet to be explored in depth archaeologically. Ethnographic accounts and indigenous documents discuss the area, but these are far from complete. Archaeologists have conducted excavations at specific sites and regional surveys, but these are few and not much comparative information has been produced to place the region into a larger Mesoamerican context (Gutierrez 2002, 2008, 2013). There are large portions of the region’s history that are still unknown, however in certain areas of eastern Guerrero preliminary archaeological and ethnohistorical work has been conducted. The communal lands of Chiepetlan in the northwestern portion of eastern Guerrero are one such area. Ethnohistorical documents suggest that the area was used as a border between the local Nahua populations and the Tlapanecs during the Postclassic period (Gutierrez 2014). The primary goal of this project was to determine if the hilltop sites on the 8km long Chiepetlan Mountain ridge were in fact a defensive and used only during the Postclassic period.

The site of Chiepetlan-Quimimiteopan on the southeastern portion of the ridge was chosen to investigate this question. The two areas of the site were chosen for excavation: the Monumental core of Chiepetlan-Quimimiteopan and Terreno de Octaviano (Gutierrez 2013). A mound profile was taken at the monumental core and lateral excavations were employed at Terreno de Octaviano. These excavations produced valuable information about the usage of the hilltop sites in eastern Guerrero (Gutierrez 2013). Most notably was an occupational period of roughly A.D. 560 to A.D. 900 dating the site to the Classic and Epiclassic periods (Gutierrez 2013). These dates place the occupation of the hilltop sites significantly earlier than the late Postclassic Nahua and
Tlapane feud. While this date refuted the hypothesis that the hilltop sites were exclusively used during the Postclassic period it introduced some interesting questions about the occupation of hilltop sites and interaction in eastern Guerrero. This project conducts a detailed preliminary investigation into the hilltop site of Chiepetlan-Quimimiteopan with the goal of providing a basis of comparison for future archaeological work at hilltop sites in eastern Guerrero.

**Structure of this Thesis**

This study will begin by addressing the physical environment of eastern Guerrero as well as give a detailed introduction to the site of Chiepetlan-Quimimiteopan (Chapter 1). This will provide a detailed context with which to assess details of the case study in Chapter 2. Chapter 2 provides a detailed discussion of the archaeological excavations themselves as well as the results of the excavation. Specific artifact categories are discussed separately to allow for ease of comparison to future studies. A preliminary analysis of these artifacts and the site of Chiepetlan-Quimimiteopan are provided in Chapter 3. The analysis situates the site within eastern Guerrero and begins to assess the connection to between Chiepetlan-Quimimiteopan and other sites in the region. Chapter 4 provides conclusions and avenues for future research to test the interpretations provided in this study.
Background: Introduction to Eastern Guerrero and Chiepetlan-Quimimiteopan

Eastern Guerrero: Physical Environment

The state of Guerrero is located in Southwestern Mexico along the Pacific coast. It is bordered to the south and west by the Pacific Ocean, to the east by the state of Oaxaca, to the northwest by Michoacan, and to the northeast by the states of Mexico, Morelos and Puebla. This study will focus on the eastern portion of the state, using the city of Chilpancingo, Guerrero as the western boundary and the state border with Oaxaca as the eastern border (Figure 1). This area of Guerrero has been divided into two main regions, the Mountain and the Costa Chica (the Little Coast).

Figure 1: Map of Eastern Guerrero (taken from Gutierrez 2002: 33, used with permission of Gerardo Gutierrez)
Figure 2: Costa Chica and Mountain Region (taken from Gutierrez 2002: 38, used with permission of Gerardo Gutierrez)

Figure 3: Elevations of Geographical Features (taken from Gutierrez 2002: 38, used with permission of Gerardo Gutierrez)
The characterization of these regions began in 1963 with Maurilio Muñoz’s publication of the regional distinction in his study *Mixteca-Nahua-Tlapaneca* and has continued to be used in current studies (Gutiérrez 2002). This regional characterization of Eastern Guerrero stems from two geographical features: the southern portion of the Sierra Madre del Sur mountain range and a narrow coastal plain along the Pacific coast (Gutiérrez 2002). The narrow and hilly coastal plain, Costa Chica, runs along the Pacific Ocean on the southern portion of the state from the city of Acapulco to the border of Oaxaca (Figure 2). This area has an altitude ranging from 0 to 1000 meters, and encompasses part of the southern slope of the Sierra Madre del Sur mountain range; it is often referred to as the lowland area of eastern Guerrero (Gutiérrez 2002). The Mountain region or highlands is located to the north of Costa Chica and crosses Guerrero along a northwest-southeast axis. It has altitudes ranging from 1000-3000 meters and contains a great deal of diversity (Figure 3).

The diversity within the mountain region has led many scholars to subdivide the region into smaller ecological or social sections. The nature of the mountains is such that it creates “an intricate system of deep gorges, constricted valleys and high [peaks] over most of Guerrero’s surface” (Gutierrez 2002: 32). This study will use two sub-regional distinctions: the high mountain and the dry mountain. The high mountain region is located between the Costa Chica and the dry mountain area to the north. The high mountain is composed of the main peaks of the Sierra Madre del Sur Mountains with altitudes of 2000 meters or more. The dry mountain region is located on the northern side of the high mountain peaks and has an altitude below 2000 meters (Gutiérrez 2002). These sub-regions correspond with the rain shadow effect that impacts the area.
The rain shadow effect creates five ecological tiers in eastern Guerrero: *tierra caliente* windward (windward lowlands), *tierra templada* windward (windward temperate land), *tierra fría* (cold land), *tierra templada* leeward (leeward temperate land), and *tierra caliente* leeward (leeward lowlands) (Figure 4) (Gutiérrez 2008). Each of these ecological tiers has distinctive vegetation, soil and precipitation levels.

![Ecological Tiers](image)

**Figure 4: Ecological Tiers (taken from Gutierrez 2002: 54, used with permission of Gerardo Gutierrez)**
There is a six-month cycle of seasonal rainfall in eastern Guerrero. The dry season is from December through April, and there is very little rainfall throughout the region. The rainy season lasts from May through October, during this season there are drastic differences in precipitation levels across the region (Gutierrez 2002, 2008). The windward slope of the mountain receives the most rainfall of any of the local sub-regions. During the six-month rainy season the windward slope receives an average of 1700-2000mm of rain (Gutierrez 2002:55). This can be contrasted with Northeastern sector of the region in the valleys, where the lowest precipitation levels are recorded. This area receives between 700-800mm of rain during the rainy season (Gutierrez 2002:55). Between these two extremes there is a lot of variety in the amount of rainfall in eastern Guerrero as can be seen in Figure 5.

There is also a large difference in the distribution of rainfall during the rainy season. The summit of the mountain has the highest frequency of rainfall; it rains approximately 50-60% of the days during the rainy season (Gutierrez 2002). During this time the sub-region gets approximately 16-18mm of rain per day. The valleys of Tlapa and Huamuxtitlan in the northern sector have fewer days of rain ranging from 33-49% of the days in the six-month period and receive only 1-3mm of rain per day (Gutierrez 2002). The dry mountain is located between these two sub-regions and receives from 8mm to 11mm of rain per day during the rainy season. The shoreline along the Costa Chica has the fewest days of rain, from 16-32% of the rainy season, but during this time it receives the highest amount of rain per day ranging from 20-30mm per day (Gutierrez 2002). These precipitation levels can be contrasted with the dry season in which the maximum amount of rainfall is approximately 200mm and recorded at the summit of the
mountain (Figure 6). The coast and the leeward side of the mountain receive only 25-50mm of rain for the entire six-month dry season (Gutierrez 2002).
Figure 6: Rainfall Distribution in Eastern Guerrero During the Dry (taken from Gutierrez 2002: 56, used with permission of Gerardo Gutierrez)
These precipitation levels greatly influence agriculture in the region. Cultivated plants require at least 400mm of water during their growth cycle, which is approximately twice the amount of rain the summit of the mountain receives during the dry season making agriculture without irrigation impractical during this time (Gutierrez 2002). This is compounded by the lack of potential irrigation sources. Permanent water sources for irrigation during the dry season are not extensive, most rivers dry up entirely during the dry season and only the main tributary rivers (Tlapaneco, Omitlán, Marquelia, Santa Catarina and Quetzala) still carry water and therefore limit the areas capable of high agricultural production (Gutierrez 2008).

Marcos Matias Alonso, conducted a study of indigenous agriculture in eastern Guerrero in 1997, and explored the agricultural productivity of the region (Gutierrez 2002). Gutierrez (2002) used Alonso’s data and determined that there were two areas of high agricultural productivity in the region: the Valley in the Tlapaneco river basin in the north and the Quetzala basin/ Amuzgo municipalities in the southeastern portion of the region (Figure 7). These areas have access to some of the only permanent water sources in the region, which improves their agriculture productivity in both the rainy and dry seasons (Gutierrez 2002). The productivity of these areas can be compared to the dry mountain sub-region, which has the lowest agricultural productivity. In his 1997 study Alonso determined that the agricultural productivity of one hectare of dry agriculture in the mountain was insufficient to produce the 1,920kg of maize required annually by a family of six with domestic animals (Gutierrez 2002 in his citation of Alonso 1997:83). Thus households in the dry mountain region would need to cultivate more land during the rainy season to produce sufficient food for the entire year. This is problematic because in
the dry mountain region there is not a large amount of viable agricultural land thus limiting the potential for agriculture (Gutierrez 2002). This creates a distinction between the valleys of eastern Guerrero, which have high agricultural productivity due to their access to irrigation and suitable agricultural land, with the mountain regions, which rely on less productive dry land agriculture but also have less available agricultural land (Gutierrez 2002). The populations of the dry mountain region are thus at a disadvantage and can support only limited populations with their agricultural resources.

Figure 7: Areas of High Maize Production in Eastern Guerrero, Total Production/Total area of Municipality (taken from Gutierrez 2002: 78, used with permission of Gerardo Gutierrez)
Eastern Guerrero has a highly variable physical environment, which produces distinctive sub-regions. Within these distinctive sub-regions the effects of the rain shadow, seasonal rainfall, and the natural topography have heavily influenced agricultural productivity and ultimately archaeological settlement patterns across eastern Guerrero.

**Chiepetlan-Quimimiteopan: Site Location and Introduction**

The location of eastern Guerrero, and the case study site, places it directly between the societies of Oaxaca and the societies of the basin of Mexico (Figure 8). When measured in direct distance Chiepetlan-Quimimiteopan is almost equidistant from both Monte Alban (210km) and the Basin of Mexico (216 km). However, the mountainous topography of the region greatly increases the distance and travel time between these areas. New distances were calculated using modern routes through the mountains as a basis for comparison (Table 1). These distances suggest that Chiepetlan-Quimimiteopan was approximately 360km northwest of Monte Alban and 295km south of the Basin of Mexico. Gutierrez (2002, 2008) suggests that these distances were close enough to allow interaction but far enough away to prevent groups from Oaxaca or the Basin of Mexico from directly controlling eastern Guerrero. The degree of interaction between these areas is still unclear and as a result this project will focus on the case-study site in an effort to provide detailed information and contribute to a more in depth understanding of the archaeology of eastern Guerrero and ultimately its placement into broader Mesoamerica. This study will focus on the mountainous area in the northern portion of eastern Guerrero, specifically the site of Chiepetlan-Quimimiteopan located on the Chiepetlan mountain range (Figure 9).
Figure 8: Location of Eastern Guerrero (taken from Gutierrez 2002:5, used with permission of Gerardo Gutierrez)
<table>
<thead>
<tr>
<th>Location</th>
<th>Direct Distance (km)</th>
<th>Distance via Modern Routes (km)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zizintla River Valley</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Tlapa Valley</td>
<td>10.69</td>
<td>27.8</td>
</tr>
<tr>
<td>Huamuxtitlan Valley</td>
<td>12</td>
<td>41.8</td>
</tr>
<tr>
<td>Pacific Ocean</td>
<td>117</td>
<td>200</td>
</tr>
<tr>
<td>Monte Alban</td>
<td>210</td>
<td>360</td>
</tr>
<tr>
<td>Basin of Mexico</td>
<td>216</td>
<td>295</td>
</tr>
</tbody>
</table>

