

Processional Ceremonies in the Formative Period Chiapas Central Depression, Chiapas, Mexico

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Processional ceremonies figured prominently in Mesoamerican religious practices at the time of European contact, and continue in different guises today. The organization of architecture, and sometimes of sculptures, within the earliest Mesoamerican political centers supports the idea that processional ceremonies date to at least the inception of polities in this area. These ceremonies provided much more than the ideological legitimization of leadership roles; they served an essential function to insure the cosmic balance and the survival of the community. The prehispanic Mesoamerican world view did not distinguish between what most contemporary people would view as pragmatic adaptive techniques designed to increase production, and belief-based practices designed to venerate or pacify cosmological forces and entities. The idea that these ceremonies were less important to survival than the construction of irrigation systems or the manufacture of stone tools would not have made sense from their perspective, which held that cosmological forces permeated every aspect of daily life (Monaghan 2000: 26-39).

Large scale processional ceremonies also created a sense of community and facilitated the emergence of social inequality, expanding the power of rulers in other areas of social and economic life (Cyphers and Murtha 2014: 86-87; Hill and

Clark 2001; Inomata 2014: 19-20), and creating what Eric Wolf referred to as structural power (Wolf 1990: 586, 590-591; 1999: 5-15). Wolf describes structural power as “the power manifest in relationships that not only operates in settings and domains, but also organizes and orchestrates the settings themselves, and that specifies the direction and distribution of energy flows” (1999:5).

Over the course of the Middle Formative period in Mesoamerica (**Table 1**), the Chiapas Central Depression, an ethnically Zoque area (Lowe 1977, 1999), saw the foundation of a number of new political centers, each of which was centered on a large scale ceremonial zone, appropriate for staging processional rituals. The organization of large-scale rituals had a strong effect on the relation between rulers and subjects, and architectural evidence indicates that this relational structure changed from the Middle Formative through the Terminal Formative periods. In this paper I explore changes in the layout of civic-ceremonial space at sites in the Chiapas Central Depression from the Middle Formative through the Terminal Formative (**Figure 1**), with special attention to the incorporation of E-Group configurations into novel alignments over time. Using ethnohistoric and ethnographic information, I interpret how these spaces may have been used.

Table 1. Chiapas Central Depression chronology.

Year	Periods	Chiapa Periods	Chiapa de Corzo phases (Bryant et al. 2005)
400	Early		
300	Classic	VIII	Jiquipilas (AD 300-350)
200		VII	Istmo (A.D. 100-300)
A.D. 100	Terminal		Horcones (100 B.C.-
100 B.C.	Formative	VI	A.D. 100)
200	Late		Guanacaste (300-100
300	Formative	V	B.C.)
400			
500		IV	Francesa (500-300 B.C)
600			
700		III	Escalera (750-500 B.C)
800			
900	Middle		
1000	Formative	II	Dili (1000-750 B.C.)

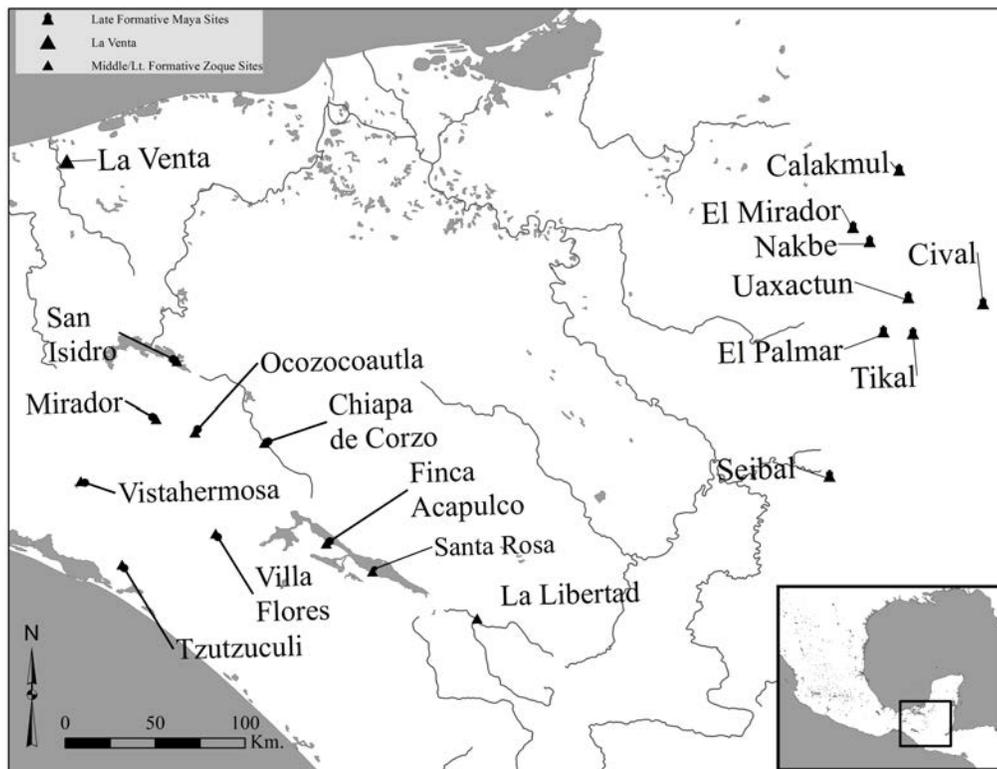


Figure 1. Middle and Late Formative sites discussed in the text.

The changes (discussed below) include the construction of less accessible spaces, and modifications in the use of spaces at these sites over time. These changes indicate a shift away from an exclusive emphasis on processional rituals that were open to the public and likely involved the participation of large numbers of commoners, to an emphasis on more exclusive rituals that were performed outside of the view of the general population, with more limited audiences consisting primarily of nobles.

Outside of a small portion of expansive iconography of the Classic Maya and the more limited iconography of the Formative period, the structure and content of ceremonies sponsored and performed by early Mesoamerican rulers are largely unknown to us. Nonetheless, the settings in which many of these ceremonies took place have in many cases endured, providing some information on the degree of accessibility and inclusivity of rituals performed by rulers. As to the processional aspect of the rituals that took place within these spaces, we have ethnohistoric and ethnographic examples of the importance of processional ceremonies from groups in the same region, and from descendants of the same Zoque culture (Alain 1989; Aramoni 2014: 246-248, 362-369; Gossen 1999: 105-158; Monaghan 2000: 31; Navarrete 1985; Vogt 1977: 42-44; YoSoyELNAGUAL 2012).

Post-conquest Mesoamerican processions crossed, and continue to cross, the landscape that surrounds settlements, and move through the settlements themselves, as well as taking place in formal ceremonial precincts (Aramoni 2014: 247-248; Vogt 1977: 42-47). Mountains in

particular have a special magical significance in the ethnohistorically documented Zoque belief systems, as places of opportunity and danger, and the homes of powerful spirits (Thomas 1990: 219-224). In the highland Maya Tzotzil and Tzeltal communities of Chiapas, the mountains that surround the communities are still perceived as imbued with the powerful forces of ancestral spirits and Earth Lords (Pitarch 2010: 35; Vogt 1977: 44). Processions to the peaks of these mountains are an important part of rituals directed at placating or petitioning these forces (Pitarch 2010: 138; Vogt 1977: 44-50).

Post-conquest processions may represent survivals of traditions that had existed either as, or alongside, state sponsored processions that took place within ceremonial precincts (Aramoni 2014: 306). We have evidence that from the Terminal Formative through the Postclassic periods in the Zoque area of Mesoamerica, processional ceremonies took place outside of ceremonial precincts, as well as within them, involving processions to caves and occasionally hilltops (Domenici 2010, 2014; Peterson and Clark 2014). It is likely that, at least in some contexts, as with the Classic Period Maya, the mounds within ceremonial precincts served as either representations or replications of mountains within sacred natural landscapes (Demarest 2006: 202; Reilly 1999: 18; Schele and Friedel 1990: 71-72).

There is some risk in projecting specific aspects of ritual performance observed historically and in the ethnographic present, especially with respect to specific religious beliefs and

cosmological interpretations (Marcus and Flannery 1994: 55; Vogt 1964). However, some cosmological concepts were widely shared across Mesoamerica, such as the division of the world into four quarters and a center, with the east-west axis being of

primary importance, as well as the division of the cosmos into different celestial and subterranean planes (Carrasco 1999: 104; Gossen 1972: 119; Lind 2015: 339; Marcus and Flannery 1994: 60; Trigger 2003: 447).

