

AperTO - Archivio Istituzionale Open Access dell'Università di Torino

Excavations at the Southern Neighborhood Center of the Tlajinga District, Teotihuacan, Mexico

This is a pre print version of the following article:

Original Citation:

Availability:

This version is available <http://hdl.handle.net/2318/1955533> since 2024-02-12T14:07:49Z

Published version:

DOI:10.1017/laq.2021.17

Terms of use:

Open Access

Anyone can freely access the full text of works made available as "Open Access". Works made available under a Creative Commons license can be used according to the terms and conditions of said license. Use of all other works requires consent of the right holder (author or publisher) if not exempted from copyright protection by the applicable law.

(Article begins on next page)

**EXCAVATIONS AT THE SOUTHERN NEIGHBORHOOD CENTER OF THE TLAJINGA DISTRICT,
TEOTIHUACAN, MEXICO.**

David M. Carballo, Luis Barba, Agustín Ortíz, Jorge Blancas, Daniela Sariñana Hernández, Maria Codlin,
Alfredo Saucedo, and Gloria Dolores Torres Rodríguez

DO NOT CITE IN ANY CONTEXT WITHOUT PERMISSION OF THE AUTHORS

David M. Carballo, Daniela Sariñana Hernández, and Maria Codlin, Anthropology Department and Archaeology Program, Boston University, 675 Commonwealth Avenue, Suite 347, Boston, MA 02215, USA (carballo@bu.edu, corresponding author).

Luis Barba, Agustín Ortíz, Jorge Blancas, and Alfredo Saucedo, Instituto de Investigaciones Antropológicas and Estudios Mesoamericanos, Universidad Nacional Autónoma de México, Ciudad Universitaria, Ciudad de México, 04510, MEXICO.

Gloria Dolores Torres Rodríguez, Zona de Monumentos Arqueológicos Teotihuacan, Instituto Nacional de Antropología e Historia, Carretera México - Pirámides 46.5 Teotihuacán, Estado de México, MEXICO.

Abstract

Investigations of the Proyecto Arqueológico Tlajinga Teotihuacan (PATT) in 2019 focused on the southern neighborhood center of this cluster of non-elite residences in the southern periphery of the ancient Mexican metropolis. Research objectives included understanding the social infrastructure of public space within the district and how it tied its inhabitants together. Methods included excavations at two large architectural complexes, geophysical prospection of the same as well as adjacent structures and plazas, and floor and sediment chemical residue analysis. They revealed architecturally elaborate complexes decorated with mural painting that appear to have been the loci of civic-ceremonial activities. Materials from the excavated portions of the complexes are inconsistent with residential uses, though it is possible that local elites lived elsewhere in the complexes or in nearby ones. The investigations therefore demonstrate that the semipublic spaces of neighborhood centers on the periphery of Teotihuacan could be as elaborate as those in the urban epicenter, underscoring the city's more muted social inequality.

Resumen

Las investigaciones en 2019 del Proyecto Arqueológico Tlajinga Teotihuacan (PATT) fueron enfocadas en el centro del barrio de esta concentración de conjuntos no élite en la periferia sur de la antigua metrópoli. Entre las metas principales se incluye mejorar el entendimiento de la infraestructura social de espacios públicos en el distrito y como estos vinculaban a sus habitantes. La metodología de estudio incluye excavaciones en dos complejos arquitectónicos de gran tamaño, prospección geofísica de los mismos en las estructuras y plazas adyacentes, y el estudio de residuos químicos en pisos y suelos. Los resultados revelaron conjuntos arquitectónicos bien elaborados y decorados con pintura mural, por lo que parecen haber servido para actividades cívico-ceremoniales. Los enriquecimientos químicos y los artefactos procedentes de las excavaciones son inconsistentes con un uso residencial. Es

posible que las élites locales vivieran en otras partes de los complejos o en estructuras cercanas a ellos.

Las investigaciones demuestran que los espacios semipúblicos de los centros de vecindarios en la periferia de Teotihuacan podían ser tan elaborados como los del centro de la ciudad, sugiriendo menores niveles de desigualdad social.

Current research at Teotihuacan indicates that public life in the residential districts of the city revolved around neighborhood centers featuring multifunctional spaces with temple complexes, plazas, civic buildings, and residences of inhabitants that were of higher social status relative to the average within any given cluster of neighborhoods. Teotihuacan's districts and wards are also termed *barrios*, and members of the Teotihuacan Mapping Project (TMP) defined these based on spatial proximity and degrees of similarity in the architecture of apartment compounds and the artifact assemblages recovered during surface collections (Millon 1973: 40-41; Altschul 1987; Robertson 2005; Smith et al. 2019). Spatial segregation in clusters of neighborhoods on the urban periphery and the presence of certain bounding walls in the urban epicenter help to identify what might have been socially meaningful units that organized labor and taxation as well as local civic, ritual, and market functions. We retain this definition of district as opposed to a larger quadripartite division of the city better termed quadrant or sector (e.g., Manzanilla 2012a: 65; Von Winning 1987: 72).

Investigations of the Proyecto Arqueológico Tlajinga Teotihuacan (PATT) are centered in a residential district located in the south of the ancient city (Figure 1). Tlajinga's separation from the rest of the city to the just south of the San Lorenzo River, where it represents the last dense cluster of apartment compounds, makes its identification as a district easier than in other cases without such clear bounding (Widmer and Storey 1993, 2012). The district straddles both sides of the southern extension of the Street of the Dead, spanning two quadrants, but most of its structures are located to the west of this central artery, including those discussed in this paper. Primary objectives of the PATT are to understand the processes of urbanization, district and neighborhood organization, and diversity in domestic life relating to socioeconomic status in this southern urban periphery. Earlier field seasons (2012-2014) focused on residential areas and the unique form of multi-family housing at Teotihuacan known as apartment compounds, as well as along the southern extension of the city's central axis, the

Street of the Dead (Carballo 2017, 2019; Carballo et al. 2019). Fieldwork in 2019 shifted focus to a portion of Tlajinga's neighborhood center.

To date, the largest carefully executed exposures of neighborhood centers at Teotihuacan have been undertaken by Rubén Cabrera Castro, Sergio Gómez Chávez, and colleagues at La Ventilla and by Linda Manzanilla and colleagues at Teopanacazco (Cabrera Castro 1996; Cabrera Castro and Gómez Chávez 2008; Manzanilla 2017). These investigations currently provide the best understanding of the social and spatial organization of districts and the centrality of neighborhood centers as nodes of urban life. Combining insights from these researchers, key elements of Teotihuacan neighborhood centers include the following: (1) public buildings that served ritual ("temple") or administrative ("civic") functions; (2) large open plazas between complexes and interior patios or courtyards within them capable of accommodating public or semi-public gatherings such as marketplaces, ballgames, dances, and processions; (3) centralized food preparation and storage facilities with aligned kitchens and storerooms capable of providing food and drink during large group gatherings; and (4) residences of local nobles representing an intermediate elite within the city's social hierarchy and who were the highest ranking in a given district (Gómez Chávez 2012: 81-90; Manzanilla 2017: 32-33). Whereas the first three of these represent clear instances of the social infrastructure of Teotihuacan's neighborhoods—areas designed for public interaction in activities that would have fostered some sense of community identity (*sensu* Klinenberg 2018)—the residences of intermediate elites, while capable of holding semi-public functions, would have reified hierarchical relations present in neighborhoods and the city as a whole (Manzanilla 2012a, 2015).

Based on existing information from neighborhoods of the city, researchers suggest that well-known Aztec corporate social groups (the *calpulli* or *tlaxilacalli*) may have their origins in Teotihuacan apartment compounds and neighborhoods, since these featured similar types of social infrastructure in public spaces as well as internal stratification whereby commoners and elites belonged to the same

group (Fargher et al. 2017; Gómez Chávez 2012). Such a precursor status may prove accurate but would be bolstered by a larger sample of excavated neighborhood centers from the city in order to both understand their social roles within the urban fabric of Teotihuacan and any of their legacies to later central Mexican civilizations. In approaching Tlajinga's neighborhood center we were particularly interested in evaluating traces of activities associated with different structures and plazas, assessing their construction sequences and degree of architectural elaboration, and comparing these with apartment compounds at Tlajinga and neighborhood centers elsewhere in Teotihuacan. Doing so allows us to gauge how Tlajinga's neighborhood center functioned within the district and what it indicates more broadly about status variability between the center and periphery of the city.