Table 1: Distances Between Chiepetlan-Quiminiteopan and Neighboring Areas

Figure 9: Location of Case Study Sites (taken from Gutierrez & Hernandez 2013)
Chiepetlan-Quimimiteopan is approximately 117 km, direct distance, from the Pacific Ocean, and is on the leeward side of the Sierra Madre del Sur mountain range in the dry mountain sub-region (Gutierrez 2002, 2010). This means the populations of the site would have been dependent on dry land agriculture during the rainy season and potentially at a disadvantage when compared to other areas of the region. The site is situated between the two irrigated and highly productive agricultural valleys in the northern portion of eastern Guerrero, however it is difficult to access these valleys from the site (Gutierrez 2002, 2010). The valley of Tlapa is located 10.69 km (27.8 via mountain route) to the southeast of the site while the valley of Huamuxtitlan is located 12 km (41.8 via mountain route) to the northeast (Figure 10). The mountainous terrain drastically increases the distance between the site and the agriculturally fertile land of the valleys. The Zizintla River valley is the valley closest to the site of Chiepetlan-Quimimiteopan and is 3km to the southwest (Figure 11). The Zizintla River valley is a narrow valley with agriculturally productive land, and a meandering river, but does not have the same increased productivity as the Tlapa and Huamuxtitlan Valleys (Gutierrez 2002). There is a plot of agricultural land approximately .87km from the site, this has an area of roughly 7.56 hectares and is the largest, most accessible agricultural land near the site. However, this area would also rely on dry land agriculture and be less productive than the irrigated fields of the valley.
Figure 10: Distance Between Site Location and the Agricultural Valleys
The site is located approximately 3.8km from the modern town of Chiepetlan along the Chiepetlan mountain ridge. While the entirety of the 8km long Chiepetlan mountain ridge showed evidence of archaeological material, this study focused on the southeastern-most portion of the ridge at the site identified as Chiepetlan-Quimimiteopan. This 2.5-kilometer portion of the ridge is surrounded by deep ravines and encased in a series of mountain ridges, which creates a self-contained crest with limited access points (Figure 12) (Gutierrez 2013). The archaeological material and terraces of the site were concentrated along the crest at the uppermost portions of the ridge. Negligible archaeological evidence was found at lower elevations, which can partially be attributed to the steep drops in elevation between from the ridge top to the surrounding ravines (Figure 13) (Gutierrez 2013).

Chiepetlan-Quimimiteopan has four distinctive sections (Figure 14) (Gutierrez 2010, 2013). The first section is a low summit at the most eastern portion of the ridge this terrace is called Teteponomiquia (Figure 15). It is a 150 meters long by 30 meters wide, and has an area of approximately 1.49 Hectares (Gutierrez 2013: 9). This area was not archaeologically excavated, but was mapped and recorded for future analysis (Gutierrez 2013).
Figure 12: Location of Chiepetlan-Quimimiteopan and Surrounding Mountain Ridges
Figure 13: Topographical Map of Chiepetlan-Quiminateopan (taken from Gutierrez 2013: 24, used with permission of Gerardo Gutierrez)
Figure 14: Four Sectors of Chiepetlan Quimimiteopan (taken from Gutierrez 2013: 10, used with permission of Gerardo Gutierrez)
Located 350 meters to the west of Teteponomiquia at an elevation of 1400 meters above sea level, is the second section of the site known as the monumental core of Qumimiteopan (Gutierrez 2010, 2013). The monumental core has a number of large architectural features, namely platforms, plazas, a ballcourt, as well as terraces (Figure 16) (Gutierrez 2010, 2013). The highest point of this section is the primary mound, which has a 32-meter long by 25-meter wide base and is 2.5 meters high (Gutierrez 2013:9). There is a plaza 100-meters to the east of the primary mound that is 33-meters by 28-meters. Directly 40-meters to the east of the plaza is a second mound. This mound has a 27-meter by 21-meter base and is 1.5-meters high (Gutierrez 2013). Additionally, 140-meters to the north of the primary mound there is a ballcourt that is 45-meters long by 13-meters wide (Gutierrez 2013: 9). This section of the site has an area of approximately 5.27 hectares.
The third section of the site is a series of residential terraces that begin at the monumental core and continue along the narrow ridge in a northeastern direction for one-kilometer (Gutierrez 2013). These terraces were mapped and have a total approximate area of 14.64 hectares (Table 2, Figure 17). The small surface area is attributed to the natural topography; the terraces are positioned on the only flattened surfaces along the narrow passageways of the ridge and surrounded by steep cliffs. This section of the site was not explored in depth, but was recorded and mapped for future research (Gutierrez 2013).
<table>
<thead>
<tr>
<th>Terrace</th>
<th>Latitude</th>
<th>Longitude</th>
<th>Approximate Area (Hectares)</th>
</tr>
</thead>
<tbody>
<tr>
<td>T1</td>
<td>17.643461°</td>
<td>-98.611581°</td>
<td>0.23</td>
</tr>
<tr>
<td>T2</td>
<td>17.644733°</td>
<td>-98.612011°</td>
<td>0.18</td>
</tr>
<tr>
<td>T3</td>
<td>17.645849°</td>
<td>-98.613356°</td>
<td>1.2</td>
</tr>
<tr>
<td>T4</td>
<td>17.643211°</td>
<td>-98.614605°</td>
<td>0.38</td>
</tr>
<tr>
<td>T5</td>
<td>17.642533°</td>
<td>-98.615863°</td>
<td>0.1</td>
</tr>
<tr>
<td>T6</td>
<td>17.642941°</td>
<td>-98.615951°</td>
<td>0.13</td>
</tr>
<tr>
<td>T7</td>
<td>17.643352°</td>
<td>-98.615541°</td>
<td>0.1</td>
</tr>
<tr>
<td>T8</td>
<td>17.644032°</td>
<td>-98.615283°</td>
<td>0.27</td>
</tr>
<tr>
<td>T9</td>
<td>17.644466°</td>
<td>-98.614899°</td>
<td>0.13</td>
</tr>
<tr>
<td>T10</td>
<td>17.644379°</td>
<td>-98.615848°</td>
<td>0.69</td>
</tr>
<tr>
<td>T11</td>
<td>17.643038°</td>
<td>-98.616839°</td>
<td>0.35</td>
</tr>
<tr>
<td>T12</td>
<td>17.643904°</td>
<td>-98.616914°</td>
<td>0.18</td>
</tr>
<tr>
<td>T13</td>
<td>17.644273°</td>
<td>-98.617325°</td>
<td>0.13</td>
</tr>
<tr>
<td>T14</td>
<td>17.644847°</td>
<td>-98.617558°</td>
<td>0.19</td>
</tr>
<tr>
<td>T15</td>
<td>17.645779°</td>
<td>-98.617670°</td>
<td>0.99</td>
</tr>
<tr>
<td>T16</td>
<td>17.646636°</td>
<td>-98.616987°</td>
<td>0.4</td>
</tr>
<tr>
<td>T17</td>
<td>17.646731°</td>
<td>-98.617841°</td>
<td>0.4</td>
</tr>
<tr>
<td>T18</td>
<td>17.646154°</td>
<td>-98.618757°</td>
<td>0.53</td>
</tr>
<tr>
<td>T19</td>
<td>17.646718°</td>
<td>-98.619923°</td>
<td>0.97</td>
</tr>
<tr>
<td>T20</td>
<td>17.647287°</td>
<td>-98.619343°</td>
<td>0.19</td>
</tr>
<tr>
<td>T21</td>
<td>17.648910°</td>
<td>-98.617153°</td>
<td>0.27</td>
</tr>
<tr>
<td>T22</td>
<td>17.648895°</td>
<td>-98.618896°</td>
<td>2.33</td>
</tr>
<tr>
<td>T23</td>
<td>17.650028°</td>
<td>-98.620707°</td>
<td>0.73</td>
</tr>
<tr>
<td>T24</td>
<td>17.649756°</td>
<td>-98.618958°</td>
<td>0.49</td>
</tr>
<tr>
<td>T25</td>
<td>17.648406°</td>
<td>-98.622122°</td>
<td>0.13</td>
</tr>
<tr>
<td>T26</td>
<td>17.645822°</td>
<td>-98.616269°</td>
<td>0.48</td>
</tr>
<tr>
<td>T27</td>
<td>17.647580°</td>
<td>-98.614571°</td>
<td>1.12</td>
</tr>
<tr>
<td>T28</td>
<td>17.645354°</td>
<td>-98.614427°</td>
<td>0.7</td>
</tr>
<tr>
<td>T29</td>
<td>17.645169°</td>
<td>-98.610969°</td>
<td>0.23</td>
</tr>
<tr>
<td>T30</td>
<td>17.643112°</td>
<td>-98.612557°</td>
<td>0.42</td>
</tr>
</tbody>
</table>

**Total Residential Terraces** 14.64

Table 2: Approximate Area of Residential Terraces from only the Third Section of the Site
The residential terraces culminate in the summit of the Chiepetlan mountain ridge. The fourth section of the site, Terreno de Octaviano, is located at the top of this summit with an elevation of approximately 1465 meters above sea level, a slightly higher elevation than at the monumental core (Figure 18) (Gutierrez 2013). Terreno de Octaviano is a large terrace 60-meters long by 40-meters wide. This terrace was subdivided into two sections: the upper terrace and the lower terrace. The lower terrace is 10-meters by 20-meters and the upper terrace is 14-meters by 22-meters (Gutierrez 2013).
Objectives

The goal of this project was to explore the Postclassic Nahua-Tlapanec frontier in northeastern Guerrero (Gutierrez 2013). The Lienzo de Chiepetlan 1 depicts this contested area as a series of fortified hilltop sites located on opposing sides of the Zizintla River (Gutierrez 2014). In this Lienzo the Nahua are depicted as entering eastern Guerrero and occupying a series of mountain ridges to the north of the Zizintla River (Gutierrez 2014). Gutierrez (2014) identified the location of these sites on the Chiepetlan mountain ridge. In an effort to archaeologically explore this Postclassic frontier the southeastern portion of the ridge, the site of Chiepetlan-Quimimitoapan, was selected for excavation (Gutierrez 2013). This portion of the ridge was selected because it is one of only a few areas of the ridge not covered by a modern occupation and also showed a great degree of variability. In an effort to explore this variability and assess the
Postclassic frontier two sections of the site were chosen for archaeological excavation: Terreno de Octaviano and the monumental core. A mound profile was taken from the second mound at the monumental core (Gutierrez 2013). Extensive looting trenches destroyed this area so a profile was taken to see if stratigraphic information could be recovered. Lateral excavations were employed at Terreno de Octaviano (Gutierrez 2013). This section was chosen for lateral excavation because it was not actively being cultivated by the local owners and appeared to be distinctive from the smaller residential terraces in the central portion of the ridge due to its isolation atop the summit. The results of these excavations will be discussed in depth in the following chapter.
Case Study: Chiepetlan-Quimimiteopan

The excavation of Chiepetlan-Quimimiteopan was undertaken in an effort to explore the Postclassic Nahua-Tlapanec frontier as well as preliminarily assess the hilltop sites of eastern Guerrero. This chapter will address the results of that excavation. Archaeological methodologies will be discussed to provide context for the excavation and the analysis of the archaeological material. Features, stratigraphy and artifacts will be examined in detail in an effort to assess the potential activities and function of the site. In addition the data provided by this case study can be used as a preliminary step toward forming a comparative basis with which to assess future archaeological work on hilltop sites in eastern Guerrero. The following discussion is divided into specific feature and artifact categories to allow for easier comparison and assessment of the archaeological material. Methodology will be discussed first to provide a context for the excavation and the discussion of features and construction phases. After the features and construction phases are explored a detailed discussion of ceramics will be provided, as they were the most abundant artifacts recovered. Following that the obsidian and shell artifacts will be examined.

Methodology

Quimimiteopan

In an attempt to understand the chronology and stratigraphy of the mound, and potentially the site, a profile of the second mound, directly east of the plaza, was excavated and cleaned to expose the internal stratigraphy and construction phases. The southwestern section of the mound was chosen to extract the profile because it appeared to be more intact than other sections (Figure 19 and 20) (Gutierrez 2013). After choosing
the location of the profile all the vegetation was removed and a control grid was installed. The control grid was approximately two meters by four meters and oriented in a North-South direction. Once the grid was in place the rock fall from previous looting was removed and the internal profile was exposed and cleaned for stratigraphic analysis.

