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CORPORATE GROUPS AND DOMESTIC ACTIVITIES AT TEOTIHUACAN

Linda Manzanilla

This article compares domestic subsistence, craft production, and ritual at several excavated apartment compounds in Teotihuacan, Mexico. A new methodological approach for studying activity areas was tested in a multifamily compound at Oztoyahualco 15B:N6W3 with the purpose of obtaining information on specific activities attributable to particular households. This approach combines the identification and mapping of chemical compounds in stucco floors with pollen, phytolith, botanical, and faunal analyses. Together with the distribution of particular types of artifacts, ritual objects, and debris, these data permit an evaluation of the corporate character of certain activities.

Este artículo compara información sobre la subsistencia, las manufacturas y el ritual doméstico en los conjuntos habitacionales excavados en Teotihuacan, México. Una nueva perspectiva metodológica de estudio de áreas de actividad fue probada en un conjunto multifamiliar de Oztoyahualco 15B:N6W3, Valle de Teotihuacan, con el propósito de distinguir actividades atribuibles a unidades domésticas específicas, a través del mapeo de compuestos químicos en los pisos de estuco, polen, fitolitos, microfósiles botánicos y faunísticos, junto con clases particulares de artefactos, objetos rituales y desechos. Así también se resaltó el carácter corporativo de ciertas actividades.

The Prehispanic cities of the central highlands of Mexico were planned settlements that served as capitals of large states. As the locus of huge demographic concentrations, they were manufacturing and exchange centers as well. Many were multiethnic centers that took advantage of the occupational skills of foreign groups; many were strategically situated with respect to resources. As one of the first urban developments in Mesoamerica, Teotihuacan was conceived as the archetype of the Mesoamerican civilized city. It was the most sacred realm, the mythic Tollan where crafts flourished.

One of the hallmarks of Teotihuacan civilization, from the third century A.D. onward, is the presence of multifamily compounds. These multi-room residential structures present an ideal opportunity to examine the nature and diversity of urban social segments. We know practically nothing

about urban life in the Basin of Mexico before A.D. 200, with the exception of some partial data on earth floors and from a one-room house in TC-49 (Charlton 1969) that resembles the local Formative houses of the village of Cuanalan (Charlton 1969; Manzanilla 1985). For the Tlamimilolpa phase (A.D. 200–350/400), elements of urban planning at Teotihuacan are clearly defined, as are indicators of domestic life in apartment compounds (Millon 1973) (Figure 1). Several examples of these have been studied since Linné's (1934) extensive excavations at Xolalpan (Figure 2); these include Tlamimilolpa (Figure 3), Atetelco, Tepantitla, La Ventilla, Tetitla (Figure 4), Yayahuala (Séjourné 1966b), Zacuala (Séjourné 1966b), Bidasoa, San Antonio Las Palmas, El Cuartel, and Structure 15B:N6W3 at Oztoyahualco (Figure 5). We also have information from Tlajinga 33 (Storey 1983, 1987,

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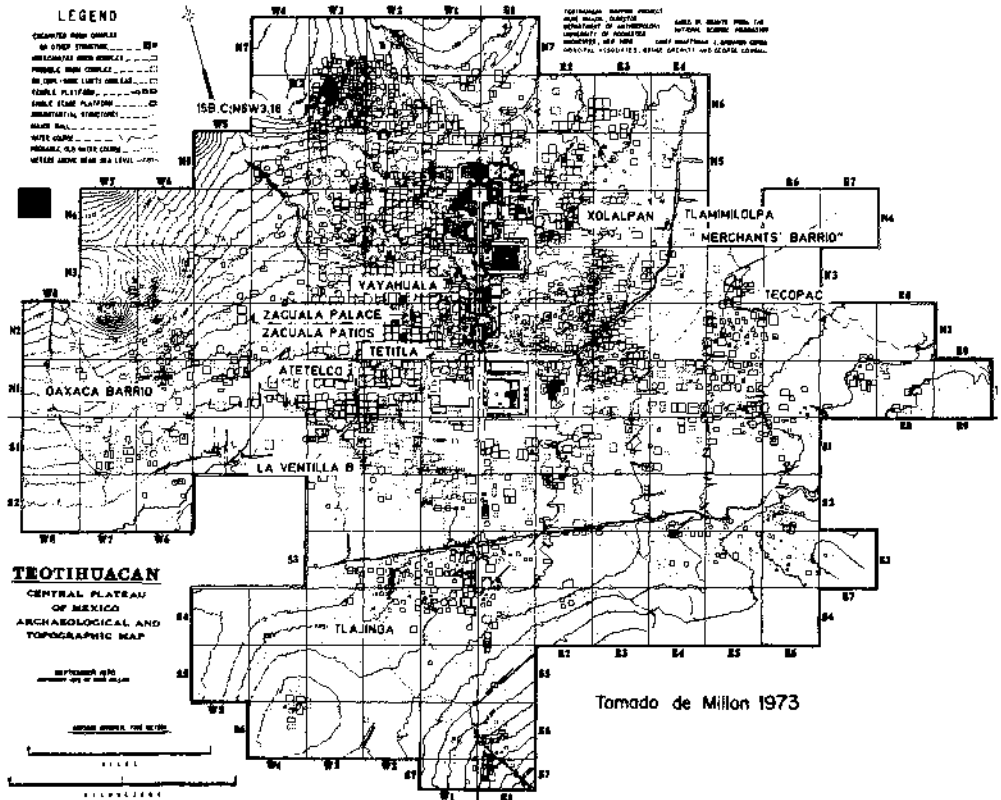
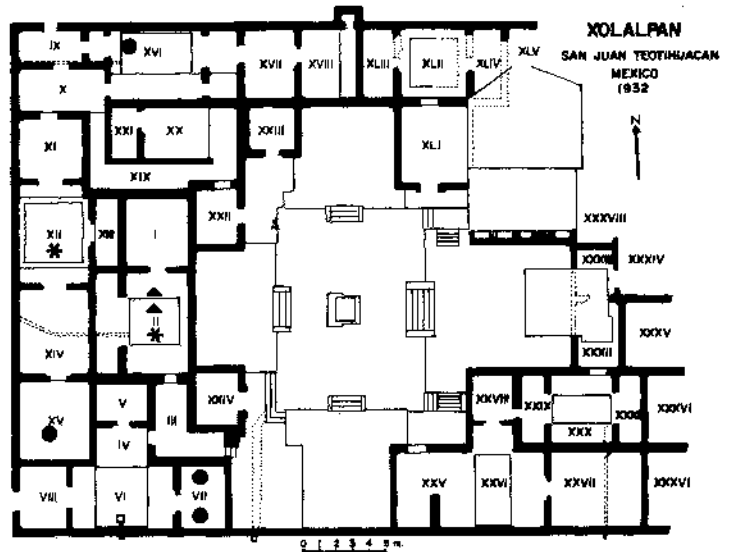


Figure 1. Map of the city of Teotihuacán showing location of some of the compounds.

Figure 2. Map of Xolalpan (Linné 1934), with placement of burials.



