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Cerro Danush: An Exploration of the Late Classic Transition in the Tlacolula Valley, Oaxaca.



Research Year: 2007

Culture: Zapotec

Chronology: Late Classic

Location: Oaxaca Valley, México

Site: Dainzú-Macuilxóchitl

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Abstract

This report describes and provides preliminary interpretations for the 2007-2008 field season of mapping and surface collection conducted on Cerro Danush at the site of Dainzú-Macuilxóchitl in Oaxaca, Mexico. Dainzú-Macuilxóchitl is an expansive settlement that was an important part of the Prehispanic Zapotec tradition. Over 130 man-made terraces were mapped, all dating to the Late Classic period (500-900 A.D.), and a large terrace complex found at the summit of Cerro Danush is interpreted as the civic-ceremonial center of the site during that time. I argue that the Late Classic shift in civic-ceremonial focus away from Cerro Dainzú to Cerro Danush implies direct involvement at the site from the nearby urban center of Monte Albán.

Resumen

Este informe describe y proporciona las interpretaciones preliminares para la temporada del campo 2007-2008 de traz y de la recolección superficial conducidos en Cerro Danush en el sitio de Dainzú-Macuilxóchitl en Oaxaca, México. Dainzú-Macuilxóchitl es un establecimiento expansivo que tenía una parte importante de la tradición zapoteca prehispanica. Sobre 130 terrazas artificiales se trazó, todo fechando al período Clásico Tardío (500-900 A.D.), y un complejo grande de terrazas encontrado en la cumbre de Cerro Danush se interpreta como el centro civico-ceremonial del sitio durante ese tiempo. Discuto que la transición del período Clásico Tardío en foco de centro civico-ceremonial lejos de Cerro Dainzú hacía Cerro Danush implique la intervención directa en el sitio del centro urbano próximo de Monte Albán.

Introduction

Cerro Danush ([Figure 1](#)) is a prominent hill located just west of the Zapotec town of Macuilxóchitl in the Tlacolula arm of the Oaxaca Valley, Mexico, some twenty kilometers southeast of Oaxaca City. It played an important role in the prehistoric settlement of Dainzú-Macuilxóchitl, which fits within the Zapotec cultural tradition, and has evidence for occupation as early as the Rosario ceramic phase (700-500 B.C.) through to European contact. The archaeological site of Dainzú-Macuilxóchitl consists of a large

disperse settlement located on the valley floor that includes the modern town of Macuilxóchitl, and is surrounded on three sides by hills, Cerro Danush in the north, Cerro Dainzú in the south, and Cerro Danez in the east, as can be seen on the INEGI topographic map below ([Figure 2](#)). Data from the initial area survey conducted by Ignacio Bernal and the regional settlement pattern survey conducted by Kowalewski et al. (1989) suggest that the site of Dainzú-Macuilxóchitl was part of yet a larger archaeological complex that includes the areas surrounding the modern towns of Tlacoahuaya and Teotitlan del Valle. Several carved stones have been catalogued from the greater region as well as the site itself, most having something to do with an early version of the Mesoamerican ballgame (Bernal 1973).



Figure 1: Cerro Danush from the *Zona Arqueológica de Dainzú*. Photo courtesy of Robert Markens, Centro INAH Oaxaca.

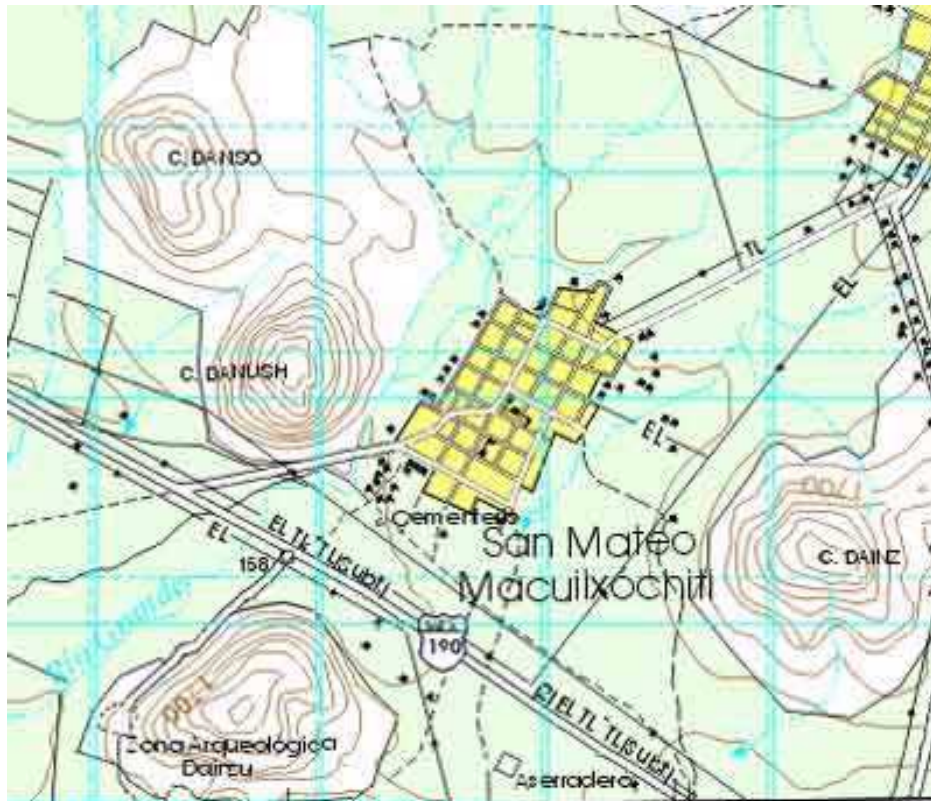


Figure 2: Topographic Map of the Dainzú-Macuilxóchtitl Area. (INEGI 2001)

According to Arturo Oliveros (1997:25), the name Macuilxóchtitl, which translates from the Nahuatl language to mean “5-flower”, is also the name of the central Mexican god associated with the Mesoamerican ballgame. An appropriate designation, since archaeological research conducted at Dainzú-Macuilxóchtitl has revealed a large corpus of iconography concerning the game. The name 5-flower, *Guiebelagayo* in Zapotec, has deep roots in the Zapotec tradition. Several ceramic figurines found at Monte Albán and other sites in the Oaxaca Valley, dating to the Classic period (A.D. 200-800), bear the glyphic representation of this name in their headdresses. According to Joseph Whitecotton (1977:157), the *Relación de Macuilxóchtitl* of 1580 states that the people of the town worshipped “Coquehuilia, lord of the center of the earth, whose calendrical representation may have been 5-Flower”

The first archaeologist to work at Dainzú-Macuilxóchtitl was Ignacio Bernal, who ran an INAH (*Instituto Nacional de Antropología e Historia*) project in the 1960s that focused on the area that is now marked as the *Zona Arqueológica Dainzú* (Dainzú archaeological zone). He and Oliveros took part in excavations and reconstruction projects on the terraces found at the base of Cerro Dainzú at the southern end of the site (Bernal and Oliveros 1988). They found a large structure (building A) on the highest terrace that appeared to have a ceremonial or religious function. One of its walls was covered with low relief carved stones that depicted men in jaguar outfits, or with feline characteristics.

These figures were believed to be associated with a version of the Mesoamerican Ballgame, and at least one ball court has been excavated and partially reconstructed at the site.



Figure 3: Low Relief Ballplayer Carving from Building A, Dainzú

These low relief carvings are some of the earliest images of the ball game that can be found in Mesoamerica. Unlike the more well-known version of the Mesoamerican ballgame that was played in I-shaped courts, where the participants did not use their hands, but rather their hips in order to bounce a soccer-sized rubber ball through a large stone hoop (Scarborough and Wilcox 1991), the Dainzú carvings (Orr 2003) depict players wearing protective equipment including helmets and holding small rubber or stone balls in their hands ([Figure 3](#)). Also, the earliest courts at Dainzú may not have been I-shaped, as the one shown below ([Figure 4](#)), which most likely was constructed in the Late Classic period (Monte-Albán IIIB-IV/Xoo phase)(Bernal and Oliveros 1988:23). In fact, Bernal (1988:10) believed that the large open patios of the initial construction phase (Late Monte Albán I/Pe phase) of building B, located on the terrace just below building A, may have functioned as ball courts. Javier Urcid (In Press) suggests that the

structure found at the summit of Cerro Dainzú may have served as a ball court in the Terminal Formative period (Monte Albán II/Niza phase) between 100 B.C. – 200 A.D.