Figure 19: Early Mapping of Quimimitéopan Monumental Core with Location of the Mound Profile Marked in red (taken from Gutierrez 2010: 133, used with permission of Gerardo Gutierrez).
Terreno de Octaviano

On both the upper and lower terrace the rock core of the mountain was flattened and used as a foundation, thus there was no archaeological material below it and it served as the marker of archaeological depth (Figure 21). In total 272 square meters were excavated at the Terreno de Octaviano section of the site (Gutierrez 2013). Lateral excavations were employed across this area. A grid was installed to divide this entire section of the site, both the upper and lower terrace, into 2-meter by 2-meter units. An alphanumeric system was employed to differentiate each of the 2x2-meter units. Letters (A, B, C, D etc.) were used to distinguish columns; these began in the lower terrace and progressed from west to east. Numbers were used to differentiate the rows, these increased in value from north to south. Thus the Northwestern most 2-meter by 2-meter unit of the lower terrace was labeled A1 (Figures 22 and 23).
Figure 21: Terreno de Octaviano Terraces (taken from Gutierrez 2013: 24, used with permission of Gerardo Gutierrez)

Figure 22: Terreno de Octaviano Upper Terrace Excavation Key (taken from Gutierrez 2013: 32, used with permission of Gerardo Gutierrez)
Figure 23: Terreno de Octaviano Lower Terrace Excavation Key (taken from Gutierrez 2013: 32, used with permission of Gerardo Gutierrez)
Figure 24: Topographical Map of Terreno de Octaviano, Lower Terrace Excavation Area (taken from Gutierrez 2013: 31, used with permission of Gerardo Gutierrez)
Figure 25: Total Area Excavated from Lower Terrace of Terreno de Octaviano (taken from Gutierrez 2013: 21, used with permission of Gerardo Gutierrez)
Excavations began in the center of the lower terrace (Figure 24); controlled five-centimeter levels were initially used, until natural or cultural strata could be determined. These initial excavations revealed a total archaeological sedimentation depth of fifteen centimeters on the lower terrace, below that point was bedrock (Gutierrez 2013). There were no changes to the stratigraphy within these fifteen centimeters so arbitrary five-centimeter levels continued to be used. Extensive lateral excavations were undertaken on the lower terrace because there was very little vertical stratigraphy to account for and analyze. A total of 108 square meters (52%) of the lower terrace was excavated, and while small artifacts were found, there was no evidence of a structure or activity areas therefore excavations were extended into the upper terrace (Figure 25) (Gutierrez 2013).

Similar to the lower terrace the upper terrace had a relatively small amount of archaeological deposition. There was twelve centimeters of archaeological sedimentation on the upper terrace (Gutierrez 2013). Again lateral excavations were employed and evidence discovered during the initial excavations indicated the presence of a structure. Thus, excavations were concentrated on the eastern portion of the upper terrace in an effort to explore the structure. Of the total 300 square meters of the upper terrace, 164 square meters were excavated (54%) (Figure 26) (Gutierrez 2013).
Overall Excavation: Features and Construction Phases

Quimimiteopan

The extensive looting damage to the mound prevented a stratigraphic analysis, however four stages of construction were identified in the profile (Figures 27 and 28). The first and lowest stage was identified as a flattened earth floor (Gutierrez 2013). While the absolute depth of this construction stage could not be determined, it appeared to be the primary phase of construction. The second stage of construction identified was
more substantial than the first. It consisted of a stone core, approximately 70cm thick and ended where the stucco floor from the third stratigraphic level began (Gutierrez 2013).

Figure 27: Quimimateopan Mound Profile (taken from Gutierrez 2013: 33, used with permission of Gerardo Gutierrez)
Figure 28: Construction Phases of Quimimateopan (taken from Gutierrez 2013: 32, used with permission of Gerardo Gutierrez)
The third stage level consisted of three stucco floors. The first stucco floor completely covered the rocks from layer two. The second stucco floor was not well defined, because it was interrupted halfway through the mound (Figures 27 and 28). This second stucco floor was used to sub-divide layer three into 3a and 3b. The area below the second stucco floor was termed 3a and the area above was termed 3b (Gutierrez 2013). Between each of the three stucco floors was a small fill layer. The fourth and final construction stage identified in the mound profile was the most substantial. It consisted of 1.4 meters of mud and stone construction and appears to be a fill layer. The stones used in this stage of construction were much smaller in size and amount and not as well aligned as the stones in stage two. The rockfall at the base of the mound was determined to be from stage 4 and most likely was removed or fell during the looting process (Gutierrez 2013).

Two radiocarbon samples were taken from the central portion of the mound at stages 3b and 4 (Gutierrez 2013). The first sample was taken just below the stucco floor in level 3b and produced a radiocarbon date of 1430 +/- 30 years BP and was calibrated to AD 560 to 650\(^1\) (Gutierrez 2013: 46). The second sample was taken from the center of the fourth fill stage, produced a radiocarbon date of 1310 +/- 30 years BP and was calibrated to AD 650 to 690\(^2\) (Gutierrez 2013: 46). While there is the potential that the dates from fill contexts are the result of redeposition, however the radiocarbon dates correspond to the stratigraphy. These dates suggest that the ridge was occupied much earlier than originally expected, though it is unclear as to when the original occupation of the site took place as the radiocarbon samples were from later stages of construction.

\(^1\) Beta Analysis Inc. Sample 329576
\(^2\) Beta Analysis Inc. Sample 329577
Terreno de Octaviano

Unlike the lower terrace the upper terrace of Terreno de Octaviano had evidence of architecture as well as evidence of man-made floors and natural floors. The bedrock was flattened to make a base, similar to the lower terrace, however there was also evidence of stucco and stone in the archaeological deposition. Approximately fourteen meters from the eastern edge of the upper terrace (unit S3) an alignment of stones was found (Figure 29). The stones were roughly 30-40cm in length, were found five centimeters below the surface and were oriented in a slightly northeasterly direction (Gutierrez 2013). This alignment of stones was explored laterally across the terrace. As stones continued to be uncovered in a northwestern direction it became clear that the stones indicated a structure (Figure 30).

Figure 29: Alignment of Stones in the Upper Terrace (taken from Gutierrez 2013: 29, used with permission of Gerardo Gutierrez)
In an attempt to uncover the nature and extent of the structure, excavations continued to explore the alignment of stones, unfortunately due to extensive plowing of the area and the intrusion of large tree roots, the exact dimensions of the structure could not be determined. However, stones were uncovered moving east towards the lower terrace in a relatively cohesive pattern. This suggested that the structure was located on the easternmost portion of the terrace beginning roughly fourteen meters west from the slope of the lower terrace (Gutierrez 2013). Stones were also found on the slope connecting the upper and lower terrace; however, it is unclear if these were steps connecting the two areas or fallen stones.
In addition to the stones uncovered during excavation, there was also evidence of stucco. In many areas the stucco was degraded and fragmentary and thus it was unclear if the stucco was from the floor or another source, although one area of preserved stucco was found near the center of the upper terrace excavation area in unit T4. This was a 30cm by 30cm piece of stucco in a concave shape (Figure 31) (Gutierrez 2013). The size and the concave shape of the stucco suggested that this could have been an area where a large water jar (olla) was placed (Gutierrez 2013). However, there is the potential that this area could have had a different function and that the concave shape was the result of depositional processes. The presence of preserved stucco above the stone layer indicates that the stucco was used on the floor, though there is the possibility that it could also have been used in other areas of the structure as well (Gutierrez 2013). It appears that the bedrock was used as a flattened surface on which a structure was created using a stone base for stabilization that was then coated in a layer of stucco (Gutierrez 2013).

Figure 31: Preserved Stucco from Unit T4 (taken from Gutierrez 2013: 32, used with permission of Gerardo Gutierrez)
In addition to the preserved stones and stucco area, evidence of fire scorched earth was found in two other areas of the upper terrace. In the northern central portion of the upper terrace, in unit U2, fire scorched earth was found and interpreted as a hearth, however no other features were found in relation to the change in sediment (Gutierrez 2013). To the southeast of the fire-scorched sediment, in unit T6, there was evidence of an additional hearth. In this area a 40 cm by 60 cm rectangular section of fire scorched sediment was found (Figure 32) (Gutierrez 2013). The scorched sediment was encased in a rectangular grouping of stones, suggesting a hearth. The rectangular hearth was located less than two meters from the preserved concave stucco with a dense concentration of ceramics and obsidian, suggesting an activity area (Gutierrez 2013). These preserved sections of stucco and hearths were the only areas that were not completely destroyed by
the repeated agricultural plowing of the site or the intrusion of large tree roots. When combined with the other archaeological evidence these features allow for a limited examination of activity within the structure.

Two radiocarbon samples were taken from near the hearths on the upper terrace of Terreno de Octaviano and were dated. One sample was located in unit V3 above the stucco floor and produced a radiocarbon date of 1160 +/- 30 years BP, calibrated to AD 780 to 900 \(^3\) (Gutierrez 2013: 46). The second sample was taken from unit U3 just below the stucco floor and produced a radiocarbon date of 1130 +/- 30 BP, calibrated to AD 780 to 900 \(^4\) (Gutierrez 2013: 46). These dates situate the site in the Epiclassic period (Gutierrez 2013).

**Ceramics**

The ceramics of eastern Guerrero are generally unknown; a ceramic chronology has yet to be established for the region. Therefore at present much of the ceramic analysis is based on paste type and vessel form. No ceramic types from other regions of Mesoamerica were found at the site the ceramics were all were local to eastern Guerrero, therefore the 4,115 ceramic sherds found at Chiepetlan-Quiminiteopan (239 from the monumental core, 3,876 from Terreno de Octaviano) were analyzed using the typology from Gutierrez (2010). This typology is based on general paste characteristics, temper and the surface finish (Gutierrez 2010: 230). This typology has a total of twenty-nine types. The ceramics from Terreno de Octaviano predominantly consisted of three of these twenty-nine types. Types 3, 25 and 2 made up 87.14% of the total assemblage (Table 3). Type 3 is *Mica laminar* and is characterized by compacted roughly textured paste, has

---

\(^3\) Beta Analysis Inc. Sample 329574

\(^4\) Beta Analysis Inc. Sample: 329575
calcite and shale temper with a 2.5 mm grain size and a very rough finish (Figure 33) (Gutierrez 2010: 232). Type 25 is *Mica Fino* and is characterized by semi-compacted, sandy textured paste, has mica temper and a polished finish (Figure 34) (Gutierrez 2010: 240). Type 2 is *Burdo laminar* and is characterized by semi-compacted and rough textured paste, metallic gray shale temper and a rough finish (Figure 35) (Gutierrez 2010: 231). These three ceramic types were identified as domestic, utilitarian wares (Gutierrez 2013). The remaining ceramic types found at the site were in small number and were also predominantly considered to be utilitarian, domestic wares (see appendix 2 for a description of other ceramic types). There was little decoration in the ceramics, only a single sherd was found with a decoration of three raised dots near the rim; no other decorations or specialized ceramics were found.

**Table 3: Percentage of Ceramic Types from Case Study Site**
Figure 33: Type 3 Ceramic from Terreno de Octaviano, photo by author material from Proyecto “Arqueología y Etnohistoria en la Montaña de Guerrero: Patrones de Expansión Político-Territorial de un Señorío Postclásico en la Mixteca-Nahua-Tlapaneca.”.

Figure 34: Type 25 Ceramic from Terreno de Octaviano, photo by author material from Proyecto “Arqueología y Etnohistoria en la Montaña de Guerrero: Patrones de Expansión Político-Territorial de un Señorío Postclásico en la Mixteca-Nahua-Tlapaneca.”.
In addition to examining ceramic paste type vessel forms were also analyzed for the ceramics at Terreno de Octaviano. Noguera's (1965) vessel form classification was combined with the vessel forms documented by Gutierrez in 2000-2001 to assess vessel forms (Gutierrez 2002). There were 148 diagnostic sherds found at Terreno de Octaviano, roughly 3.6% of the total assemblage. Of the forms that could be determined from these limited diagnostic sherds the majority were Cajetes (small bowls, 1.6%), straining vessels (0.8%) and ollas (0.3%). However these numbers are a bit skewed. The large percentage of straining vessels can be identified with body sherds, thus increasing their representation in the assemblage. In addition there are other lines of evidence suggesting that ollas, or other large storage vessels comprised more than 0.3% of the ceramic assemblage. One line of evidence to suggest a larger number of ollas is the presence of
many large handles (Figure 36). These handles are too large to be attached to serving or consumption vessels, were coarse with large temper and appeared to be similar in type, thickness and overall appearance to the olla diagnostic sherds. While this is not definitive it does suggest the presence of ollas or potentially other large storage vessels. In addition there was a large number of body sherds (1354), roughly 32.9% of the total assemblage, which were similar to the olla diagnostic sherds. They were of the same type, were large in size and had a similar thickness to the ollas. These sherds suggest that large, thick walled vessels were present at the site, which could potentially have been ollas or other large storage or cooking vessels. This interpretation is likely given the isolated location of the sites; the storage of water would have been important element of life at these hilltop sites due to a lack of access to permanent water sources and a reliance on rainwater from a six-month period (Gutierrez 2002).

