

Figure 9.12. Sources of gray translucent chert near Ejutla at Huertas (top) and Monte del Toro (bottom).

that differs in several key respects from the suite of stone tools that we recovered at the other Classic period sites. No evidence of shell working was found for the domestic units we excavated at El Palmillo, the Mitla Fortress, and Lambityeco.

9.4. Conclusions

The Ejutla craftworkers engaged in the high-intensity production of shell ornaments and ceramic figurines for exchange, but they did not do so to the exclusion of other craft activities. They also made lapidary objects and ornaments at a lower level of intensity, but nevertheless at least some of those objects also appear to have been made for exchange. The craftworkers imported the obsidian blades but made most of the other tools they used in their craft activities, including tools from animal and human bone that were intended more for local consumption. In other words, not only were they specialized domestic producers tied into widespread economic networks (both as producers and consumers), but they were multicrafters who did not engage full-time in any one crafting task. Clearly, the different elements of 'craft specialization' should be decoupled.

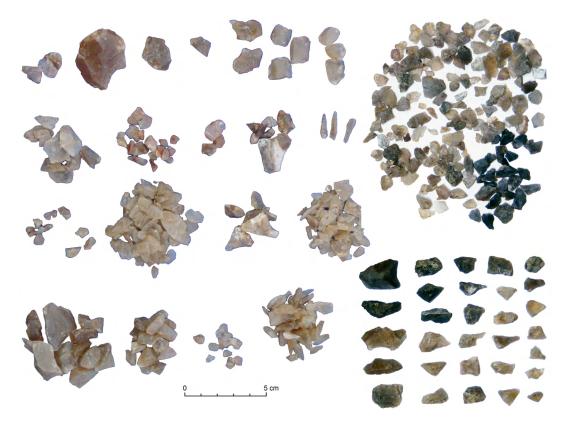


Figure 9.13. Chert production debris from making microdrills.

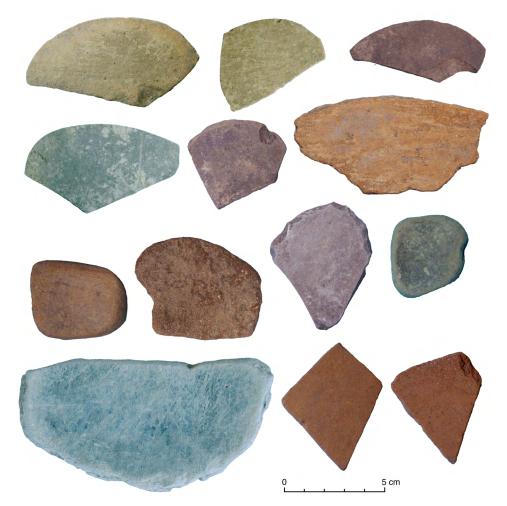


Figure 9.14. Repurposed ceramic sherds used as abraders.



Figure 9.15. Stones with grooved lines; top photos are two sides of the same stone.

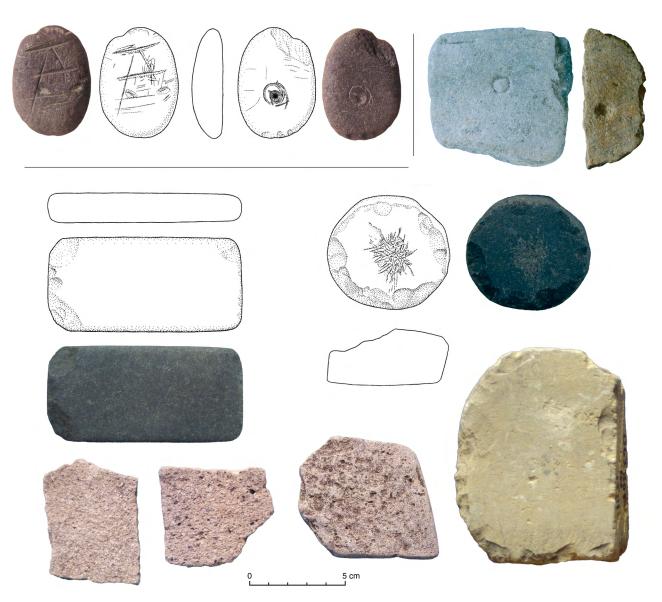


Figure 9.16. Stone platforms for working shell and lapidary and ceramic sherds with drill impressions (top right).