Middle Formative Chiapas E-Group Processional Arrangements

Civic-ceremonial spaces constructed during the Middle Formative period in the ethnically Zoque area of the Chiapas Central Depression and its surroundings bear close resemblance to an arrangement of structures

at the Gulf Coast Olmec site of La Venta, Tabasco, in what John Clark and Richard Hansen have termed the Middle Formative Chiapas (MFC) complex (2001: 4-5) (Figure 2).

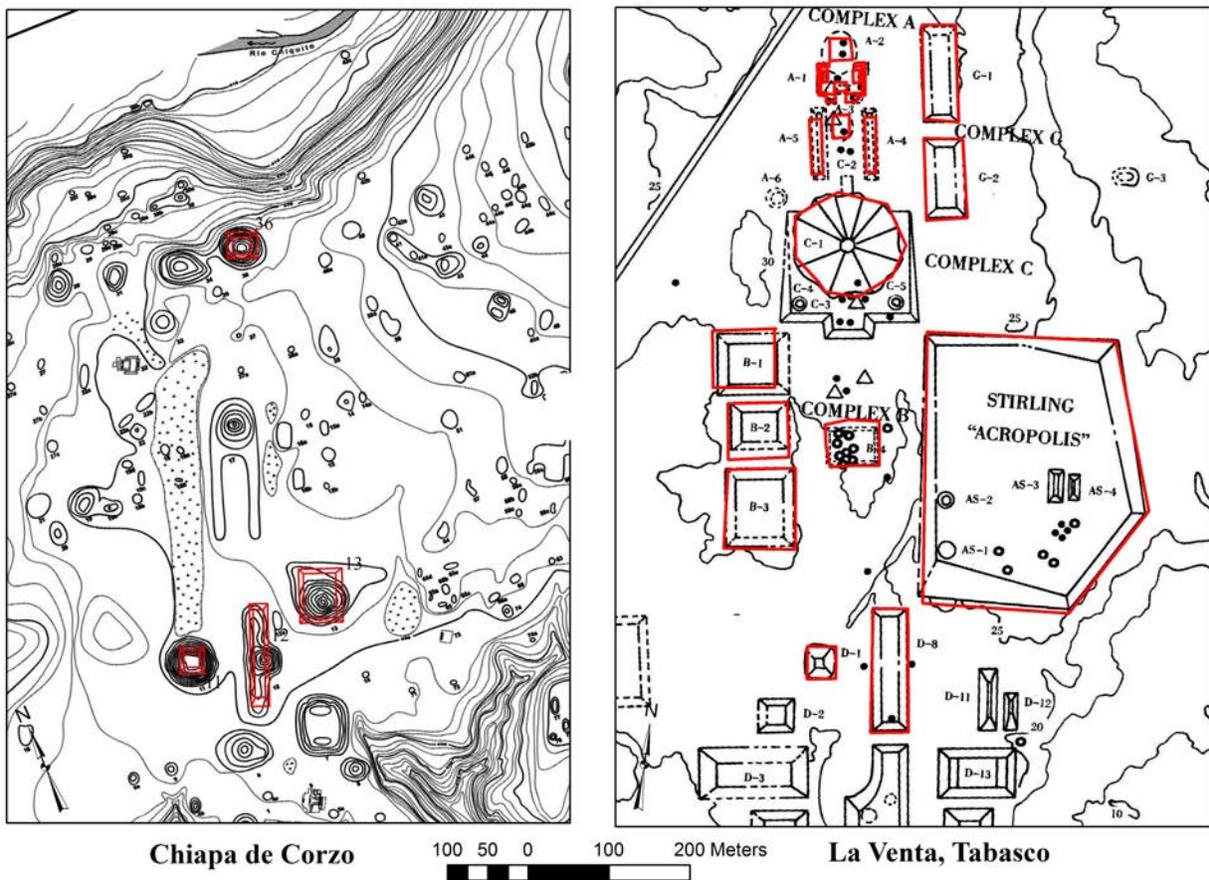


Figure 2. Chiapa II phase MFC structures at Chiapa de Corzo and the La Venta ceremonial zone. (plans adapted by Tim Sullivan from Bachand et. al 2008 and González Lauck 1997)

Whether this pattern originated at La Venta or elsewhere is not currently clear. Recent excavations at Ceibal, and reanalysis of dates from La Venta indicate that the earliest known E-Group (but not the earliest MFC complex) is from Ceibal (Inomata et al. 2013). In any case, the use and of MFC complexes outlived the existence of La Venta as a political center. At Chiapa de Corzo, and possibly at two other settlements that survived into the Terminal Formative period, the organization of architecture surrounding the E-Group was reconfigured through new constructions that created less accessible ceremonial spaces, which conform closely to a pattern repeated at contemporary sites in the Maya Lowlands.

One indication that Middle Formative ceremonial complexes in the Chiapas Central Depression served as processional spaces rather than large plaza spaces from which the public (nobles and/or commoners) viewed regal-ritual performances that took place on the northern

mound can be found in Jerry Moore's (1996: 791) observations on the spatial constraints that limit various aspects of performance. The distance between the northern mound and the northern edge of the E-group of the ceremonial complexes at Chiapa de Corzo and La Venta (approximately 430 m), and to a lesser, but still important extent at the other sites considered in this study (a mean of about 230 m), extend beyond the limits of effective performative space if the plazas were used as a setting for viewing ritual performances enacted on the northern pyramid (**Figure 3**). While temples and elite residential structures almost certainly served as platforms on which rulers and religious functionaries performed rituals, including those held during the course of processions (as they continue to do in contemporary Maya communities), the overall layout of these spaces suggests that they were designed for participants to move through, not as enormous stadiums filled with spectators.



Figure 3. Chiapa de Corzo, view to northeast from Mound 11 towards Mound 36. Photo courtesy of Lynne Lowe.

I begin with a consideration of Chiapa de Corzo, because it was occupied as a political center throughout the period under consideration and because we have better data on construction sequences at this site than any of the others considered in the discussion. The most recent excavation data (Bachand and Lowe 2011, 2012) and my re-interpretation of older data from the site of Chiapa de Corzo (Sullivan 2009: 97; 2012: 36; 2015) indicate that the E-Group (Mounds 11 and 12), the Mound 13 platform, and Mound 36 at the northern end of the site, were built in relatively close succession, presumably as an organized template, which parallels the organization of Groups C, B, D, and the Sterling Acropolis at La Venta (see Figure 2). This MFC template occurs at a number of sites with Middle Formative occupations in and around the Chiapas Central Depression, including Tzutzuculi, Mirador (Chiapas), Ocozocoautla, Finca Acapulco, and La Libertad (Clark ca. 2016; Clark and Hansen 2001: 3-12) (see Figure 1). San Isidro may also have this template, with Mounds 20 and 2 as the E-Group, and Mound 25 as the northern mound.¹

The MFC complexes vary somewhat in degrees of completeness and correspondingly in dimensions. As defined by Clark and Hansen, the MFC template "...consists of a long, north-south plaza (sometimes with a double square) with a pyramid at the northern end of this plaza, a long mound with an offsetting eastern pyramid (an E-Group) on the southern end, a large acropolis or broad mound on the eastern margin of the plaza, and a row of smaller platforms to the west of the plaza" (2001: 12). The MFC complex differs from

the arrangement of lowland Maya E-Groups in the presence of a large mound located at some distance to the north of the E-Group, which created an extensive processional space oriented roughly north-south, and the presence of an acropolis to the northeast of the E-group. Several other Chiapas III and IV sites in the area have an E-Group with an acropolis structure to the northeast but lack an obvious analogue to the northern mound of the MFC complex, such as Santa Rosa (Delgado 1965: Fig. 2), and Vistahermosa (Treat 1986: Fig. 6). In the Maya Lowlands, coeval constructions at the center of Ceibal (Real 2 phase) also appear to conform to this partial MFC pattern (Inomata et al. 2013: Fig. 3).

A second consideration is the scale of these plazas relative to the population of the settlements and broader polities in which they are situated. The area of the plaza at Chiapa de Corzo during Chiapa II measured from the southern base of the northern mound to the northern edge of the long mound of the E-group, and bounded on the east by the western base of the Mound 13 and on the west by the eastern base of Mound 11 measures approximately about 56,700 m², with a crowd capacity of just about 37,800 people (given a crowd distribution of 1.5 m² per person). My population estimates for Chiapa de Corzo during Chiapa II are 1,090 for the settlement of Chiapa de Corzo, and a population of 17,500 for the 2,600 km² of polity at large (Sullivan 2009: 88; 2012: 32). So the area of the Chiapa II phase plaza could have contained over twice the number of men, women, and children in the polity with considerable room to spare (see Figure 2).