![Figure 36: Type 2 Handle from Terreno de Octaviano photo by author material from Proyecto “Arqueología y Etnohistoria en la Montaña de Guerrero: Patrones de Expansión Político-Territorial de un Señorio Postclásico en la Mixteca-Nahua-Tlapaneca.”](image)
The distribution of ceramics varied across Terreno de Octaviano (Figure 37). Approximately 73.5% (3,023) of the ceramics from Terreno de Octaviano were recovered from the upper terrace. The highest concentrations of ceramics were found inside of the structure in units S4, S5, U3, V5 and T5 (Gutierrez 2013). Both S4 and S5 show high concentrations near the line of stones. These high concentrations continue into T5 near the hearth and preserved stucco area (Gutiérrez 2013). The ceramics in U3 show a great degree of variability. Within U3, nine types of ceramics are present, as well as evidence of four different types of vessel forms (olla, cajete, jicara and straining vessels). The second area with the highest concentration of ceramics was located on the downward slope between the upper and lower terrace, and the base of the slope suggesting their deposition was the result of erosion (Gutierrez 2013).

Figure 37: Distribution of Ceramics at Terreno de Octaviano (taken form Gutierrez 2013: 36, used with permission of Gerardo Gutierrez)
The mound profile at the monumental core produced 239 sherds. These ceramics were distinctive from the ceramics at the Terreno de Octaviano. At Terreno de Octaviano types 2 and 3 were the most abundant and while there was also a significant number of type 2 and type 3 sherds found at the monumental core, there was a great deal more variety in the ceramic types. There was a large amount of type 19 found and Quimimiteopan, which was identified at Terreno de Octaviano, but in very small numbers (28 sherds). In addition a larger amount of types 18, 28 and 5B were found at Quimimiteopan, two types that were not present at Terreno de Octaviano. Type 19 is Naranja and is characterized by compact and rough textured paste and smoothed surface finish on both sides and orange color (Gutierrez 2010:239). Type 18 is Negro Pulido and is characterized by compact and fine paste, polished surface and gray color (Gutierrez 2010: 238). Type 28 is Azoyú Arenoso and is characterized by compact textured paste medium reddish brown in color with quartz and mica temper (Gutierrez 2010:241). Type 5B is Gris Metálico and is characterized by compact and medium texture paste, dark bluish gray color and its production of a metallic sound (Gutierrez 2010: 233).

Table 4: Count of Ceramic Types Found at the Monumental Core
These four types of ceramics are less coarse and more finely made than the predominant types at Terreno de Octaviano. They each have a smoother surface finish, finer temper and more distinctive colors. There is also a great deal more variety in the ceramic types at the monumental core. Type 19 has the highest frequency at the monumental core, but only makes up 16.7% of the assemblage. This is in contrast to the ceramics at Terreno de Octaviano where three types make up 87.14% of the assemblage. The differences in ceramic types could potentially correspond to differences in function between these two sections of the ridge or differences in status or access to ceramics, however much more work needs to be done to refine the understanding of ceramics in eastern Guerrero before this can be determined.

Obsidian
A total of 84 pieces of obsidian were recovered from Chiepetlan-Quimimiteopan, all demonstrate a great deal of size variability. The majority of the obsidian was recovered from Terreno de Octaviano (81 pieces), with three pieces being found at Quimimiteopan.

<table>
<thead>
<tr>
<th>Type</th>
<th># of pieces</th>
<th>% of total</th>
<th>Avg. Length (cm)</th>
<th>Avg. Width (cm)</th>
<th>Avg. Thickness (cm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Broken flake</td>
<td>6</td>
<td>7.14%</td>
<td>1.94</td>
<td>1.43</td>
<td>0.33</td>
</tr>
<tr>
<td>Debris</td>
<td>30</td>
<td>35.71%</td>
<td>1.26</td>
<td>0.98</td>
<td>0.25</td>
</tr>
<tr>
<td>Prismatic Blade</td>
<td>48</td>
<td>57.14%</td>
<td>2.14</td>
<td>1.18</td>
<td>0.29</td>
</tr>
<tr>
<td>Total</td>
<td>84</td>
<td>100.00%</td>
<td>1.78</td>
<td>1.19</td>
<td>0.29</td>
</tr>
</tbody>
</table>

Table 5: Obsidian Type Counts and Averages from Chiepetlan-Quimimiteopan
Prismatic blades made up 57.14% of the total obsidian artifacts (Table 5). The remaining 42.86% were identified as complete flakes, broken flakes and debris through the use of Sullivan and Rozen’s (1985) debitage classification system. Debitage categorizations were made based on Sullivan and Rozen’s (1985) diagnostic dimensions of variability including three dimensions of variability, single interior surface, point of applied force and margins. The single anterior surface was determined by the presence of positive percussion features such as the bulb of percussion, ripple marks or force lines on a single surface (Sullivan and Rozen 1985:758). The presence or absence of an intact striking platform was the second dimension of variability (Sullivan and Rozen 1985:758).

Margins, the third dimension of variability, were considered to be intact if the distal end of the flake ends in a feather or hinge termination (Sullivan and Rozen 1985:759). Based on these characterizations debris was characterized by a lack of discernible dimensions. Flake fragments had a discernible single interior surface but lacked a point of applied force and intact margins (Sullivan and Rozen 1985: 759). Broken flakes had a discernible single interior surface and an intact point of applied force, but lacked intact margins (Sullivan and Rozen 1985: 759). Complete flakes had all three of the dimensions intact or discernible (Sullivan and Rozen 1985:759). Of these four debitage categories, only two were present at Chiepetlan-Quimimiteopan: debris (Figure 38) and broken flakes (Figure 39).
Figure 38: Debris from Terreno de Octaviano, photo by author. Material from Proyecto “Arqueología y Etnohistoria en la Montaña de Guerrero: Patrones de Expansión Político-Territorial de un Señorío Postclásico en la Mixteca-Nahua-Tlapaneca.”.

Figure 39: Broken Flake from Terreno de Octaviano, Material from Proyecto “Arqueología y Etnohistoria en la Montaña de Guerrero: Patrones de Expansión Político-Territorial de un Señorío Postclásico en la Mixteca-Nahua-Tlapaneca.”.
Aside from a single piece of obsidian found in the center of the lower terrace, and the three pieces of obsidian found at the Mound profile, the remainder of the obsidian was scattered across the upper terrace of Terreno de Octaviano (1-2 pieces per 2x2 meter unit). Although it appears three areas had showed higher concentrations of obsidian than others. Unit R3, just outside of the structure, had five pieces of obsidian. Three of the five pieces were identified as debris and the remaining two were identified as prismatic blades. Unit T6, the unit with the hearth had two prismatic blades, two pieces of debris and one broken flake. Unit S6 also near the hearth had seven prismatic blades. Analysis of the use-wear indicates that the obsidian found in these high concentrations was heavily utilized. The obsidian from these areas, as well as across the site was heavily worn and damaged. The average prismatic blade was 2.14 cm in length, 1.18 cm in width and had a large number of chips (Table 5). Many prismatic blades showed evidence of reworking in the form of percussion marks and small flake scares along the edges. Two pieces of obsidian showed distinctive evidence of the reworking of prismatic blades into other tools types (Figures 40 and 41). The broken and worn quality of the obsidian combined with the evidence of reworking suggests that obsidian was not readily accessible. If obsidian were easily obtained, than small, broken or worn pieces of obsidian tools would have most likely been discarded instead of reworked to maintain their use-life (Hirth 2008).
Figure 40: Reworked Obsidian from Terreno de Octaviano, Piece #1, photo by author. Material from Proyecto “Arqueología y Etnohistoria en la Montaña de Guerrero: Patrones de Expansión Político-Territorial de un Señorío Postclásico en la Mixteca-Nahua-Tlapaneca.”
Multiple lines of evidence suggest that the obsidian found at the site was being manufactured at another location. The obsidian found at Chiepetlan-Quimimiteopan showed no evidence of cortex and none of the obsidian found was in the form of cores. In addition there were no areas of the site that had dense concentrations of debitage, preparation flakes, macroflakes or other markers of obsidian production (Hirth 2008). This combined with the high concentration of prismatic blades suggests that the obsidian was entering the site in the form of pre-made prismatic blades. It is unlikely that the obsidian was transported directly from the source to the site as prismatic blades because of the great distance and fragility of obsidian (Hirth 2003).

Both gray (73 pieces, 86.9%) and green obsidian (11 pieces, 13.1%) were present at the site. The obsidian from this excavation has yet to be sourced, however it is likely that the green obsidian comes from Pachuca, Hidalgo because it is the closest source of green obsidian to eastern Guerrero and was previously identified at the site of Contlalco.
(Smith et al 2007, Gutierrez et al 2011). This source is located approximately 350km to the north of Chiepetlan-Quimimitopean. Gray obsidian from the eastern Guerrero site of Contlalco, was sourced to Paredón, Hidalgo (Gutierrez et al 2011). While Contlalco dates much earlier from the mid to late Formative period it is possible that the same source of obsidian was used at Chiepetlan-Quimimitopean. However, obsidian sources shifted through time as political control of trade networks changed in other regions of Mesoamerica (Aoyama 2001; Hirth 2008; Joyce at al 1995). Based on the proximity of the Paredón obsidian source, which is located approximately 50 km from the Pachuca obsidian source, it is possible that the gray obsidian could have been imported into the region along the same trade route as the Pachuca obsidian. However, Sourcing analysis will need to be undertaken to assess the validity of this interpretation.

![Image of obsidian artifact with 1 cm marker]

Figure 42: Green Obsidian from Terreno de Octaviano, photo by author. Material from Proyecto “Arqueología y Etnohistoria en la Montaña de Guerrero: Patrones de Expansión Político-Territorial de un Señorío Postclásico en la Mixteca-Nahua-Tlapaneca.”.

Hirth (2008: 446) suggests that in the Epiclassic period obsidian was being transported throughout Mesoamerica in the form of preformed cores. It is possible that obsidian was being collected at the source, transformed into preformed cores and entering
eastern Guerrero through various trade routes within the Tlapa and Huamuxtitlan Valleys (Pye and Gutierrez 2007). The obsidian could then be manufactured and refined into various tools to be traded locally. While this is likely, it needs to be archaeologically tested through an examination of the obsidian in the valleys as well as through confirmed obsidian sourcing.

Shell

While most of the shell recovered was fragmentary and degraded a total of 252 semi-complete pieces of shell were recovered, 11 pieces from Quimimiteopan and 241 from Terreno de Octaviano. There was great variety in the size of the shell. There were large oysters over 15 cm long and shell segments as small as 3 cm. The shell was classified as bivalves, univalves (gastropods) or unidentified if the pieces were too fragmentary to distinguish. The majority of the shells from both Terreno de Octaviano and the monumental core were identified as bivalves (89.2%) predominantly oysters (Figure 44). A much smaller amount (4.1%) was identified as univalves (gastropods) (Figure 45), while the remaining 6.7% could not be identified (Gutierrez 2013).
Figure 43: Bivalve, Oyster from Terreno de Octaviano photo by author. Material from Proyecto “Arqueología y Etnohistoria en la Montaña de Guerrero: Patrones de Expansión Político-Territorial de un Señorío Postclásico en la Mixteca-Nahua-Tlapaneca.”.
Figure 44: Gastropod, potentially pupura, from Terreno de Octaviano photo by author. Material from Proyecto “Arqueología y Etnohistoria en la Montaña de Guerrero: Patrones de Expansión Político-Territorial de un Señorío Postclásico en la Mixteca-Nahua-Tlapaneca.”.

