

Background to the Ejutla Site

The Ejutla Valley is a small alluvial basin at the southern edge of the much larger Valley of Oaxaca (see Figure 1.1). Together they are the core of Mexico's Southern Highlands. While high mountain ridges largely define the edges of these valleys, the physiographic divide between them is so gradual that one traveling the main highway is hardly aware of passing from one (Oaxaca) to the other (Ejutla), and throughout most of the prehispanic era, Ejutla was part of the political, cultural, and economic networks that centered on the Valley of Oaxaca. Population densities were never as high and individual sites were never as large in Ejutla. Nevertheless, the relationship between the two valleys was not static (Feinman and Nicholas 1990, 1992, 2013, 181–82). When Ejutla was first settled during the Early–Middle Formative period, it was a nearly vacant frontier with only a few small settlements. The population grew and site hierarchies developed in Ejutla as Monte Albán was established (ca. 500 BCE) in the center of the Valley of Oaxaca and expanded its hegemony over the subsequent centuries, but it was not until the Classic period (ca. 250–900 CE) that large population centers (>1000) were established in the Ejutla Valley and the region was more tightly interconnected to the Valley of Oaxaca (see Table 1.1). By the Late Postclassic period, after Monte Albán's decline as the regional capital, a series of small, economically interdependent polities in Ejutla may have increased their ties to coastal areas outside the Central Valleys of Oaxaca.

The fuller incorporation of Ejutla into Monte Albán's political sphere during the Classic period appears to have had economic ramifications. The Ejutla Valley has fewer large expanses of good farmland and receives less rainfall than parts of the Valley of the Oaxaca, so exchanging surplus crops to communities in the larger valley was not the draw. Instead, Ejutla is positioned geographically closer to the coast and is a crossroads for natural transportation routes that enter the valley system from the east and south (White and Barber 2012), serving as a conduit for coastal and lowland products from farther south, including marine shell and cotton. Surface shell was recorded at a much higher proportion of sites (six to seven times as many) in Ejutla than in the Valley of Oaxaca (Feinman and Nicholas 1990, 1992, 85, figure 7), with most of the shell observed at sites near the Ejutla River, its tributaries, or along the Atoyac River between its confluence with the Ejutla River and its exit point from the central valleys, at the southwestern edge of the Ejutla Valley (Feinman and Nicholas 2013, 116–17). These sites largely track the movement of Pacific Coast shell into Ejutla, but only at the Ejutla site did we find clear evidence of shell ornament production.

Spindle whorls were not frequently observed during surface survey in either valley, yet we noted twice as many in Ejutla (Feinman and Nicholas 1992, 88, figure 8), most of which are small, simple whorls that fit into Mary Parsons's (1972; see also Carpenter et al. 2012) category of whorls that were used for spinning cotton. Postclassic ethnohistoric accounts relate that cotton largely was traded from lowland coastal areas, such as Tututepec and Tehuantepec, south of the central valleys, to highland towns where it was woven into finished textiles (Ball and Brockington 1978). In addition, Ejutla is lower in elevation than the Valley of Oaxaca, and there are small patches of good flat land with high water table along the Atoyac River in southern Ejutla where it would have been possible to grow cotton (Feinman and Nicholas 2013, 118; see also Saindon 1977). Whether or not cotton was grown in Ejutla in prehispanic times, this resource, like shell, most likely traveled routes through Ejutla to reach communities farther north.