At La Venta, the southern plaza measured from the southern face of Mound C-1 to the northern base of Mound D-8 and from the eastern face of D-1 to the western edge of the Sterling Acropolis, encompasses around 50,250 m², with a corresponding capacity of just under 33,500 people (see Figure 2). Imprecision in the mapping of La Venta and ambiguities in the boundaries of

the Chiapa de Corzo plaza area make these dimensions hypothetical. These dimensions are, however, relatively similar between these two centers and other sites with the MFC pattern within the Chiapas Central Depression, with the exceptions of Finca Acapulco and Tzutzuculi, which have markedly truncated plaza areas (**Figure 4**).

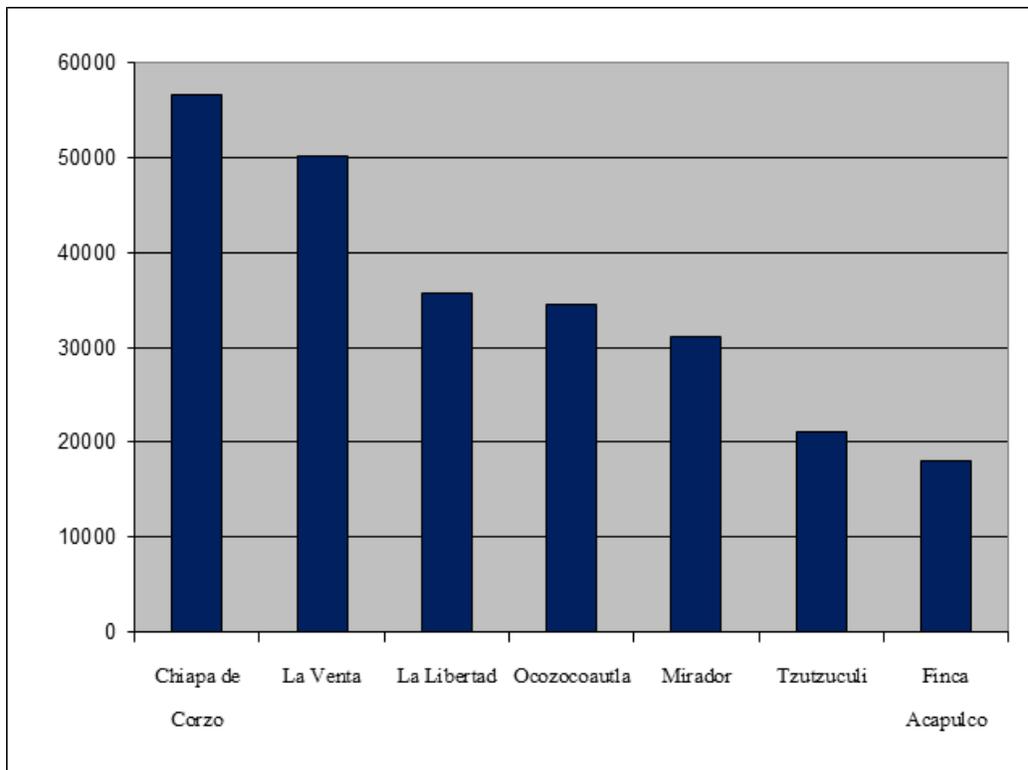


Figure 4. Plot of plaza areas in square meters, in and around the Chiapas Central Depression

Data collected in the hasty 1969 excavations of Mound 17, before its destruction in preparation for construction of a Nestle factory (see Figure 3), suggest that the first stage of the mound was constructed in Chiapa III (Lee and Clark ca. 2016), as a 1.3 m tall platform, after the rest of the civic ceremonial complex had been long

established (**Figure 5**). The southern face of Mound 17 was located approximately 195 m to the north of the northern face of Mound 12, the long mound of the E-Group, at the head of a plaza measuring 26,325 m², and a corresponding capacity of 17,550 people, which is still more than the estimated total Chiapa III polity population of 20,000.

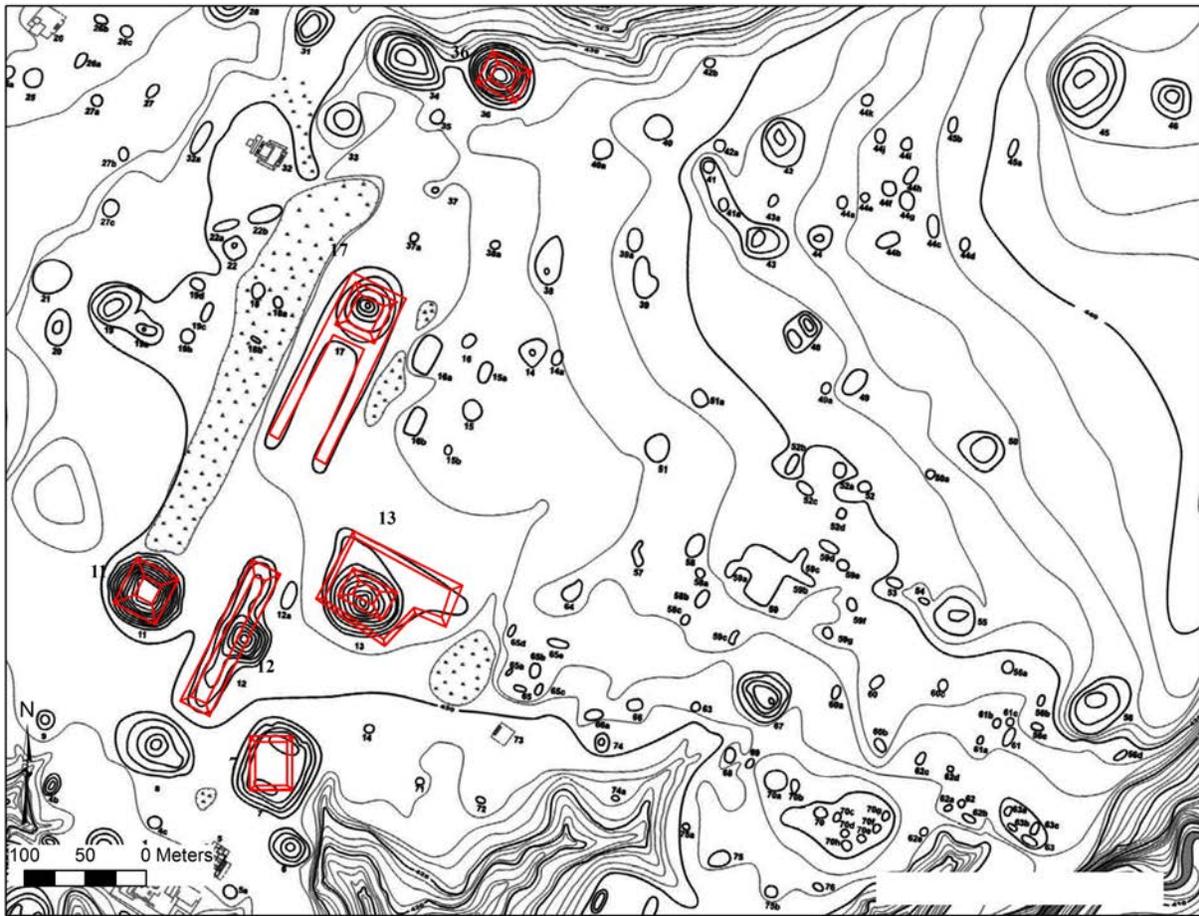


Figure 5. Chiapa III structures at Chiapa de Corzo.

David Cheetham and Thomas Lee interpreted Mound 17 as an elite residential platform (2004). If they are correct, then the construction of this mound may have placed the residential locus of the ruling family in the center of the civic ceremonial zone, and the processions that took place here may have revolved around the ruler's residence.

It is also notable that Mound 17 at Chiapa de Corzo was originally constructed with two flanking 70 cm tall platforms, that extended about 100 m. to the south of the southern face of the platform (see Figure 5), creating an enclosed a space with an area of about 3,200 m², and a potential capacity of

2,130 people (also more than the entire estimated population of the settlement Chiapa de Corzo during this phase). The dimensions of this space would have been more amenable to the viewing of public ritual performed on the Mound 17 platform. Nonetheless, the low height of the flanking platforms suggests that whatever activities took place within this space, they were visible to people standing outside.

La Venta's modest and now destroyed Mound B-4 (see Figure 2) may have served a similar function to Chiapa de Corzo's Mound 17 at some point in the site's trajectory as a political center. However, in

contrast to Chiapa de Corzo and Middle Formative sites in the Chiapas Central depression, at La Venta the elite appear to have established a ceremonial space that was more restricted both visually and in terms of access in, the form of Complex A, located to the north of Mound C-1 (Gillespie 2008; Reilly 1999).