(REOBUJAZO DE LINNE 1934)

- ▲ CHILD BURIAL
- ADULT BURIAL
- * CENSER

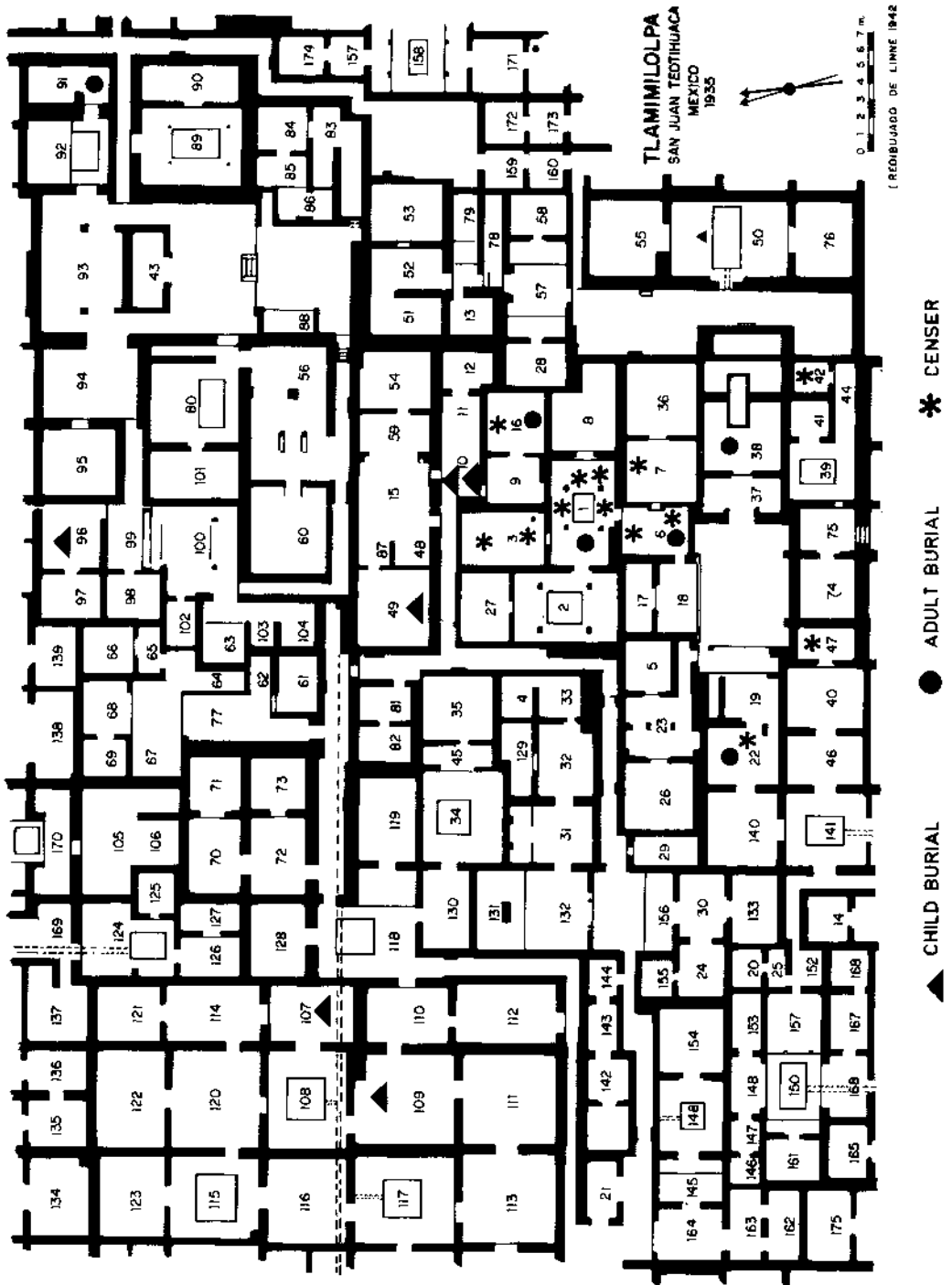


Figure 3. Map of Tlamimilolpa (Linné 1942), with placement of burials.

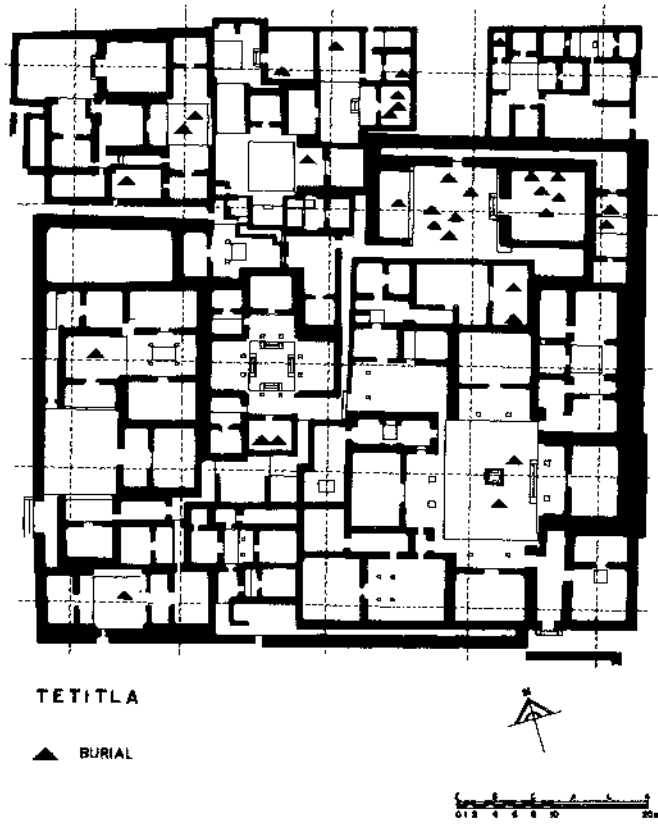


Figure 4. Map of Tetitla (Séjourné 1966b), with placement of burials.



Figure 5. Aerial photograph of Oztoyahualco 15B:N6W3 taken by the author.

1991, 1992; Storey and Widmer 1989; Widmer 1991) and Maquixco Bajo (TC8) in the southern outskirts of the city (Sanders 1966, 1994, 1995), as well as from domestic structures in the foreign wards of the city (Rattray 1987, 1988, 1993; Spence 1989, 1992, 1994).

In the following section I describe the methodology that was used for the activity area analyses at Oztoyahualco. The subsequent discussions consider the nature of the Teotihuacan apartment compounds and the evidence for different activities, as indicated through the articulation of chemical, botanical, faunal, and artifactual analyses (Manzanilla 1987, 1993b; Manzanilla et al. 1990).

Oztoyahualco 15B:N6W3: Methodological Approaches

From 1985 to 1988 we carefully dissected an apartment compound at Oztoyahualco 15B:N6W3 (Figure 5), at the northwestern boundary of the city, in Millon's N6W3 square (Manzanilla 1993b), as part of an intensive interdisciplinary project. We knew that stucco floors were scrupulously swept in the ancient domestic setting, so we would not have abundant macroscopic remains for our analysis. We thus planned a strategy that took into consideration chemical traces of activities on the plastered floors, as well as microscopic evidence related to these activities.