2.1. The Ejutla Site

The prehispanic community at Ejutla de Crespo was initially settled in Monte Albán Early I (ca. 500–300 BCE) on a low spur on the north side of the Ejutla River overlooking the broadest stretch of alluvium in the Ejutla Valley (Figure 2.1, Figure 2.2). The continuously occupied settlement was one of the largest sites in the Ejutla Valley throughout the prehispanic era, growing to more than 1800 inhabitants in the Classic and Postclassic periods (Feinman and Nicholas 2013, 107, 165), when the limits of the site expanded beyond the bounds of the modern community (covering ~1 km²). The site was recorded during mid-twentieth-century visits and reconnaissance by archaeologists of Mexico's Instituto Nacional de Antropología e Historia, who reported several tall mounds in town (Feinman and Nicholas 2013, 20–23), and a cruciform tomb, likely Postclassic, was reported in the center of town early in the twentieth century (Diguet 1905). Although no evidence of this tomb existed at the time of the regional survey, we documented at least 12 mounds, several still standing 8–12 m tall (Figure 2.3) (Feinman and Nicholas 2013, 290). Fragments of carved stones were visible in the outer foundation walls of several houses in town. The largest one portrayed an individual with arms crossed on the chest (Figure 2.4), a posture thought to signify revered ancestors (Marcus 2002, 119), similar to several carved stones from Río Viejo (Monuments 7–9) and other sites on the Pacific Coast of Oaxaca (Joyce et al. 2001, 352; Urcid 1993, figure 18; Urcid and Joyce 2001, 203–04, 207; Zeitlin 1993).



Figure 2.1. View of Ejutla de Crespo in the center of the Ejutla Valley (photograph taken in 1985 during the regional survey).