Reilly (1999) interprets La Venta's complex A as representing the watery underworld. There are no analogues in the position of La Venta's Complex A in any of the sites with MFC patterns in and around the Chiapas Central Depression (Clark 2001: 185). Nonetheless, artificial reservoirs have been identified in Chiapa II and III contexts at Chiapa de Corzo, to the southeast of the E-Group (Bachand et al. 2008: 77; Lowe 1962: 56), at La Libertad, to the east of Mound 3 (Miller 2014: 68-69), and in Chiapa III contexts at Ocozocoautla directly east of the E-group (McDonald 1999: 62). It is possible that at these sites a representation

of the watery underworld was incorporated into the processional ceremonial route, in a much more public space than at La Venta. In support of this interpretation, at Chiapa de Corzo this reservoir was turned into a cemetery during the Chiapa IV period, suggesting the space's continued association with death and the underworld.

Judging from dimensions alone, other sites in the Chiapas Central Depression could be interpreted as having taken the placement of Chiapa de Corzo's Mound 17 as the northern boundary of the ceremonial precinct (**Figure 6**). Still, despite the closer similarity in plaza dimensions between that defined for the Mound 17-E-Group arrangement at Chiapa de Corzo, the placement of these mounds on the northern boundary of ceremonial precincts suggests that they had different ideological significance, and served a different role in processional ceremonies than the Mound 17 platform.

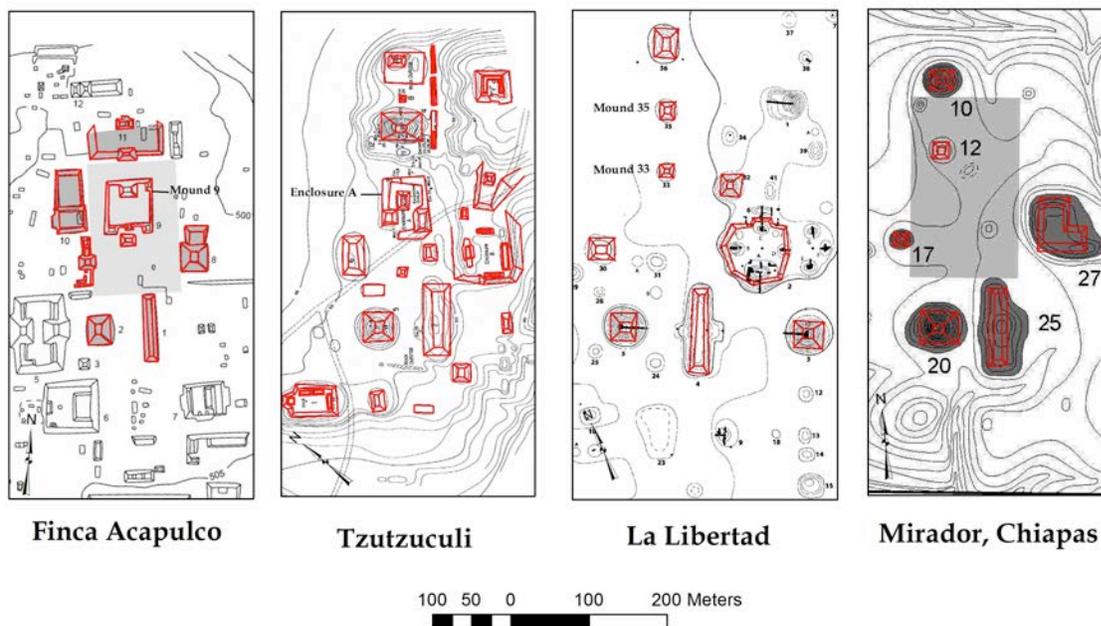


Figure 6. Middle Formative Chiapas complexes with analogues to Chiapa de Corzo, Mound 17. (base maps modified from Clark 2016)

At Chiapa de Corzo the northern mound of the MFC complex, Mound 36, continued to be expanded in Chiapa III and IV, indicating that the Mound 17 platform was situated in the center of processional ceremonies throughout the Middle Formative rather than serving as the northern mound in a truncated version of the original plaza. Analogues to the Mound 17 platform are present in Mound 9 at the earlier site of Finca Acapulco (Clark ca. 2016: Fig. 16), Enclosure A at the coeval site of Tzutzuculi (Clark ca. 2016: Fig. 2; McDonald 1983: Fig. 2), and possibly in the somewhat diminutive Mound 12 at Mirador (Agrinier 2000: Fig. 1) and one of the two low mounds (Mounds 34 and 35) in the northern plaza at La Libertad (Miller 2014: Fig. 2.2). An equivalent candidate for central residential platform appears to be absent at the site of Ocozocoautla.

The construction of an elite residential platform at Mound 17 in Chiapa III implies some important changes in the structure of Zoque processional ceremonies. I would suggest that during the Chiapa III period, participation in certain aspects of processional ritual became more specialized and restricted to a limited group of people within the plaza in front of Mound 17. There is no evidence, however, that limitations were placed on the ability of the public to view these activities, such as the construction of palisades on the flanking arms of the platform. Indeed, the observation of the rituals that took place in this space by the public at large was likely a key aspect of establishing and maintaining legitimacy of rulership (although, as Inomata has pointed out [2015], whether the maintaining legitimacy was part of the intent of rulers remains an open question). Nonetheless, this shift suggests that rulers

may have been performing the role of a central intermediary with aspects of the cosmos that were not accessible to commoners. This alteration may reflect a change in the perception of rulers as associated with the *axis-mundi* (Reilly 1990, 1995; Reilly et al. 1994). At some sites, in the Chiapas Central Depression, such as Ocozocoautla, this change in the organization of processional ritual, and correspondingly, in the status of rulers, appears to have been rejected. At other sites, such as La Libertad and Mirador, the Mound 17 analogues are very small and may have served a similar symbolic purpose, but without high-status functionaries residing on the platforms.

The Chiapa II configuration at Chiapa de Corzo, without Mound 17, could easily accommodate the structure of Tzotzil Maya ritual at the contemporary town of Chamula described by Gary Gossen: “Chamula cosmological symbolism has as its primary orientation the point of view of the sun as he emerges on the eastern horizon...north on his right hand, south on his left hand” (1972: 119). Gossen uses this logic to explain among other things, the normal path of Chamula processions out of the west facing entrance of the church, towards the north, and completing a counter-clockwise circuit. These processions “follow the path of the sun” starting in the east or southeast, moving to the center of the sky (north), then descending to the west, and into the underworld (south) (1972: 119-121). This cosmological framework appears to be shared by the Tzotzil of Zinacantan (Vogt 1977: 43), by the Tzeltal Maya of Cancuc (Pitarch 2010: 196), and by the Yucatecan Maya. Friar Landa also described rituals that moved in counter-clockwise circuits at the Postclassic Maya settlement of Sotuta, and

for colonial period Itzamal (Solari 2014). Counter-clockwise ritual circuits are also observed in contemporary Zoque ceremonies in Copoya, Chiapas (YoSoyELNAGUAL 2012), and in Ocozocoautla, Chiapas (Alain 1989).

If processional ceremonies at Chiapa de Corzo during the Chiapa II period followed this highland Maya cosmological framework, processions may have been initiated at the acropolis (Mound 13), and moved to the right (the northeast) toward Mound 36, then following the path of the sun, moved to the south around the E-group (Mounds 11 and 12), to the south of the reservoir (again, a possible representation of the watery underworld) and completed the circuit, moving to the northwest back to the acropolis.

If the addition of an elite residential platform in the center of the ceremonial precinct in Chiapa III (Mound 17) marked a new locus for the start of processions, then the rules of highland Maya ceremonial structure would be violated. As Mound 17 and its flanking arms faced south, starting a procession from this mound and moving to the right would direct the procession towards the southwest on a path that would first pass through the symbolic watery underworld of the south, around the E-Group and the reservoir, before moving through the symbolic path of the rising sun.

To engage briefly in some wild speculation, the elites residing on Mound 17 may have had a different, more stationary role in processions than their Chiapa II predecessors, performing rituals in their role as the *axis-mundi* while lower tier elite and commoners engaged in processions following the symbolic path of the sun around them.

It should be kept in mind that first stages of Mound 7, located to the southeast

of the E-Group (see Figure 5) were also constructed during Chiapa III, creating a 2 m tall platform (Lowe 1962: 45). The Chiapa III stage of Mound 7 was oriented to 7° east of true north (declinated from Lowe 1962: 46 using NOAA [2013]), rather than the dominant Chiapa de Corzo architectural orientation of 28° east of true north.