Figure 4: I-shaped Ballcourt at Dainzú-Macuilxóchitl

Other research concerning the stone carvings and the ballgame at Dainzú includes Heather Orr (1997; 2001), Joyce Marcus (1983a), and Bernal and Seuffert (1968; 1979). Although interpretations of the message depicted in the stone relief carvings and the purpose of the ball game at Dainzú vary, the research to date firmly establishes Dainzú-Macuilxóchitl as an important Late Formative period (Monte Albán I/Pe and II/Niza phases) site with its settlement concentrated around the civic-ceremonial center at Cerro Dainzú (Fernández Dávila and Gómez Serafin 1993). During this same time, on a prominent hilltop just 20 kilometers to the northwest, the site of Monte Albán was emerging as the urban center of the newly formed Zapotec state that was beginning to expand its influence over the Oaxaca Valley and beyond (Flannery and Marcus 1983:83-125; Redmond 1983). Javier Urcid (In Press) proposed that the “narrative” of the stone relief carvings at Dainzú depict conflict between Dainzú and Monte Albán in

the Terminal Formative period (Monte Albán II/Niza phase) that ultimately resulted in the subjugation of Dainzú.

Data from the Oaxaca Valley Survey Project (Kowalewski, et al. 1989) as well as more recent excavations (Markens 2002, 2004; Winter 2004) at Dainzú-Macuixóchitl show a considerable expansion of the settlement around Cerro Dainzú during the Early Classic period (Monte Albán IIIA/Pitao phase) between 200 – 500 A.D. Although this did not involve much in the way of construction of monumental architecture, the increased area of scatter for the distinctive ceramics of this period shows expansion to the north and west of Cerro Dainzú. Researchers have suggested that Dainzú-Macuixóchitl served as a center for tribute collection to Monte Albán during this period (Winter 1989b), but its civic-ceremonial focus remained at Cerro Dainzú.

In the subsequent Late Classic period (Monte Albán IIIb-IV/Xoo phase) between 500 – 900 A.D., Dainzú-Macuixóchitl underwent a major transition that saw an increase in the construction of monumental architecture, overall size of the site, and its population making it second in all three categories only to Monte Albán in the Valley of Oaxaca. In addition to this, Dainzú-Macuixóchitl experienced a shift in architectural focus with the near abandonment of the civic-ceremonial center at Cerro Dainzú in favor of new settlements toward the northern end of the site around Cerro Danush (Kowalewski, et al. 1989). In fact, the only new monumental construction in the Cerro Dainzú area involved the addition of an I-shaped ball court ([Figure 4](#)), similar in design and orientation to the ones found at Yagul and Monte Albán. These changes at Dainzú-Macuixóchitl are concurrent with and related to other developments in the Tlacolula Valley, such as the growth at sites like Yagul and Lambityeco, and the construction of hilltop settlements at Santa Ana del Valle and San Miguel del Valle. It also appears to be concurrent with developments in and around Monte Albán, such as the construction of a major settlement at Cerro Atzompa. These changes in the Late Classic period (Monte Albán IIIb-IV/Xoo phase) are the focus of the current research project.

What happened in Oaxaca during Early Postclassic period (Monte Albán V/Liobaa phase) between A.D. 900-1200 is not well understood, and is subject to some considerable differences in interpretation. Marcus Winter (1989a; Winter 1989b:75-77) has proposed that many sites were either abandoned or greatly reduced in population at this time and no new monumental construction occurred, while John Paddock (1970) and others (Marcus and Flannery 1990) have suggested a continuous pattern of transition toward the system of competing centers that evolved in the Late Postclassic period. At this time, the archaeological evidence for occupation at Dainzú-Macuixóchitl during this period is insufficient to draw any conclusions (Markens 2004; Markens, et al. 2008; Winter 2004).

The Late Postclassic period (Monte Albán V/Chila phase) between A.D. 1200-1521 is characterized by what has been described as a pattern of competing fragmentary or “balkanized” tributary states (Flannery and Marcus 1983:217; Whitecotton 1992). Documentary evidence shows that regional centers, including Macuixóchitl, participated in conquest, marriage alliances, and tribute collection during this period (Acuña 1982; Markens, et al. 2008; Whitecotton 2003). Evidence for the influx of influences located

outside the Valley of Oaxaca, such as the Aztec and Mixtec states, also becomes apparent in the archaeological record for that time (Bernal 1966). Several Postclassic period polities in the region, such as Tehuantepec and Mitla (Flannery 1983; Winter 1989), maintained hilltop fortresses where their populations could retreat to in order to fend off attackers. In general, the Late Postclassic in Oaxaca consisted of local competing polities vying for advantage in a super-regional system of trade and tribute (Oudijk 2000).

Notes on Dating and Ceramic Phases for the Valley of Oaxaca

Students of Oaxaca Archaeology, such as myself, quickly realize that the literature concerning dating and ceramic phases is confusing. In fact, there are two competing systems in place: one that holds to the original system developed by Caso et al. (1967) that has been adapted through subsequent research (Kowalewski, et al. 1978), which combines the name of the Zapotec capital, Monte Albán, with roman numerals (i.e. Monte Albán I), and the other developed by Michael Lind (1991-1992) and now used by others (Martinez Lopez, et al. 2000; Urcid 2001; Markens 2004, 2008), which replaced the numeral system with Zapotec names to distinguish ceramic phases (i.e. Danibaan phase). In this report, I make no effort to support or refute either system, but simply attempt to incorporate both as much as possible. In order to do this, the dates have been adjusted slightly. For example, Lind et al. use A.D. 500 – 800 for the Late Classic Peche/Xoo phases, and Caso et al. use A.D. 600 - 900 for the Late Classic Monte Albán IIIb-IV, I merely combine the dates A.D. 500 – 900. [Table 1](#) (below) is based on Gary Feinman's (2007:4) recent classification, but has been modified to incorporate the Lind et al. system. This table forms the basis of classification for this report.

Table 1: Archaeological Timeline for the Oaxaca Valley

Period	Dates	Caso et al.	Lind et al.
Late Postclassic	1200 – 1521 A.D.	Monte Albán V	Chila
Early Postclassic	900 – 1200 A.D.	Monte Albán V	Liobaa
Late Classic	500 – 900 A.D.	Monte Albán IIIb-IV	Peche/Xoo
Early Classic	200 – 500 A.D.	Monte Albán IIIA	Pitao
Terminal Formative	200 B.C. – 200 A.D.	Mone Albán II	Niza
Late Formative	300 – 200 B.C.	Late Monte Albán I	Pe
Late Formative	500 – 300 B.C.	Early Monte Albán I	Danibaan
Middle Formative	700 – 500 B.C.	Rosario	Rosario

Project Goals and Theoretical Approach

The goal of this project is to investigate transition in social and political organization in the Tlacolula Valley of Oaxaca during the Late Classic period (500-900 A.D.). The research design involves investigating proposed shifts in the settlement pattern of Dainzú-Macuilxóchitl and comparing/contrasting the interpretations with research

conducted at other contemporary sites in the Tlacolula Valley, such as Lambityeco (Lind 1967; Paddock 1983b), Yagul (Bernal and Gamio 1974), and El Palmillo (Feinman and Nicholas 2004; Feinman, et al. 2002), as well as the urban center of Monte Albán. More specifically, the project aims to determine what political and social changes prompted the people of Dainzú-Macuilxóchitl to move away from their civic-ceremonial center at Cerro Dainzú and establish a new one at Cerro Danush, and how this relates to what was happening at other concurrent sites.

The project consisted of the intensive mapping and systematic surface collection of the man-made features on Cerro Danush. The theoretical or philosophical approach is rooted in procesual archaeology, and is often categorized as Behavioral Archaeology (Schiffer 1975). In this sense, I am interested in interpreting the human behavioral patterns that may describe the arrangement or distribution of the artifacts found on the surface. LaMotta and Schiffer (2001) assert that behavioral patterns in the archaeological record can be addressed on three scales: the interactive scale (artifact analysis), the activity scale (artifact distribution), and the systemic scale (synchronic variation of material culture). These concepts will now be translated into the research design of this project.

Understanding and interpreting human behavior on the activity scale is the main focus of this project. The premise is that through careful examination of the distribution of artifacts on the surface and their relationship to architectural features, one can infer or interpret the long-term and generalized human activities that took place there in the past. For example, the distribution of ceramic forms in a given area can imply domestic, ceremonial, or other behavioral patterns. Intensive total station mapping was designed to record the layout, orientation, and topographic position of all man-made features, while systematic surface collection was designed to collect a representative sample of the spatial distribution of artifacts. Of course understanding behavioral patterns on the interactive scale is imperative toward establishing meaningful activities. Therefore, the artifact analysis was designed to separate the artifacts into forms, such as *ollas*, *cántaros*, *cajetes* (domestic items), *sahumadores*, *figurillas*, and *silbates* (ritual or ceremonial items). These assignments of form reveal the interactive nature of the materials with the individuals who used them. Establishing patterns in their spatial distributions through statistical analysis provides a larger picture of the activities that took place on Cerro Danush. From this analysis, the function of Cerro Danush within greater Dainzú-Macuilxóchitl can be interpreted to answer questions of the systemic scale.