All the tools we documented for shell working could be used on more than one material once the skill was mastered. We know from the form of artifacts, the nature of cut marks and edges, and byproducts that some of these materials were perishable, like the hollow cane stalks that were fashioned into tubular drills (e.g., Caso 1965), both to extract small shell disks and to hollow out stone bowls. Cordage with abrasive and water could effectively cut shell, ornamental stone, and bone. The artisans made the small microdrills they used to perforate shell, stone, and bone beads and the basalt tools they used to initially break shell into smaller fragments for finishing into ornaments. Obsidian blades and flaked chert tools, of course, were not limited to cutting shell, but they were major parts of the tool kit for making ornaments of various materials. The abrading tools, stone platforms, and quartz polishing stones could be used with multiple materials. This multicrafting, or use of cross-craft technologies (Shimada 1996, 2007), was an important aspect of the high-intensity production at Ejutla.

Theoretical Implications and Concluding Thoughts

"Projects grow like organisms, with serendipity and supple adjustment, not like the foreordained steps of a high school proof in plane geometry."

(Stephen J. Gould 1985, 174)

Our interest in Ejutla began during the waning days of the Valley of Oaxaca Settlement Pattern Project in 1980, as we walked the path that formed the southern boundary of the project's survey area. This boundary was arbitrary, based on time and local permissions, and settlement did not drop off as we neared the border with the Ejutla district, to the south. We often thought about what might lie farther south and soon made plans to return to Oaxaca to extend the survey to include the Ejutla Valley (Feinman and Nicholas 1990, 2013), but we never imagined the anomalous quantities of cut marine shell, including broken ornaments, that we would find on the surface at the edge of Ejutla de Crespo, the contemporary district head town. Sites with massive accumulations of shell, places where that marine material seemingly was worked, are extremely rare in the landlocked Valley of Oaxaca, and finding even one piece of shell at a site during the survey was a rare event. So, in 1990, we set out to find why there was so much shell at the prehispanic site under the modern town of Ejutla de Crespo. Although, to start, we could not date the surface shell to a specific time period, the best-represented taxa were Pacific Coast varieties that were generally used for ornamentation rather than food in prehispanic Mesoamerica. This piqued our interest in interregional interaction between Ejutla and the Valley of Oaxaca and between Ejutla and the Pacific Coast.

We began the excavations at the Ejutla site with several basic questions in mind. When did the shell working occur? Most of the broken pottery on the surface could pertain to the Classic period, but ceramics from multiple periods (Monte Albán Late I-Monte Albán V, 300 BCE-1520 CE) were mixed with the shell debris and other artifacts. From where was the shell procured, and was it all from the Pacific Coast? What was the socioeconomic context of production? We had found dense surface shell over a large area at the eastern edge of the prehispanic site, so was this a ward of households whose occupants crafted shell into ornaments as Flannery and Marcus (2005, 66; Marcus 1989) argued for Formative period San José Mogote, or something else? Was this activity undertaken in a residential context, as indicated by surface debris that we observed mixed with the shell?

But the confirmation of shell ornament production at Ejutla was not all that awaited us. During the excavations we recovered thousands of pieces of cut and broken shell, but few complete ornaments, from a dense midden adjacent to a residential structure that was occupied during the Classic period (ca. 550–800 CE). Most of the shell was from the Pacific Coast, 100 km south of Ejutla over steep mountains. Chemical and microartifactual analysis of the floor helped tie the residents of the house to shell ornament production, but there were few ornaments in the house and only one small shell bead in the subfloor tomb. Given the huge quantities of cut shell debris in the midden and the rarity of finished shell ornaments in and near the house, we reasoned that the Ejutla shell workers crafted high volumes of ornaments for exchange and not for their own consumption.

The Ejutla craftworkers who fashioned shell into ornaments were specialists, in the sense that they produced for exchange or economic transfer. But they enacted their craft in a residential context. Clearly, they were not devoted full-time to this activity and engaged in multicrafting, including ceramic production, which we ultimately discovered and documented with more precise chronological control that it temporally proceeded shell ornament manufacture at least in the area we excavated.

The Ejutla multi-craftworkers also applied some of the same techniques and tools to produce lapidary objects, a process referred to as cross-craft technology (Shimada 1996, 2007). Around and under the excavated house there were at least five ash-filled pits, or pit kilns, and the amount of broken pottery we encountered during the excavations was overwhelming, including thousands of mold-made clay figurine fragments, hundreds of sherds with firing defects, and molds for making figurines and other ceramic forms. The figurines were not only made for the household but were consumed at other sites in the Ejutla Valley (Carpenter and Feinman 1999; Feinman 1999). In sum, the Ejutla artisans produced multiple crafts for exchange at a high level of intensity situated in a residential context. The practice of multiple craft production activities in association with domestic units (Feinman 1999; Feinman and Nicholas 2007a) has recently been more widely recognized in prehispanic Mesoamerica as well as in other premodern economies (Brumfiel and Nichols 2009; Hirth 2009a, 2009b, 2009c; Shimada 2007).

The new evidence from Ejutla on the nature of production and exchange in the Classic period economy of Oaxaca had revolutionary ramifications for how we think about Mesoamerican economies and even premodern economies