After the geophysical, geochemical, and archaeological plotting of surface materials, we chose mound 15B:N6W3 to begin a detective-like analysis of each room. We gathered architectural and funerary data as Linné (1934, 1942) did for Tlamimilolpa and Xolalpan, Séjourné (1966b) for Tetitla, Yahualala, and Zacuala, and as Piña Chán (1963) and Vidarte did for La Ventilla. We plotted the distribution of artifacts on floors as Monzón (1989) did for San Antonio Las Palmas, as Sánchez Alaniz (1989) did for Bidasoa, and as Sanders (1966, 1994, 1995) did for Maquixco Bajo. We also screened and analyzed flotation samples as Widmer did for Tlajinga 33 (Storey and Widmer 1989; Widmer 1987). These studies were supplemented with fine-grained analyses of phytoliths and pollen, botanical and faunal microfossils, and chemical compounds on floors, as well as micro-artifactual distributions (Barba et



Figure 6. Ceramic plate and mortar on top of floor of room C40.

al. 1987; Manzanilla 1988–1989, 1993b; Manzanilla and Barba 1990). In this manner, we obtained the anatomy of an apartment compound during Xolalpan times (ca. A.D. 550). This case serves as reference for the reconsideration of socioeconomic variations in domestic compounds at Teotihuacan.

Because the Oztoyahualco 15B:N6W3 compound was abandoned and the residents took most of their goods with them, we found only traces of some “de facto refuse” in certain rooms, and some exceptional cases of *locus agendi* areas (Manzanilla 1986a, 1986b, 1988–1989) (Figure 6). During the excavation process, we isolated discrete distributions that appear to represent activity areas. These normally were delimited structurally, representing offerings or burial cavities excavated in the floors, associations of storage vessels, or concentrations of artifacts or faunal remains in the corners of the rooms. These potential activity areas exhibited specific sets of artifactual characteristics that were then compared with the distribution of the biological elements and chemical compounds to gain an idea of the set of activities associated with each room.

One of the methodological approaches that was most useful in assessing past activities was the chemical analysis of the stucco floors of the compound. Barba (1986; Barba and Manzanilla 1987; Ortiz and Barba 1993) has demonstrated in ethnographic as well as archaeological examples that stucco floors trap chemical compounds derived from specific activities that are repeatedly

enacted in a structure. At Ozttoyahualco 15B:N6W3 we collected samples to a depth of 5 cm in each square meter of the stucco floor. The following tests were completed on each sample:

Phosphates. This semiquantitative test is based on the intensity of blues that appear on the surface of filter paper, which reflects the quantity of phosphate in each sample. Areas where organic refuse was abundant tend to have high phosphate values.

Carbonates. The quantity of carbonates present in the sample was estimated based on its reaction to hydrochloric acid. A scale from one to five was employed to measure the level of intensity of these reactions. Leaving natural calcium carbonate deposition aside, carbonate concentrations could be derived either from tortilla preparation, or from stucco and limestone processing.

Levels of pH. These were determined by routine procedures that are used for soils in a water solution; they were measured with a combined electrode. The presence of fire in the vicinity of a stucco floor increases pH values.

Color. Soil samples were compared using a Munsell Soil Color Chart. Color can be an indicator of organic material; a change in color also can signify where a fire has been lighted.

Specific chemical tests for sodium and iron were used in locations where it was expected that particular activities had been enacted. For example, iron concentrations are derived from agave processing or from the butchering of animals. Organic and inorganic chemical analyses also were undertaken on specific types of ceramic vessel bottoms. These provided further information on food preparation and consumption.

Apartment Compounds

Apartment compounds generally consist of several rooms at slightly different levels, arranged around open spaces (courtyards, refuse areas, and light wells) that serve as places for ritual, rainwater collection, partial refuse disposal, and light provision. The compounds contain different apartments joined by passages for circulation. They have domestic sanctuaries, and the entire compound is enclosed within an exterior wall (see Figures 2-4).

It is believed that these compounds were occupied by corporate groups sharing kinship, resi-

dence, and occupation. It has been archaeologically ascertained that craftspeople dedicated to the manufacture of different products lived in separate compounds (Millon 1968; Spence 1966). In mapping activities shared by all households in our compound, we found additional data supporting this idea. Unfortunately our fossil DNA tests on the burials at Ozttoyahualco 15B:N6W3 (Millones 1994) did not provide sufficient collagen to evaluate kinship ties between individuals of each household.

The apartment compounds at Teotihuacan vary considerably in surface area. Some are very large, such as Tlamimilolpa (Linné 1942), Yayahuala, Zacuala Palace, and Tetitla (ca. 3,600 m²; Séjourné 1966b); others are medium size, such as Tlajinga 33 (2,280 m²; Storey 1992), Bidasoa (1,750 m² at S2E4; Sánchez Alaniz 1989), Xolalpan (more than 1,344 m²; Linné 1934), and Mound 1-2 in TC8 at Cerro Calaveras (1,500 m²; Sanders 1966, 1994). Other compounds are much smaller, such as the one we excavated at Ozttoyahualco 15B:N6W3 (slightly more than 550 m²), Mounds 3 and 4 at TC8 (340 and 529 m², respectively; Sanders 1966), and the one excavated by Monzón at San Antonio Las Palmas (280 m², at N7W3; Monzón 1989).

Individual household sectors within the compound could be distinguished either by taking into consideration the circulation alleys or access points (Sanders 1994:19-37), or by mapping the different food consumption loci for each nuclear household. The Ozttoyahualco 15B:N6W3 compound had three sections (Figure 7) that we propose were related to three households (Ortiz and Barba 1993; Ortiz Butrón 1990). Each apartment included a zone for food preparation and consumption, sleeping quarters, storage areas, sectors for refuse, patios for cult activities, and funerary areas. Additionally, there were zones in which the entire family group or compound group (all the households in an apartment compound; see Sempowski 1994:9-10) gathered to share activities, particularly those related to ritual and perhaps the curation of domestic animals.

We suspect that members of different household units participated in specialized activities related to the larger urban setting. In the compound that we studied, the whole compound

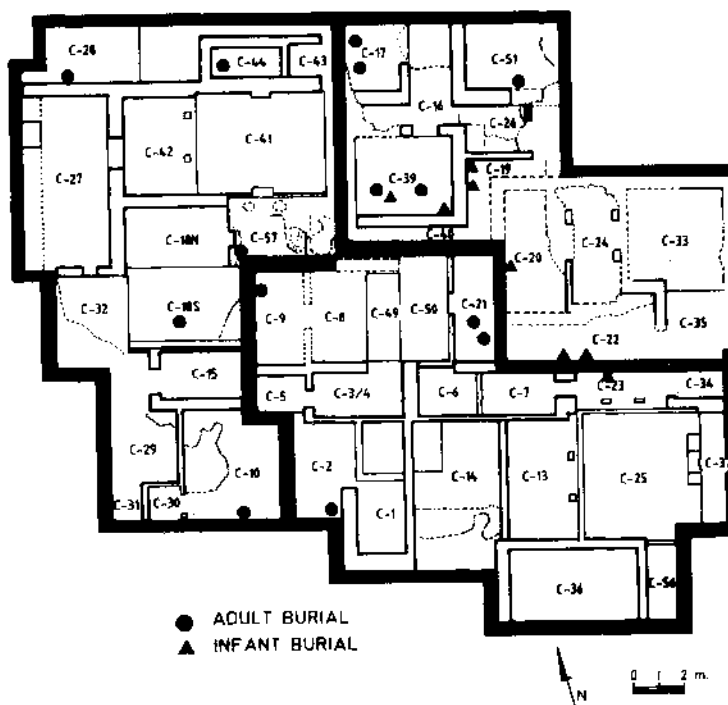


Figure 7. Simplified map of Oztoyahualco 15B:N6W3 with the three proposed sections and placement of burials.

group likely specialized in the stucco plastering of neighboring three-temple plazas and perhaps of other structures at Oztoyahualco. Other compound groups in the city seem to have been devoted to the production of certain ceramic wares, textile manufacture, obsidian or lapidary working, or even painting activities. I review some of these data below.