Field Methods

Excavations were planned in concert with community members from San Pedro Tlajinga through conversations with local stakeholders and a public event involving social mapping, where we looked to identify areas of potential interest for research that would not disrupt the rhythms of daily life in the community (e.g., Lightfoot et al. 2014). Prehispanic Tlajinga's neighborhood center likely comprises the structures on the large platform on the western border of the Street of the Dead, spanning eastern portions of grid squares S3W1 and S4W1. To the north is a cluster of mounds mapped by the TMP as a triadic group, which could be the primary temple complex for the district and whose largest mound is designated 7:S3W1. No controlled excavations have been undertaken in this area, but there is evidence of contemporary exploratory digging and we previously registered portions of the complex using magnetometry and ground-penetrating radar (Blancas et al. 2019).

To the south are three large elevated complexes, designated 1, 2, and 4 of S4W1. The center points of each are approximately 100 m apart from one another and the area is bisected by railroad tracks, a dirt road, and the towers of overhead powerlines. Complex 4:S4W1 is topographically the

highest mound in the district and measures some 50 m on a side. The fact that Complex 1:S4W1 was bisected by railroad construction accounts for its disturbed topography depicted in Figure 1.

Contemporary pits excavated into Complexes 1 and 4 and the dirt road crossing Complexes 2 and 4 have left portions of walls and floors exposed, which alerted us to the fact that all three are well made structures, with their walls and floors covered in concrete and lime-stucco typical of more elaborate architecture at Teotihuacan. They contrast with the apartment compounds excavated thus far at Tlajinga, which are not elevated from the ground surface and whose construction is a mix of stone and adobe walls with scarce application of concrete and lime-stucco within courtyards. The complexes in this southern portion of the neighborhood center therefore appeared to be of more substantial construction than typical domestic architecture at Tlajinga and a possible complement to the mound group to the north centered at 7:S3W1.

Through community-engagement events, we identified Complexes 1, 2, and 4 and open areas to the north of the last and in the center of the district for study. We opened excavations at the most elevated portions of Complexes 2 and 4 and explored other areas using remote-sensing techniques and auger probes, in the case of the two open areas. A modern cut to the north of Complex 4:S4W1 provided a reference point for establishing an excavation grid of 2 x 2 m units oriented to the *talud-tablero* façade of the platform on which the complex sits. Excavations proceeded with the goals of exposing architecture to define spaces and cultural features and to uncover floors for chemical analysis.

The discovery of mural fragments in both complexes was illuminating in demonstrating the decorative elaboration of the complexes while at the same time necessitating a slower pace for the excavations in order to document spatial patterns of the majority of fragments found scattered in structural collapse layers and to conserve those few areas with fragments still adhering to walls. For the in situ conservation of stucco-coated surfaces, materials used in cementing and filling consisted of sand, sediment from the excavations, and slaked lime, with distilled water, alcohol, and 5-7% ammonium

carbonate as cleaning solvents, and sodium carboxymethyl cellulose, casein, and cellulose pulp as chemicals for other conservation processes. For a few mural fragments extracted from structural collapse we reconnected adjoining pieces using a synthetic adhesive (Mowital, at 8-10% xylene), due to the thickness of the backing concrete (6-8 cm) requiring harder adhesive than lime. All architecture remains were reburied at the conclusion of the field season.

Architecture and Depositional Contexts at Complexes 2 and 4

Excavations were the most intensive in Complex 4, with a total volume of 91.4 m³, whereas the exposure in Complex 2 was roughly a third this volume at 30.2 m³. In both cases, we uncovered portions of interior patios or courtyards with surrounding structures. As the larger exposure, the layout of structures in Complex 4 remains clearer (Figure 2). Here, a central patio is surrounded by two structures to the east and south with a likely third to the west, where we did not excavate. Given that the external wall to the basal platform of the complex is located under 4 m from the northern limit of excavations, there would not be space for another structure to the north similar in size to those that were uncovered. Extrapolating from the excavated sections, the patio should therefore have a total area of 64-80 m². This is approximately half the area of primary patios at compounds such as Tetitla and under a quarter of the largest at La Ventilla's neighborhood center (Manzanilla 2006: Table 1). Nevertheless, its positioning at the edge of Complex 4 might indicate it served as a secondary patio or courtyard, similar in size to the second largest examples at Tetitla and Zacuala, and a larger one could be located elsewhere in unexcavated parts of the complex.

The structure east of the patio was designated Structure 4A; it was the most fully excavated and we documented two earlier construction phases. Whereas the front *talud* walls of Structure 4A were preserved to a height of 1 m, the staircase and central axis were partially destroyed following its abandonment. Being close to the modern surface, the final floor was also largely stripped away, and our

excavations instead exposed the penultimate construction phase, Structure 4A-sub. This substructure featured a mix of stone and adobe, and a grid of box-and-fill walls made of adobe and uncut stone was erected on top of the penultimate floor to raise the living surface in constructing the final structure on the earlier one.

Structure 4B is the designation for the building to the south of the patio and is more elaborately built and decorated. Facing the patio is a complete *talud-tablero* façade and two steps leading to a portico whose walls have mural fragments preserved in situ. Behind the portico is a room with other preserved mural fragments. Most fragments were likely associated with Structure 4B and were encountered in the patio at the corner of Structures 4A and 4B. Their motifs are discussed in a section to follow. Other deposits of note include fragmented ritual incense burners found in the approximate center of the patio (Feature 49) and two cache deposits at the east (Feature 44) and south (Feature 46) axes of Structure 4A. The incense burners were found in the fill of a post-collapse intrusive pit that may have seen the removal of a central altar from the patio. They include fragments of a stone sculpted Old God of Fire (*Huehuetēotl* in Nahuatl) and of a ceramic composite censer. Both are consistent with ritual activities in the patio. Another large ceramic fragment from Feature 49 was part of a fine-grey ware cup likely imported from southern Puebla or Oaxaca (Figure 3b).

Feature 46 is a cache deposit associated with Structure 4A-sub. The complete miniature vessels and single-chamber *candeleros* from the feature are consistent with a Late Tlamimilolpa phase (250-350 CE) interment, whereas associated sherds are a majority (59 percent) this phase designation but also contain significant (27 percent) representation from the subsequent Early Xolalpan phase (350-450 CE). As a result, we interpret the deposit and associated substructure as dating to late in the Late Tlamimilolpa phase or in the transition to Early Xolalpan—mid to late fourth century (see Carballo et al. [2019: Table 1, Figure 12] for radiocarbon dates from elsewhere in Tlajinga).

Feature 44 is a large, square, clay-cemented stone box that was constructed on top of Structure 4A-sub likely as a consecration offering made in the construction of Structure 4A. The fill within the box and mounded up immediately around it was a very intentionally placed, homogenous sand that is atypical in the stratigraphy of Teotihuacan. One of the most abundant materials in the offering were shell beads, with a majority of these made from spiny oyster (*Spondylus* spp.) from the Pacific coast (see Figure 2). Combined with the sand fill, it could mean that the offering held aquatic symbolism, as appears to have been the intent in an offering from Teopanacazco's neighborhood center, where Ortíz (2015:163) excavated a pit offering just west of the central patio filled with layers of fine sand and shell (see also Manzanilla 2012b:493). Nevertheless, another major class of offering in Feature 44 at Tlajinga were small square beads made from minerals, including polished iron ore and pyrite. The first are not yet identified but display ferromagnetism when hung from a string and introduced to a common magnet, possibly indicating they are magnetite rather than hematite. Both are relatively rare as lapidary material at Teotihuacan, including elsewhere at Tlajinga (Gazzola 2005; Widmer 2019: Table 1). Other contents included sheets of mica and disarticulated bone. Of the bone, the largest fragments were of a human femur and partial mandible, while the rest were small and splintered. High ash concentrations associated with the bone could indicate that they were redeposited from a cremation, but this possibility requires further study. A majority (38 percent) of the associated ceramic sherds correspond to the Xolalpan phase (350-550 CE), and we would place Feature 44 somewhere in the middle of this phase, during the mid-fifth century.