The research problem, political and social organization in the Tlacolula Valley, can only be addressed on the systemic scale, meaning that the analysis of the distribution of artifacts will be applied to interpret the spatial and temporal variation in human behavior in terms of the overall system in which Dainzú-Macuilxóchitl existed, the Zapotec state. The nature of state systems is dynamic, and can vary from firmly consolidated and controlled empires to loosely confederated autonomous polities. In the thousand year reign of the early or classic Zapotec state (200 B.C. – 800 A.D.), Monte Albán's influence and control over other sites in the Valley of Oaxaca most likely varied considerably. Interpretations made concerning the behavioral patterns at Dainzú-

Macuilxóchitl on the activity and interactive scale therefore need to be placed in the context of that dynamic system, and where possible applied to advance our understanding of it. This is the final task of the project, to compare/contrast the spatial and temporal behavioral patterns established for Dainzú-Macuilxóchitl to related sites Lambityeco, Yagul, and Monte Albán in order to develop a working model for political organization of the Zapotec state in the Late Classic period (Monte Albán IIIb-IV/Xoo phase).

Field Operations 2007 – 2008



Figure 5: Nezahuacoyotl Xiuhtecutli on the Total Station

Introduction

Prior to this study, no intensive archeological investigations had taken place on or around Cerro Danush, so the foci of this investigation were as follows:

1. To develop an accurate and informative topographic map of Cerro Danush, with particular attention paid to all man-made features.
2. To conduct a controlled surface collection substantive enough so that the distribution pattern of surface materials could be probed statistically to identify areas of past activities. The interpretation of the results would then be used to address the research question. The targeted points of interest would also serve as starting points for future excavation.

Secondary objectives of this investigation involved refining the occupational history of the site, integrating geographic information from previous archaeological projects at the

site, and mapping important natural features such as caves and sources of water that may have had roles in the settlement pattern.

Site Mapping Procedures

The map below ([Figure 6](#)) depicts the archaeological site of Dainzú-Macuixóchitl. It is the same map that is shown in the introduction ([Figure 2](#)) with features added by the author for demonstration. Enclosed within the large dark bordered polygon is the area known to contain prehistoric monumental architecture (Kowalewski, et al. 1989:1086-1089). The smaller shaded-in polygons are the approximate areas where archaeological excavations have taken place: A) area of excavation for the *Proyecto Salvamento Arqueológico Carratera Oaxaca-Mitla* (Winter 2004), B) area of excavation for Robert Marken's dissertation project (2002), C) area of excavation conducted by Enrique Fernández Davila and Susana Gómez Serafin (1993), D) the Dainzú archaeological zone (Bernal and Oliveros 1988). The points overlaying Cerro Danush are the data points collected during this project: the blue points are the Bench Marks that were recorded with a hand-held GPS (Global Positioning System) mapping device, and the brown points are the mapping points recorded with the total station.

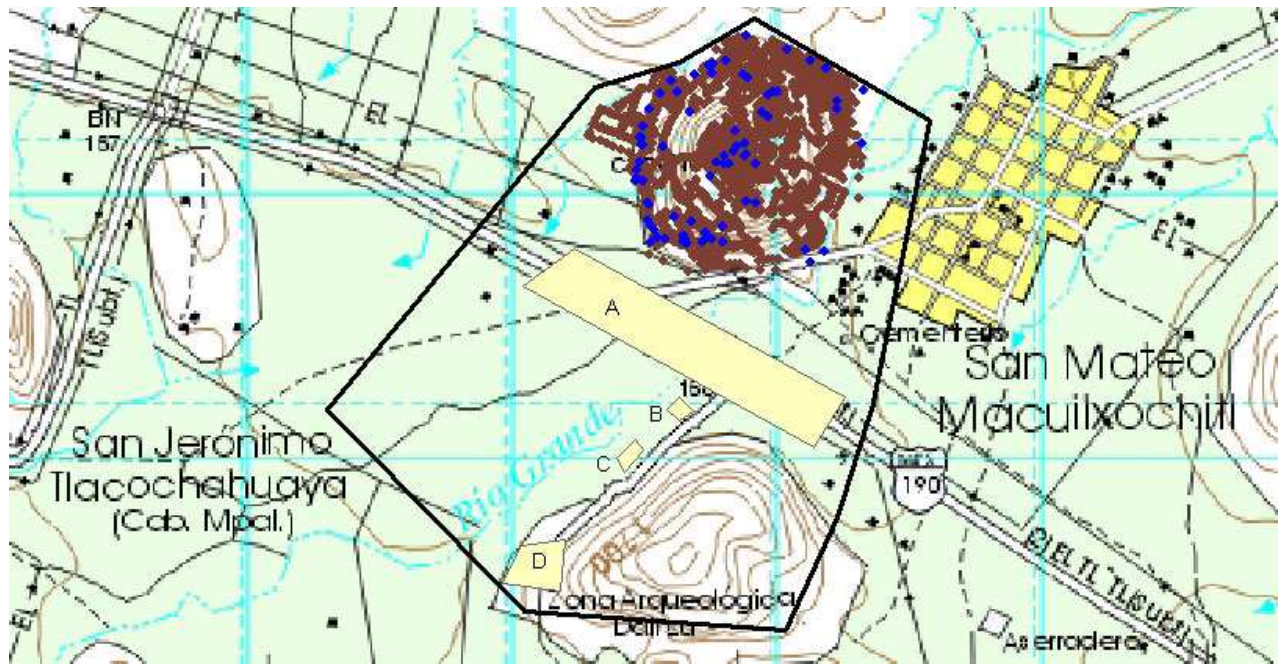


Figure 6: Modified INEGI Topographic Map (INEGI 2001)

The mapping project began in mid-September 2007 and was completed on October 31st, 2007. During that time, the field crew used a prism/total station combination to map the boundaries of all man-made terraces, stone wall supported paths between the terraces, mounds, features, springs, caves, cliff paintings, and topographic points (brown points, [Figure 6](#)). We began by establishing the site Bench Mark or Datum point

on the summit, and mapping the group of terraces around it. This proved to be very difficult because we had to climb the mountain daily with all of the equipment in tow, and we had to move the total station frequently in order to get good vantage points. After working our way down the mountain a little, we were able to begin setting up the total station on the valley floor. This enabled us to cut down on measurement error and time by increasing the number of points that could be measured from a single bench mark point. In this manner, we worked our way around the mountain. All subsequent station points (bench marks) were numbered and marked by placing long nails in the ground, with marked orange engineer tape tied around the neck. All of these points were also measured in UTM (Universal Transverse Mercator) coordinates and saved as waypoints (blue points, [Figure 6](#)) with the hand-held GPS mapping device for comparison.

Two mapping notebooks were kept: one maintained by the archaeologist with the prism team and the other with the total station. The prism notebook was used to develop sketches and record notes about the prism placement, while the total station notebook was used to record the coordinates, angles and distances of all the measurements. Although the data recorder saves all of this information, keeping a hard copy insures that the data is never lost. The information from the data recorder and the GPS were downloaded and compared every night, and the notebooks were invaluable for detecting human error and correcting it.

A Nikon DTM-420 total station and TDS 48GX data recorder were used to measure the mapping points. A mapping Bench Mark was established at the summit of Cerro Danush on Terrace C1 (*Cumbre 1*), with the arbitrary location of 5000 N, 5000 E, and 2000 m elevation. A Garmin G-V GPS device was used to record the UTM coordinates of the site Bench Mark (reported accuracy to within 2m). The total station data points were then downloaded, transformed and rotated into the UTM coordinate system using the program FORESIGHT DXM by Tripod Data Systems (TDS). After the initial site Bench Mark, all other subsequent bench marks were tested for accuracy using GPS waypoints plotted manually on the map. These tended to fall within 1-2m range of the plotted points, horizontally. In addition to this, all of the measured points (total station and GPS) were then overlaid digitally onto an INEGI 1:50,000 topographic map ([Figure 6](#)), which was used to verify horizontal accuracy by examining points plotted near obvious locations such as bridges or road intersections. The INEGI map was also used to establish vertical accuracy by examining points located on or near contour lines. Additionally, an aerial photograph was also used to verify the positions of obvious features and their relationship to mapped points.

Once the accuracy of the points was established to within acceptable limits (usually 1-2 meters) based on the INEGI topographic map ([Figure 6](#)), terrace limits, walls, paths, and other man-made features were drawn in using TurboCAD v3 Computer Assisted Drawing (CAD) software. The point and line data were then downloaded into the ArcView v9.2 Desktop Geographic Information System (GIS) software to be geographically referenced. The elevation measurements from the mapping point file were converted to a TIN (Triangulated Irregular Network) raster surface using the 3D Analyst extension in ArcMap, and contour lines were made at varying intervals from this

surface to demonstrate the topography of the site. The resulting map (Figure 7) is oriented to UTM grid north (Not astronomical true north or magnetic north).