Evidence for Different Activities

Three building levels were detected: two of Teotihuacan date (Late Tlamimilolpa and Late Xolalpan) overlaid by two Aztec houses (one on the southeastern corner, on top of C36, and the other in the western portion on top of C18). This article only deals with the Late Xolalpan occupation.

Food Processing and Consumption

At Oztoyahualco 15B:N6W3 we located three kitchen sectors (C3-4, C15, and C19), recognized by dark red stains on the floor, a reduction of carbonate values, and a considerable increment of pH in the place where the portable stove stood.

Ash augmented the pH in the stain zone. This area was surrounded by a semicircular band of phosphates (Manzanilla and Barba 1990; Ortiz 1990; Ortiz and Barba 1993) (Figure 8). The phosphate band suggests that this also was a major consumption area. In some cases, grinding instruments were found near the characteristic dark red stains. Access to storage rooms also was nearby. Plant and animal remains provide further support for food processing and consumption. Subsistence remains included rabbit, hare, young and adult deer bones, charred agave spines, *Panicum*, charred maize remains, squash phytoliths, and charred prickly pear seeds.

In one of these kitchens, C3-4, the door provided access to a small service patio (a medium-size open space where refuse was swept and where rainwater probably was collected). The patio drained to the north, where we found a band of refuse from the consumption area (e.g., turkey remains). The phosphate value was high near the drain, where all the small-grained refuse was concentrated.

Other Teotihuacan apartment compounds had similar access to plant resources, including maize,

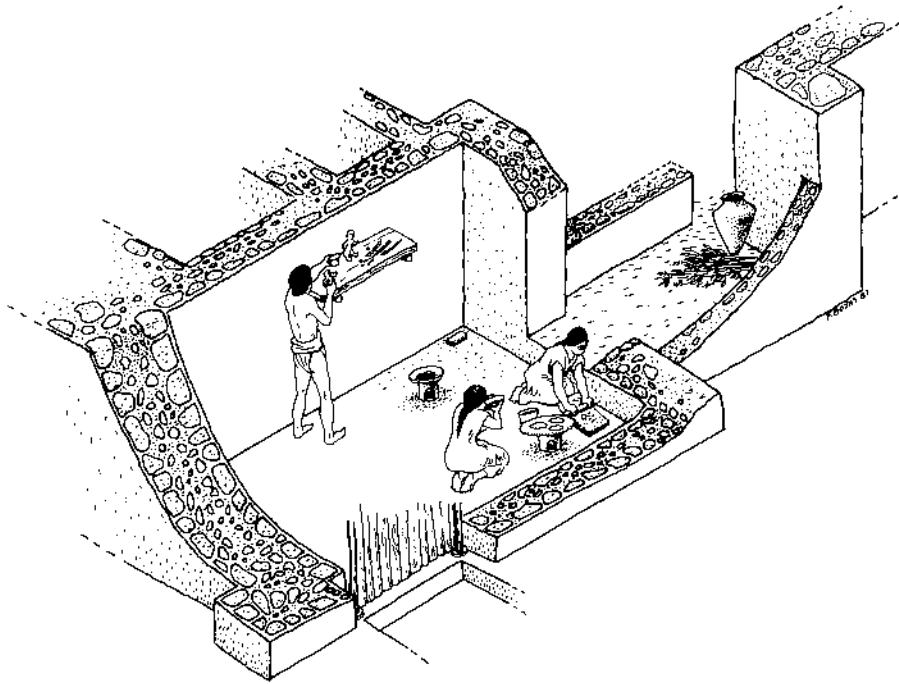


Figure 8. Artistic reconstruction of activities in C3-4 and C5 as drawn by Fernando Botas.

amaranth, beans, squash, chili peppers, *Chenopodium*, *Portulaca*, *Physalis*, cactus, Mexican hawthorn (*Crataegus mexicana*), and Mexican cherries (*Prunus capuli*) (González 1993; Manzanilla 1985, 1993b; McClung 1979, 1980:162–163; Storey 1992:64) (Figure 9). Other plants used for medicinal purposes, fuel, and construction include purslane, wild potatoes, wild reeds, umbelliferous plants, white sapodilla, pine, oak, juniper, ditch reeds, and bulrushes. Yet the greater abundance of *Nicotiana* at San Antonio Las Palmas (Monzón 1989), avocado at Teopanczco (McClung 1979), and cotton at Tlamimilolpa (Linné 1942) and Teopanczco (McClung 1979) suggest differential access to certain foreign botanical resources associated with manufacturing and ritual consumption.

Tetitla (Séjourné 1966b) and Maquixco Bajo-Mound 3 (Sanders 1994:63) were rich in agave end-scrapers, probably for *pulque* production. Sizable differences were noted in the number of scrapers per compound. For example, the three small compounds in Maquixco Bajo had 243 scrapers, while Ozttoyahualco 15B:N6W3 had only six. Likewise, 93 projectile points were

recovered at Maquixco Bajo compared to only 10 at Ozttoyahualco 15B:N6W3. These differences may reflect specialized procurement activities at the former. In contrast, mano and metate distribution was more even. We recovered 8 metates and 13 manos in the Ozttoyahualco 15B:N6W3 compound (Hernández 1993); Sanders (1994:66) found 29 metates and 35 manos in all three compounds at Maquixco Bajo, with a rough estimate of 8 to 10 metates and 12 manos per compound.

In general, important faunal resources included rabbits, hares, deer, dogs, and turkey, supplemented with duck and fish (Sanders 1994:31; Starbuck 1975; Valadez Azúa 1993; Valadez and Manzanilla 1988). At Ozttoyahualco, we recorded a wide variety of rabbit and hare species (*Sylvilagus floridanus*, *Sylvilagus cunicularius*, *Sylvilagus audobonii*, *Romerolagus diazi*, and *Lepus callotis*). We even detected young individuals, so we have proposed a breeding locus for rabbits in C10 (see Figure 7). We also recovered four young dogs, often in child burials (Valadez Azúa 1993; Valadez and Manzanilla 1988); thus we also have proposed that the residents raised dogs.