Precisely why it was built with this unusual orientation is not known. Michael Blake's analysis of the Chiapa de Corzo E-Group (2013) demonstrates that neither equinoxes nor solstices pass over the southern end of the E-Group. At the later E-group configuration at Caracol (Chase and Chase 1995: 95-97), there is a structure located directly to the southeast of the E-Group with a similar deviation from the dominant site orientation. The Caracol structure is located adjacent to, and parallels what appears to be a canal that led from the E-Group to a reservoir (Chase et al. 2013: Fig. 15.11). We do not know if the Chiapa III stage of the Mound 7 construction had stairways facing north or east, as excavations on these sides of the mound did not reach Chiapa III constructions. We do know that it had a western stairway that faced the reservoir (Lowe 1962: 45). As such it may have served some role in facilitating interaction with the forces of the underworld. Mound 7's break from the dominant orientation of the site may have marked a new starting point for processional rituals, with the movement of participants off the north edge of this mound marking the change of meaning of the ceremonial space from profane to sacred.

The experience of a procession through the site of Chiapa de Corzo in the Chiapa II and III periods would have been considerably different from what is possible today, with the mounds covered in grass

rather than tamped clay, which was likely painted. The Nestle plant enclosure occupying the footprint of Mound 17 and impeding access around the ceremonial zone has also substantially altered the space. The clay surfaces of platforms and pyramids of Chiapa II and III would have amplified the sounds of whatever musical instruments accompanied processions, which would have included whistles, ocarinas, flutes, and trumpets (Lee 1964:66-70). Rattles and drums were likely utilized as well (although these instruments have not been securely documented in artifacts or imagery at Chiapa de Corzo), which would have echoed off these constructions, creating an otherworldly atmosphere.

The use of colored clay or paint to decorate structures is known for the Middle Formative (Boone 1989:53; Drucker 1953:23, 36, 38, 42), and it is likely that the designers of the spaces at Chiapa de Corzo during these periods decorated the exteriors of their constructions. While the very large civic-ceremonial zone at Chiapa de Corzo may have been used for mundane activities, the colors of the structures would have contributed to the performative effect of the space as a conduit to other planes of reality. Furthermore at least some of the participants were likely costumed and masked as deities, as is frequently manifested on Middle Formative Olmecoid iconography. All of these factors contributed to the effect on participants and observers of processional (and non-processional) ceremonies that took place within these spaces.

Late Formative Transitions

By the beginning of Late Formative period there is evidence for disruption of the regional political landscape. Upstream from Chiapa de Corzo, there appears to have been

While the Chiapa III construction of Mound 17 would have interrupted sightlines towards Mound 36 from the southern parts of the civic-ceremonial zone, the Chiapa III, its 1.3 m height would not have blocked the view of the 5.6 m tall northernmost mound from most of the site, although its superstructure would have increased its height. Even so, the position of Mound 17 did not interfere with the sightlines between Mounds 7, 13, or 11, and Mound 36. Proceeding from either Mound 7 or Mound 13 to the north, the shape of Mound 36 is echoed by the Cerro El Zapote (see Figure 3), located to its north. Turning southwestward from Mound 36 in Chiapa II the procession would have had an unimpeded view to the E-Group, and through that, to whatever vegetation surrounded the reservoir on the south end of the ceremonial precinct. In Chiapa III the Mound 17 platform, even with its relatively low height, would have effectively blocked the view from the base of Mound 36 of the reservoir area until the party reached the western flanking platform of Mound 17, at which point this watery area would have been visible between Mounds 11 and 12 of the E-Group. In both phases the full reservoir area would not have been visible until passing the E-Group, which while not surprising to any of the participants very likely would have had an emotive effect, given the otherworldly context of the processional ceremonies.

a hiatus in mound construction during Chiapa V, and settlement appears to have been relatively light in Chiapas VI (Bryant et al. 2005: 6). In the Upper Central

Depression many sites were abandoned or relocated to more defensible locations (Bryant and Clark 1983: 226; Bryant et al. 2005: 265; Lowe 1999: 86). We also currently have no evidence for the initiation of new E-group construction in the Chiapas Central Depression during these periods. Upstream from Chiapa de Corzo, the sites of La Libertad and Finca Acapulco were abandoned (the latter toward the end of Chiapa III [Clark 2016]). On the Pacific Coast and in the western Central Depression, respectively, the sites of Tzutzuculi (McDonald 1983: 67; 1999: 57) and Vistahermosa (Treat 1986: 16-20) were abandoned.

At the centers that survived, we see a greater degree of variability in the organization of civic-ceremonial space than was present in the Middle Formative. At Chiapa de Corzo the focus of construction during Chiapa V and VI shifted notably towards an emphasis on building to the

south of the E-Group (**Figure 7**). The first stages of Mounds 1 and 1a were begun during Chiapa V, each of which employed masonry architecture, which was relatively new and uncommon at Chiapa de Corzo at the time. Two-room temples were also constructed on Mounds 1 and 1a during Chiapa V (Agrinier 1975: 14; Lowe and Agrinier 1960: 17-18). The first (relatively modest) stages of Mound 5 were constructed on the eastern side of this plaza (Lowe 1962: 7), and Mound 8 was expanded during Chiapa V. These constructions resulted in the formation of a southern plaza measuring approximately 90 m N-S by 60 m E-W, with an area of about 5,400 m² and a capacity of 3,600 people. The potential capacity of this plaza is still very generous relative to the population of the settlement of Chiapa de Corzo, during this period estimated at 1,640, but could no longer hold the entire population of the polity, estimated at 13,300 (Sullivan 2009: 201, 2015).

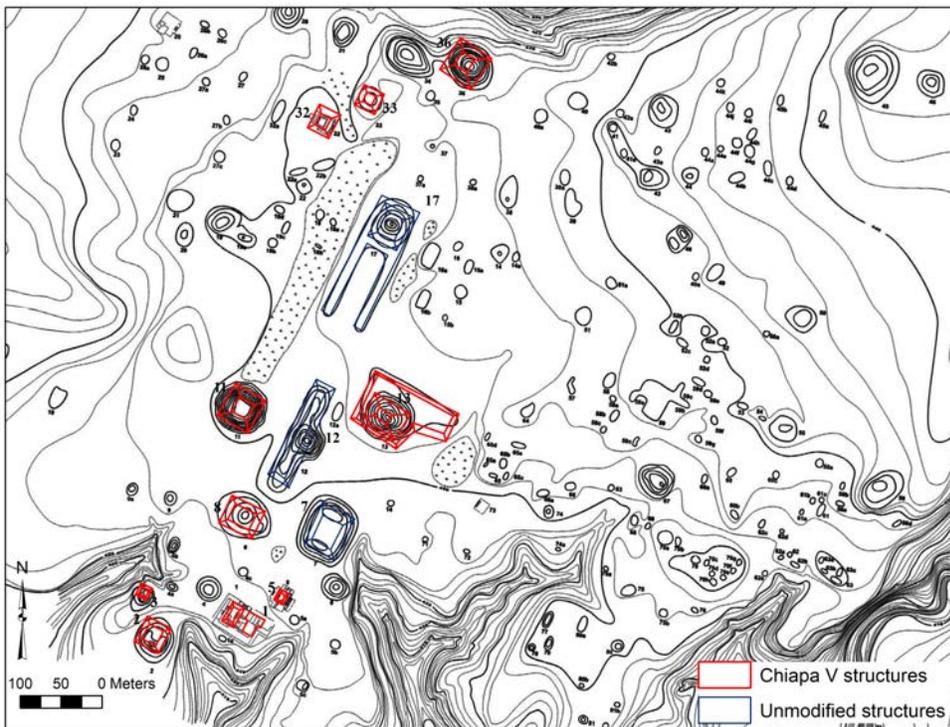


Figure 7. Chiapa V structures at Chiapa de Corzo (earlier structures unmodified in this phase outlined in blue).

More importantly, the dimensions of this space would have allowed for relatively intimate performances by the royals. The visual limitations from the main body of the settlement to the east imposed on this space by the presence of Mound 7 (which was last expanded during Chiapa IV, and apparently not altered during Chiapa V or VI [Lowe 1962: 47], allowing for the possibility that it became overgrown, further limiting visibility), and the limitations on accessibility imposed by the gully behind Mound 5, would have made this space less accessible by commoners than the MFC complex to the north.

Additionally, this new space with its cut-stone and plastered surfaces would have had distinct acoustics from those of plazas with clay-faced structures. The intensity of reverberations would have been greater, allowing for the possibility that while commoners may have been excluded from viewing many of the ceremonies taking place in the new plaza area, they may have heard the music and commotion accompanying these ceremonies at a greater volume than with the earlier, more accessible areas. While it is possible that this effect was an unintentional consequence, Steven Houston and Karl Taube have pointed out that at least by the Classic Period, there is evidence that the Maya had developed an understanding of the acoustic properties of architecture (2006:259).