In considering the possible functions of Structures 4A and 4B and their adjoining patio it is worth noting that no sub-floor burials typical of residences at Teotihuacan were encountered. Although the few remains from Feature 44 may represent redeposited remains, they would be a small fraction of a complete individual. Another notable absence typical of residences are grinding tools such as manos and metates. One corner piece of a sculpted metate was recovered from Complex 4 (Figure 3e), but this

class of artifact was relatively scarce, inconsistent with food production activities in the patio group. Metates with sculpted motifs on sides could have also been used for grinding pigments used in mural painting, as suggested by Séjourné (2002[1966]: 217-218), or future microbotanical study could show evidence for pigment grinding as Zurita Noguera et al. (2013) have documented at the Teopanacazco neighborhood center.

Excavations at Complex 2 were more limited than at Complex 4 but discovered a comparable spatial context in uncovering a portion of an intermediate sized patio or courtyard with adjacent building whose walls were decorated with murals, the documentation of which slowed the pace of excavation. Only portions of an eastern building (Structure 2A) and earlier construction underneath it (Structure 2A-sub) were excavated, including exposure of part of the entrance steps, frontal portico, and interior room of the first (Figure 4). The few wall segments uncovered in Structure 2A-sub were of nicely made adobe bricks covered in clay from interior walls rather than the cruder box-and-fill adobe walls used in raising the floor from Structure 4A-sub to Structure 4A. Yet this indicates that in both complexes the penultimate construction layers were less elaborate than the final ones in having a mix of stone and adobe walls and no clear signs of mural art. Tops of walls are visible in the road that traverses the complex, indicating there is also another structure to the south of the patio of Complex 2.

An out-curving bowl of polished, monochrome ware was discovered along with a fragment of a human cranium as a cache offering (Feature 48) associated with Structure 2A-sub (Figure 3a). As with the ceramics in Feature 46 of Structure 4A-sub, the vessel is diagnostic of the Late Tlamimilolpa phase (250-350 CE) and suggests the two structures were generally contemporaneous. Another offering coupling pottery vessels and human bone was found on the final floor of the patio but represents a later reoccupation of the area during the Mazapan phase (850-1050 CE). The assemblage consists of a tripod bowl (Figure 3c), a flat-bottomed bowl, and a small dish (Figure 3d), all three of which are decorated. The tripod is a Macana Red-on-Brown vessel with interior decoration in negative and incised

crosshatches on the basal interior, consistent with use as a *molcajete* for grinding chiles or making salsa. These were found by Manzanilla and colleagues (1996: 250) in the anthropogenic caves behind the Sun Pyramid associated with radiometric dates spanning the eighth to tenth centuries. This dating is also consistent with radiocarbon dates on bone and wood from an intrusive Mazapan burial, also accompanied with vessels, from Complex 17:S3E1 at Tlajinga (Carballo et al. 2019: Table 1). It is further evidence of rural occupation at Tlajinga during the Terminal Corral and Early Tollan phases of the Toltec capital of Tula.

Mural fragments were concentrated in the interior room of Structure 2A where they were exceedingly dense. Most were recovered on top of a red-painted stucco floor in the small (c. 1.2 x 1 m) exposure of the interior room. The northern wall of this room had been ripped out and may have been the source of the mural fragments following an act of purposeful destruction and interment of the fragments. There was also mural painting directly on one large adobe from this room and on a large, nicely cut rectangular stone block found face-down in the portico (see Figure 4). This block has part of a frieze of painted green disc-beads termed *chalchihuites* in Nahuatl and used by the Aztecs in decorating more elaborate buildings. The ranch overseer of Rancho Tlajinga, whose property the excavation area sits on, informed us that a large cut stone block with part of a sculpted frieze of discs motifs was encountered during agricultural work on Complex 1:S4W1, and is now in the ranch owner's possession. We can therefore extrapolate that all three complexes contained elaborately made and decorated structures.

Geophysical Studies

Prospection using magnetic gradient analysis was undertaken in two gridded blocks to the north and south of the excavations, providing additional information on architectural alignments to the northern platform and Complex 1:S4W1 (Figure 5). The platform grid measured 60 x 20 m and covered

an area where community members, and occasional archaeologists, gather to play soccer on an informal pitch. The magnetic gradient map documents dipoles suggesting the subsurface presence of stone alignments, yet none form closed rooms or structures. Wall alignments to the west are thicker than those to the east are and correspond to Structure 11:S4W1 of the TMP. The grid on top of Complex 1:S4W1 measured 40 x 40 m, with an eastern segment of 20 x 10 m unanalyzed because of surface disturbances. The prospected area revealed subsurface walls of different sizes with some alignments well defined as rooms while the organization of other spaces were obscured by accumulated structural debris. To the center-south of the area is a possible patio of dimensions (approximately 15 x 15 m) falling between the largest one at Tetitla and La Ventilla (Manzanilla 2006: Table 1). Excavations in the future would verify the spatial organization of the complex, but the prospection suggests similarities to that encountered in excavations at Complexes 2 and 4.

Chemical Residues in Floors

At the conclusion of the excavations in Complex 4 a total of 56 samples of floor surfaces were taken from the two construction episodes (Figure 6). Samples from the substructure 4A-Sub1 (n=18) displayed low values of phosphates, protein residues, and carbohydrates and an absence of fatty acids. The low values of carbonates indicate the floor was not covered with lime stucco. The low values of other chemical markers are inconsistent with the structure's use as a residence, or at least in those rooms that were sampled, and the structure may therefore have served an administrative or storage function. An alternative explanation is that the occupation of the structure was very short and did not allow for the accumulation of many absorbed residues.

Structure 4B represents the subsequent and final construction episode at the complex and samples (n=38) were taken from its frontal patio, portico, and interior room. The exhibit a clear difference from Substructure 4A-Sub1 in registering high values of chemical residues. High values were

registered especially in parts of the patio and the interior room. They could also be associated with more administrative or ritual activities, as opposed to domestic habitation. High values of pH may indicate ash from the termination of the structure at the end of the city's Classic period occupation, though macroscopic evidence of large-scale burning was not observed during excavations.

Mural Symbolism

In addition to the lines of evidence gathered from architectural, artifact, and chemical distributions, the motifs and symbolism in the recovered mural fragments provide important lines of information regarding the elaboration of the complexes relative to other parts of Tlajinga and other parts of the city and could shed light on possible uses and activities in these spaces. Analysis of the iconography and pigmentation of mural fragments is ongoing, but several general observations can be made regarding their quality and the themes represented. Motifs discovered in situ in the portico and interior room of Structure 4B share thematic similarities to others discovered in Teotihuacan's urban epicenter (Figure 7). Among these are murals from a complex at the foot of the Sun Pyramid, called the Palace of the Sun, Zone 5A, or by its grid designation of 13:N4E1 (Figure 7h). Murals from Portico 13 and Room 13 in this complex feature scenes of birds with song scrolls, volutes of "water" scrolls, butterflies, and four-petaled flowers (de la Fuente 2001: 70-74; Magaloni-Kerpel et al. 2020: 199-205; Miller 1973: 80-82). The central figure in the Portico 13 murals is a Net Jaguar, while that of the Room 13 mural is the celestial Great Bird being shot down by blowgun, known from pan-Mesoamerican mythologies (Nielsen and Helmke 2015). Any larger central figures from the Tlajinga 4B mural remain unclear. Fragments of at least two birds were recovered, the most complete of which features a combination of a hooked beak tip and plumage mixing a speckled upper interior wing and striped lower interior wing (Figure 7f). These could be attributes indexing black hawk-eagles (*Spizaetus tyrannus*) proposed for bird depictions in other murals of Teotihuacan (Navarrijo Ornelas 2001: 331). There is at least one claw motif

in the collection as well as star elements (Figure 7c) like depicted in the Zone 5A Portico 13 mural and in one from Room 13, but other pieces are too fragmentary or ambiguous to match presently.

Nevertheless, the backdrop seems consistent with one depicting a Teotihuacano paradise featuring birds, butterflies, and flowers seen in murals from Atetelco, the Palace of the Sun, Tepantitla, and in other imagery from the city, which may have symbolized a glorious afterworld for warriors, women who died in childbirth, or others who died for valiant causes (Helmke and Nielsen 2017: 132-133).