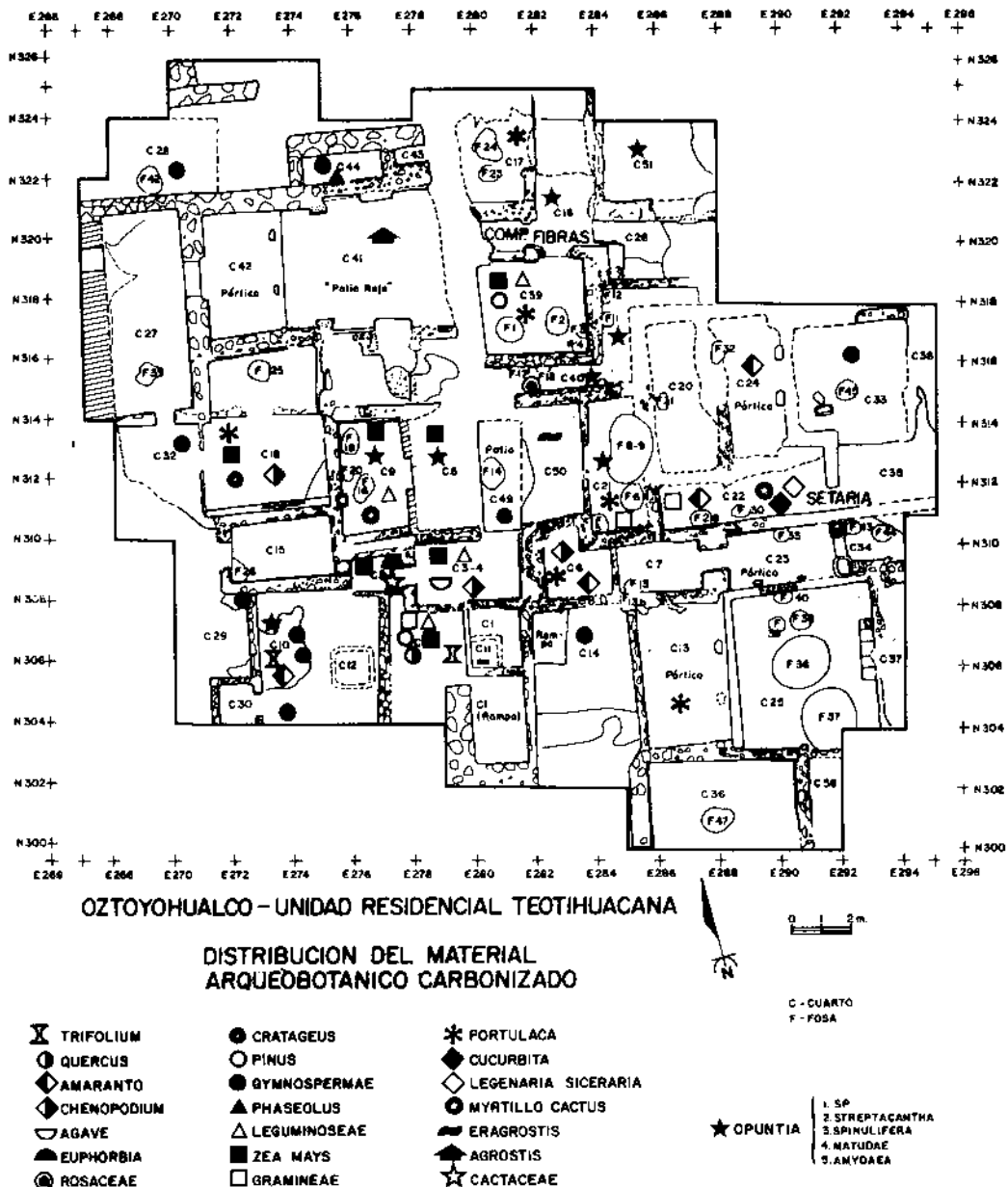


Figure 9. Location of carbonized archaeobotanical material in Oztotuhualco 15B:N6W3 (González 1993:Figure 429).

The abundance of rabbit and hare bones also has an ideological counterpart in a small rabbit sculpture that stood on a temple model in one of the ritual courtyards (C33), probably as a patron deity (Figure 10). Rabbit feet appear to have been ritually cut in C9 as part of a group ritual held in a small destroyed temple (at C57) (Hernández

1993; Manzanilla 1988–1989, 1993b; Manzanilla and Ortiz 1991).

Storey (1992) and Widmer (1987) found large amounts of rabbits, turkey eggs, small birds (such as quail and pigeon), as well as small freshwater fish at Tlajinga 33, and low counts of deer, dog, and turkey. It is particularly interesting that Storey



Figure 10. Model of a temple (10 x 7.6 cm) and small rabbit sculpture (probably a patron deity) found in courtyard C33.

(1992) suggests turkey eggs could have been obtained externally, without necessarily breeding turkey at Tlajinga 33.

In Xolalpan times, there could have been shortages in meat distribution in response to population pressure. One of the relevant responses may have been the breeding of rabbits together with turkeys and dogs at Ozttoyahualco. Another possible response was the consumption of freshwater fish at Tlajinga 33. However, we have no way as yet to compare the number of individuals of each faunal species per unit area in the apartment compounds, because the only thorough data yet published is that of Ozttoyahualco 15B:N6W3 (Valadez Azúa 1993; Valadez and Manzanilla 1988).

Starbuck (1975:181–182) suggested that between the Terminal Preclassic (last centuries B.C.) and the end of the Classic period (first seven centuries A.D.), a change from locally available animal resources to a reliance upon a much-expanded support area, probably encompassing most of the Valley of Mexico took place. He also proposed a decrease in the importance of deer during the Classic horizon. There are, however, some points of disagreement, because our experience at the Late and Terminal Formative village of Cuanalan, in the southern Teotihuacan Valley, shows that a wide variety of lake, land, and mountain resources were consumed (Manzanilla 1985). This range of resource exploitation continued in Classic period Teotihuacan.

Even though approximately the same faunal and floral species are represented in all the apart-

ment compounds, the quantities varied. Tetitla showed an unprecedented diversity of birds (as well as a particular richness in botanical species); Yayahuala had a wide variety of marine mollusks (as well as a high proportion of *Chenopodium* and amaranth); the consumption of small birds and freshwater fish was high in Tlajinga 33; and Ozttoyahualco 15B:N6W3 relied heavily on several species of rabbits and hares. At present, the degree to which these data reflect differential access to faunal and floral resources cannot be determined, because many other alternatives related to group choice and ideology have not yet been considered. One difference between compounds can be pointed out: the presence of different hunting techniques represented in the technological repertory. For example, Tetitla had projectile points of various sizes that would have permitted the residents to cope with small, medium, and large animals (Séjourné 1966b:Figure 117). Even though Linné only published offerings from burials, the projectile points at Xolalpan (Linné 1934:Figures 258, 259, 263, 264, 293–297, 298–311) and Tlamimilolpa (Linné 1942:Figures 247, 252, 263–271) show similar size ranges. On the contrary, Ozttoyahualco 15B:N6W3 only had projectile points of medium and large size, which were found in conjunction with many examples of blow-gun projectiles, perhaps for hunting small animals (Hernández 1993). Linné (1942:187) also found blow-gun projectiles at Tlamimilolpa.

Storage

At Ozttoyahualco 15B:N6W3, two storage sectors were adjacent to two of the food consumption areas already mentioned. In C5, San Martín storage amphorae were present, together with several plant macrofossils dominated by charred maize, noncarbonized Leguminosae, charred *Chenopodium*, cactus, *Euphorbia*, and noncarbonized *Ipomoea*. The quantity of *Casimiroa* pollen (95 percent) indicates that there was surely a mass of stored *Casimiroa*. This plant had medical uses in Prehispanic times, and early chroniclers reported that it had hypnotic and somnific effects (Barba et al. 1987). In line with its use for storage, the floor surface in C5 did not indicate intense utilization or activity. Chemical values revealed no more

than a slight rise in phosphates. The other storage sector (C18) was a large room situated in the western portion of the compound; it housed 11.47 percent of the sherds recovered from the compound, particularly San Martín orange storage vessels, together with red, orange, and brown jars, nine *candeleros*, two figurines, and some fragments of mother-of-pearl (*Pinctata mazatlanica*).