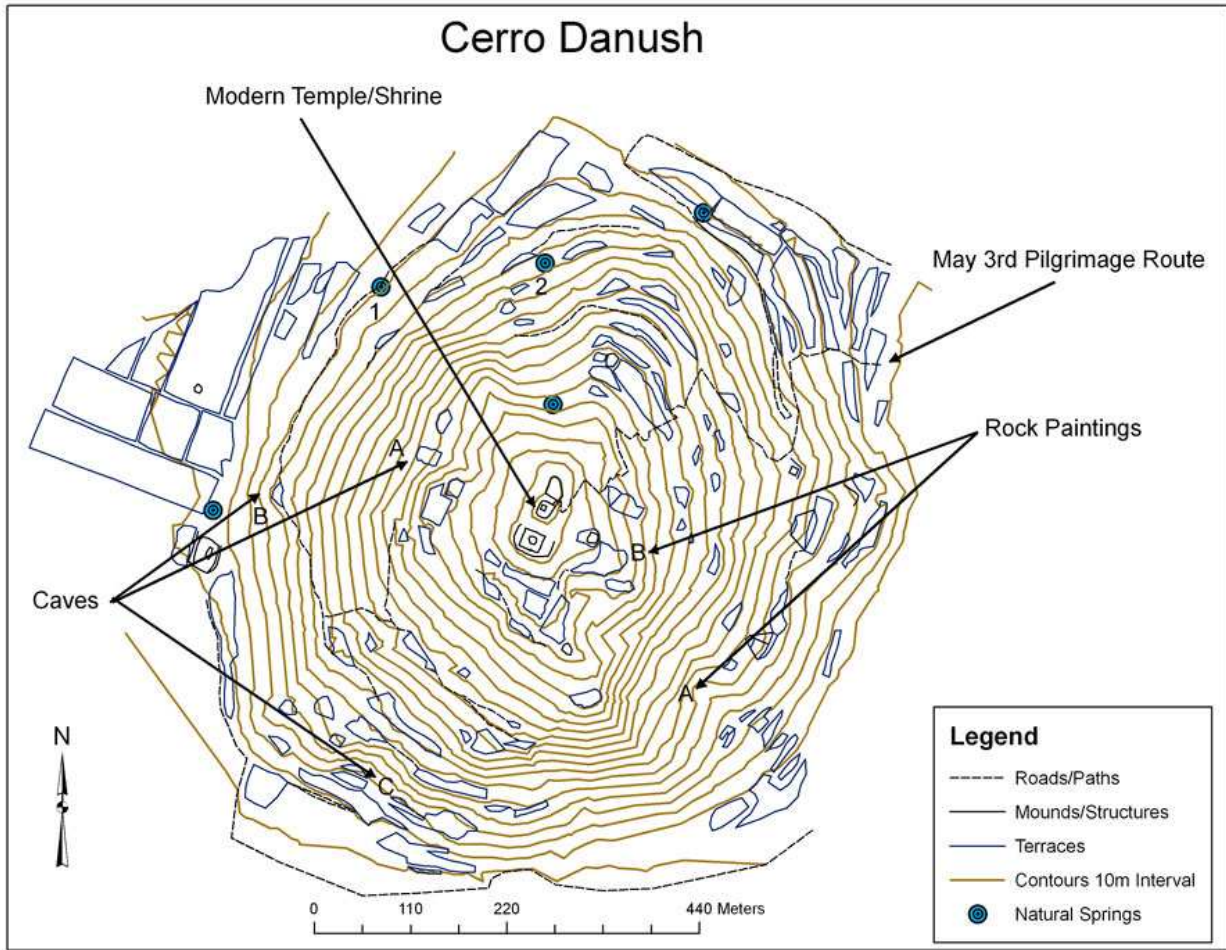


Figure 7: Cerro Danush (1:5,107 Scale)

Discussion of Features Mapped on Cerro Danush

During the field season, we mapped several features on Cerro Danush, including man-made terraces, natural springs, caves, rock paintings, ancient foot trails, modern unimproved roads, stone walls, stucco floors, collapsed tombs, and temple mounds. The following section involves a discussion and description of some of these features with limited interpretations. The remaining features are discussed throughout the text.

Rock Paintings

Two sets of rock paintings were found on Cerro Danush, both on the eastern side of the mountain. The paintings are monochrome red, probably from cochineal dye. The first

set ([Figure 8](#), left side), labeled A on the site map above, is located on an exposed stone face just above some small caves. It appears to depict a human face with animal attributes. The paintings labeled B on the site map ([Figure 8](#), right side), were painted on an exposed cliff face below terrace C6. It is simple in design, almost like stick figure drawings, and appears to show half-human half-animal creatures either hunting or in some type of combat. These paintings have not been dated, and at this time there is no interpretation of their content.



Figure 8: Rock Paintings on Cerro Danush (A left, B right, Figure 7)

Natural Springs

Five natural springs were found on Cerro Danush during the mapping project, at least two of these, labelled 1 and 2 on the site map, provide a constant source of water year round. The others dry up during the latter part of the dry season (January to May). These springs are used today to provide water for livestock. Four of the five springs are located on the north side of the mountain, and one (#1, [Figure 7](#)) was located very close to an ancient path with access to terraces on the north, south, and west sides of Cerro Danush. On the terraces closest to this spring, an unusually large number of Late Classic (Monte Albán IIIb-IV/Xoo phase) ceramic sherds from *cántaros*, ceramic vessels used for carrying water, were collected. This suggests that these springs served as water sources for the people living on the terraces during the Late Classic period.



Figure 9: Natural Spring on the North Side of Cerro Danush (#2, Figure 7)

Caves

Several small caves were found on the exposed rock faces of Cerro Danush on all sides. The majority of these measure no more than a meter or so in diameter, but on occasion they are larger. Like many of the small caves at Cerro Danush, the one shown in [Figure 10](#) appears to have been hollowed out some by hand, perhaps for storage of dried corn or beans. The position of the *mano de metate* found at the base of the opening supports this interpretation.



Figure 10: Small Cave Located Above Terrace S20 (C, Figure 7)

According to Alicia Barabas (2003) mountains, caves, and springs form important parts of the sacred or ritual landscape. Mountains are believed to contain spirits of ancestors or even more powerful supernatural forces, caves are a source of communication with these beings, and springs symbolize the wealth or abundance that the mountains provide. These beliefs have been documented ethnographically for many highland Mesoamerican cultures (LaFarge 1947; Lipp 1991; Parsons 1936; Vogt 1969). One cave found on Cerro Danush (B, [Figure 7](#)) is large enough for a person or two to enter. It is located just above the western terrace complex, near a large temple mound and natural spring. Perhaps this cave was the focus of some ritual or ceremonial function in the past, but there were no artifacts found on the surface to support this notion.



Figure 11: Terrace S19 at the Southern Base of Cerro Danush

Man-Made Terraces

Man-made terraces like the one shown in [Figure 11](#) are found all over Cerro Danush ([Figure 7](#)). The artifacts that were collected on them suggest that they were built to support domestic units or household complexes in the Late Classic period (Monte Albán IIIb-IV/Xoo phase). Nearly all of the terraces were constructed by placing stone retaining walls on the down-slope sides ([Figure 12](#)), and filling in the remaining portion with stone and soil. We mapped these terraces by following the retaining walls, but erosion often made it difficult to map the up-slope borders of the terraces. In some places, we found evidence for terraces, such as exposed stucco house floors ([Figure 13](#)), but were unable to define the borders of the terraces. Therefore, it is safe to assume that the map of Cerro Danush is incomplete, in that there were most likely several more terraces that cannot be seen today due to erosion and destruction. Also, many of the terraces we were able to map may have been larger and more well-defined during their time of occupation.



Figure 12: Stone Retaining Wall (Terrace C5 West)



Figure 13: Exposed Stucco Floor

Surface Collection Procedures

Surface collection began on November 5th 2007, and was concluded on December 21st 2007. Initial reconnaissance of the site conducted in the summer of 2003, coupled with the available literature (Kowalewski, et al. 1989; Markens, et al. 2008), led me to believe that there were a few small terraces at the base of the mountain and a complex of 3-4 terraces at the summit. After the first week of mapping, this was found to be a false assumption and the reality was that much of the mountain was terraced. During the ensuing month, we mapped over 120 terraces varying in size from less than 100 square meters to over 3000 square meters. In light of this discovery, the original plan for controlled surface collection had to be modified for logistical and budgetary reasons. After some thought, I decided to collect as many of the terraces as I could, leaving out those with limited visibility of surface materials due to excessive undergrowth or destruction.



Figure 14: Nestor (left) and Atilano Performing Surface Collection

For the purposes of identification, the terraces were arbitrarily divided into eight groups based on their location ([Figure 15](#)): norte-este (northeast), norte-central (north-central), norte (north), cumbre (summit), sur (south), este (east), oeste (west), and sur-oeste (southwest). Within these groups, terraces were assigned numbers, so that each particular terrace could be further identified. For example, terraces in the northeast group were named NE1-NE17 ([Figure 16](#)).