By Chiapa VI, with the construction of the Mound 5 palace (Lowe 1962: 7), the E-Group at Chiapa de Corzo had been fully integrated into a pattern that is frequently repeated at sites in the Maya Lowlands. This pattern consists of a north-facing temple complex to the south of the E-Group and a palace to the southeast of the E-Group, forming a relatively enclosed royal plaza. This pattern is present at Late Formative E-

Group complexes in the Maya Lowlands, such as the Leon group and Acropolis at El Mirador (Šprajc et al. 2009: Fig. 2), the E-Group at Calakmul, Mexico (Folan 1992: Fig. 3), and the E-Group Plaza (along with the South Pyramid and Group III) of Cival (Estrada-Belli 2011: Fig. 4.1) in the Peten, among others (**Figure 8**). This pattern is evidently absent in the E-Group configurations of Ceibal (Inomata et al. 2013: Fig. 3), Tikal (Sharer and Traxler 2006: Fig. 4.5), El Palmar (Doyle 2012: Fig. 2), and Uaxactun (Ricketson 1933: Fig. 3), among others.

It is worth noting here that the engraved stone referred to as Stela 2 at Chiapa de Corzo, which has one of the earliest long count dates yet known in Mesoamerica (36 BCE), was not in fact part of a stela, but rather part of the architecture of the Mound 5 palace (Perez de Lara and Justeson 2006: 8). As such it is very possible that the information conveyed by this feature was not visible from outside of the structure. Even if it did decorate an external part of the structure, its placement on the Mound 5 palace would have made its audience more restricted than if it had decorated a stela placed in the less restricted access northern plaza. This is a further line of evidence that rulers were interacting at least in some aspects, with an increasingly limited audience. These lines of evidence suggests that the new southern addition to the ceremonial complex created a space for ceremonies involving a relatively restricted group of elite at the site.

The Chiapa V version of the Maya E-Group pattern may be repeated at Ocozocoautla, as there are two mounds to the south of the E-Group (Mounds 19a and b), however neither of these mounds have been excavated, and we consequently do not know when they were built or what kinds of

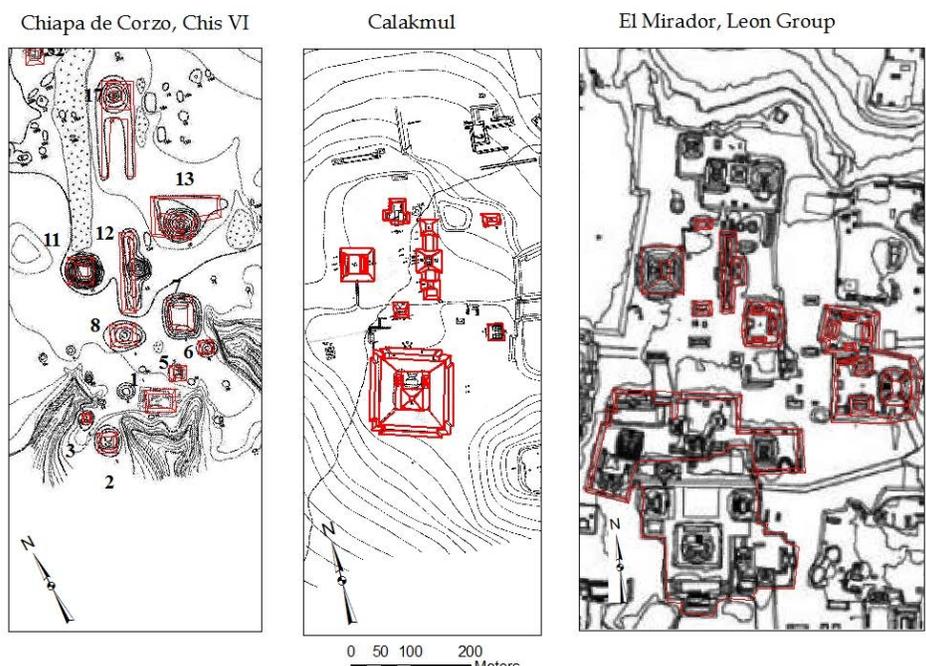


Figure 8. Chiapa VI constructions in the southern ceremonial precinct at Chiapa de Corzo and Late Formative Lowland Maya E-group configurations. (Calakmul map after Folan 1992; Mirador map after Dahlin 1984: 20-21)

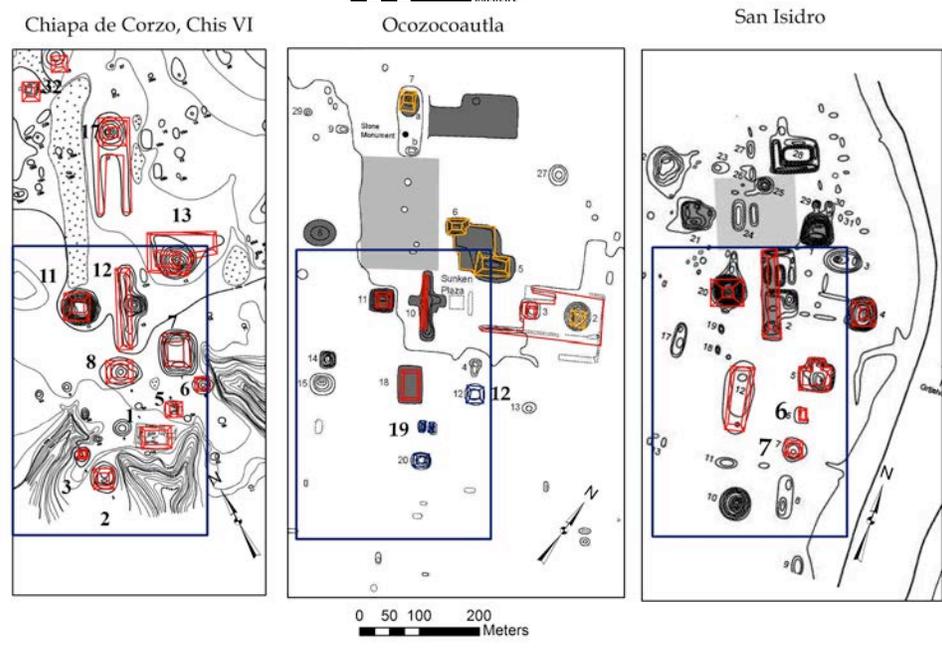


Figure 9. Late to Terminal Formative E-Group arrangements from in and around the Chiapas Central Depression.

superstructures they supported. Ocozocoautla's Mound 12 is situated roughly in the location of Mound 5 at Chiapa de Corzo, but again, this mound has not yet been excavated. Ocozocoautla's Mound 18, the first stage of which was constructed in Chiapa III (McDonald 1999: 62) appears to be a somewhat expanded analogue of the Chiapa IV Mound 8 at Chiapa de Corzo (**Figure 9**).

At San Isidro, which was occupied through Chiapa VI (Lowe 1998: 38), Mounds 6 and 7 at the southern end of the civic-ceremonial complex are potential candidates for analogues to the southern complex at Chiapa de Corzo. However, this interpretation will remain speculative for the foreseeable future, as these structures were not excavated during the salvage investigations at San Isidro (Lowe 1999; L. Lowe 1998), and now lie deep beneath the waters of the Chicoasen dam.

There are two very notable differences between the Late and Terminal Formative layouts of Chiapa de Corzo and possibly the layouts of Ocozocoautla and San Isidro, with those of the Maya Lowlands. First, the triadic architectural elements that are ubiquitous at the Late Formative sites in the Mirador Basin, and common elsewhere in the Maya Lowlands (Hansen 1998: 75), are apparently absent at Chiapa de Corzo, Ocozocoautla, and San Isidro. Second, at contemporary Maya sites, temple and palace complexes associated with E-Groups are generally located directly to the south of the E-group, while at Chiapa de Corzo and possibly at Ocozocoautla and San Isidro they are positioned to the southeast of the E-group. These differences may indicate the persistence of certain Zoque cosmological conceptions of space from the Middle Formative and a rejection

of certain Lowland Maya cosmological concepts.

We should also not ignore the fact that construction, burials, and/or caching continued on Mounds 11, 12, 13, 17, 32, 33, and 36, in the older northern precinct at Chiapa de Corzo. This continued construction and maintenance indicates that while the meaning and content of processional ceremonies was altered by the creation of a more restricted space at the southern end of the ceremonial precinct, at least certain aspects of older processional rituals continued to be practiced, visible to the public, and possibly involving the participation of the non-elite.