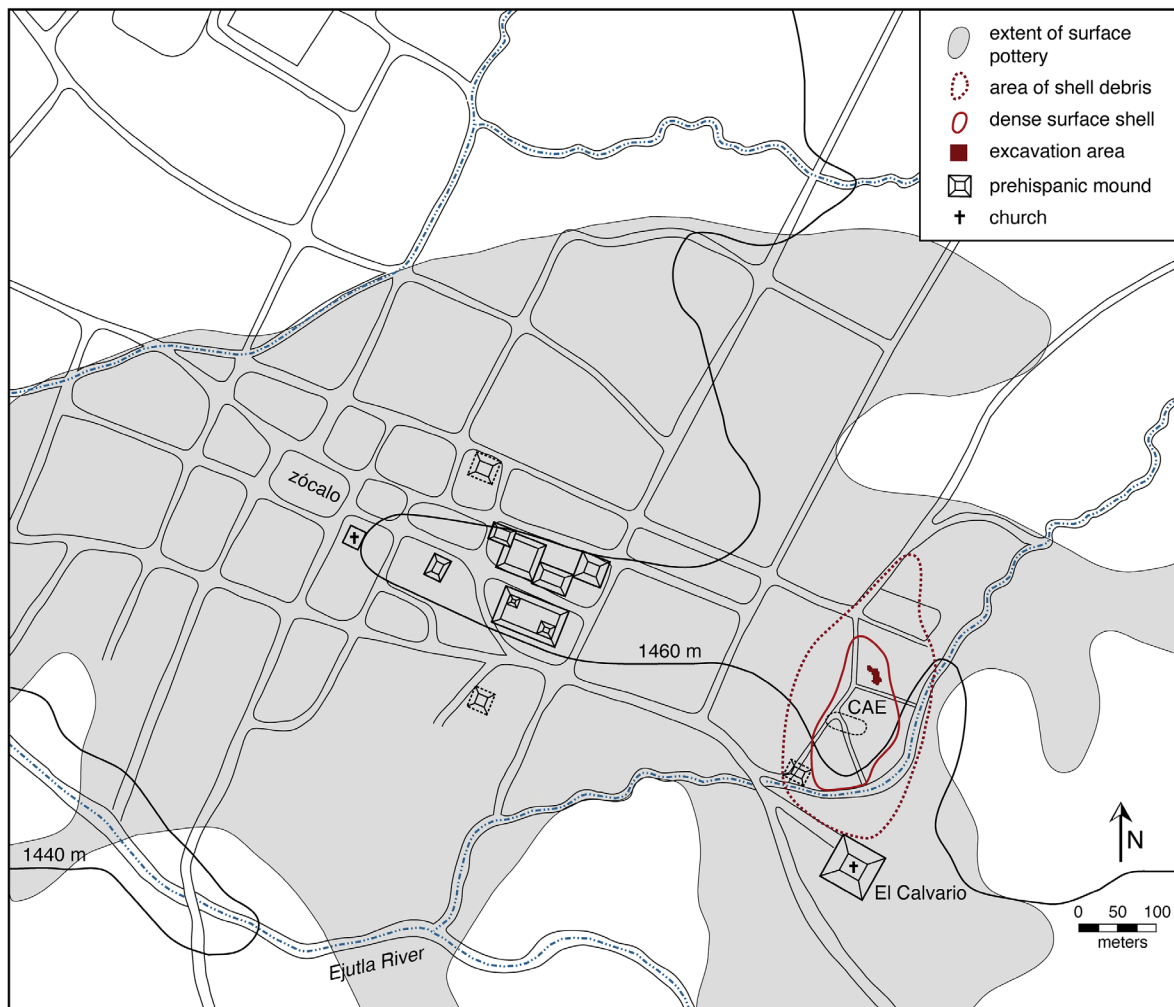


Figure 2.2. Map of Ejutla de Crespo showing the extent of the archaeological site, the prehispanic mounds, and the area of dense surface shell.



Figure 2.3. Prehispanic mounds with multiple visible plaster floors in a house lot in the center of Ejutla de Crespo.



Figure 2.4. Carved stone with crossed arms (placed upside down) in the wall foundation of a house lot in Ejutla de Crespo.

The site's monumental core consists of a large, raised platform adjacent to a linear group of large mounds (see Figure 2.2). Two smaller structures are situated on top of the platform, one at each end; the center of the platform may have served as a fairly open plaza. The two tallest structures are part of the linear group of four mounds on the north side of the platform; three of the mounds partially enclose a plaza, open on the north, with the

tallest structure on the east. Other prehispanic structures were dispersed across the town, including two on which churches were later constructed, one in the town's center and the other (El Calvario) near the area of dense shell (Figure 2.5). Most of the monumental structures are within modern house lots and have been heavily damaged; others are known to have been destroyed completely by modern constructions. Observations of exposed mound fill in several of the structures place initial construction between 200 BCE and 200 CE, and associated surface ceramics indicate continued use in later periods.

Shell was a rare find across most of the site. We did not observe any marine shell on or near the mounds in the center of town, and only one piece on the mound at the southern edge of the shell area. The shell was heavily concentrated in several agricultural fields along the eastern edge of town (and the prehispanic settlement), where many hundreds of pieces of broken shell glistened on the surface (Figure 2.6). During the survey we made three collections in this several-hectare area, picking up shell fragments, ceramics, obsidian, and other stone materials. Many shell fragments had cut edges and other evidence of working, either sawing, smoothing, or drilling. The collections include fragments of unfinished beads, disks, and bracelets, and small nacreous inlay pieces were numerous. Only two small disks and one drilled pendant were finished and complete. The identified taxa are all Pacific Coast species, including large gastropods—*Malea ringens*, *Patella mexicana*, *Strombus galeatus*, *Strombus gracilior*—and several pelecypods—*Ostrea iridescens*, *Pinctada mazatlanica*, *Spondylus princeps* (Keen 1971;



Figure 2.5. El Calvario on the top of a prehispanic mound just south of the area of dense surface shell.

Morris 1966). The most common of these, almost 60%, was mother of pearl, *Pinctada*. All these species were used in Mesoamerica as raw materials for shell ornaments and ritual items (e.g., Ekholm 1961; Kolb 1987; Pires-Ferreira 1975; Starbuck 1975; Suárez 1977), and several of these species were recovered from Early Formative contexts in the Valley of Oaxaca (Flannery and Marcus 2005, 81; Pires-Ferreira 1975, 1976).