Geometric bands from Complex 4 feature sequential motifs identifiable as water scrolls and rhomboid elements separated by vertical lines known from the braziers of the Old God of Fire to represent that fundamental element, between which are disc motifs (Figure 7g). The coupling of water and fire bands is seen on other murals at Teotihuacan, such as at the Totometla compound, and represents a clear precursor to the well-known Aztec *difrasismo*, or metaphoric couplet, *atl tlachinolli* “the water, the burning” (Juárez Osnaya 2014: 248-259). The couplet is often glossed in English as “burning water.” It was a pan-central Mexican concept in the sixteenth century, shared by Nahuas and Otomis, and was associated both with war and as a fundamental creative force (Séjourné 1976: 99-110; Wright Carr 2012). If the band of disc motifs between the water and fire bands represents jade beads, as is often interpreted, it may convey a sense of “precious” burning water (see Angulo Villaseñor 2001: 77), perhaps precious war or creation.

Mural fragments from Complex 2 feature a feathered eye as a dominant motif and there are a dozen or more individual elements of these encountered from an area of only approximately 2 m² (Figure 8). Other motifs include lattice-like triangles with curling interior lines, discs, stars, and vertical lines. Green lattice and disc motifs are present on murals from Room 12 at Tetitla, and the green feathered eye is seen on depictions of birds or bird-headdresses at that compound and elsewhere, as well as on a depiction of the Storm God on the temple-shaped altar in Atetelco’s central patio (Miller 1973: 147, 151, 164-165). The feathered eye is also seen on the murals of Techinantitla, both embodied

on the Feathered Serpent and various birds and disembodied as a glyphic element on one of the flowering trees (Berin 1988). Langley (1986: 249-251) records four variants of feathered eye signs, with those from the Tlajinga Complex 2 mural unlike any of them in all details (see also Urcid 2013: 856-863). None match the particular combination as seen in Tlajinga Structure 2A where the eyes are fully disembodied (Figure 8a, Figure 8d), not clearly part of glyphic compound, and positioned among the green lattice and scrolls. It is possible that the larger composition featured feathered eyes within a diagonal lattice, somewhat like mural 2 of Portico 25 at Tetitla, which features depictions of full birds between lattice. Alternatively, those from Complex 2 at Tlajinga could represent stylized icons of birds, perhaps quetzals because of the green plumage, and the central curve in the scroll motifs is iconic of a curled wing (Figure 8c), as is seen in full depictions of birds elsewhere in the city's art (Navarijo Ornelas 2001: 335; Urcid personal communication 2020).

Conclusion

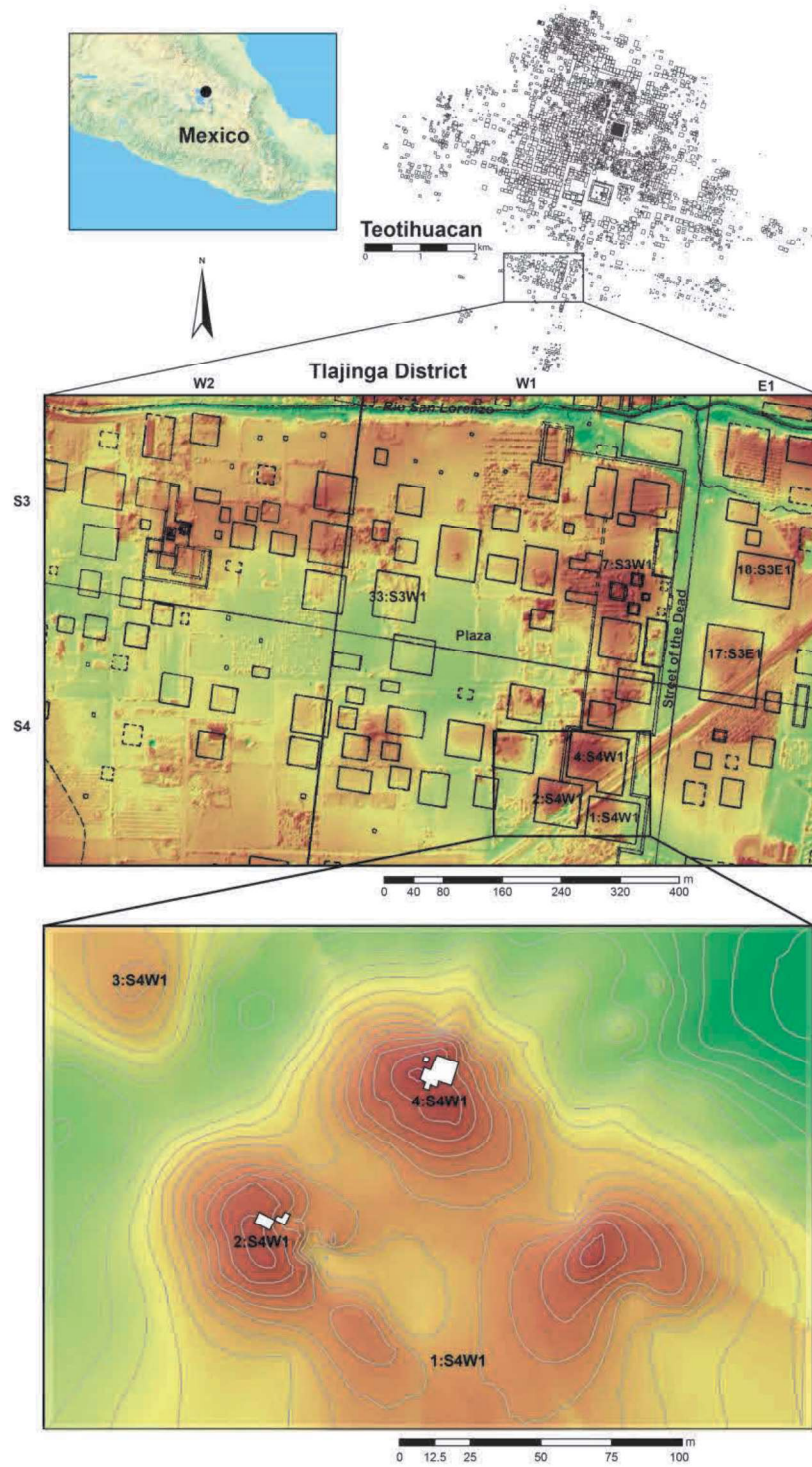
Recent investigations at Teotihuacan have illuminated ways in which social inequality could be muted relative to other Mesoamerican cities in some domains yet prevalent in others (Carballo 2020; Manzanilla 2006, 2012a, 2015, 2017; Smith et al. 2014, 2019). New field work at Tlajinga adds to our understanding of such issues by revealing portions of a southern district center featuring large, elaborately made and decorated platform complexes on the urban periphery. Although situated over 2 km from the Teotihuacan's epicenter, among dozens of apartment compounds made from simpler construction techniques and decorated minimally, if at all, Complexes 1, 2, and 4 of S4W1 stand out as elevated platforms with masonry construction techniques and mural and sculptural adornments characteristic of more elaborate buildings in the city center. Likewise, offering deposits such as Feature 44 contain long-distance trade items—particularly beads made from iron ore and spondylus shell—with relatively restrictive distributions within Teotihuacan's artifact inventories.

Mural themes, especially those encountered at Complex 4, appear to convey ultimate-sacred propositions (sensu Rappaport 1971) or high-level meaning (sensu Rapoport 1988) within Teotihuacano cosmology. Iconography of the murals, their association with patios or courtyards of an intermediate size, and little documentation of the sub-floor burials, chemical residues, and food-production tools such as made from ground stone, all support a working hypothesis that the excavated portions of Complexes 2 and 4 served semi-public functions. It is important to emphasize that all three platform complexes may have also had residential components; they are just not apparent from portions we have excavated and chemically analyzed thus far. Lab analyses are also ongoing and will provide other lines of evidence on which to base interpretations. Ritual incense burners encountered in the patio of Complex 4 are suggestive of a ceremonial space, though it also may have served functions associated with socialization and learning. As such, the complexes would have provided components of the social architecture of the Tlajinga district, as would the open platforms and plazas in the area for larger gatherings and the northern neighborhood center around 7:S3W1, which has only seen minimal investigations.

Acknowledgements

The investigations reported in this article were made possible by the financial support of the H. and T. King Grant for Precolumbian Archaeology of the Society of American Archaeology and by Luis Octavio Ruzo, to whom we are greatly appreciative. We thank the inhabitants of San Pedro Tlajinga and the Consejo de Arqueología and Zona Arqueológica de Monumentos de Teotihuacan, INAH, for their logistical and administrative support of the project. Jorge Archer, Citlali Coronel, Jesper Nielsen, David Wright Carr, Javier Urcid, and Maria Teresa Uriarte provided helpful suggestions regarding mural iconography. We dedicate the article to the memory of Pedro Cahuantzi Hernández, whose skilled hand drew the artifact illustrations and whose companionship on this project and others, and is greatly missed.