Partly a consequence of the small number of recent extensive excavations, few storage rooms have been identified in apartment compounds. Room 89 at Tlajinga 33 was probably a store-room; *Argemone* sp., Malvaceae, Leguminosae, and plant fibers were found there (Storey and Widmer 1989:414). Séjourné (1966a:29, *láminas* 6 and 7) describes a room with storage vessels at Tetitla. Sanders (1994:31–33) identifies Rooms 2 and 3 of Mound 3 at Maquixco Bajo as possible storage areas for *Spondylus calcifer*.

Butchering and Refuse Sectors

At Ozttoyahualco 15B:N6W3 all the southern rooms had evidence of butchering; several rabbit and hare remains were found, together with high phosphate values. Only one other context had similar findings. In a corner of a room (C9) to the east of the service courtyard, we found 12 obsidian blades near rabbit, rodent, and mollusk remains, and high phosphate and pH values (Manzanilla 1988–1989).

In other compounds, nonplastered open areas at the fringes of the compound may have served as refuse disposal and butchering areas. In Tlajinga 33, Storey and Widmer (1989:410) mention three depositional areas: patios, courtyards, and open unroofed areas with packed earth floors located at the peripheries of the compounds.

Manufacture and Construction

Edge rejuvenation and prismatic blade extraction was carried out in many compounds. Prismatic blade cores have been found at Maquixco Bajo (Sanders 1994, 1995), Ozttoyahualco 15B:N6W3 (Hernández 1993), and Xolalpan (Linné 1934:Figures 325, 327). But core-to-blade ratios were variable. For example, at Maquixco Bajo 37 prismatic cores (Sanders 1994:66) and 304 prismatic blades were recovered (Santley et al. 1995:483). In contrast, at Ozttoyahualco



Figure 11. A sample of stucco polishers found at Ozttoyahualco 15B:N6W3.

15B:N6W3, only nine prismatic cores were found, compared to 349 prismatic macroblades and 342 prismatic blades (Hernández 1993:461).

Plaster polishing also was important at Ozttoyahualco 15B:N6W3. This activity was detected in the northern sector of the compound, where some graves that cut into the plaster floor were intended to be recovered again with stucco. Yet the compound was abandoned before this task was concluded. The calcium carbonate mixture was already prepared, with a basalt polisher on top of it. There were 42 polishers and 16 polisher fragments in our compound (a total of 58), an abundance that indicates a probable group occupation (Figure 11). Fewer of these artifacts (40) were obtained from the three compounds in Maquixco Bajo (Sanders 1994:66).

Crespo Oviedo and Mastache de E. (1981) proposed that there were two sites in the Tula region that could be considered Zapotec settlements where lime was obtained for plastering Teotihuacan: El Tesoro and Acoculco. Spence (1992) supported this idea by proposing that the Zapotec controlled the mining, processing, and importation of lime to the city. Our research at Ozttoyahualco 15B:N6W3 does not support this interpretation. We have concluded that parts of the northwestern district of the ancient city had direct links with settlements in the Tula region, and that our compound was perhaps more related to Chingú (Díaz O. 1980), a Teotihuacan settlement also located in the limestone area near Tula. The number of plaster "polishers" made of volcanic scoria (*tezontle*) per square meter could be used to differentiate the relevance of this activity

in apartment compounds, assuming that Linné and Séjourné saved all the specimens found. Tetitla had .19 polishers per square meter; the Oztoyalualco compound, .10; Xolalpan, .04; and Tlamimilolpa, .01.

Other craft activities also varied by compound. Lapidary work involving greenstone, slate, and onyx, marine-shell working, and ceramic manufacture, particularly of San Martín Orange ware, were clearly represented at Tlajinga 33 (Krotser and Rattray 1980; Storey 1991; Widmer 1991).

Several figurine molds were found at Xolalpan (Linné 1934:Figures 199–208); and stone celts for cutting wood were particularly abundant in Grave 1 at that compound (Linné 1934:Figures 246–256). Different kinds of pigments for painting walls, pottery, and probably codices, as well as spindle whorls and needles, were recorded at Xolalpan. Tlamimilolpa (Linné 1942) also had evidence of textile manufacture, as well as basket making and fiberwork. Tetitla (Séjourné 1966b) is represented by bone instruments for working hides and polishing pottery.

With respect to figurine production, the Oztoyalualco compound only had 132 figurines and figurine fragments from Teotihuacan times (Manzanilla 1993b:358–369), very few in comparison, for example, to Maquixco Bajo, where Kolb (1995) mentions 2,150 figurines for the same time period. Within the Oztoyalualco compound, each household or family unit appears to have used different ceramic wares. Matte and Red Hematite wares are associated with Household 1. Household 2 used black, brown, Copa, Granular, and San Martín wares. Household 3 had a concentration of orange and Thin Orange wares. These patterns may reflect differential access to pottery production in the urban setting for each nuclear household.

Cult Areas

It has been proposed that a superimposition of deities on two levels occurred for the first time at Teotihuacan. Lineage gods were patrons of lines of descent, and above them was the deity Tlaloc as god of place, protector of territory, and patron of the city and the caves (López Austin 1989).

Among the deities present at Teotihuacan, the Fire God (Huehuetéotl), who was known from the



Figure 12. Burial 8 in a pit (90 cm in diameter) in C21, with dismantled theater-type censer around the body.

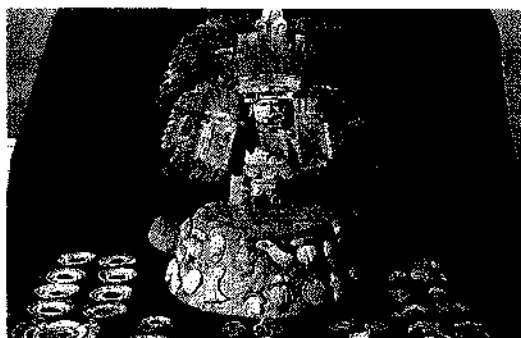


Figure 13. Theater-type censer found around Burial 8 (height of the lid: 34.5 cm, height of the main figure: 18.5 cm).



Figure 14. Representations of squash flowers and fruits, tamales, cotton, maize corn cobs, and other economically important plants and processed food that surrounded the censer's lid (pieces 3–5.1 cm).

Formative horizon, always appears associated with the eastern portions of apartment compounds. Another deity present in domestic contexts is the Fat God, generally represented in figurines or appliquéed on tripod vessels. The Butterfly Deity is depicted on incense burners and is probably linked to death and fertility. In partic-

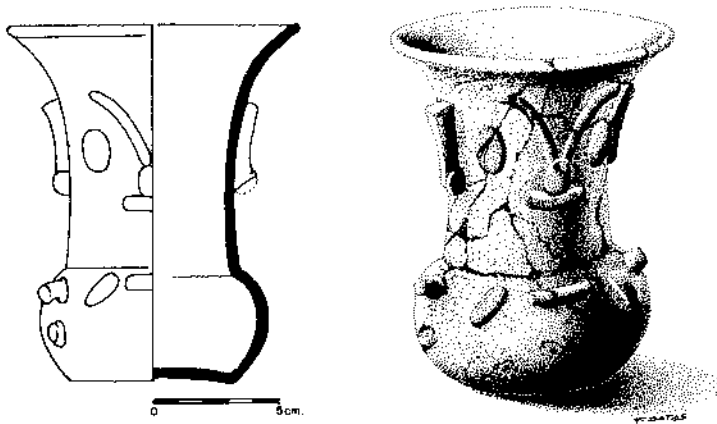


Figure 15. Tlaloc vase found in Burial 4 in C51.