Obsidian was unusually abundant in these fields. Of the almost 200 pieces of obsidian that we recorded across the site during the survey, more than half (112), mostly heavily worn blades, were collected from the area of dense surface shell, an area of several hectares compared to 130 ha for the entire site (see Figure 1.3). Because shell is a hard, abrasive material that tends to wear down stone tools quickly (Lewenstein 1987, 113; Parry 1987, 108), the association of the obsidian tools with the shell was additional support for shell working at Ejutla. There were many fewer tools of other stone materials visible on the surface.

Broken prehispanic pottery littered the area, with diagnostic sherds from Monte Albán Late I through Monte Albán V, but most abundant were the ubiquitous, undecorated G-35 bowls that date broadly to the Classic period (Feinman and Nicholas 2013, appendix IV). Ten of 11 figurine fragments, as well as the one spindle whorl and the two pottery wasters that we collected during the regional survey, were found in these fields. Based on these surface artifacts, it is likely that spinning and ceramic production were also practiced in this sector of the site.



Figure 2.6. Fragments of shell and prehispanic pottery visible on the surface of a field at the eastern edge of Ejutla de Crespo.

We centered one of the collection areas (CAE) in a field of dense shell and ceramics where there were many building stone fragments on the surface. The domestic character of the surface artifacts indicated that the stones were likely from a prehispanic residential structure. Did the occupants of this possible house also engage in other craft activities,

or were those crafts carried out by different households in this ward or neighborhood at the edge of the site? That question would take excavation to unravel.

2.2. The Importance of Domestic Units in Mesoamerica

The household was an important Mesoamerican institution that had long-term durability (Kowalewski and Heredia 2020). This durability of domestic units was documented decades ago in the Maya Lowlands by stratigraphic excavations of houses that exposed long sequences of rebuilding and other activities carried out over time on the same spot (e.g., Willey et al. 1965). The same pattern was observed in excavations of Formative period houses in the Valley of Oaxaca in the late 1960s–1970s (Drennan 1976; Flannery and Marcus 2005; Whalen 1981). Generally, throughout the prehispanic era (Early Formative through the Postclassic period), household units were small, consisting of a nuclear family, although larger households did develop in some times and places (Kowalewski and Heredia 2020). These households were the principal units of production and consumption in prehispanic Mesoamerica (Hirth 2009a, 1).

Prior to our excavations in Ejutla in the early 1990s, most houses excavated in the Valley of Oaxaca dated to the Formative period (Drennan 1976; Flannery 1976a; Flannery and Marcus 2005; Whalen 1981; Winter 1972). The early house was a small, rectangular, one-room structure with a hard-packed earthen floor and walls built with wattle and daub, typically 15–25 m² in size (Flannery 1976b; Winter 1976a). Outdoor workspace surrounding the house comprised a range of features, including storage pits, hearths, ovens, activity areas, household middens, and burials, all within an area of 300–400 m² (Flannery and Marcus 2005, 34; Winter 1976a). These residential spaces were generally separated from each other by 20–40 m of open space (Winter 1976a).

Three Classic period houses excavated in a residential area north of the Main Plaza at Monte Albán had a different plan (Winter 1974). The houses, located on separate terraces and spaced approximately 25 m apart, had stone foundations and walls of adobe, with small rooms enclosing three or four sides of a central, square patio with a plaster floor. The deceased were often interred inside the house, typically in small tombs under the floor of one of the rooms or under the patio. Are these the patterns we would find in a Classic period residence in Ejutla, far from the capital?

Inspired by the survey findings at Ejutla, we returned to the site to excavate houses and examine household activities, not just the crafting of shell ornaments. Over four field seasons (1990–93), we excavated a small Classic period residence of intermediate status and its immediate surroundings, where we documented multicrafting by one household, but we were blocked from uncovering the entire house by adjacent modern house lots that limited

the expansion of our excavations. And finding additional intact ancient houses in the heavily plowed fields (we did not find the house until the third year of the project) would be time-consuming.