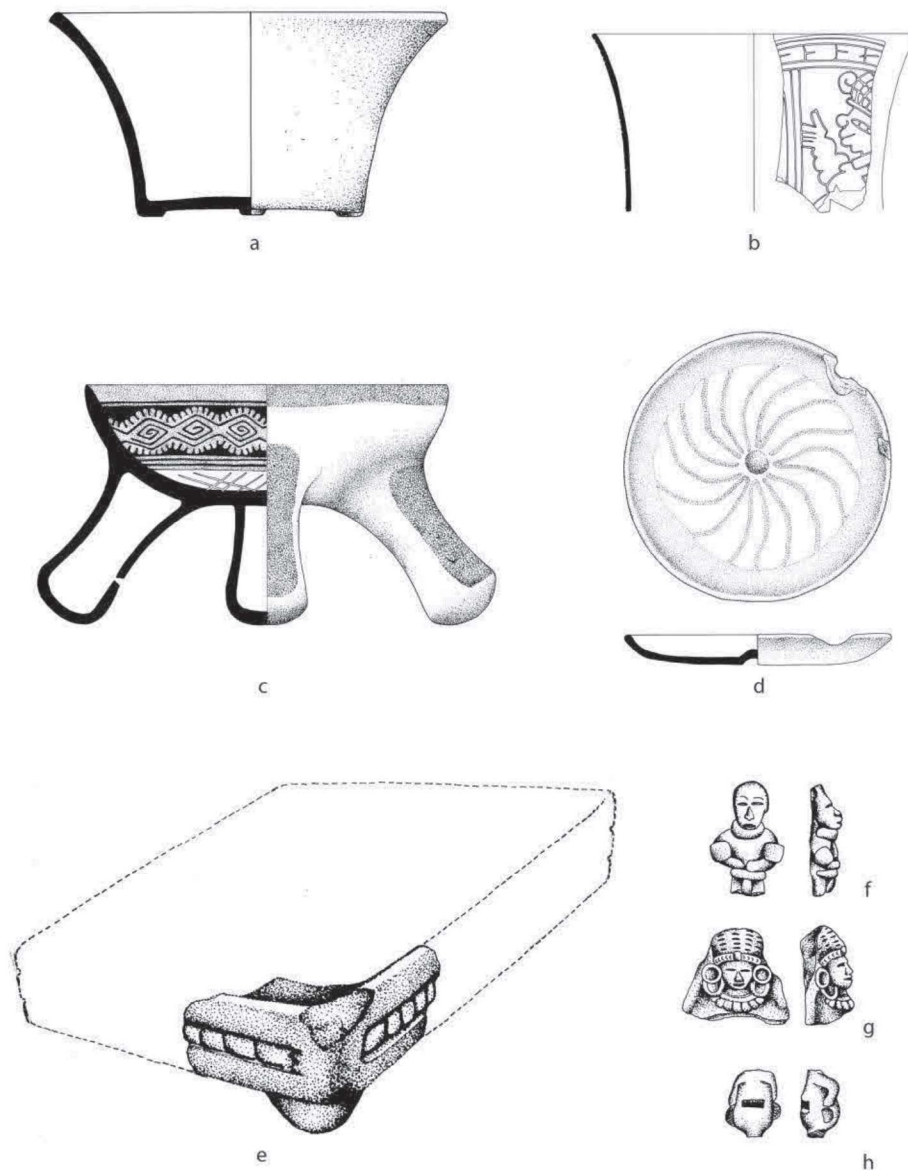
Figures



1. Location of Teotihuacan, Tlajinga district, and southern neighborhood center. Excavation areas are shaded white.



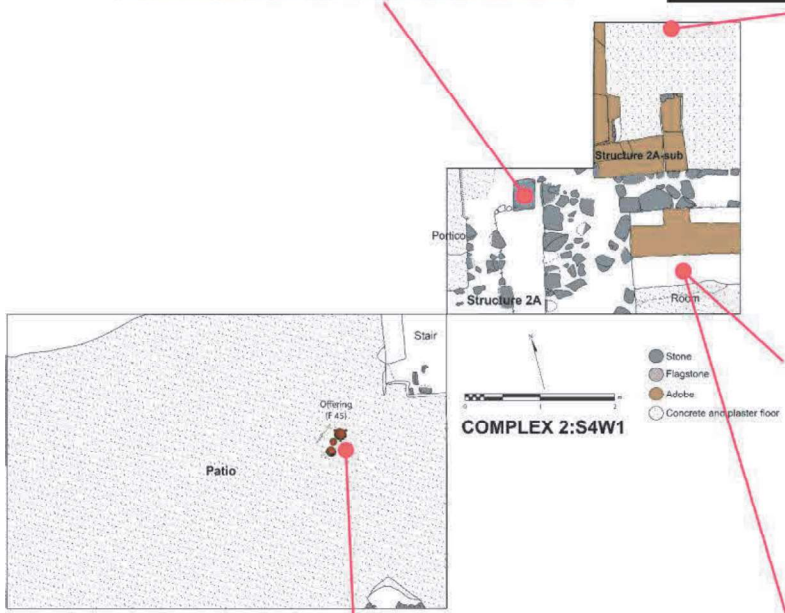
2. Planview illustration of excavations at Complex 4:S4W1 with associated features and finds indicated. Artifact illustrations by Pedro Cahuantzi Hernández.



3. Artifacts recovered from excavations in Complexes 2 and 4: (a) polished, out-curving bowl diagnostic of the Late Tlamimilolpa phase; (b) fragment of incised fine-gray ware cup, possibly from Oaxaca or southern Puebla; (c) Macana Red-on-Brown tripod vessel with negative decoration and interior crosshatching, diagnostic of the Mazapan phase; (d) small dish with central nubbin and spiral pattern, diagnostic of the Mazapan phase; (e) corner of sculpted grinding stone; (f) partially handmade figurine fragment; (g) fully mold-made figurine fragment; (h) fragment of whistle. Illustrations by Pedro Cahuantzi Hernández.