Figure 45: Red Bivalve from Terreno de Octaviano Unit U4, photo by author Material from Proyecto “Arqueología y Etnohistoria en la Montaña de Guerrero: Patrones de Expansión Político-Territorial de un Señorío Postclásico en la Mixteca-Nahua-Tlapaneca.”.
Two pieces of red shell were recovered from Terreno de Octaviano, A red bivalve was identified and found in unit U4 (Figure 45) and a second red bivalve shell section was identified in unit U6 (Figure 46). The exact type of the red shell could not be determined, however it is possible the shell is a spondylus shell, and had some social significance due to its red color. Spondylus shell was considered to be a prestige good in Mesoamerica particularly for its prized red color, which is suggested to be associated with blood sacrifice, fertility and cosmology (Staller and Stross 2013: 186).

It is unclear as to what the shell was being used for at the site. There was no evidence to indicate the shell was being processed, as no debris was recovered. Additionally the shell did not show any evidence of drill marks nor was it associated with shell beads or ornaments. It is possible that the oysters could have been consumed at the site, however the long distance of the site from a source of shell combined with the lack
of information concerning its transport and issues of preservation suggest that this needs further study to be assessed.

The distribution of shell varied greatly across Terreno de Octaviano (Figure 47). The lower terrace had a much denser concentration of shell than the upper terrace. Though it is possible that its placement was the result of erosion, the dense concentrations of shell were found far removed from the downward slope of the terraces suggesting the placement was intentional.

Figure 47: Distribution of Shell across Terreno de Octaviano (taken from Gutierrez 2013:44, used with permission of Gerardo Gutierrez)
The shell and oysters are most likely from the Pacific Ocean, approximately 117 km away, as there are no closer sources of oysters or bivalves in the mountain region. However in spite of the distance and rough terrain considerable evidence of shell was recovered. It is likely that the shell followed trade routes from the Pacific coast into the Valleys of eastern Guerrero (Pye and Gutierrez 2007). The presence of shell indicates at the very least an indirect connection between the site of Chiepetlan-Quimimateopan and the Pacific coast. Future research into trade routes and exchange goods could help clarify the relationship between the hilltop sites and the sites of the Costa Chica region.
Preliminary Analysis of Chiepetlan-Quimimiteopan

The original objective of this project was to explore the Postclassic Nahua-Tlapanec frontier, however the radiocarbon dates taken from Chiepetlan-Quimimiteopan suggest that the site was occupied much earlier than the Postclassic. These dates provided a range of A.D. 560-900 for the monumental core section of the site and a range of A.D. 780-900 for the Terreno de Octaviano section of the site. These dates are well before the late Postclassic entrance of the Nahuas into the region and the coalescence of the Tlapanec kingdom in the region (Gutierrez 2002, 2014). Thus the initial assumptions that this area of northeastern Guerrero was only occupied during the Postclassic as a frontier location were disproved. This introduced a number of new questions: Since these sites were occupied prior to the Postclassic, why did the Nahuas choose this area to begin their entrance into eastern Guerrero? What were these hilltop sites used for prior to the Postclassic and when were they first occupied? Why was this area occupied prior to the Postclassic and are there differences in artifact assemblages between the two periods? Ultimately this project could only assess the archaeological assemblages of this site in an effort to understand its function and placement in eastern Guerrero as well as provide a comparative basis to answer these questions with future research. This chapter provides a preliminary analysis of Chiepetlan-Quimimiteopan in the context of eastern Guerrero.

Origins of Artifacts: Imports and Access

The two areas of Chiepetlan-Quimimiteopan chosen for excavation showed no evidence of craft production or manufacture. In addition many of the artifacts were made from material not local to the mountainous region of eastern Guerrero. This suggests that ceramics, obsidian and shell were each being imported to the site. Ceramics were being
manufactured and imported from shorter distances than the obsidian and the shell. While there is evidence of imported ceramics from other regions, such as ceramics from Teotihuacan and Monte Alba, at other sites in eastern Guerrero this site showed no evidence of ceramic importation from other regions (Gutierrez 2002). The ceramics were all local types, suggesting they were manufactured within eastern Guerrero. To date ceramic studies in eastern Guerrero have yet to establish ceramic chronologies or a geographic distribution of ceramic manufacture. It is thus difficult to determine where the ceramics were manufactured within the region. It is likely that the ceramics were being manufactured at a site from the Valleys and being imported to Chiepetlan-Quimimitope, however ceramic production could have been taking place at a number of different locations within the region.

The ceramics identified at the site are largely utilitarian and domestic wares. There was no evidence of fine ware or decorative ceramics, however in eastern Guerrero painted gourds were also used in place of ceramics (Gutierrez 2002). Painted gourds do not preserve well archaeologically in this region, but their documented usage in suggests that the absence of polychrome or decorative ceramic types should not be taken as an indication of solely domestic or utilitarian site function.

The obsidian and shell were being imported from much greater distances than the ceramic. The obsidian was worn and heavily used suggesting that it was not readily available, however both gray and green obsidian were recovered. While the source of the gray obsidian is unknown, the green obsidian was most likely being imported from the Pachuca obsidian source in Hidalgo, Mexico. The green color of Pachuca obsidian was symbolically associated with agriculture, fertility and maize and was considered to be a
prestige good throughout Mesoamerica (Stemp et al. 2012). The symbolic associations of Pachuca obsidian increased its value and while there were fewer pieces of green obsidian found at the site it indicates that inhabitants were not simply importing the most accessible and available obsidian. The presence of both gray and green obsidian suggests that the inhabitants of the site were actively choosing which types of obsidian to import, however the worn and damaged quality of the obsidian suggests that this process was infrequent or limited by socio-political or economic factors that have yet to be determined.

The importation of any type of shell to the site would also have taken considerable effort; the 117km route to the Pacific Ocean is largely mountainous with difficult terrain. Because shell was not necessary for daily life, as ceramics and obsidian were, the presence of shell at the site suggests that it was being intentionally imported for specific social, symbolic or economic reasons.

The lack of manufacture and production evidence from these two sections of the site has two probable explanations. The first is that the production areas were located in a different section of the site, the most likely being the residential terraces of section 3. The two areas chosen for excavation are distinctive. The monumental core has largely communal architecture and Terreno de Octaviano sits isolated atop a summit, these two areas could thus hold more significance or prominence along the ridge which could explain the lack of manufacture and production areas in these two sections. In Oaxaca there is evidence of craft production, particularly stone-working and ceramic production, along hilltop terraces (Blanton 1978; Feinman et al 2002; Finsten 1995; Kowalewski et al 1989). Similar patterns could be found in eastern Guerrero and Chiepetlan-
Quimimiteopan, where sections of hilltop terraces were used for craft production and manufacture. However there would have been a lack of direct access to obsidian, shell and ceramic materials from Chiepetlan-Quimimiteopan suggesting that the second interpretation is more likely.

The second explanation is that the goods entering the site were doing so via the Valleys of Tlapa and Huamuxtitlan. Pye and Gutierrez (2007) describe a network of roads that passed through eastern Guerrero to connect the sites of southern Puebla and Morelos to trade and communication routes along the Pacific coast into Guatemala (2007:231). These trade routes would have connected the Pacific coast with sites towards the Basin of Mexico and allowed goods to be transported between the two areas via the Valleys of Tlapa and Huamuxtitlan. It is probable that goods, such as obsidian and shell, were being directly traded through these routes. The topography of eastern Guerrero would have restricted the movement of people and goods thus limiting access to the imports. Sites in the mountainous region, such as Chiepetlan-Quimimiteopan, would not have had direct access to these trade routes. Therefore it is likely that goods were entering the region via trade routes located in the valleys and subsequently being traded or distributed into the mountainous area.

The goods would most likely have been imported into the valleys and manufactured there before being distributed throughout the region. Similar patterns of obsidian exchange are found across Mesoamerica. Obsidian was transported from the source to large regional centers as preformed cores, once at the centers it was processed or sent to secondary centers for processing and subsequently traded to smaller sites (Hirth 2008; Sheets 2000). This pattern would explain the lack of production areas at
Chiepetlan-Quimimiteopan. If raw materials were being imported into the Valleys and processed there then smaller sites in the mountains would show no evidence of manufacture or processing because goods would be imported in ready-made form. The lack of production areas combined with the lack of direct access to trade goods suggests that the inhabitants of Chiepetlan-Quimimiteopan would have acquired their goods through some sort of interaction with sites in the valleys.

While the second explanation is most likely for the importation of shell and obsidian, ceramics had a more local source and could have potentially been produced at another area of the site. Each of these interpretations can be easily tested by looking for evidence of production at both the residential terraces of Chiepetlan-Quimimiteopan as well as sites in the valley.

**Agricultural Land and Potential Competition**

The site of Chiepetlan-Quimimiteopan is located in an isolated hilltop location, which, in addition to limiting its access to trade goods, also limits its access to good agricultural land. In addition, the limited land available for cultivation would have relied on dryland agriculture, which was far less productive than irrigation agriculture. Thus the low productivity of dryland agriculture within the dry mountain would have required the inhabitants of the site to cultivate more land during the rainy season in order to meet their annual food requirement, but this was severely limited by the availability of agricultural land in the mountainous region. The 7.56hectare field that is located .87km to the west of the site would have been the most easily accessible and largest area of land available for cultivation near the site. The terraces in the central portion of the ridge (section 3) could potentially have been residential and agricultural, however the overall surface area for
this portion of the site was small, under 15 hectares to be used for both residences and agriculture (see table 2).

Gutierrez (2002) suggests that the sites in the mountainous region were at a disadvantage when compared to their counterparts in the valley who had abundant agricultural land as well as permanent water sources for irrigation. This agricultural advantage could have provided the groups in the productive valleys with a source of power and prestige as well as been a potential source of conflict (Gutierrez 2002: 79). While it is likely that there was competition over the limited agricultural resources (land and water) in eastern Guerrero the degree and type of competition or interaction is currently not well understood. The sites of the valley would have had access to agricultural land, irrigation and trade routes giving them a clear advantage over the sites in the mountain who would have had limited resources and access. If competition in the region were strong sites would have needed defensive measures, particularly those in the mountains who would have been at a disadvantage.

The isolated location of the Chiepetlan-Quimimateopan provided it with defensive utility. Borgstene and Mathieu (2007) suggest that there are three elements, which make a site defensive in Mesoamerica: barriers, visibility and elevation. Barriers are defined as “structures or landscape features that limit or control access to a site or movement through a landscape” (Borgstene and Mathieu 2007: 196). The natural topography surrounding Chiepetlan-Quimimateopan serves as a barrier for incoming threats, deep ravines and steep cliffs limit access and entrance to the site. The second defensive feature is visibility; this “includes structures or landscape features that affect how far and in which direction one can see from a site or across the landscape” (Borgstene and
Mathieu 2007: 197). This feature usually includes high points on the landscape or within a site. Both Quimimiteopan and Terreno de Octaviano are located at the highest point in their respective areas of the ridge allowing for a high degree of visibility in every direction. This positioning also encompasses the third element of defensive site, elevation. These features on the landscape would have allowed Chiepetlan-Quimimiteopan to defend itself from the dynamic warfare present in Mesoamerica, however it is unclear if this was the original intention of the site.

While the site of Chiepetlan-Quimimiteopan was in an isolated location and had a defensive utility it is unclear if the site location was chosen solely for defensive purposes. There is potential for conflict within the region and the site was used defensively during the Postclassic period, however additional archaeological investigations need to be done to confirm if the site was defensively used through time or if other factors contributed to its hilltop location prior to the Postclassic period.
Conclusions and Future Research

The site of Chiepetlan-Quiminiteopan provides an opportunity to begin assessing the hilltop sites of eastern Guerrero. The site is located in an isolated hilltop location, as are many of the hilltop sites in eastern Guerrero, but it shows evidence of trade and interaction. The goods imported to the site were not only basic utilitarian necessity items, such as ceramics or gray obsidian, but some had symbolic significance, were of higher value and took considerable effort to obtain, such as shell and Pachuca obsidian. How is it that an isolated hilltop site, with little access to trade routes and agricultural land, was able to acquire prestige goods from other regions in Mesoamerica? Interaction is the primary answer. While it is likely that within eastern Guerrero sites located in the mountainous region were required to interact with sites in the valley to acquire trade goods, it is unclear how this interaction took place. The differential access to trade goods, agricultural land and water within the region suggests that interactions between the mountain sites and the valley sites may not have been simple exchanges.