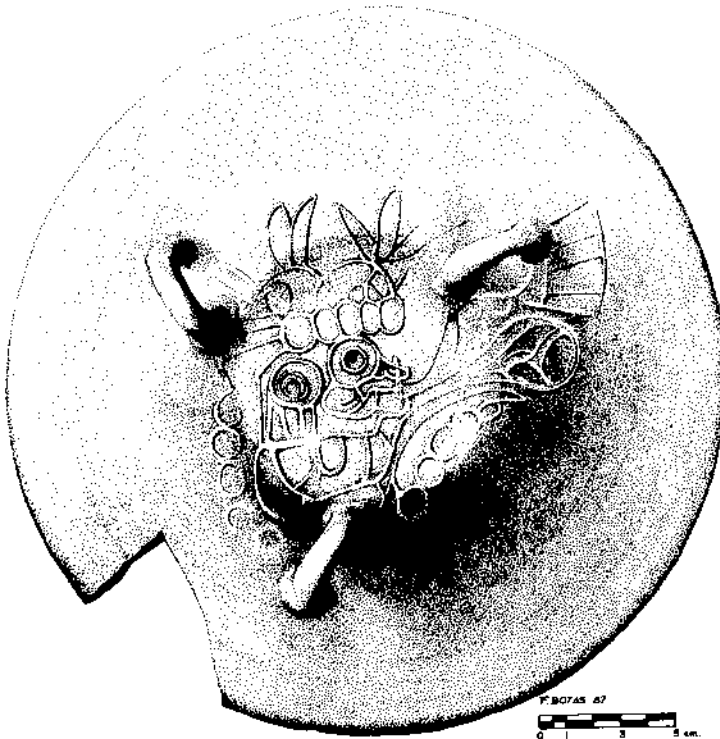


Figure 16. Tlaloc representations on a "handled cover."

ular, the impressive theater-type censer we found accompanying the burial of an adult male (Figure 12) had butterfly wings in the chest of the main figure (Figure 13) and displayed a wide array of food and economically important plants (Manzanilla and Carreón 1991) (Figure 14).

In domestic contexts, the state god Tlaloc was

represented in figurines with goggles and elaborate headdresses, as well as on Tlaloc vases (Figure 15) and on a "handled cover" (Figure 16). However, at Oztoyalhualco 15B:N6W3, we also had evidence of patron gods related to particular families. A stucco rabbit sculpture was found on a miniature Teotihuacan temple-shaped shrine

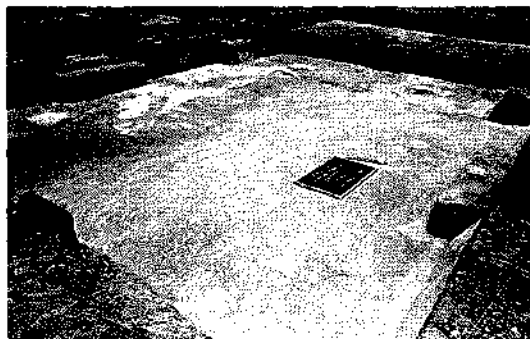


Figure 17. The main courtyard (C41) of Oztoyahualco 15B:N6W3 (5.5 x 4.5 m).

(made of basalt) in one of the ritual patios (see Figure 10).

There were three ritual courtyards in the Oztoyahualco compound, each corresponding to a household; the largest one (C41) probably also served the compound group as a whole and was called the "Red Courtyard," due to its mural paintings (Figure 17). It was the only one with a central altar in its lower construction level. The second one (Courtyard 25) had evidence of theater-type censers; many Aztec pits in this court-

yard disturbed offerings or burials. The third one (Courtyard 33) contained the miniature temple with the rabbit sculpture mentioned above (see Figure 10).

Some activity areas related to ritual preparation were detected around these courtyards. At Oztoyahualco 15B:N6W3, in the corner of C9 (near the main shrine), a concentration of 58 obsidian prismatic blade fragments, a basalt hammerstone, and a limestone half sphere (with radial cutting marks probably caused by the continuous cutting of rabbit and hare limbs) (Figure 18) were found (Hernández 1993; Manzanilla 1993b). There also were numerous funerary and offering pits, particularly in the eastern half of the compound. The northeastern household (Household 3) had the most burials, and also the greatest quantities of foreign fauna: bear, jaguar, mother-of-pearl, and other marine shells (including *Spondylus calcifer*).

Religion should be seen as a sphere of sociopolitical integration organized into a hierarchy in which the patron gods of household groups and barrios, occupational deities, the gods of specific priestly groups, and state deities (such as

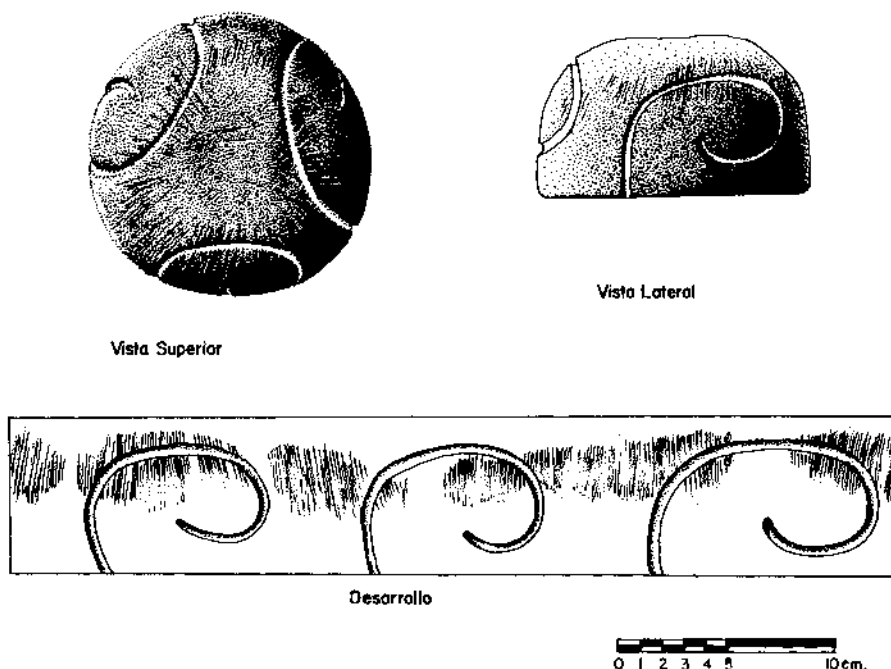


Figure 18. A limestone half sphere found in C9 in association with prismatic blade fragments and rabbit and hare limb bones.

Tlaloc) are superimposed (Manzanilla 1993a). Teotihuacan society was integrated mainly through religion. The conception of the four courses of sacred space permeated the domestic domain of Teotihuacan (Manzanilla 1993b). Spatial patterning seems to have been established for the disposition of functional sectors, which extended beyond the framework of the nuclear household. Thus, in general, storage zones were found to the west; those for refuse to the south; funerary areas were concentrated in the middle of the eastern sector (although exceptions exist); and neonate burials were located primarily on a north-south band, in the eastern third of the compound. The affinity for order so patently manifest in the grid system of the city finds its correspondence on the domestic level as well.