During the regional surveys in both Oaxaca and Ejutla, we had mapped many hilltop sites where the ancient inhabitants had artificially flattened the slopes and constructed stone retaining walls to create flat spaces on which to build their houses. These sites are generally far from contemporary villages and have suffered less destruction from modern activities, such as heavy plowing. We often could see stone foundations and other remains of residential structures, and surface evidence of various craft activities was not uncommon. Terrace sites were a common form of settlement in Oaxaca, especially during the Classic period, when more than half of the population lived in one of these densely packed towns (Feinman and Nicholas 2013). The highest concentration of terrace sites was in the Tlacolula, or eastern, arm of the valley. A terrace site in Tlacolula seemed to be the ideal place to begin excavating more houses.

2.3. Excavations at Other Classic Period Sites in the Valley of Oaxaca

Our initial goal was to excavate a sample of houses at multiple locations to obtain household-level information on domestic activities that we could compare to Ejutla and begin to explore questions concerning the region's ancient economy (e.g., Feinman 1999; Feinman and Nicholas 2004a, 2007a, 2010, 2012). We ultimately excavated Classic period houses at three sites in the dry Tlacolula Valley, two hilltop terrace sites—El Palmillo and the Mitla Fortress—and a valley floor site—Lambityeco—in a setting more similar to the Ejutla site (see Figure 1.1). All four sites have extended occupational histories, although most of the excavated contexts pertain to the Classic period or the very beginning of the Early Postclassic period (ca. 900–1200 CE). Each site was at its apogee during the Classic period. At all four sites we excavated broad horizontal exposures to uncover complete houses and associated outdoor work and midden areas. To ensure comparability, we followed consistent field and laboratory methods and procedures (see chapter 3). At the three Tlacolula sites we recovered information that touches on many of the questions that we began investigating at Ejutla, and here we briefly describe the sites and the extent of our investigations.

El Palmillo is a large terrace site on the top and steep slopes of a rocky promontory that descends from the mountain ridge that defines the eastern edge of the Valley of Oaxaca. At its greatest expanse during the Classic period, the site's inhabitants had constructed more than 1400 terraces, most of which were residential (Feinman and Nicholas 2004b). Over a decade (1999–2008) we excavated eight houses on residential terraces spanning the bottom to the top of the hill (Feinman and Nicholas 2009, 2012; Feinman et al. 2002a). The three houses near the bottom of the hill were smaller

and had fewer rooms than other houses we excavated at El Palmillo. The three residences at the top, near the site's civic-ceremonial core, were larger and more elaborate structures. We also excavated a small ballcourt situated between two of the more palatial structures (Feinman and Nicholas 2011a). Two houses on mid-slope terraces were intermediate in size and elaboration. Location on the hill generally reflects a status gradient at El Palmillo, with houses near the top showing signs of higher status than those closer to the bottom. During the excavations we collected ample evidence of a range of economic activities, including stone working and the processing of xerophytic plants in most houses, and ceramic production in the lowest set of residences (Feinman and Nicholas 2009, 2007b; Feinman et al. 2002a, 2007; Haines et al. 2004).

The Mitla Fortress is located on a freestanding rocky butte in eastern Tlacolula, approximately 10 km north of El Palmillo. The site is known mostly for a series of tall stone defensive walls that ringed the top of the hill in the Postclassic period (900–1520 CE), but the site was more than a military redoubt. During the Classic period it was a population center, with more than 500 terraces and other residential structures (Feinman and Nicholas 2004b). Between 2009 and 2011 we excavated houses on three residential terraces, two just below the defensive walls and one farther down the slope (Feinman and Nicholas 2011b, 2012; Feinman et al. 2010). In addition to working local stone and processing fiber from xerophytic plants, the site's residents made obsidian blades from imported cores and raised turkeys (Feinman and Nicholas 2012, 241, 244; Lapham et al. 2013, 2016).