There was the potential for conflicted interaction and warfare as well as peaceful economic interactions and many possibilities between these two extremes. Future archaeological work within eastern Guerrero can help refine the current understanding of interaction between these two sub-regions and a more nuanced conceptualization of how these two areas interacted will provide archaeologists with a better understanding of how eastern Guerrero developed economically as well as socio-politically. By examining archaeological sites in the valley as well as hilltop sites in the mountainous region
archaeologists can begin to understand how each of these sub-regions grew and influenced the development of eastern Guerrero.

Eastern Guerrero has often been thought of as a marginalized area of Mesoamerica, but this study as well as others in the region have shown that eastern Guerrero was not isolated and that it participated in broader Mesoamerican networks of trade and exchange. Due to its location between the societies of Oaxaca and the societies of the basin of Mexico, and the known interaction between these areas, understanding the development of eastern Guerrero could have implications for understanding broader Mesoamerican interaction. While interaction did occur between eastern Guerrero and broader Mesoamerica, the region appears to have had its own unique socio-political and economic development, distinctive from other areas of Mesoamerica. As a result eastern Guerrero should be examined as its own unique regional system, which interacted with broader Mesoamerica, but was not defined or limited by broader trends.
Bibliography

Aoyama, Kazuo

Armillas, Pedro

Balkansky, Andrew K.

Blanton, Richard E.

1993 *Ancient Mesoamerica: a comparison of change in three regions*. Cambridge University Press., New York, NY, USA:

Blomster, Jeffrey P (editor).
2008 *After Monte Albán: transformation and negotiation in Oaxaca, Mexico*. University Press of Colorado, Boulder, Co

Borgstede, Greg, and James R Mathieu

Brown, Kathryn M., and Travis W. Stanton (editors).

De la Croix, Horst
1972 *Military considerations in city planning: fortifications*. G. Braziller,, New York:

Ember, Carol R, and Claire Riley

Feinman, Gary M., and Linda M. Nicholas
Feinman, Gary M, Linda M Nicholas, and Helen R Haines

Finsten, Laura


Gorenstein, Shirley

Gutiérrez, Gerardo


2011 *Contalco y la Coquera: arqueología de dos sitios tempranos del municipio de Tlapa, Guerrero: con otros ensayos sobre el periodo formativo y los desarrollos culturales del oriente de Guerrero hasta el periodo postclásico /*. Editorial Letra Antigua, [México].


Gutiérrez, Gerardo, and Alicia D. Hernandez

Gutiérrez, Gerardo, and Mary E. Pye

Hirth, Kenneth G


2000 Archaeological research at Xochicalco. University of Utah Press, Salt Lake City.


Holt, H. Barry

Jimenez, Elizabeth
Jimenez Moreno, Wigberto

Joyce, Arthur A, Laura Arnaud Bustamante, and Marc N Levine

Joyce, AA, JM Elam, and MD Glascock

Joyce, Arthur a., and Michelle Goman
2012 Bridging the theoretical divide in Holocene landscape studies: social and ecological approaches to ancient Oaxacan landscapes. *Quaternary Science Reviews* 55: 1–22.

Kowalewski, Stephen a., Gary M. Feinman, Laura Finsten, Richard E. Blanton, and Linda M. Nicholas
1989 *Monte Albán’s Hinterland, Part II: Prehispanic Settlement Patterns in Tlacolula, Etna, and Ocotlan, the Valley of Oaxaca, Mexico*. Museum of Anthropology, University of Michigan, Ann Arbor.

Noguera, Eduardo
1930 Ruinas arqueologicas del norte de mexico. … *la Sec. de Educ. Pubi.) Mexico, DF, Talleres Graficos …*

1965 *La cerámica arqueológica de Mesoamérica*. Universidad Nacional Autónoma de México., México:

Orr, Heather S., and Rex Koontz (editors).
2009 *Blood and Beauty: Organized Violence in the Art and Archaeology of Mesoamerica and Central America*. Cotsen Institute of Archaeology at U C L A.

Palka, Joel W

Parsons, Jeffrey R.

Pye, Mary E., and Gerardo Gutiérrez
Rice, DS, and PM Rice  

Sanders, William T.  

Saunders, Nicholas J.  

Sheets, Payson  

Sheets, Payson  


Smith, Michael E, and John F Doershuk  

Smith, Michael E, Adrian L Burke, Timothy S Hare, and Michael D Glascock  

Staller, John E., and Brian Stross  

Stemp, WJ, C Helmke, JJ Awe, Tristan Carter, and Sarah Grant  
Sullivan, AP, and KC Rozen  

Vera, Alfredo, and Juana Mitzi Serrano  
2005  Secuencia ceramica en el Valle de Tlapa. Escuela Nacional de Antropoloia e Historia.


Willey, Gordon R. (Gordon Randolph)  
Appendix 1: Preliminary Survey of Vessel Forms

Much like the rest of the region only preliminary analyses of the ceramics have been conducted. These preliminary analyses predominantly examined ceramic paste, temper and finish (Gutierrez 2010). Gutierrez (2010) created a typology of these ceramic features that are found across eastern Guerrero. Despite the creation of this classification system, studies have shown no geographic distinction or delineation in the use or presence of these ceramic wares across eastern Guerrero. The distribution of ceramic wares is relatively uniform across the entirety of the region (Vera & Mitzi Serrano 2005). In addition, few archaeological excavations have been undertaken and provided dates, as a result there is currently no established ceramic chronology. In an effort to expand what is known about ceramics in eastern Guerrero a comparative analysis of vessel forms was conducted. Vessel form is one of the variables that have yet to be assessed for eastern Guerrero as a result a preliminary analysis of vessel forms was undertaken in an effort to explore potential trends of ceramic usage across eastern Guerrero. This is a preliminary and comparative analysis, however Terreno de Octaviano and Quimimiteopan have a chronological and geographic anchor, which can serve as a basis to assess future archaeological research of ceramics in the region.

Methodology

Vessel forms for Terreno de Octaviano and Quimimiteopan were determined using Noguera’s (1965) general vessel forms classification. These general forms were combined with the ceramic types from Gutierrez’s (2010) classification system to determine common vessel forms for particular ceramic types. Though few diagnostic sherds were recovered from the case study sites, particular combinations of ceramic type
and vessel form appear to be more common than others. There are five combinations of vessel form and ceramic type that were found at both Terreno de Octaviano and Quimimitopan in higher concentrations: type 3 cajete, type 5 cajete, type 25 cajete, type 3 Olla and type 3 strainer (Figures 1-3). In addition type 25 tecomates were present with increased concentrations at Terreno de Octaviano, but were not found at Quimimitopan. A total of thirty-four combinations of ceramic type and vessel form were identified for Terreno de Octaviano and Quimimitopan, however these five were present in larger quantities (See attached Spreadsheets). These thirty-four typed vessel forms were used as the basis for comparison with other sites in the region.

Gutierrez (2002; 2010) conducted a systematic surface survey of a large number of sites in eastern Guerrero; forty-eight of these sites had surface collections, one was excavated and all were compared to the results of Terreno de Octaviano and Quimimitopan. These sites were classified based on geographic location and three separate areas were distinguished: The Valley of Huamixtitlan (blue in excel), The Valley of Tlapa (red in excel) and the Mountains (Orange in excel). Survey sites were placed into one of these three regions and the geographical distinctions were maintained in this analysis in an effort to assess any geographical trends in ceramic usage across eastern Guerrero.

The ceramics from this survey and excavation were typed using the same classification system from Gutierrez (2010) and the diagnostic sherds were removed and analyzed using Noguera’s (1965) general forms (Table 7 & 8). Though only a small number of diagnostic sherds were recovered from these sites, some general trends in
ceramic usage emerged, these greatly needed to be expanded and further tested with excavation and chronological dating, but can be used as the basis for future analysis.

Ceramic Trends

These trends were established using small concentrations of diagnostic sherds predominantly from surface survey and as such should be tested archaeologically. Of the five most common vessel forms from the case study sites only one was found to be common at other sites in the region. Type 25 cajetes had the highest concentration and were found at twenty-three other sites from the survey. From these sites nine were located in the mountains, six in the Valley of Tlapa and eight in the Valley of Huamuxtitlan, thus no clear geographic distinction in the usage of this vessel form could be determined. The remaining four common vessel forms were found in significantly lower concentrations at other sites. Type 3 cajetes were found at seven other sites and type 3 Ollas were found at two other sites. In comparison type 3 straining vessels were not found at any of the other sites and type 5 cajetes were found at a single site, Quimimitopan-Chiepetepec, which is located near the area of the case study sites. Thus with the exception of type 25 cajetes the common forms found at Terreno de Octaviano and Quimimitopan are not as prevalent at other sites in the region.

There were two typed vessel forms that were found at the case study sites in small concentrations, which were present in large numbers across other sites. Type 19 cajetes were the most common typed vessel form found at the monumental core of Quimimitopan and were found at fourteen other sites (Figure 4). Seven of these sites were located in the mountains, four in the Valley of Tlapa and three in the Valley of Huamuxtitlan. This distribution could suggest that this typed vessel form was more
common in sites located across the mountainous region of eastern Guerrero, but further investigation is needed to confirm that. Type 7 cajetes had the second highest concentration, they were found at twenty-one sites (Figure 5). Nine of these sites were located in the mountains; eight were in the Valley of Tlapa while only four were located in the Valley of Huamuxtitlan. This distribution could suggest a usage of this typed vessel form predominantly in the Valley of Tlapa and the surrounding mountainous area, however that is unclear. These two, typed vessel forms appear to be common across eastern Guerrero, they were found in small quantities at multiple sites across the region and their usage has the potential to be distinguished geographically.

The majority of the sites (42, 87.5%) from this analysis had less than seven types diagnostic sherds that corresponded to those of Terreno de Octaviano and Quimimiteopan. Of the six sites that had higher concentrations of similar typed vessel forms two were different areas of the Contlalco excavations. This can be at least partially attributed to the excavation of the site; the remaining ceramics were from archaeological survey and had significantly less ceramics to analyze for the Contlalco study. The remaining four sites had between seven and ten typed vessel forms in common with the case study sites. One of these sites was located in the Valley of Huamuxtitlan (Los Cuartos), and the other three were located in the mountainous region (Huitzapula, Olinala and Tenango-Tepexi). This distribution begins to suggest a geographic difference in the usage of particular typed vessel forms. Though the numbers are currently inconclusive this can be explored archaeologically.

There were six typed vessel forms that were found at Quimimiteopan and not at Terreno de Octaviano. Of these, five were found to be very rare at other sites: type 18
cajete, type 26 cajete, type 4 jicara, type 21 jicara, type 19 olla. Each of these typed forms was found at no more than two other sites across the area of analysis. In contrast the sixth typed form, type 1A cajete, was found in high concentrations at twenty sites. These sites were distributed across all three geographic areas suggesting a more ubiquitous usage, which coincided with the utilitarian nature of type 1A.