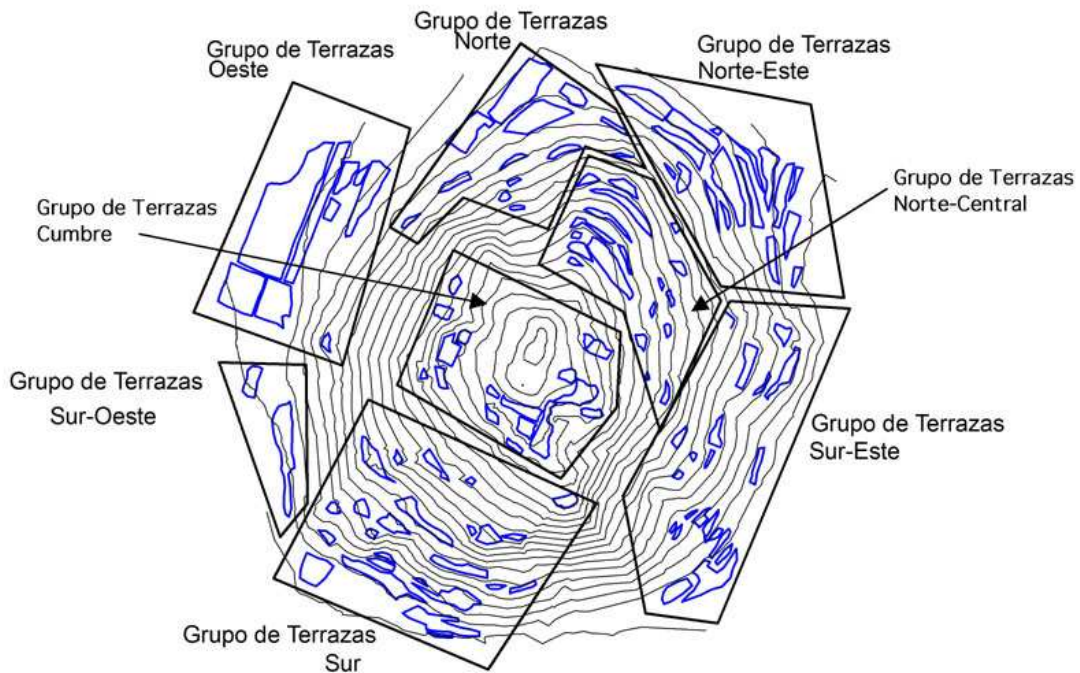


Figure 15: Positions of Terrace Groups on Cerro Danush

Because I am interested in exploring the pattern of distribution in surface artifacts, the terraces had to be collected in units of comparable measure, and so that the sample represented the spatial distribution of surface area for each terrace. In addition to this, time and budgetary constraints eliminated the possibility of establishing grid systems. The solution was simple but effective. Artifacts would be collected using circles of equivalent surface area, which were arbitrarily placed on each terrace so that most of the horizontal space was represented. I use the term space here in order to differentiate the ideas of horizontal position and surface area. I was not necessarily interested in collecting a similar amount of surface area for each terrace, but rather distributing the collection circles so that I could identify separate activity areas within a terrace if they existed. The resulting terrace maps reveal that surface area collected differs greatly between terraces, but that most of the space was covered.

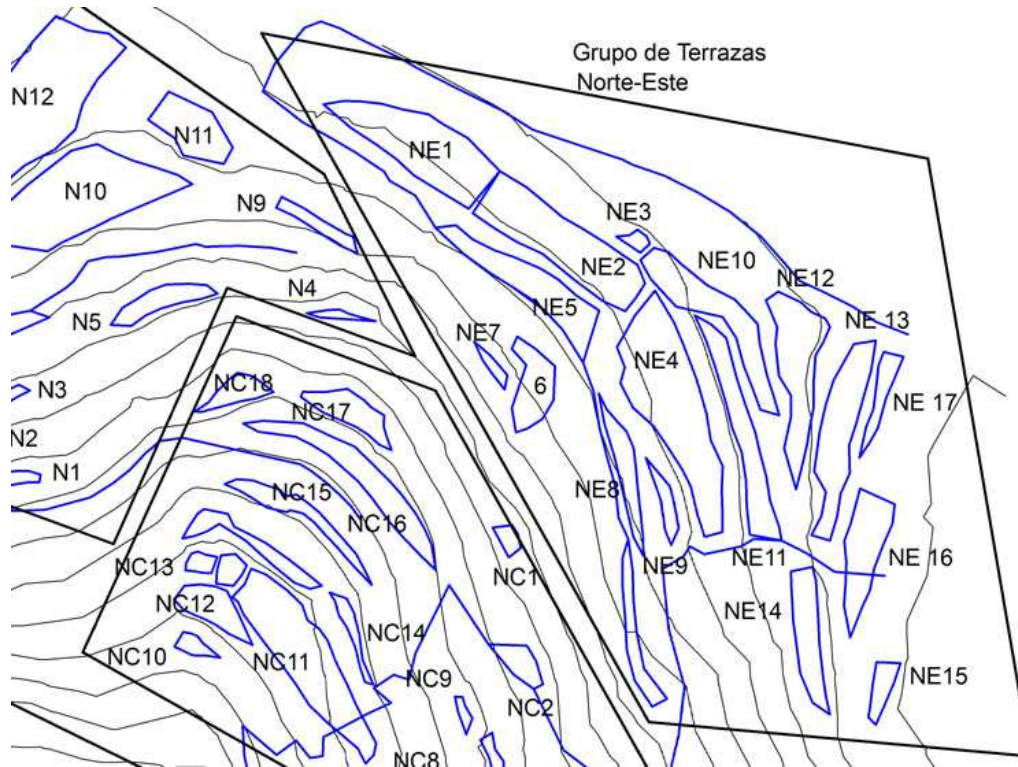


Figure 16: Assignment of Terrace Numbers for NE Terrace Group

The circles consisted of two chaining pins tied together with twine at a distance of 4 meters, giving a surface area of just over 50 meters squared. One chaining pin, which served as the circle's center, was placed firmly in the ground and the coordinates were recorded with the GPS. Then, the crew member would use the second chaining pin to mark the outer boundary of the circle. All cultural material within the circle was collected and placed in marked Zip-Lock bags. The circles were generally collected by starting in the South West corner of the terrace and moving North and East. Circles were distinguished by recording the terrace designation, the relative position north and east on the terrace and the UTM coordinates of the center. For example, the circles on terrace NE1 were named starting in the southwest corner with N1E1 and numbers increased as one moved east and north ([Figure 17](#)).

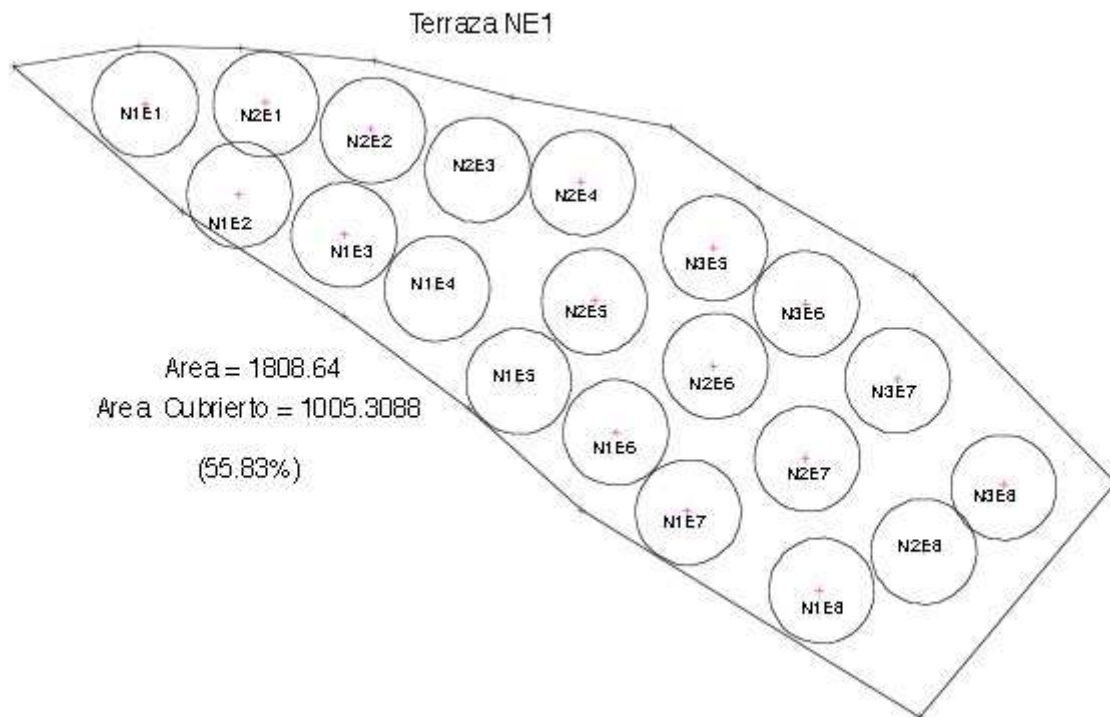


Figure 17: Positions of Collected Circles on Terrace NE1

Artifact Analysis Procedures

Artifact analysis was conducted between the 2nd of January 2008 and 15th of February 2008. The purpose of the artifact analysis was to explore the distribution pattern of classified forms and not contribute to the already extensive classification systems established for Oaxaca. Ceramic, chipped stone, and ground stone artifact counts were recorded on prepared forms for each circle collected. The volume of artifacts collected in each circle was also recorded based on number of bags and level of fill (up to 1/3, 1/3-2/3, above 2/3) for each circle, in order to statistically limit issues caused by artifact size differences.