The adoption of this architectural configuration with Maya roots was uncommon throughout the Chiapas Central Depression and its vicinity during the Late and Terminal Formative. It is absent at the site of Mirador (Agrinier 2000: Fig. 1). It is also absent at the small Middle Formative through Early Classic site of El Cielito, which has two small E-Groups (Navarrete 1960: Fig. 2), and at the E-Group at the site of Santa Rosa in the Upper Grijalva region (Brockington 1967: Fig. 1; Delgado 1965: 33-34). Neither El Cielito nor Santa Rosa appear to have an MFC template. It is also notable that there is as of yet no evidence for new E-Group construction in or around the Chiapas Central Depression from the Late Formative through Early Classic periods (Lee et al. 2015; Lowe 1959; Lowe 1998; Navarrete 1960). The scarcity of these Lowland Maya and ancestral Zoque architectural templates may indicate a general lack of involvement with, or a rejection of geopolitical trends and their accompanying ceremonial traditions that appear to have been adopted by the elite at Chiapa de Corzo, and possibly at Ocozocoautla and San Isidro.

Discussion and conclusions

For the period when the MFC complexes made their first appearance in the Central Depression, we have little evidence for strong social divides between elites and commoners (Sullivan 2015). The individuals responsible for the design and construction of these spaces very likely had a greater, or different understanding of cosmological forces than commoners, as well as a wider geographic network of political relationships with individuals with similar sets of knowledge. Nonetheless, the initial layout of these civic-ceremonial spaces suggest that the opportunity for active participation of commoners may have been a key selling point in mustering the labor for constructing and maintaining these novel ceremonial spaces. These new arenas for ritual performances would have provided the opportunity for certain groups and individuals to gain a reputation for privileged ties to cosmological forces through sponsoring, leading, and participating in processional ceremonies. While we do not know the extent to which the evolution of this special status allowed elites to exclude groups or individuals from social, economic or political advancement, processional ceremonies would appear to be a venue in which the development of structural power, *sensu* Wolf (1990: 586, 590-591) could take place, thereby justifying the gradual expansion of social and political inequality.

If a group of individuals gained recognition as privileged intermediaries with different levels of the cosmos, reflected in the establishment of an elite residence on Chiapa de Corzo's Mound 17, and Finca Acapulco's Mound 9, this elevation in status would have facilitated the ability of this group to exercise power in other facets of

life. Whether through small-scale practices which the Spanish at contact understood as witchcraft (Aramoni 2014: 27-66), or through the broader ability to influence the coming of rainfall or the generosity of the earth deities.

None of these population centers was operating in a vacuum, and interactions between the elite from different centers was likely an important factor fueling the elaboration of ceremonies, and establishing the permanence of a class of elite. Still, the commoner population does not appear to have been excluded in any meaningful way from processions until Chiapa V. This lack of exclusion suggests that commoners were part of the intended audience of these ceremonies.

By the Late Formative, we see evidence at Chiapa de Corzo, and possibly at Ocozocoautla and San Isidro, for the imposition by the elite of restrictions on public participation and access to important aspects of ceremonial activities through the construction of more restricted ceremonial spaces. While other aspects of processional ceremonies were maintained, and likely open to the view, and possibly the participation, of the wider public, the establishment of increasingly restricted and specialized ritual space, characterized by a less accessible and visible plaza, and by the introduction of two-room temples, south of the E-Group marked new social divisions within the polity. As I have discussed elsewhere, the burial data from Chiapa de Corzo also suggest increasingly pronounced social divisions, both between elite and commoners, and between rulers and lower tier elite (Sullivan 2013: 51-52; 2015). This restricted access was likely accompanied by a constriction of avenues for social or

economic advancement to the commoner population, and eventually the non-royal elite. While this exercise of structural power may not have been a principal motivation behind the organization of these spaces, it does appear to have been at least an unintended consequence.

With that in mind, we should not view the Late and Terminal Formative modifications of the Middle Formative civic-ceremonial spaces as marking a complete break with earlier processional rituals. Excavations at Chiapa de Corzo have demonstrated that the original northern MFC part of the civic-ceremonial complex continued to be modified and used during Chiapa V and VI. Nonetheless, whether it was the intent of rulers or not, the modifications to processional ceremonies, along with changes in the political and social structure of the center at Chiapa de Corzo were accompanied by population decreases in the city, at the same time that the regional population was rising (Sullivan 2009: 197-201; 2013: 52-53; 2015). These were the first population decreases the city had seen since its inception. If the conservation of earlier traditions was in part an attempt to maintain popular support of the regime, it does not appear to have been terribly successful, as many people appear to have voted with their feet and moved out of the city. On the other hand, if the goals of rulers included limiting the number of people in the city, to better control pathways to social and political advancement, the strategy may be viewed as highly successful.

It is significant that this trend of incorporating E-Groups into increasingly restricted ceremonial spaces does not seem to have spread throughout the Chiapas

Central Depression. This may have to do with greater levels of interaction between the elite of Chiapa de Corzo, Ocozocoautla, and San Isidro with the Maya Lowlands. Exactly why these centers rather than others would have had greater interaction with people from the Maya Lowlands is not clear, but may have to do with positions on communication routes and traditions established in the Middle Formative of long-distance exchange.

While survey data suggest that the population in the Chiapa de Corzo hinterland increased during the Chiapa V and VI (Late and Terminal Formative) periods (Sullivan 2009: 197-201, 2013: 53-53; 2015), elsewhere in the Chiapas Central Depression survey data from the 1950s and 1960s suggest a decline in the number of occupied sites (Bryant et al. 2005: 6-7; Lee et al. 2015; Lowe 1959; Navarrete 1960; Peterson and Clark 2014).

It may be that a prolonged drought, which in the semi-arid Chiapas Central Depression would have had devastating effects on farming communities, caused the abandonment of many sites out of necessity. This form of crisis would have likely undermined the confidence of commoners in the ability of their rulers and their rituals to successfully placate the cosmological forces responsible for rainfall. Variability in architectural configurations within the area may reflect different responses to this cosmological and ideological crisis. Yet the fact that a variety of population centers weathered this crisis with an array of responses in the organization of ceremonial space provides some interesting avenues for future research in the Chiapas Central Depression.

References Cited

Agrinier, Pierre

1975 *Mound 1a: A Late Preclassic Architectural Complex*. Papers of the New World Archaeological Foundation. Brigham Young University, Provo, Utah.

2000 *Mound 27 and the Middle Preclassic Period at Mirador, Chiapas, Mexico*. Papers of the New World Archaeological Foundation 58. New World Archaeological Foundation, Brigham Young University, Provo, Utah.

Alain, D. R.

1989 *Carnaval zoque año 1989 ... recuerdos y nostalgias para la gente que en ese tiempo apreciaban el baile de plaza*. Video posted on YouTube.
<https://www.youtube.com/watch?v=h5Za7bUsEy4>. Accessed 6/10/2015.

Aramoni, Dolores

2014 *Los Refugios de lo Sagrado: Religiosidad, Conflicto y Resistencia entre los Zoques de Chiapas*. 1 ed. CONACULTA, Tuxtla Guitierrez, Chiapas, Mexico.

Bachand, Bruce R. and Lynne S. Lowe

2011 *La Tumba del Montículo 11 de Chiapa de Corzo y los Olmecas del Formativo Medio*. Paper presented at the Encuentro Arqueología de Chiapas: Avances e Interpretaciones Recientes: 60^a aniversario de la fundación arqueológica del nuevo mundo., San Cristobal de las Casas, Chiapas, Mexico.

2012 Chiapa de Corzo's Mound 11 Tomb and the Middle Formative Olmec. In *Arqueología Reciente de Chiapas: Contribuciones del Encuentro Celebrado en el 60 Aniversario de la Fundación Arqueológica Nuevo Mundo*, edited by L. S. Lowe and M. E. Pye, pp. 45-68. Papers of the New World Archaeological Foundation. vol. 72. Brigham Young University, Provo, Utah.

Bachand, Bruce R., Lynne S. Lowe and Emiliano Gallaga

2008 *Chiapa de Corzo Archaeological Report of the 2008 field season, English version of report*. Electronic document: <http://chiapadecorzo.byu.edu/>

Blake, Michael

2013 *Solar Orientations and Formative Period Site Layouts in Southeast Mesoamerica: Sunrise and Sunset Alignments during the Equinoxes and Solstices*. Paper Presented at the 78th Annual Society for American Archaeology Meeting, Honolulu, Hawaii.

Boone, Elizabeth Hill (editor)

1985 *Painted Architecture and Polychrome Monumental Sculpture in Mesoamerica*. Dumbarton Oaks Research and Library Collection, Washington, D.C.