Burials and Foreign Raw Materials

Burials are common in domestic contexts. However, with the exception of Tlajinga 33 and probably La Ventilla, the number of adults interred in each compound is too low, relative to the area of the compound, to account for most of its inhabitants. For example, 7 burials are recorded for Xolalpan, 13 for Tlamimilolpa, and 18 for the compound at Ozttoyahualco 15B:N6W3 (see Figure 7). Perhaps other adults, particularly women, were buried elsewhere.

Certain burials in each compound had rich offerings. Burial 8 at Ozttoyahualco (see Figure 12) was exceptional, for it contained a 22-year-old male adult with an intentionally deformed skull that was associated with an impressive theater-type incense burner (see Figures 13 and 14) (Manzanilla and Carreón 1991). In what seems to represent a funerary ritual, the incense burner appliqué were removed from the lid, and all were placed around the deceased. The chimney was deposited toward the west, with the lid and the figure to the east of the skull. Representations of plants and sustenance (ears of corn, squash, squash flowers, cotton, tamales, tortillas, and perhaps amaranth bread) were placed to the south; the four-petaled flowers, roundels representing feathers, and mica disks were situated to the east and west.

Although Ozttoyahualco 15B:N6W3 had only 18 burials, fewer than were found at Tlajinga 33 (Storey 1983, 1987, 1992) or La Ventilla "B"

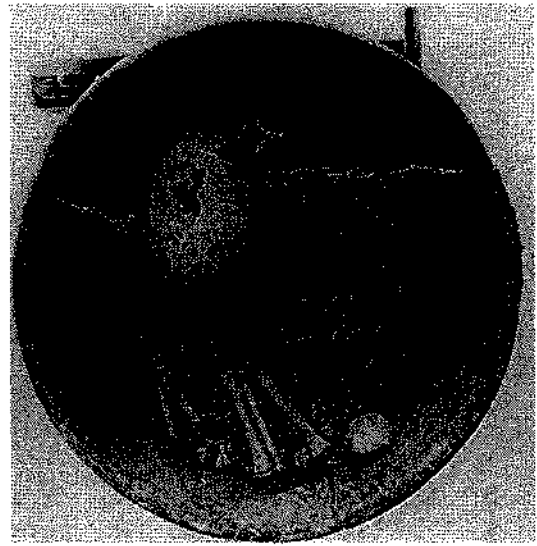


Figure 19. Burial 11, a new-born baby inside a bowl (23 cm in diameter) found in C22.

(Serrano and Lagunas 1974), there are important conclusions regarding these data. We hypothesized that there were three nuclear households at Ozttoyahualco. The first household, in the southeastern section, is represented by only three burials. The second, in the western portion of the compound, also has three burials, all adults. The third, in the northeastern section, has 11 burials, of which six represent new-born babies (Figure 19) and children (see Storey 1986).

This overrepresentation of burials belonging to particular sectors of the apartment compounds is also noted for Xolalpan (see Figure 2), where nearly all the burials are concentrated in the southwestern section. At Tlamimilolpa (see Figure 3), nearly all are grouped in the central-southern section; at Tetitla (see Figure 4), they are concentrated in the northeastern section. It seems there is one family that is well represented with respect to funerary practices; the rest are under-represented.

Each household at Ozttoyahualco 15B:N6W3 had one or two burials that stood out because of their grave goods (Burial 8 for unit 1, Burial 13 for unit 2, and probably Burials 10 and 1 for unit 3). Burial 8 was the most outstanding of the compound group as a whole.

Theater-type censers were used frequently at Xolalpan (where they are found in the altar and in

a western courtyard) and Tlamimilolpa (where they are grouped around Burial 4 and kept in caches, ready for ritual use). Decorated tripods also are common at Xolalpan and Tlamimilolpa, but very rare—although present—at Ozttoyahualco. Probably one difference lies in the presence of Maya fine wares in the western portion of Xolalpan and in the central part of Tlamimilolpa, possibly due to their proximity to the Merchants' Barrio. Other imported wares, such as Thin Orange and Granular wares, are present in all compounds. Exotic raw materials such as mica, slate, and marine shells, were present in burials at Xolalpan, Tlamimilolpa, and Ozttoyahualco, although there are differences in quantity and in the proportion of Pacific vs. Atlantic shell species.

Conclusion

At Ozttoyahualco 15B:N6W3 there was, in general, a clear differentiation among the various sectors of the structure. The southern sector was associated with refuse. Areas for food preparation and consumption, as well as the sleeping quarters, were set around the central portion of the compound. The eastern sector was rich in funerary and ritual components. The western sector was devoted to storage. Finally, the northwestern sector had the largest courtyard, probably the compound's meeting place.

The compound was transformed by closing circulation alleys and accesses when the family structure changed. Distributional maps of all types of archaeological materials—ceramic types, obsidian, polished stone, bone, antler, and shell, as well as chemical compounds, pollen, phytoliths, seeds, and faunal macrofossils—help identify activities and choices particular to each nuclear household.

(1) Matte and Red Hematite wares and symbols of the Butterfly God are associated with Household 1, situated to the south. This household has the largest concentration of prismatic blades and is the locus for the ritual butchering of rabbits.

(2) Household 2, to the west, used black, brown, Copa, Granular, and San Martín wares. It was characterized by rabbits and hares held in captivity, the butchering of animals for consump-

tion, and activities where side- and end-scrapers were used. Foreign wares and minerals were more prevalent in the household, as were symbols of fire.

(3) Household 3, to the northeast, was the poorest in pottery diversity, having a concentration of orange and Thin Orange wares, together with Tlaloc symbols. Differences between the ceramic assemblages associated with each household may indicate either differences in access among households and/or domestic distinctions in ritual and other activities.

One of the great problems in comparing the Ozttoyahualco compound with others excavated at Teotihuacan is that, in the latter cases, a high percentage of the data comes from small-scale excavations, with no context control. Comparing these data with those collected during the controlled, large-scale excavations at Ozttoyahualco can only be handled through presence/absence.

When we take into consideration the presence/absence of botanical and faunal resources, as well as exogenous raw materials, we conclude that differences in access were relatively slight between compounds. There may be a whole range of socioeconomic possibilities, with no clear-cut distinctions between groups in the urban setting. One may think that there are differences in quantities, but the problem is the comparability of the samples.

However, differences exist among the specialized activities enacted by household groups of different compounds. Dominant activities also vary by households, suggesting group and family specializations. Differences in the number of high-status products, particularly decorated ceramic tripods or mural paintings, and variability in the quality of construction itself have been noted.

One household in each compound seems to have been the most active in linking the household group to the urban hierarchy. The preponderance of Tlaloc cult items (Tlaloc vases, figurines, and representations in "handled covers") in Household 3 suggests its members served this role for Ozttoyahualco 15B:N6W3.

If Millon (1981:209) is right in proposing that the apartment compounds are a byproduct of state decisions to control the population of the city,

then further research might focus on the articulation between these social units and urban organization as a whole at Teotihuacan. It also may be worth considering whether the inefficiency of the state bureaucracy, and its inflexibility to change, which may ultimately have caused its collapse (Millon 1988), was in part provoked by the difficulty of harmonizing the interests of such a vast array of ethnic, occupational, and social groups.

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