Feature 48

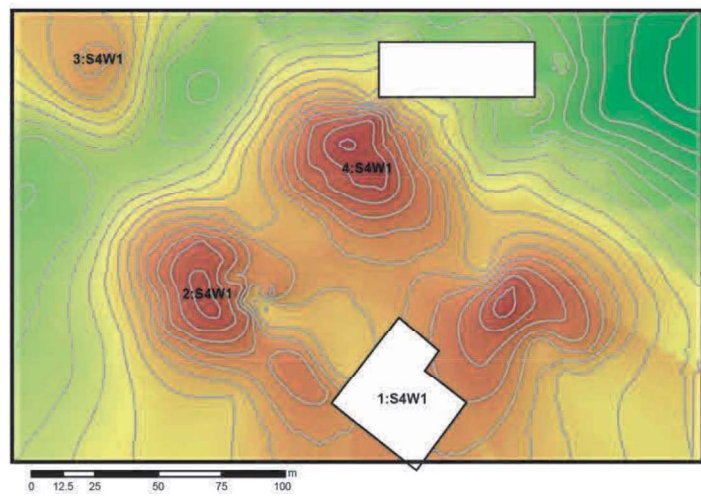


Feature 47

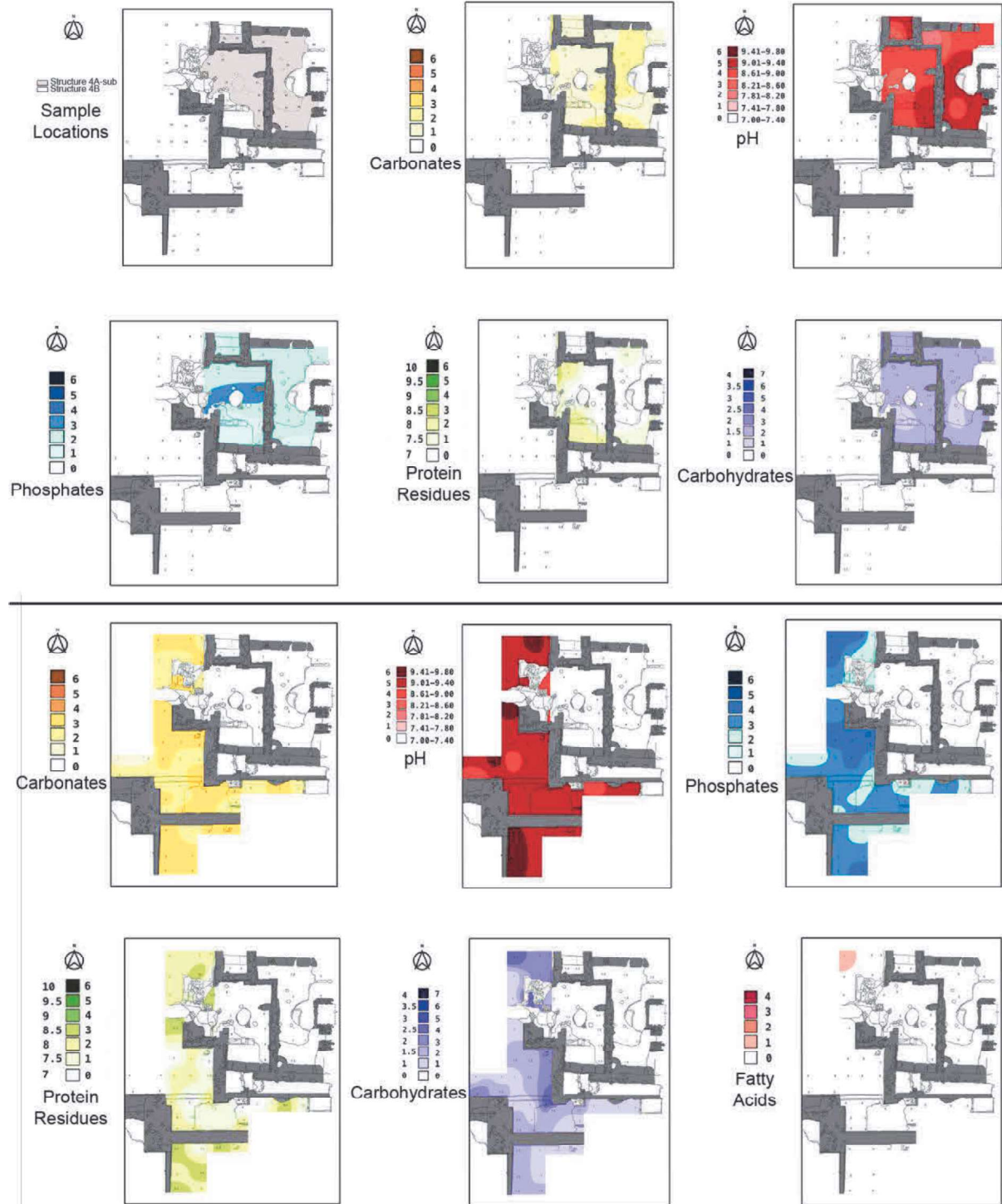
Feature 45



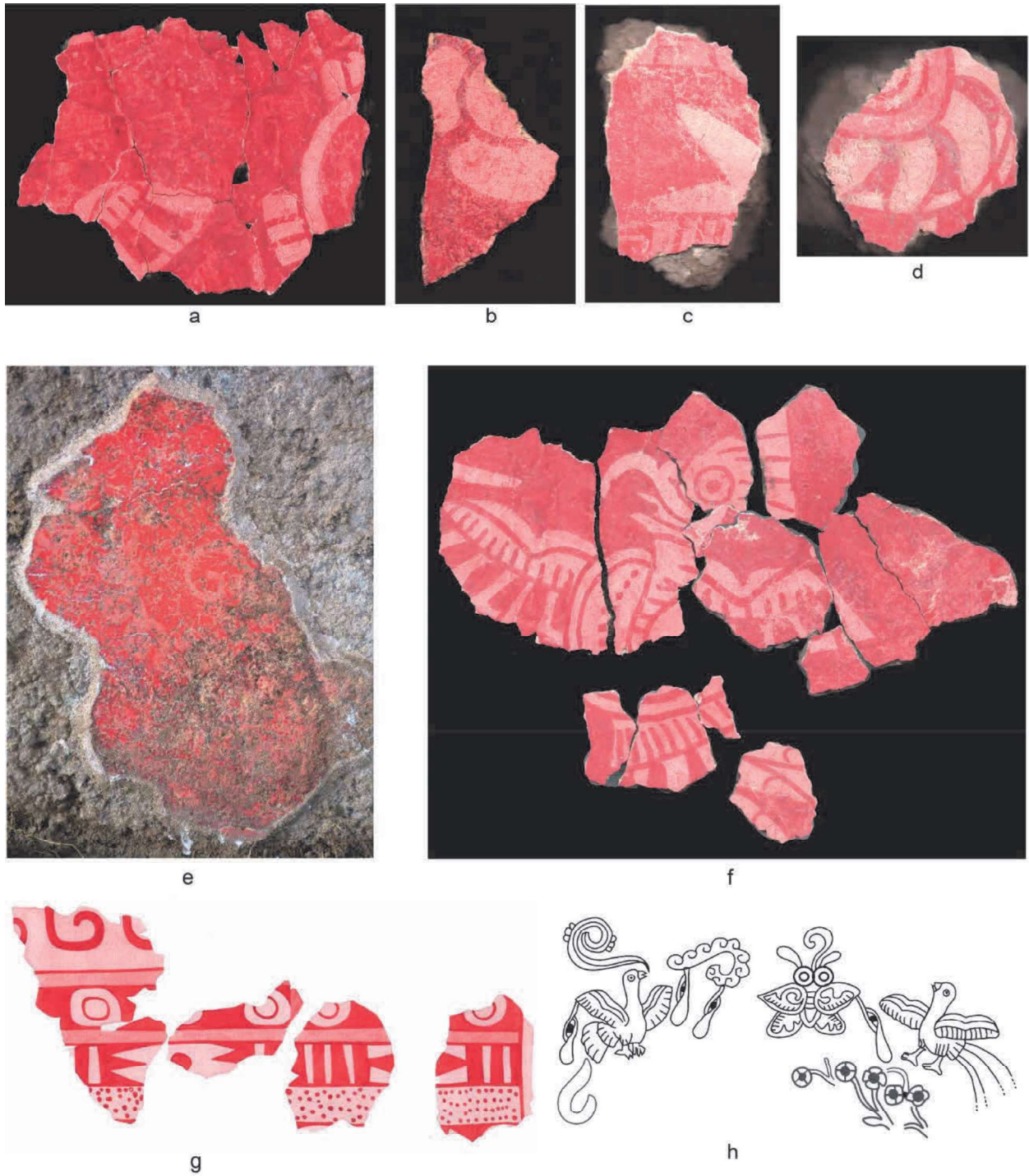
4. Planview illustration of excavations at Complex 2:S4W1 with associated features and finds indicated.



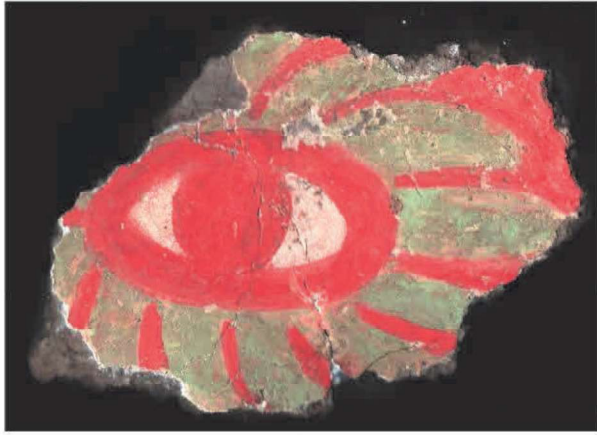
5. Areas mapped by magnetic gradient, including the platform north of Complex 4:S4W1 and the center of Complex 1:S4W1, indicated in white on the topographic map. Hypothetical wall alignments are indicated in black.



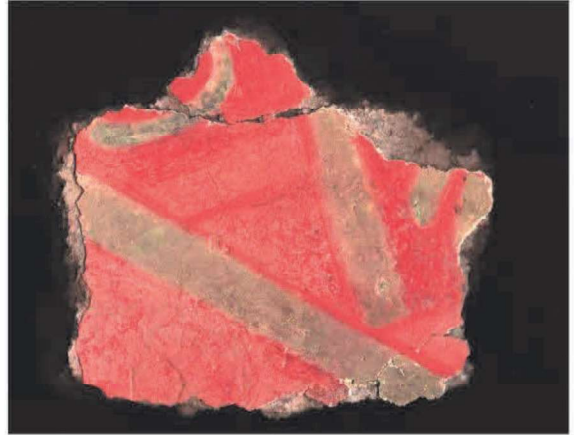
6. Maps depicting sample locations and intensities of certain chemical compounds from Structure 4A-Sub1 (top) and Structure 4B with its associated patio (bottom) from Complex 4:S4W1.