For the classification of ceramic forms and periods/phases, I used a combination of Caso et al.'s system developed mostly from their project of excavations at Monte Albán (Caso and Bernal 1973; Caso, et al. 1967), Kowalewski et al.'s work from their extensive valley survey projects (Blanton, et al. 1982:375-382; Kowalewski, et al. 1989:829-837; Kowalewski, et al. 1978), Ignacio Bernal's classifications from his work at Yagul and Dainzú (Bernal 1967; Bernal and Gamio 1974), and Winter et al.'s more recent work throughout the Valley of Oaxaca (Markens 2008; Martinez Lopez 1994; Martinez Lopez, et al. 2000).

Ceramics were sorted into categories such as: ollas (cooking vessels), cajetes cónicos (conical bowls), cajetes semiesféricos (semispherical bowls), cajetes cilíndricos (cylindrical bowls), vasos sencillos (simple cups), vasos complejos (cups with applique decoration), figurillas (figurines), silbatos (whistles), sahumadores (incense burners), urnas (effigy urns), comales (large flat plates used to cook tortillas), chirmorleras (bowls used to make sauces), cántaros (vessels used to hold and carry water), and desechos (wasters). They were further organized by rim diameter, basal decoration and supports, paste color, incised patterns, and rim shape. All of these categories were developed by Caso et al. (1967), and refined by subsequent work for the Late Classic period (Monte Albán IIIb-IV/Xoo phase) (Kowalewski, et al. 1978) (Markens 2002; Martínez Lopez, et al. 2000). Since the majority of ceramics collected fit well with the descriptions of these categories, it appears the major occupation for the terraces on Cerro Danush took place during that time. Ceramic artifacts that were found for other periods include solid handle brown *sahumadores* (Blanton, et al. 1982, cat. 2220) and G3M *silueta compuesta* bowls (Kowalewski, et al. 1978, cat. 1102 and 1105) from the late Postclassic period (Monte Albán V/Chila phase), and a very small sample of incised G23 (Blanton, et al. 1982, cat. 1312) and G12 (Kowalewski, et al. 1978, cat.1207) conical bowls from the Early Classic period (Period Monte Albán IIIA/Pitao phase) and Late Formative/Early Classic (Monte Albán Ib-IIIa) periods respectively.

Chipped stone artifacts were sorted into categories: flakes, debitage, points, blades, scrapers, cores, bifaces, and other (w/description). They were further separated by color and source material (chert/flint, quartz, volcanic stone, and obsidian). These materials are not useful in relative dating, but generally matched those found at contemporary sites in the Oaxaca Valley (Haines, et al. 2004).

Ground stone artifacts were sorted into categories: mano, metate, molcajete (mortars), tejolote (pestle), rueda (large stone wheel with perforation in center (Bernal and Gamio 1974), hacha (axe or celt), and other (w/description). Once again these materials are not useful in relative dating, but do match artifacts found at Monte Albán, Yagul, and just about every other site in the Valley of Oaxaca. Since many of the forms are still in use today, they are excellent indicators of domestic activities.

Although the material analysis for this report is limited to qualitative interpretation, subsequent statistical analysis of the frequency counts will be used to probe the cultural materials collected for correlation and association of their distribution patterns. The raw data recorded on the analysis forms and data from the statistical analyses will be transferred into an MS Access data base that is also an ArcGIS geo-referenced data base. Then, these data can be mapped and explored graphically to identify activity centers and target areas for excavation.

Initial Conclusions and Interpretations

Although extensive analysis of the data collected in this project has yet to be conducted, there are several interesting and important conclusions that can be drawn from the mapping and collection data at this point. Since the focus of this research project is the Late Classic period, the concluding remarks will be in reverse order, starting with the

Late Postclassic period and leaving the in-depth discussion of the Late Classic period until the end.

Cerro Danush in the Late Postclassic Period, A.D. 1200-1521

Most of the information we have for Dainzú-Macuilxóchitl during the Late Postclassic period (Monte Albán V/Chila phase) comes from the study of colonial documents, such as the *Relaciones Geograficas*, which is the source for the map shown above ([Figure 18](#)). At that time, the town of Macuilxóchitl developed into an important center within the Tlacolula Valley. A new Zapotec dynasty was founded at the site of Zaachila (Paddock 1983a) by a ruler who went by the name of 5-Flower. Macuilxóchitl came under the control of this dynasty and marriage alliances were formed between the two polities (Whitcotton 1983, 2003). We also know from colonial documents that at one point, Macuilxóchitl was ordered to conquer the town of Mitla (Whitcotton 1977:121) in order to bring the entire Tlacolula Valley under Zaachila's control. The modern town of Mitla, named for the Nahuatl term, Mictlan, or land of the dead, was the location of a grand palace site that served as a religious center and housed an oracle (Oudijk 2000). In the late fifteenth century, the Mexica, or Aztec, conquered many sites in the Valley of Oaxaca, and Macuilxóchitl is listed in the Codex Mendocino as one of the sites paying tribute to the Aztec Empire (Whitcotton 1977:123).



Figure 18: 1580 Map of Macuilxóchtli (Acuña 1982)

The ceramic data from the surface collection suggest that the terraces on Cerro Danush were not inhabited during the Late Postclassic period. Cerro Danush did, however, continue to play an important role to the people in the area. The presence of a few Late Postclassic G3M composite silhouette bowls ([Figure 19](#)), and solid handled brown *sahumadores* ([Figure 20](#)) that were collected in small amounts on individual terraces, suggest that individuals or households may have returned to Cerro Danush to participate in ceremonies associated with ancestor veneration, a process that is well-documented for Zapotec communities in historic times (Marcus 2003:348) and even takes place to some extent today (Parsons 1936).



Figure 19: Solid Sahumador Handles from Terrace C2

There are two specific areas where Late Postclassic *Sahumadores* were found in larger numbers ([Figure 20](#)). The first cluster was on a raised platform; terrace E9 that supported a large mound, which probably served as a temple in the Late Classic period. This likely represents a communal ceremony or ritual, but at this point, no further conclusions can be drawn. The second cluster of Late Postclassic *sahumadores* was found on terrace C2, just below the summit ([Figure 18](#)), where Kowalewski et al. (1989:1088-1089) reported two man-made structures or mounds (#101 on their map). This structure appears to be a low platform mound supporting two smaller mounds, and may have been constructed in the Late Postclassic period. Kowalewski et al. (1989:341-344) also reported the presence of solid handle *sahumadores* on the summit of Cerro Danush. Their survey data show this phenomenon, Late Classic hilltop complexes becoming pilgrimage shrines in the Late Postclassic, occurring at other sites in the Tlacolula Valley and may signal a shift in ritual activity.



Figure 20: G3M Composite Silhouette Bowl Fragments

Cerro Danush: Ritual Landscape and the Festival of the Cross

Today the town of Macuilxóchitl has the appearance of the Spanish colonial design, with a central church and plaza surrounded by a small city grid. Most of the older inhabitants still speak Zapotec, but the younger generations appear to only use Spanish. The people are mostly subsistence farmers, with the men supplementing this by finding temporary jobs here and there and the women by selling home made items, such as woven rugs, pottery, chocolate, and tortillas in the local markets. Although the terraces on Cerro Danush have not been inhabited for many years, the mountain still plays an important role in Macuilxóchitl's Catholic, or syncretic, ceremonial calendar.

Every May 3rd, the inhabitants of the village make a pilgrimage to the summit of Cerro Danush, where they have built a small temple shrine that houses three large crosses (Figure 7). They take part in overnight ceremonies, such as burning incense and leaving food offerings. Similar ceremonies take place all over Mesoamerica on that day, as part of the celebration of the Festival of the Cross. According to Johanna Broda (2001), these ceremonies are the product of syncretism between the catholic celebration and a pre-Hispanic festival associated with agriculture. In particular, Broda (2001:171) concludes that the Festival of the Cross as it is practiced today in Central Mexico contains elements that are quite similar to those described by the friars Diego Durán (1971) and Bernardino de Sahagún (1950) concerning the Aztec festival of *Huey Tozoztli*. During this ceremony, the Aztec ruler, Mocetzoma, climbed Mt. Tlaloc along

with other local leaders, where they bestowed a stone image of the rain god, *Tlaloc*, with offerings of flowers, clothing, food, and the blood of a freshly sacrificed child. These offerings were made in order to petition for rains so that the recently planted maize crop would be bountiful. Several ethnographic accounts have documented the persistence of such ceremonies, with the sacrificial replacement of fowl for children, in Oaxaca (Barabas 2003), Mexico (Albores Zarate 2001; Vasquez 2001), Guanajuato (Lastra and Nava 2000) and many other places (LaFarge 1947; Vogt 1969).