Lambityeco has long been in the regional archaeological literature following excavations at the site by John Paddock in the 1960s (Paddock et al. 1968). This large site on the valley floor in the middle of the Tlacolula arm consists of two major architectural sectors that are largely chronologically distinct, the earlier sector (Yegüih) to the east (Formative through Early Classic, 700 BCE–500 CE) and the later sector (Lambityeco) to the west (Late Classic, 500–900 CE), where Paddock excavated two palatial residences (Lind 2017; Lind and Urcid 2010). During the early work at the site salt production and ceramic production were documented as important economic activities (Lind and Urcid 2010; Payne 1970; Peterson 1976). We worked at Lambityeco in 2013–16, excavating a residence and associated ballcourt, plaza, and temple in the main civic-ceremonial core of the site (Feinman and Nicholas 2016b, 2019a; Feinman et al. 2016), just south of the two palaces excavated by Paddock. We recovered relatively few stone or ceramic artifacts or features associated with productive activities; an exception was a cluster of large jars in the earliest surface of the residence that were likely used in salt production (Feinman et al. 2016). Instead, most of the material remains were associated with ritual activities, including incredible quantities of figurines and whistles and large ollas and serving vessels. Based on the modest size and layout of the

residence, we suspect that its occupants were functionaries associated with ritual activities, perhaps low-level priests (Feinman and Nicholas 2019a; Feinman et al. 2016).

As we expanded our corpus of information on the material record from Classic period houses in the Valley of Oaxaca, we gained additional insights that sharpened our interpretations of economic activities at Ejutla and, more broadly, the prehispanic economy. Throughout the remaining chapters, we bring in material findings from El Palmillo, the Mitla Fortress, and Lambityeco as they are relevant. For some comparisons, the findings at sites where we excavated more than one house are presented as averages.

The construction of a corpus of domestic units for Classic period Oaxaca provides an analytical lens into domestic variability and the implications that diversity has on political and economic relations at scales larger than the household.

Research Program and Field Methodology

The questions we had about shell working at Ejutla were many, from more specific ones—what kinds of ornaments were made, how was the shell processed, what shell species were used, when did this activity take place—to broader ones about context and scale—were the production locale(s) residential, was there a division of labor between households, how was the shell procured, were ornaments made for local use or for broader networks of exchange? To answer these questions, we implemented a three-stage investigatory plan that was carried out over four field seasons (1990–93): surface collection, test pits, and large-scale horizontal excavations.

3.1. Exploratory Field Season

The first field season (July–August 1990) was largely exploratory (surface collection and test pits), to produce a detailed map of the shell-working area, to collect surface information on spatial variability in shell and other artifact distributions, to gather subsurface evidence of shell ornament production, to gain a preliminary chronological assessment of this activity, and to gauge the stratigraphic integrity of the area of surface shell and its suitability for large-scale excavations (Feinman et al. 1991). The latter was a primary concern, as the dense prehispanic debris concentrations that we noted in the area with surface

marine shell raised the worrisome prospect that much of this area was already impacted by contemporary farming.

We began this fieldwork by preparing the map, using Brunton pocket transits and 100 m tapes. We recorded all modern features (structures, fences, roads and footpaths, and watercourses) in the fields on the east side of town where we had found surface shell during the regional survey (Figure 3.1). The area with surface shell debris was approximately 4.9 ha, although the western boundary was difficult to define because of modern constructions that were encroaching onto the fields that were littered with surface shell.

Once we prepared the detailed map of the shell-working area, we laid out a grid of 20 × 20 m blocks across the area. The grid was drawn to include not just contemporary agricultural fields but also some adjacent modern house lots where there was good surface visibility (Figure 3.2). The initial 45 blocks in the grid covered approximately 37% of the area with some visible surface shell and 90% of the 2 ha area with the densest surface concentrations of shell. Each 20 × 20 m block was divided into 100 2 × 2 m units (the provenience designations for all surface and excavation units refer to the southwest corner of that unit). To assess variation in surface material and the



Figure 3.1. The area with surface shell, planted in corn, extends east to the line of trees in the background.