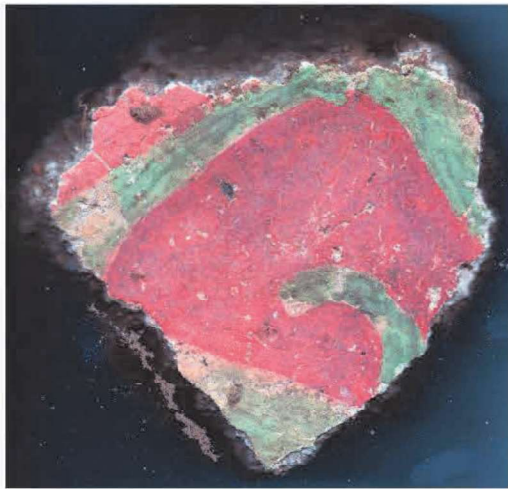
7. Mural fragments from Complex 4:S4W1: (a-d, f) fragments found in structural collapse; (e) fragment found adhering to portico wall of Structure 4B; (g) illustration of articulated fragments with geometric motifs with fire and water symbols, by Pedro Cahuantzi Hernández; (h) elements from Palace of the Sun or Zone 5A mural in Portico 13, depicting similar themes to above (redrawn from Miller 1973: Figure 116).



a



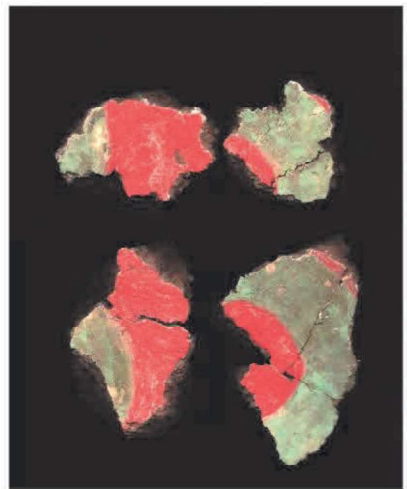
b



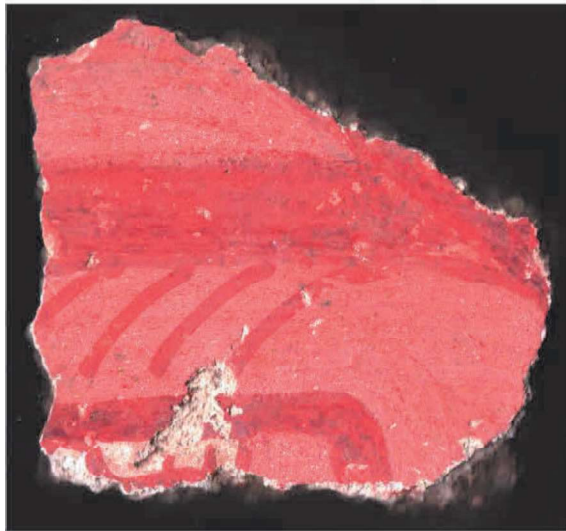
c



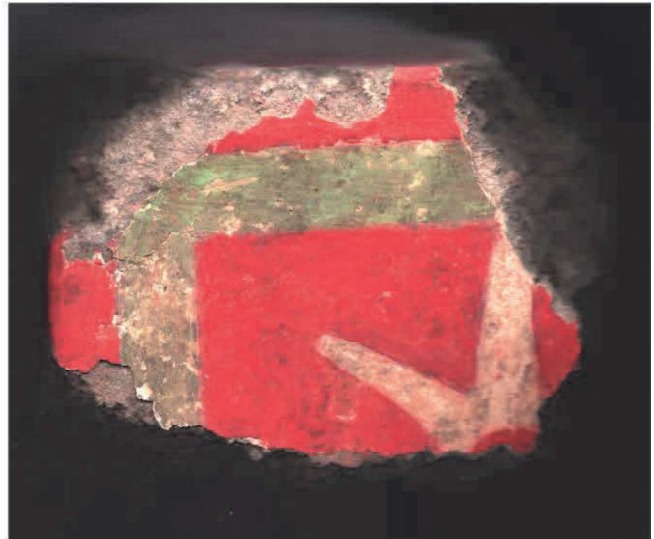
d



e



f



g

8. Mural fragments from Complex 2:S4W1.

Bibliography

Altschul, Jeffrey H.

1987 Social Districts of Teotihuacan. In *Teotihuacan: Nuevos Datos, Nuevas Síntesis, Nuevos Problemas*, edited by Emily McClung de Tapia and Evelyn Childs Rattray, pp. 191-217. Universidad Nacional Autónoma de México, Mexico City.

Angulo Villaseñor, Jorge

2001 Teotihuacan: aspectos de la cultura a través de su expresión pictórica. In *La Pintura Mural Prehispánica en México, I, Teotihuacan, Tomo II, Estudios*, edited by Beatriz de la Fuente, pp. 65-186. Instituto de Investigaciones Estéticas, Universidad Nacional Autónoma de México, Mexico City.

Berrin, Kathleen (ed.)

1988 *Feathered Serpents and Flowering Trees: Reconstructing the Murals of Teotihuacan*. The Fine Arts Museums of San Francisco, San Francisco.

Blancas, Jorge, Luis Barba, Agustín Ortiz, Guillermo Acosta, Andrés G. Mejía Ramón, and David M. Carballo

2019 Estudio de conjuntos departamentales y organización de barrios utilizando sensores remotos y geofísica en el distrito de Tlajinga, Teotihuacan. *Ancient Mesoamerica* 30: 115-128.

Cabrera Castro, Rubén

1996 Las excavaciones en La Ventilla. Un barrio Teotihuacano. *Revista Mexicana de Estudios Antropológicos* 42:5–30.

Cabrera Castro, Rubén, and Sergio Gómez Chávez

2008 La Ventilla: A Model for a Barrio in the Urban Structure of Teotihuacan. In *Urbanism in Mesoamerica, Vol. II*, edited by Alba Guadalupe Mastache, Robert H. Cobean, Ángel García Cook, and Kenneth G. Hirth, pp. 37–84. Instituto Nacional de Antropología e Historia and Pennsylvania State University, Mexico City and University Park.

Carballo, David M.

2017 Daily Life in Teotihuacan's Southern Periphery: The Tlajinga District. In *Teotihuacan: City of Water, City of Fire*, edited by Matthew H. Robb, pp. 124-129. Fine Arts Museums of San Francisco and University of California Press, San Francisco.

2019 Urban Life on Teotihuacan's Periphery: New Research at the Tlajinga District. *Ancient Mesoamerica* 30: 91-94.

2020 Power, Politics, and Governance at Teotihuacan. In *Teotihuacan: The World Beyond the City*, edited by Kenneth G. Hirth, David M. Carballo, and Barbara Arroyo, pp. 57-96. *Dumbarton Oaks and Trustees of Harvard University*, Washington, D.C.

Carballo, David M., Kenneth G. Hirth, Daniela Hernández Sariñana, Gina M. Buckley, Andrés G. Mejía Ramón, and Douglas J. Kennett

2019 New Research at Teotihuacan's Tlajinga District, 2012-2015. *Ancient Mesoamerica* 30: 95-113.

de la Fuente, Beatriz

2001 Zona 5A: Conjunto del Sol. In *La Pintura Mural Prehispánica en México, I, Teotihuacan, Tomo I, Catálogo*, edited by Beatriz de la Fuente, pp. 59-79. Instituto de Investigaciones Estéticas, Universidad Nacional Autónoma de México, Mexico City.

Fargher, Lane F., Richard E. Blanton, and Vernice Y. Heredia
2017 Aztec State-Making, Politics, and Empires: The Triple Alliance. In *The Oxford Handbook of the Aztecs*, edited by D. L. Nichols and E. Rodríguez-Alegría, pp. 143-159. Oxford University Press, New York.