These trends are very general and based off of a small number of diagnostic sherds found across eastern Guerrero. Though no conclusive evidence was found, general geographic and potential chronological trends begin to emerge suggesting a differential usage of ceramics in eastern Guerrero. These trends can be tested with future archaeological comparisons; both chronological and geographic information will be needed to properly assess this information in the future.
FIGURES

Figure 48: Type 25 Ceramic, Exterior (top), Interior (bottom), photo by author material from Proyecto “Arqueología y Etnohistoria en la Montaña de Guerrero: Patrones de Expansión Político-Territorial de un Señorío Postclásico en la Mixteca-Nahua-Tlapaneca.”.
Figure 49: Type 5 Ceramic, Exterior (top), Interior (bottom), photo by author material from Proyecto “Arqueología y Etnohistoria en la Montaña de Guerrero: Patrones de Expansión Político-Territorial de un Señorío Postclásico en la Mixteca-Nahua-Tlapaneca.”
Figure 50: Type 3 Straining Vessel, Exterior (top), Interior (bottom), photo by author material from Proyecto “Arqueología y Etnohistoria en la Montaña de Guerrero: Patrones de Expansión Político-Territorial de un Señorío Postclásico en la Mixteca-Nahua-Tlapaneca.”.
Figure 51: Type 19 Ceramic, photo by author material from Proyecto “Arqueología y Etnohistoria en la Montaña de Guerrero: Patrones de Expansión Político-Territorial de un Señorío Postclásico en la Mixteca-Nahua-Tlapaneca.”.
Figure 52: Type 7 Ceramic, Exterior (top), Interior (Below), photo by author material from Proyecto “Arqueología y Etnohistoria en la Montaña de Guerrero: Patrones de Expansión Político-Territorial de un Señorío Postclásico en la Mixteca-Nahua-Tlapaneca.”
<table>
<thead>
<tr>
<th>Distinction in Excel</th>
<th>Corresponding Information</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blue colored text</td>
<td>Sites located in the Valley of Huamuxtitlan</td>
<td>Los Cuartos (1)</td>
</tr>
<tr>
<td>Red Colored Text</td>
<td>Sites Located in the Valley of Tlapa</td>
<td>Cerro Quemado (1)</td>
</tr>
<tr>
<td>Orange Colored Text</td>
<td>Sites Located in the Mountainous region</td>
<td>Ocoapa (2)</td>
</tr>
<tr>
<td>Typed Vessel Form Title with an *</td>
<td>Most Common Types Forms from the Case Study</td>
<td>Ware 25: Tecomate*</td>
</tr>
<tr>
<td>Typed Vessel For Title with _Q</td>
<td>Typed Forms Were Found at Both Terreno de Octaviano and Quimimiteopan</td>
<td>Ware 21: Cajete_Q</td>
</tr>
</tbody>
</table>

Table 6: Key for Distinction of Data in Excel

Table 7: Vessel Forms from Gutierrez 2002 Survey, Attached

Table 8: Ceramic Analysis from Chiepetlan/Quimimiteopan, Attached
Appendix 2: Ceramic Typology

This case study utilizes the ceramic typology created by Gutierrez (2010). The ceramic typology is published in *Arqueología de la antigua provincia de Tlapa: desde el período arcaico hasta la independencia de México* (Gutierrez 2010: 240-232). This appendix provides an English translation of the ceramic typology published by Gutierrez (2010).

For the creation of these provisional types a series of characteristics related to constitutive elements of the paste were observed: clay and temper.

1. General characteristics of the paste: compaction, texture and color.
2. Characteristics of the temper: identification of the temper, structure of the temper (laminated, granular), color, size and abundance.
3. Surface finish: color, texture (smooth, polished), decoration (slip, esgrafiadio, paint designs).

**Description of the preliminary ceramic types**

Type 1a: *Burdo Grano Blanco de Cuarzo*

Ceramics of semi-compacted paste with a coarse or rough texture with colors ranging from 2.5Y 5/2 grayish brown, 10YR 2/1 black, with quartz temper with an average grain size of 2.5mm., some specimens show temper of large size. The temper has a density of 17.3 grains per square centimeter. The surface finish is coarse, and some sherds were smoothed on one or both sides. In some cases the surface is very eroded. The color of the surface ranges from 5YR 5/6 yellowish red to 10YR 6/4 light yellowish brown and the interior from 2.5Y 4/1 dark gray to 5Y 6/1 gray, the average thickness is
5.43mm. Some pieces have temper of red and black stone, which could be ground ceramic. This type does not have similarities with ceramics mentioned in the surrounding regions.

Type 1b: Burdo grano Blanco de Calcita

Ceramics of semi-compacted paste with coarse texture and some pieces with the texture of chalk, with colors ranging from 2.5Y 5/2 grayish brown; 10YR 5/1 gray to 10YR 2/1 black. The temper is calcite and shell with a density of 17 grains per square centimeter. The surface finish is coarse, and some sherds were smoothed on one or both sides. In some cases the surface is very eroded. The color of the outer surface ranges from 5YR 5/6 yellowish red to 10YR 6/4 light yellowish brown and the interior ranges from 2.5Y 4/1 dark gray to 5Y 6/1 gray, the average thickness is 5.43mm. This type does not have similarities with ceramics mentioned in the surrounding regions.

Type 2: Burdo Laminar

Ceramics of semi-compact paste, coarse in texture with colors ranging from 10YR 6/4 light yellowish brown and 2.5Y 5/2 grayish brown to 10YR 5/1 gray and 10YR 2/1 black. The temper is laminated schist in a metallic gray color with an average grain size of 2.5mm. The temper has a density of 35 grains per square centimeter. The surface finish is coarse, and some sherds were smoothed on one or both sides. In some cases the surface is very eroded. The thickness ranges from 0.23 to 0.38cm. The forms are: cajetes with a flat base and straight lip.
The type *Tinajas laminar* from the center of Guerrero (Teopantecuanitlán) is similar to type 2 *Burdo laminar* from the site of Contlalco in terms of the composition of the paste, texture, color of the paste, interior treatment and clay color. The *Tinajas laminar* were dated between 600 and 1250 BC. Our type 2 appears in Contlalco in the upper stratas and the type *Tinajas laminar* goes back to the earliest stages of Teopantecuanitlán.

Type 3 *Mica Laminar*

Ceramics of semi-compact paste with a coarse texture and colors ranging from 10YR 6/4 light yellowish brown, 2.5Y 5/2 grayish brown and 10YR 2/1 black. The temper is calcite and laminated schist in a metallic gray color with an average grain size of 2.5mm, there were also pieces of ground mica mixed with the clay that glisten and reflect in the light. The temper has a density of 23 grains per square centimeter. The surface finish is coarse, and some sherds were smoothed on one or both sides. In some cases the surface is very eroded. The thickness varies from 0.18 to 0.45cm. This type does not have similarities with ceramics mentioned in the surrounding regions.

Type 4: *Rojo Metálico*

Ceramics with compact paste and fine texture ranging from Gley1/3/N very dark gray; 5YR 7/8 reddish yellow; 10YR 6/6 brownish yellow and 10YR 6/2 light brownish gray, with a small amount of fine calcite temper. The surface finish is fine and polished. The colors of both sides are 5YR 6/6 reddish yellow. Some sherds show remnants of a black line decoration typical of Aztec wares. The ceramic forms present for this type
have a thickness ranging from 0.4 to 0.6cm. This ceramic type has the characteristic of producing a metallic sound. This type does not have similarities with ceramics mentioned in the surrounding regions.

Type 5a *Gris Fino*

Ceramic with very compact paste and a fine texture with the color Gley2 ¼ dark bluish gray and Glay1 4/N dark gray. The temper is fine-grained calcite and has a density of 8 grains per square centimeter visible on the surface. The surface finish is smoothed on both sides and Gley1 4/N dark gray in color. The ceramic forms present have a thickness that varies from 0.38 to 0.4cm. This ceramic type has the characteristic of producing a metallic sound. The type *Balsa Gris Compacta* from the area of central Guerrero (Teopantecuanitlán) is similar to type 5a *Gris Fino* from the site of Contlalco in terms of consistency of the paste, color, texture, firing and interior treatment. The forms reported are not similar to those of Contlalco. The G 3 type from Monte Alba is similar to type 5a *Gris Fino* from Contlalco in terms of paste composition and surface finish, it is temporally situated in the middle and late Preclassic period.

At Contlalco this type appears in the lower strata of the excavation. From the relationships that exist with the ceramics from the surrounding regions we believe that this type would temporally be situated in the middle to late Preclassic periods.

Type 5a1 *Gris Fino Inciso*

Ceramics very compact paste and fine texture with the color Gley2 4/1 dark bluish gray and Glay1 4/N dark gray. The temper in thin grained calcite and has a density
of 8 grains per square centimeter visible on the surface. The surface finish is smooth on both sides and Gley1 4/N dark gray in color. The ceramic forms present have a thickness that varies from 0.38 to 0.4cm. This ceramic type has the characteristic of producing a metallic sound, in addition there are incised geometric patterns on the surface. The G12 type of Monte Albán is similar to type 5a1 Gris Fino Inciso from Contlalco in terms of composition of the paste, surface treatment and decoration. The forms reported from Contlalco are cajetes with straight hyperboloid walls and rounded rims and cajetes with curved hyperboloid walls and smoothed rims. These are located in the Monte Albán I period (Late Preclassic).

The Loza Gris Fina from the Rio Verde Valley is similar to type 5a1 Gris Fino Inciso from the site of Contlalco in terms of color of the paste and incised decoration. The forms present at Contlalco are ollas. At Contlalco this type appears at the lower strata, from the similarities with the surrounding regions this type is temporally located in the middle Preclassic.

Type 5b Gris Metálico

Ceramics with compact paste and medium texture with colors ranging from Gley2 4/1 dark bluish gray and Glay1 4/N dark gray. The temper is fine-grained mica and quartz with a density of 6 grains per square centimeter visible on the surface. The surface finish is smooth on both sides and Gley1 4/N dark gray in color; on the exterior there is a dark colored band from 1 to 2cm in thickness. Some sherds have an external surface color of 2.5Y 6/2 light brownish gray. The ceramic forms present for this type have a thickness of 0.38 up to 0.4cm. This ceramic type has the characteristic of producing a metallic sound.
Tentatively this type is found from the middle to late formative period. At the site of Contlalco this type appears in the lowest strata of the excavation, from the similarities present in the surrounding regions, Monte Alban 1, this type is temporally placed in the Preclassic period.

**Type 6 Gris Burdo**

Ceramics with semi-compact paste and a sandy texture with the color Gley1 4/N dark gray to 10YR 6/1 gray. The temper is feldspars with 0.1mm grain size and has a density of 13 grains per square centimeter visible on the surface. The surface finish is coarse, but both sides are smoothed. The thickness of this type varies from 0.38 to 0.69cm.

The type G1 from Monte Alban is similar to type 6 *Gris Burdo* from Contlalco in terms of components of the paste and the surface finish; The forms reported for Contlalco cajetes with straight hyperboloid walls and rounded edges. Temporally this type is dated to Monte Alban 1. In Contlalco this type appears in all the strata of excavation, by the similarities with the G1 from Monte Alban, the type 6 can be placed from the middle to late Preclassic period.

**Type 6a Burdo con Gravilla**

Ceramic with very compact paste, coarse texture with the color Gley1 4/N dark gray pottery. It had a temper of feldspar and gravel that are dark gray in color with a grain size of 1mm in thickness. The temper has a density of 16 grains per square centimeter visible on the surface. The surface finish is smoothed on both sides and has a
color of Gley1 4/N dark gray, many are eroded. The thickness varies from 0.48 to 1.07cm. This type does not have similarity to ceramics mentioned in the surrounding regions.

Type 7 Bayo Burdo

Ceramic with compact paste and coarse texture, with the color ranging from 10YR 7/4 very pale brown to 10YR 6/1 gray. The temper is calcite and some gravel grains medium to large in size, the paste is not well fired. The temper has a density of 18 grains per square centimeter present on the surface. The surface finish is smooth on both sides with a color of 10YR 7/3 very pale brown, some sherds were observed with glaze of the same color, others are very eroded and grainy which is difficult to classify. The thickness of this type ranges from 0.3 to 0.98cm. This type is a domestic ceramic apparently with local centers of production. This type does not have similarity to ceramics mentioned in the surrounding regions.

Type 7a Bayo Burdo Inciso

Ceramic of compact paste and coarse texture, with color 10YR 7/4 very pale brown to 10YR 6/1 gray. The temper is medium to coarse grain calcite with a density of 18 grains per square centimeter visible on the surface. The surface finish is smoothed on both sides with a color of 10YR 7/3 very pale brown and in some sherds there is a slip of the same color. The ceramic is very eroded and difficult to classify. The thickness of this type ranges from 0.3 to 0.98cm, linear geometric patterns are incised on the outside wall. This type does not have similarity to ceramics mentioned in the surrounding regions.
Type 8: *Anaranjado Metálico*

Ceramic with compact paste with medium to fine texture with color from 5YR 6/6 reddish yellow to 7.5YR 6/6 reddish yellow. It has very fine-grained calcite temper with a density of 13 grains per square centimeter visible on the surface. The surface finish is polished well on both sides with a red slip 2.5YR 5/8 red and some pieces 2.5YR 6/8 light red. This type has a thickness of 0.29 up to 0.6cm. This ceramic type has the characteristic of producing a metallic sound. This type has no similarity to ceramics mentioned in the surrounding regions, but by the type of paste and the type of firing it is likely that it belongs to the Epiclassic period- early Postclassic.