The overstated size of Cerro Danush, depicted with a large cross on top, on the colonial map ([Figure 18](#)), implies longevity for this ceremony into the early colonial period. The archaeological evidence listed above also supports the existence of similar rituals in the Late Postclassic period. Recent discoveries at Dainzú-Macuilxóchitl (see below), establish a connection as early as the Late Classic period between Cerro Danush and the Zapotec rain god, *Cocijo*, who had very similar characteristics to the Aztec god, *Tlaloc*. With Aztec influence making its way into the Oaxaca Valley in the Late Postclassic, it is possible that the shifting ritual pattern that Kowalewski et al. recorded (see above) involving mountain shrines and offerings, included the spreading of this and other Aztec ceremonies.

Cerro Danush in the Early Postclassic Period, A.D. 900 – 1200

As stated in the introduction, the ceramic assemblage for the Early Postclassic period (Monte Albán V/Liobaa phase) has yet to be extensively defined and agreed upon, and there are some considerable differences in interpretations for the Oaxaca Valley during this time (Marcus and Flannery 1990; Winter 1989a). Although Robert Markens (2002) has made progress toward defining the ceramics of the Early Postclassic period, his data is qualitative and comes from the assessment of whole vessels taken from grave lots, not always useful when dealing with the fragmentary materials found in surface collections. Kowalewski et al. (1978) have also developed descriptions of ceramic categories based on their survey data, however, these are also hard to associate with the collection material of Cerro Danush. It is, therefore, extremely difficult to draw any conclusions about the Early Postclassic from the surface collection at Cerro Danush. That being said, I believe that the preliminary analysis of ceramic materials collected as part of this project suggest that there was some occupation of Dainzú-Macuilxóchitl during the Early Postclassic period, making it an excellent site for further inquiry into this problem.

According to ceramic studies in the Oaxaca Valley (Caso, et al. 1967; Markens 2002), the G3M semispherical bowl first appears in the Late Classic period and continues through the Late Postclassic period, albeit there are some significant changes in form. Diagnostic fragments for many of the different G3M bowl forms were found in small amounts on Cerro Danush during the collection phase of this project, suggesting that Dainzú-Macuilxóchitl was occupied in the Early Postclassic. The number of diagnostic pieces for these G3M bowls, however, is very small compared to the diagnostic types for the Late Classic ceramics, and they are not found at all on many of the terraces. Tentatively, I interpret this to mean that during the Early Postclassic period, the terraces of Cerro Danush were slowly abandoned, possibly in favor of new settlements on the

valley floor in the area of the modern town. This most likely coincides with the slow abandonment of other sites like Monte Albán, Jalieza, Lambityeco, and El Palmillo and the development of a new socio-political order in the Valley of Oaxaca (Feinman 2007). It is perhaps during this time, that the hereditary ruling class of Macuilxóchitl, which became more prominent in the following Late Postclassic period, established themselves in a new civic-ceremonial center, one that lies under the modern structures of today's town.

The Oaxaca Valley in the Late Classic Period, A.D. 500 – 900

Monte Albán saw a significant increase in construction activity and population growth in the Late Classic period (Monte Albán IIIb-IV/Xoo phase). The main plaza grew to its final size and layout, with more restrictive access than had existed earlier (Blanton 1997:63-66). The number of occupied terraces on the nearby peaks of El Gallo and Cerro Atzompa increased substantially, and a large civic-ceremonial precinct was built on Cerro Atzompa's summit (Blanton 1978:88-91). At the same time, the settlement patterns at other sites in the Oaxaca Valley mirrored these changes. This was to be the apogee of Monte Albán and possibly the highest political order achieved by the Zapotec state (Marcus and Flannery 1996:225). Then, at the end of this period Monte Albán saw a great decline in its influence, resulting in the slow abandonment of the site. In this section, I will attempt to lay out some of the theories concerning social and political organization for the Zapotec state in the Late Classic period, and how the data from this study of Dainzú-Macuilxóchitl might add to the conversation.

Differentiating between the Monte Albán IIIb and IV ceramic assemblages, Kowalewski *et al.* (1989:281) noted that the bulk of Monte Albán IIIb materials from their survey were found in the northern ETLA and the southern Zimatlan Valleys, with just a few sites from the Tlacolula Valley exhibiting them. Monte Albán IV materials seemed to be limited to the Tlacolula Valley, leading Kowalewski *et al.* (1989:281) to propose a significant increase in settlement there for that period. More recently, Michel Oudijk (2003) proposed that the differences between Monte Albán IIIb and IV ceramic assemblages were spatial and not temporal, and Martinez Lopez *et al.* (2000) conclude that there is no difference at all between them. These subtle contrasts have led researchers to develop several competing theories for the Late Classic period.

Kent Flannery, Joyce Marcus, and their contributors (1983:183-216) paint the Late Classic period (A.D. 600-900) as a time of political change, when Monte Albán's political power and influence were waning and other valley centers like Zaachila, Cuilapan, Lambityeco and Macuilxóchitl were becoming less integrated and more independent, perhaps even competitive with one another. Subsequent data from Kowalewski *et al.*'s survey (1989) and Laura Finsten's work at Jalieza (1995) seemed to support this conclusion by revealing a general increase in craft production and market activities during the Late Classic period. Archaeological excavations conducted by John Paddock and Ignacio Bernal also seemed to support this theory, as they concluded that settlement in the Tlacolula Valley was shifting away from lower lying piedmont settlements, like Lambityeco, toward more defensible hilltop sites, such as Yagul (Bernal and Gamio 1974; Paddock and Bernal 1970:212). The regional survey data

showed this pattern to be widespread, leading researchers to propose the Late Classic as a period of heightened conflict between neighboring centers (Elam 1989; Kowalewski, et al. 1989; Paddock and Bernal 1970:210-225).

Arthur Joyce (2004) proposed that changes in the layout and design of civic-ceremonial architecture at Monte Albán in the Late Classic period reflect attempts by ruling elites to solidify their hereditary social status by restricting public access to ceremonial space. Joyce Marcus' (1983b) study of carved stone monuments in the Late Classic period seems to correlate well with Joyce's conclusions. She argues that the Late Classic carved stone monuments, in contrast to earlier periods, became smaller, were exhibited in private, not public spaces, and the themes represented in them shifted away from military conquest toward the establishment of hereditary lineages. These arguments, taken together, seem to suggest the Late Classic period as a time of consolidation, where ruling elites became concerned with cementing their higher status and preserving it for their future generations.

In support of his argument, Arthur Joyce (2004) specifically points to the marked increase in the number of Temple-Patio-Altar (TPA) structures at Monte Albán. The TPA complex was first described by Marcus Winter (1986), which he characterized as a "formalized ritual ceremonial precinct ... [that] consists of a large enclosed patio with a small raised platform or altar in the center and a temple situated atop a platform on one side of the patio" (1989b:45-46). Although TPA complexes first appear at Monte Albán in the Early Classic period, their presence extends to other Oaxaca Valley centers in the Late Classic period. Excavations undertaken at Lambityeco, have led to a more extensive classification and understanding of these monuments (Lind and Urcid 1983), as they were shown to contain the residences of Lambityeco's political and religious elite.

Recently, Lind and Urcid (2006) have proposed that during the Late Classic period, Monte Albán, which had grown significantly, was taking a more active role in administering the "District Centers" (2006:24) of Macuilxóchitl, Lambityeco, Yagul, and Mitla in the Tlacolula Valley. They suggest that the Rulers of Monte Albán actually sent out lesser lords to take direct control of the production and distribution of material goods at these centers. For Lambityeco, this meant the direct control of salt production and distribution. Their theory characterizes political organization during the Late Classic period in the Oaxaca Valley as being dominated by the strong centralized state of Monte Albán, which contrasts greatly with the theory of more independent competitive centers listed above.

Dainzú-Macuilxóchitl in the Late Classic Period, A.D. 500 – 900

The vast majority of ceramics collected as part of this project fit within the Monte Albán IIIb-IV/Xoo phase classification, and only a very small sample of diagnostic materials for earlier ceramic phases was found, revealing the Late Classic to be the period of occupation for the terraces on Cerro Danush. A significant sample of Monte Albán V/Chila phase ceramics was also found, but the distribution of diagnostic forms suggest a pattern other than occupation, which will be covered below. The distribution of

ceramic, ground stone, and chipped stone materials collected on Cerro Danush implies that the terraces were built to hold domestic units. The terraces also seem to decrease in size and increase in complexity as elevation increases, with the most complex construction on the summit. This suggests a hierarchical order to their placement, as has been found at other terraced sites like El Palmillo (Feinman and Nicholas 2004; Feinman, et al. 2002, 2006).

The Late Classic period marks a significant change in the settlement pattern of Dainzú-Macuilxóchitl, with the construction of a TPA or Palace Patio Altar (PPA) (Lind and Urcid 2006:15) on the summit of Cerro Danush ([Figure 18](#)). This complex would serve as the new civic-ceremonial center, while the settlement at Cerro Dainzú was all but abandoned. In addition to this, Dainzú-Macuilxóchitl saw population growth and an increase in monumental construction on the Valley Floor, at the southern base of Cerro Danush. Kowalewski et al. (1989:251-301) identified two possible market areas, as well as evidence for ceramic production. These data seem to support Lind and Urcid's interpretation for Late Classic political organization in the Tlacolula Valley.