Gazzola, Julie
2005 La producción lapidaria en Teotihuacan. Estudio de las actividades productivas en los talleres de un conjunto habitacional. In *Arquitectura y urbanismo: pasado y presente de los espacios en Teotihuacan. Memoria de la Tercera Mesa Redonda de Teotihuacan*, edited by María Elena Ruiz Gallut and Jesús Torres Peralta, pp. 841-878. Instituto Nacional de Antropología e Historia, Mexico City.

Gómez Chávez, Sergio
2012 Structure and Organization of Neighborhoods in the Ancient City of Teotihuacan. In *The Neighborhood as a Social and Spatial Unit in Mesoamerican Cities*, edited by M. Charlotte Arnauld, Linda R. Manzanilla, and Michael E. Smith, pp. 74-101. University of Arizona Press, Tucson.

Helmke, Christophe, and Jesper Nielsen
2017 Of Gods and Rituals: The Religion of Teotihuacan. In *Teotihuacan: City of Water, City of Fire*, edited by Matthew H. Robb, pp. 130-137. Fine Arts Museums of San Francisco and University of California Press, San Francisco.

Juárez Osnaya, Alberto
2014 *El Desarrollo arquitectónico de Totometla en el marco del sistema urbano de Teotihuacan*. Instituto Nacional de Antropología e Historia, Mexico City.

Klinenberg, Eric
2018 *Palaces for the People: How Social Infrastructure Can Help Fight Inequality, Polarization, and the Decline of Civic Life*. Crown, New York.

Langley, James C.
1986 *Symbolic Notation of Teotihuacan: Elements of Writing in a Mesoamerican Culture of the Classic Period*. British Archaeological Reports, International Series 313, Oxford.

Lightfoot, Elizabeth, Jennifer Simmelink McCleary, and Terry Lum
2014 Asset Mapping as a Research Tool for Community-Based Participatory Research in Social Work. *Social Work Research* 38(1): 59-64.

Magaloni-Kerpel, Diana, Megan E. O'Neil, and María Teresa Uriarte
2020 The Moving Image: Painted Murals and Vessels at Teotihuacan and the Maya Area. In *Teotihuacan: The World Beyond the City*, edited by Kenneth G. Hirth, David M. Carballo, and Barbara Arroyo, pp. 193-224. Dumbarton Oaks and Trustees of Harvard University, Washington, D.C.

Manzanilla, Linda R.
2006 Estados corporativos arcaicos: Organizaciones de excepción en escenarios excluyentes. *Cuicuilco* 13(36): 13-45.

2012a Neighborhood and Elite “Houses” at Teotihuacan, Central Mexico. In *The Neighborhood as a Social and Spatial Unit in Mesoamerican Cities*, edited by M. Charlotte Arnauld, Linda R. Manzanilla, and Michael E. Smith, pp. 55-73. University of Arizona Press, Tucson.

2012b Base de datos del sitio de Teopancazco. Proyecto “Teotihuacan: elite y gobierno”, 1997-2005. In *Estudios Arqueométricos del Centro de Barrio de Teopancazco en Teotihuacan*, edited by Linda R. Manzanilla, pp. . Instituto de Investigaciones Antropológicas, Universidad Nacional Autónoma de México, Mexico City.

2015 Cooperation and Tensions in Multiethnic Corporate Societies Using Teotihuacan, Central Mexico, as a Case Study. *Proceedings of the National Academy of Sciences of the United State of America* 112: 9210-9215.

2017 Teopancazco: A Multiethnic Neighborhood Center in the Metropolis of Teotihuacan. In *Multiethnicity and Migration at Teopancazco: Investigations of a Teotihuacan Neighborhood Center*, edited by Linda R. Manzanilla, pp. 1-48. University Press of Florida, Gainesville.

Manzanilla, Linda, Claudia López, and AnnCorinne Freter

1996 Dating Results from Excavations in Quarry Tunnels Behind the Pyramid of the Sun at Teotihuacan. *Ancient Mesoamerica* 7(2): 245 – 266.

Miller, Arthur G.

1973 *The Mural Painting of Teotihuacan*. Dumbarton Oaks Research Library and Collection, Trustees for Harvard University, Washington, D.C.

Millon, Rene

1973 *The Teotihuacan Map, Part One: Text*. University of Texas Press, Austin.

Navarijo Ornelas, Lourdes

2001 La presencia de las aves en la pintura mural teotihuacana. In *La Pintura Mural Prehispánica en México, I, Teotihuacan, Tomo II, Estudios*, edited by Beatriz de la Fuente, pp. 325-341. Instituto de Investigaciones Estéticas, Universidad Nacional Autónoma de México, Mexico City.

Nielsen, Jesper, and Christophe Helmke

2015 The Fall of the Great Celestial Bird: A Master Myth in Early Classic Central Mexico. *Ancient America* 13: 1-46.

Ortiz Butrón Agustín

2015 Determinación de las características de un barrio teotihuacano con arqueometría. El caso de Teopancazco. Unpublished doctoral dissertation. Facultad de Filosofía y Letras, UNAM.

Rapoport, Amos

1988 Levels of Meaning in the Built Environment. In *Cross-Cultural Perspectives in Nonverbal Communication*, edited by Fernando Poyatos, pp 317-336. C.J. Hogrefe, Lewiston, NY.

Rappaport, Roy A.

1971 The Sacred in Human Evolution. *Annual Review of Ecology and Systematics* 2: 23-44.

Robertson, Ian

2005 Patrones diacrónicos en la constitución de los vecindarios teotihuacanos. In *Arquitectura y Urbanismo: Pasado y Presente de los Espacios en Teotihuacan. Memoria de la Tercera Mesa Redonda de*

Teotihuacan, edited by Maria Elena Ruiz Gallut and Jesús Torres Peralta, pp. 277-294. Instituto Nacional de Antropología e Historia, Mexico City.

Séjourné, Laurette

1976 *Burning Water: Thought and Religion in Ancient Mexico*. Shambala Publications, Berkeley.

2002 [1966] *Arquitectura y pintura en Teotihuacán*. Siglo Veintiuno, Mexico City.

Smith, Michael E., Abhishek Chatterjee, Angela C. Huster, Sierra Stewart, and Marion Forest

2019 Apartment Compounds, Households, and Population in the Ancient City of Teotihuacan,

Mexico. *Ancient Mesoamerica* 30(3): 399–418.

Smith, Michael E., Timothy Dennehy, April Kamp-Whittaker, Emily Colon, and Rebecca Harkness

2014 Quantitative Measures of Wealth Inequality in Ancient Central Mexican Communities. *Advances in Archaeological Practice* 2: 311–323.

Urcid, Javier

2013 Scribal Traditions from Highland Mesoamerica (300-1000 AD). In *The Oxford Handbook of Mesoamerica Archaeology*, edited by Deborah L. Nichols and Christopher A. Pool, pp. 855-868. Oxford University Press, New York.

Von Winning, Hasso

1987 *La iconografía de Teotihuacan: los dioses y los signos, Tomo I*. Universidad Nacional Autónoma de Mexico, Mexico City.

Widmer, Randolph J.

2019 Lapidary Craft Production at 17:S3E1 and 18:S3E1, The Tlajinga District, Teotihuacan. *Ancient Mesoamerica* 30: 181–197.

Widmer, Randolph J. and Rebecca Storey

1993 Social organization and household structure of a Teotihuacán Apartment Compound: S3W1:33 of the Tlajinga Barrio. In *Prehispanic Domestic Units in Western Mesoamerica: Studies of the Household, Compound, and Residence*, edited by Kenneth G. Hirth and Robert S. Santley, pp. 87-104. CRC Press, Boca Raton.

2012 The “Tlajinga Barrio”: A Distinctive Cluster of Neighborhoods in Teotihuacan. In *The Neighborhood as a Social and Spatial Unit in Mesoamerican Cities*, edited by M. Charlotte Arnauld, Linda R. Manzanilla, and Michael E. Smith, pp. 102-116. University of Arizona Press, Tucson.

Wright Carr, David Charles

2012 Teoatl tlachinolli: una metáfora marcial del centro de México. *Dimensión Antropológica* 19(55): 11-37.

Zurita Noguera, Judith, Raúl Valadez Azúa, Bernardo Rodríguez Galicia, Diana Martínez Yrizar, and Emilio Ibarra Morales.

2013 Evidencias botánicas y zoológicas de los periodos Xolalpan tardío y Metepec en el sitio arqueológico de Teopanazgo, Teotihuacan (siglos V y VI dC). *Boletín Antropológicas* 1(20): 1-18.