Type 9 *Bayo*

Ceramic with semi-compacted paste and medium texture, color 5YR 5/3 reddish brown. It has a temper of mica and fine-grained feldspar, which can be seen on the surface of both sides. The temper has a density of 15 grains per square centimeter visible on the surface. The surface finish is smoothed on the interior and the exterior with a color from 7.5YR 7/4 pink to 7.5YR 6/4 light brown. The thickness of the ceramic varies from 0.38 to 1.0cm. The type *Rincón fino* from central Guerrero (Teopantecuautlán) is similar to type 9 *Bayo* from Contlalco in terms of the surface finish, the paste color, exterior and interior treatment and wall thickness.
Type 9a: *Bayo Inciso*

Ceramic with semi-compacted paste and medium texture, color 5YR 5/3 reddish brown. It has a temper of mica and fine-grained feldspar, which can be seen on the surface of both sides. The temper has a density of 15 grains per square centimeter visible on the surface. The surface finish is smoothed on the interior and the exterior with a color from 7.5YR 7/4 pink to 7.5YR 6/4 light brown. The thickness of the ceramic varies from 0.38 to 1.0cm this type is characterized by incised geometric designs on the exterior.

The type *Café claro pulido* from the center of Guerrero located in the Tejas and Chichitlantepec phases of the site of Xochipala is similar to type 9a *Bayo inciso* from the site of Contlalco in terms of paste color, surface finish; the forms at both sites are *cajetes* with straight hyperboloid walls and straight diverging edges and have the same type of decoration. The chronological date for the type *Café claro pulido* is the middle and late Preclassic, cross-dating the type 9a *Bayo Inciso* places it in these chronological periods. The ceramic *pasta café fina* from the lower Rio Verde valley is similar to the type 9a *Bayo Inciso* in terms of the color of the paste, and the surface finish of brown slip and incised decoration. Temporally this type of placed in the Minizundo (400-100 B.C.)- Late Preclassic phase. This type appears at the site of Contlalco in the lowest strata of the excavation, from these similarities to the surrounding regions this type can be placed in the middle to late Preclassic period.

Type 10: *Costa del Golfo*

Ceramic with compact paste and fine texture, color from 2.5Y 5/1 gray to 2.5YR 6/8 light red and 2.5 5/1 reddish gray. The temper is very fine-grained calcite and mica
and is in low proportion. The surface finish shows sherds were once polished, but most of them are eroded and appear to be smoothed. The surface color is the same as the ceramic paste. The thickness ranges from 0.37 up to 0.69cm. The principal characteristic of this ceramic is that it has the appearance of chalk and when the clay is touched it covers the hands. This type has no similarity to those described in the surrounding regions, but can be seen in large amounts in the ceramic collections of the Huaxteca region.

Type 11 and 12 *Moderno*

Ceramics of all kinds, tiles, glazed ceramics, etc. that are currently manufactured.

Type 13: *Pasta Negra*

Ceramic with semi-compacted paste, porous texture and medium finish from color 5Y 2.5/1 black, it has a temper of medium-grained calcite sometimes mixed with medium-grained mica and well ground ceramic. The temper has a density of 35 grains per square centimeter visible on the surface. The surface finish is smooth inside and on some occasions the exterior is polished. The color of the surface can be brown, bayo and sometimes black. This type of ceramic has a thickness of 0.38 to 0.61cm. This type does not have similarity to ceramics mentioned in the surrounding regions.

Type 13a: *Pasta Negra Inciso*

Ceramic with semi-compacted paste, porous texture and medium finish from color 5Y 2.5/1 black, it has a temper of medium-grained calcite sometimes mixed with medium-grained mica and well ground ceramic. The temper has a density of 35 grains
per square centimeter visible on the surface. The surface finish is smooth inside and on some occasions the exterior is polished. The color of the surface can be brown, bayo and sometimes black. This type of ceramic has a thickness of 0.38 to 0.61 cm, and is characterized by incised geometric lines on the surface. This type does not have similarity to ceramics mentioned in the surrounding regions.

Type 14: *Mica Ollinalá*

Ceramic with semi-compacted paste and a sandy-crumbly texture, color 2.5YR 5/8 Red. The surface finish is smooth, although it is usually very eroded. The main characteristic of this type is the mica temper, which reflects in the sunlight and produces a glow on the surface. The thickness of this ceramic type varies from 0.38 up to 1.2 cm. This type is diagnostic for the Balsas region.

Type 15: *Bayo Metálico*

Ceramic with compact paste and fine texture color of 5YR 5/6 yellowish red, there is no temper on the surface. The surface finish is polished and 10YR 5/3 brown in color and it has a slip of the same color. The thickness of this type varies from 0.63 to 0.92 cm. The main feature of the ceramic is that it produces a metallic sound when struck against another surface. The type *Rincón pulido* from central Guerrero (Teopantecuanitlán) has some similarity to type 15 *Bayo Metálico* from Contlalco in terms of firing and color of the paste as well as the incised lines decoration on the edges.
Type 15a: *Bayo Metálico Inciso*

Ceramic with compact paste and fine texture color of 5YR 5/6 yellowish red, there is no temper on the surface. The surface finish is polished and 10YR 5/3 brown in color and it has a slip of the same color. The thickness of this type varies from 0.63 to 0.92cm. The main feature of the ceramic is that it produces a metallic sound when struck against another surface. This type is the same as the previous, and only varies with the presence of incised decoration.

Type 16: Mayólica

Ceramic with compact paste, glazed and possible manufacture from the 16\(^{th}\), 17\(^{th}\) and 18\(^{th}\) centuries.

Type 17: *Burdo Texmelincan*

Ceramic with slightly compact paste and coarse texture, color 7.5YR 5/6 strong brown with medium grained quartz temper. The temper has a density of 8 grains per square centimeter visible on the surface. The surface finish is smooth on the interior, and the exterior if extremely coarse with a color of 10YR 4/3 brown. The thickness of this ceramic ranges between 0.53 up to 0.92cm. This type does not have similarity to ceramics mentioned in the surrounding regions.

Type 18: *Negro Pulido*

Ceramic with compact paste and fine texture, color 7.5YR 5/1 gray with fine-grained calcite temper. The temper has a density of 4 grains per square centimeter visible
on the surface. The surface finish is polished on both sides and appears to have a color of 10YR 2/1 black. The thickness of this type ranges from 0.39 to 0.82 cm. This type does not have similarity to ceramics mentioned in the surrounding regions.

Type 19: *Naranja*

Ceramic with compact paste and coarse texture, color 5YR 5/8 yellowish red with medium-grained calcite temper. The temper has a density of 15 grains per square centimeter visible on the surface. The surface finish is smoothed on both sides and has a coarse appearance, the color is the same as the paste. The thickness of this type is between 0.52 and 1.07 cm.

Type 19a: *Negro sobre Naranja*

Ceramic with compact paste and coarse texture, color 5YR 5/8 yellowish red with medium-grained calcite temper. The temper has a density of 15 grains per square centimeter visible on the surface. The surface finish is smoothed on both sides and has a coarse appearance, the color is the same as the paste. The thickness of this type is between 0.52 and 1.07 cm. Black painted geometric lines on the surface characterize this type. This type is not similar to the ceramics of the surrounding region, but could be associated with ceramics of the Epiclassic period in the Basin of Mexico.

Type 20: *Rojo Pulido*

Ceramic with compact paste and fine texture, color 7.5YR 5/3 brown with medium-grained calcite temper in medium proportion. The surface finish is smooth on
the interior, the exterior has a wash of color 2.5YR 4/8 red that was burnished, there are some traces of red paint. The thickness of this type ranges from 0.68 to 0.92cm. This type does not have similarity to ceramics mentioned in the surrounding regions.

Type 21: Café

Ceramic with a compact paste and coarse texture, color 10YR 5/2 grayish brown with a medium-grained mica temper with a high proportion visible on the surface. The surface finish is smoothed on both sides and an interior slip with the color 7.5YR 5/3 brown is present; the exterior has a decoration of horizontal bands of the color 10YR 3/3 dark brown. The average thickness of this type varies from 0.52 to 1.02cm. The main feature of the ceramic is that it produces a metallic sound when struck against another surface. This type does not have similarity to ceramics mentioned in the surrounding regions.

Type 22: Naranja sobre Gris

Ceramic with compact paste and fine texture, color 2.5Y 6/2 light brownish gray over which there is a layer or wash of color 10R 5/8 red of 0.2cm, sometimes on both sides; Medium to fine grained sand temper. The temper has a density of 11 grains per square centimeter visible on the surface. The surface finish is smooth on both sides. The color of the surface is the same as the paste, the interior sometimes has a wash of black color. The thickness of this ceramic ranges from 0.58 to 0.91cm. The type Rojo sobre gris from the center of Guerrero located in the Tejas and Chichitlantepec phases of the site of Xochipala is similar to type 22 Naranja sobre Gris from the site of Contlalco in
terms of the components of the paste, the surface finish and color and the forms at both sites are cajetes with straight hyperboloid walls. This type is chronologically placed in the Preclassic periods.

Type 23: *Guinda sobre Blanco*

Ceramic with semi-compact paste and granular texture, color from Gley1 4/N dark gray to 10YR 6/1 gray. It has white slip on the interior and exterior. The temper is fine particles of sand and fine-grained mica. The surface finish is brown, yellowish or reddish brown. It is decorated with horizontal bands of guinda color. This type of ceramic belongs to the Postclassic period, Yeztla Naranjo, and is principally located from the center of Guerrero to the border with the states of Mexico and Michoacan.

Type 24: *Crema*

Ceramic of very compact paste with a fine texture, color 10YR 8/3 very pale brown with a fine-grained temper of calcite in low proportion. The surface finish is smoothed and polished on both sides, and the same color as the paste. This type of ceramic ranges from 0.49 to 0.63cm.

Type 25: *Mica Fino*

Ceramic with semi-compacted paste, sandy texture with various colors ranging from 10R 6/6 light red to 10YR 3/3 dark brown. The principal characteristic of this type is that it has a temper of mica that produces a glare on the surface. The sixe of the temper grains is less than 0.2mm. The temper has a density of 38 grins per square centimeter
visible on the surface. The surface finish is polished on both sides. The thickness varies from 0.40 to 0.68cm. This type does not have similarity to ceramics mentioned in the surrounding regions.

Type 25a: *Mica Fino Inciso*

Ceramic with semi-compacted paste, sandy texture with various colors ranging from 10R 6/6 light red to 10YR 3/3 dark brown. The principal characteristic of this type is that it has a temper of mica that produces a glare on the surface. The size of the temper grains is less than 0.2mm. The temper has a density of 38 grains per square centimeter visible on the surface. The surface finish is polished on both sides. The thickness varies from 0.40 to 0.68cm. It has characteristic geometric patterns incised on the surface. This type does not have similarity to ceramics mentioned in the surrounding regions.

Type 26: Rojo Texcoco

Ceramic with very compact paste and fine surface finish, color 10YR 6/1 gray, with temper of very hard rock 2mm in size. The surface finish is polished on both sides with color from 6/6 light red to 10YR 3/3 dark brown, sometimes they have a wash that is black in color. The thickness of this ceramic type varies from 0.58 to 0.91cm. This type does not have similarity to ceramics mentioned in the surrounding regions, but it is in the Basin of Mexico and we believe it is diagnostic to the Postclassic period.
Type 27: *Crema Alcozaúca*

Ceramic with semi-compacted paste, sandy granular texture, color 2.5Y 7/4 pale yellow. The temper is red sand with a grain thickness of 1.1mm. The temper has a density of 10 grains per square centimeter visible on the surface. The surface color is the same as the paste and is smoothed. The thickness varies from 0.4 to 0.67cm. This type does not have similarity to ceramics mentioned in the surrounding regions.

Type 28: *Azoyú Arenoso*

Ceramic with compact paste and granular and medium texture, color 5YR 5/3 reddish brown with some changes in color due to the firing atmosphere. The temper is quartz and mica and can be seen on both sides. The density of the temper is 10 grains per square centimeter visible on the surface. The surface finish is smoothed on both sides with colors from 7.5YR 7/4 pink to 7.5YR 6/4 light brown. The thickness of this type ranges from 0.38 to 1.0cm. This type does not have similarity to ceramics mentioned in the surrounding regions.

Type 29: *Pasta Gris*

Ceramic with very compacted paste and a fine texture; color 10YR 6/1 gray with temper of very hard stone. The surface finish is smoothed on both sides and has a color of 2.5Y 6/2 light brownish gray, sometimes with a black wash. The thickness of this ceramic ranges from 0.58 up to 0.91cm. This type does not have similarity to ceramics mentioned in the surrounding regions.