Dainzú-Macuilxóchitl as a District Center

There are several important points that support the notion that Dainzú-Macuilxóchitl was taken over by an outsider from Monte Albán in the Late Classic Period:

- 1) The authority of the local ruling class, with its civic-ceremonial precinct well established at Cerro Dainzú, was uprooted and resettled.
- 2) The new ruler, as at Lambityeco, seemed to justify his position by invoking a seminal figure in Zapotec religion, *cocijo*, the god of rain.
- 3) The TPA/PPA complex, not seen at Dainzú-Macuilxóchitl in earlier periods, has a standardized layout first developed at Monte Albán, and closely resembles concurrent structures at Lambityeco.
- 4) The ceramic assemblage for Oaxaca in the Late Classic period is far more standardized and less labor intensive than at any other time in the Tlacolula Valley.

Points 1-3 can be covered together with a discussion of the structure found on the summit of Cerro Danush. The 3D image depicted in [Figure 21a](#), clearly reveals the design and layout of the complex, which includes a large enclosed patio with central altar and stepped temple - the civic-ceremonial portion of the complex. Just below that, the ceramic distributions of materials on the surfaces of terraces C5-C12 were all of the Late Classic period, and reveal a domestic pattern. The terrace complex itself is rather isolated on three sides by steep open terrain, and on the fourth by a stone mound and reinforced wall ([Figure 21b](#)). This clearly demonstrates the elevated status of its inhabitants. In fact, no other structure on the site is as restrictive or elaborate as the TPA/PPA complex.

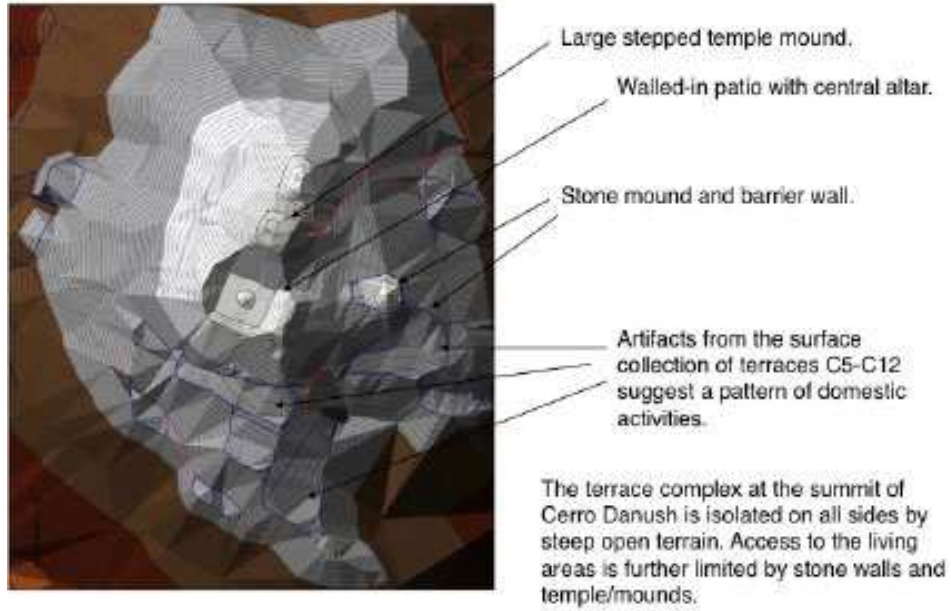


Figure 21a: 3D Surface Image of the TPA/PPA Complex on Cerro Danush

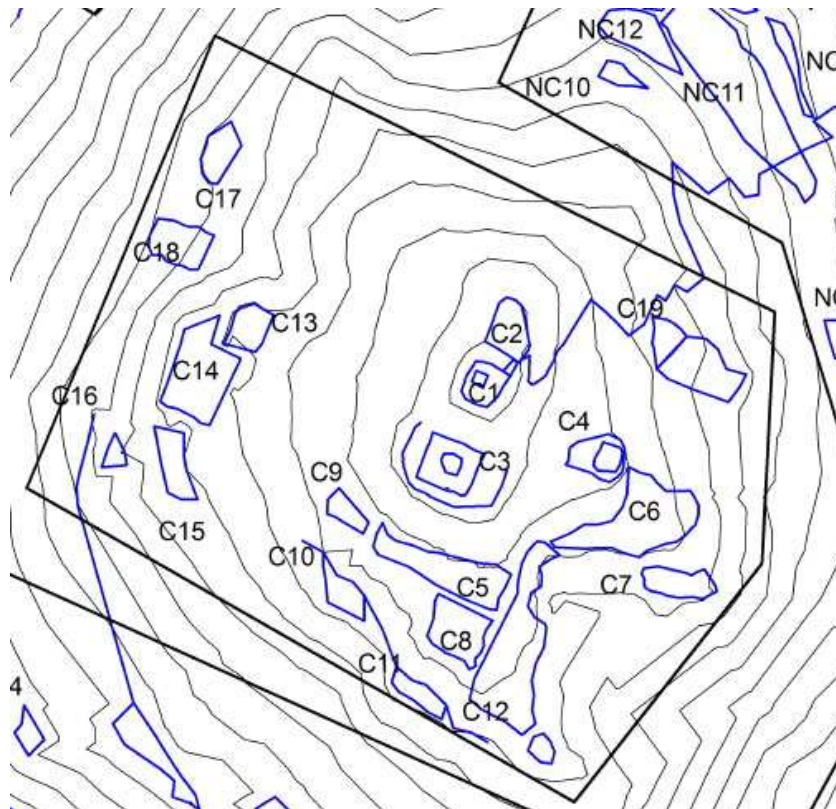


Figure 21b: Topographic Map of Terrace Complex at the Summit

Large stucco floors with stone foundations ([Figure 22](#)) exposed by looting pits on terrace C5, may have been part of an elite residence. In addition to this, a large carved

stone, excavated by looters and left on the surface of the same terrace, appears to be a door jamb to a tomb with the image of an individual wearing a cocijo mask ([Figure 23](#)). This large stone was “rescued” by members of Centro INAH Oaxaca days before this project began, and now safely resides in the community of Macuilxóchitl. First, only a person of high status would be buried in an elaborate tomb with carved door jambs, but more importantly the individual seems to be invoking or “impersonating” (Sellen 2002) the Zapotec god of rain, Cocijo. Adam Sellen (2002) proposed that rulers would often play this role in rituals involving the agricultural cycle of corn. In this way, the ruler would cement his authority by becoming the provider of this important food source. To this day, the people of Macuilxóchitl perform rituals on the summit of Cerro Danush to invoke a healthy rainy season and an abundant harvest of corn.



Figure 22: Stucco Floor and Stone wall Foundation, Terrace C5. Photo courtesy of Robert Markens, Centro INAH Oaxaca.



Figure 23: Carved Stone found on Terrace C5, Cerro Danush. Photo courtesy of Robert Markens, Centro INAH Oaxaca.

The ceramic assemblage for the Late Classic period at Dainzú-Macuixóchitl, is nearly identical to those reported for Yagul (Bernal and Gamio 1974) and Lambityeco (Payne 1970). Gary Feinman (1980) developed a novel way of drawing conclusions concerning administrative organization based on ceramic production. He argued that centralized political organization would mean that the state would exert more control over ceramic production to increase productivity, resulting in ceramic forms that are more standardized and easier to produce. This is true of the Monte Albán IIIb-IV/Xoo phase ceramics, as many of them are mold-made and of a rather low or “drab” (Marcus and Flannery 1996:224) quality. Although there are disagreements as to whether these ceramics were built in government workshops or by individual households, it can be said that there was a system in place, above the individual site level, that dictated the exact forms that would be produced and how they were made. I suggest that the system was developed and overseen by administrators at the capital of the Zapotec state, Monte Albán.

Lastly, I would like to point out that marriage alliances often played an important role in the development of political hierarchies in Mesoamerica, as is well-documented for the Late Postclassic period in Oaxaca (Whitecotton 1990). Therefore, the transfer of rule at Dainzú-Macuilxóchitl need not have been violent, but may have involved the marriage between a member of the elite ruling family at Cerro Dainzú with one from Monte Albán. This type of empire building during the Late Classic period may be reflected in the development of the stone “genealogical registers” (Marcus 1983b:191), which resemble the cloth lienzos of the Postclassic and Colonial times.

These conclusions are tentative, and further research in the form of excavations is needed at Dainzú-Macuilxóchitl. The ongoing statistical analysis of the site distribution pattern is designed to target areas of excavation for a second field season. As with any research project, as questions are answered, new questions are raised. In this case, further research should focus on answering such questions as: What materials, if any, were being developed and distributed at Dainzú-Macuilxóchitl that required state administrative control? Was there a hierarchy among the administrative centers, and if so, how is this manifested in the archaeological record? That being said, the data so far seem to support the notion that Dainzú-Macuilxóchitl was incorporated into the large centralized Zapotec state based at Monte Albán as a district administrative center during the Late Classic period.

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