Brockington, Donald L.

1967 *The Ceramic History of Santa Rosa, Chiapas, Mexico*. Papers of the New World Archaeological Foundation 23. New World Archaeological Foundation, Brigham Young University, Provo, Utah.

Bryant, Douglas Donne and John E. Clark

1983 Los primeros mayas precolombinos de la cuenca superior del Río Grijalva. In *Antropología e historia de los mixe-zoques y mayas: Homenaje a Franz Blom*,

- edited by L. Ochoa and T. A. Lee. Centro de Estudios Mayas, Universidad Nacional Autónoma de México., México, D.F.
- Bryant, Douglas Donne, John E. Clark and David Cheetham
 2005 *Ceramic Sequence of the Upper Grijalva Region, Chiapas, Mexico, Part 1*. Papers of the New World Archaeological Foundation, 67. Brigham Young University, Provo, Utah.
- Carrasco, David
 1999 *City of Sacrifice: The Aztec Empire and the Role of Violence in Civilization*. Beacon Press, Boston, Massachusetts.
- Chase, Arlen F. and Diane Z. Chase
 1995 External Impetus, Internal Synthesis, and Standardization: E Group Assemblages and the Crystallization of Classic Maya Society in the Southern Lowlands. In *Acta Mesoamericana*, edited by N. Grube, pp. 87-101. vol. 8. Wayeb, Bonn, Germany.
- Chase, Arlen F., Diane Z. Chase and John F. Weishampel
 2013 The Use of LiDAR at the Maya Site of Caracol. In *Mapping Archaeological Landscapes from Space*, edited by D. C. Comer and M. J. Hanover, pp. 187-197. Springer Briefs in Archaeology. vol. 5. Springer New York.
- Cheetham, David and Thomas A. Lee
 2004 Cerámica Zoque Temprana en Chiapa de Corzo: Secuencia, Transición, y Relaciones Externas. In *2004 Anuario, Centro de Estudios Superiores de México y Centroamérica.*, pp. 287-315. Universidad de Ciencias y Artes de Chiapas, Tuxtla Guitierrez, Chiapas, Mexico.
- Clark, John E.
 2001 Ciudades Tempranas Olmecas. In *Reconstruyendo la ciudad maya: el urbanismo en las sociedades antiguas*, edited by A. Ciudad Ruiz, M. J. P. d. L. Iglesias and M. d. C. M. Martínez, pp. 183-210. Sociedad Española de Estudios Mayas, Valladolid, Spain.
 2016 Western Kingdoms of the Middle Formative. In *Early Maya States*, edited by R. J. Sharer and L. P. Traxler. University of Pennsylvania Press, Philadelphia.
- Clark, John E. and Richard D. Hansen
 2001 The Architecture of Early Kingship: Comparative Perspectives on the Origins of the Maya Royal Court. In *Royal courts of the ancient Maya*, edited by I. Takeshi and D. H. Stephen. Westview Press, Boulder, Colo.
- Cyphers, Ann and Timothy Murtha
 2014 Early Olmec Open Spaces at San Lorenzo, Veracruz. In *Mesoamerican Plazas: Arenas of Community and Power*, edited by T. Inomata and K. Tsakumoto, pp. 71-89. Arizona State University Press, Tempe, Arizona.
- Bruce A. Dahlin
 1984 A Colossus in Guatemala: The Preclassic Maya City of El Mirador *Archaeology* 37: 18-25.
- Delgado, Agustín

- 1965 *Excavations at Santa Rosa, Chiapas, Mexico*. Papers of the New World Archaeological Foundation 13. New World Archaeological Foundation, Brigham Young University, Provo, Utah.
- Demarest, Arthur
 2006 *Ancient Maya: The Rise and Fall of a Rainforest Civilization*. Cambridge University Press, New York.
- Domenici, Davide
 2010 Patrones de Uso Ritual del Espacio Pipogeo en la Selva El Ocote (Chiapas). In *VI Coloquio Pedro Bosch Gimpera. Lugar Espacio y paisaje en arqueología Mesoamérica y otras áreas culturales*, edited by E. Ortiz Diaz, pp. 349-386. UNAM, Mexico, D.F.
 2014 Cueva del Lazo: Child Sacrifice or Special Funerary treatment? Discussion of a Late Classic Context from the Zoque Region of Western Chiapas (Mexico). In *The Bioarchaeology of Space and Place: Ideology, Power, and Meaning in Maya Mortuary Contexts*, edited by G. D. Wrobel, pp. 39-76. Springer, New York.
- Doyle, James A.
 2012 Regroup on "E-Groups": Monumentality and Early Centers in the Middle Preclassic Maya Lowlands. *Latin American Antiquity* 23(4):355-379.
- Drucker, Philip, Robert F. Heizer and Robert J. Squier
 1959 *Excavations at La Venta, Tabasco, 1955* Bulletin 170. Smithsonian Institution Bureau of American Ethnology, Washington, D.C.
- Estrada-Belli, Francisco
 2011 *The First Maya Civilization*. Routledge, New York.
- Folan, William J.
 1992 Calakmul, Campeche: A centralized urban administrative center in the northern Peten. *World Archaeology* 24(1):158-168.
- Gillespie, Susan D.
 2008 *The Architectural History of La Venta Complex A: A Reconstruction Based on the 1955 Field Records*. Foundation for the Advancement of Mesoamerican Studies., Crystal River, Florida.
- Gonzalez-Lauck, Rebecca
 1997 Acerca de piramides de tierra y seres sobre naturales: observaciones preliminares en torno al edificio C-2, La Venta, Tabasco" *Arqueología Mexicana* 17 (segunda época): 79-97. (enero-junio).
- Gossen, Gary H.
 1972 Temporal and Spatial Equivalentents in Chamula Religious Symbolism. In *Reader in Comparative Religion: An Anthropological Approach*, edited by E. Z. Vogt and W. A. Lessa, pp. 135-149. Harper and Row, New York.
 1999 *Telling Maya Tales: Tzotzil Identities in Modern Mexico*. Routledge, New York.
- Hansen, Richard
 1998 Continuity and Disjunction: The Preclassic Antecedents of Classic Maya Architecture. In *Function and Meaning in Classic Maya Architecture.*, pp. 49-122. Dumbarton Oaks Research Library and Collection, Washington, DC.

- Hill, Warren D. and John E. Clark
 2001 Sports, gambling, and government: America's first social compact? *American Anthropologist* 103(2):331-345.
- Houston, Stephen D. and Karl J. Taube
 2006 *The Memory of Bones: Body, Being, and Experience among the Classic Maya*. University of Texas Press, Austin, Texas.
- Inomata, Takeshi
 2014 Plaza Builders of the Preclassic Maya Lowlands: The Construction of a Public Space and a Community at Ceibal, Guatemala. In *Mesoamerican Plazas: Arenas of Community and Power*, edited by K. Tsukamoto and T. Inomata, pp. 25-40. University of Arizona Press., Tempe, Arizona.
 2015 Theories of Power and Legitimacy in Archaeological Contexts: The Emergent Regime of Power at the Preclassic Maya Community of Ceibal, Guatemala. In *Political Strategies in Pre-Columbian Mesoamerica*, edited by S. Kurnick and J. Baron. University Press of Colorado, Boulder, Colorado.
- Inomata, Takeshi, Daniela Triadan, Kazuo Aoyama, Victor Castillo and Hitoshi Yonenobu
 2013 Early Ceremonial Constructions at Ceibal, Guatemala, and the Origins of Lowland Maya Civilization. *Science* 340():467-471.
- Lee, Thomas A. and John E. Clark
 2016 *Chiapa de Corzo, Mound 17: Comparative Analysis of a Salvage Excavation*. Papers of the New World Archaeological Foundation. Brigham Young University, Provo, Utah.
- Lee, Thomas A., Carlos Navarrete and John E. Clark
 2015 *Reconnaissance and Excavations in the Malpas Basin, Chiapas, Mexico*. Mary E. Pye ed 78. New World Archaeological Foundation, Brigham Young University, Provo, Utah.
- Lind, Michael
 2015 *Ancient Zapotec Religion: An Ethnohistorical and Archaeological Perspective*. University Press of Colorado, Boulder, Colorado.
- Lowe , Gareth W.
 1959 *Archaeological Exploration of the Upper Grijalva River, Chiapas, Mexico*. Papers of the New World Archaeological Foundation 2. New World Archaeological Foundation, Brigham Young University., Provo, Utah.
- Lowe, Gareth W.
 1962 *Mound 5 and Minor Excavations at Chiapa De Corzo, Chiapas, Mexico*. Papers of the New World Archaeological Foundation. Brigham Young University, Provo, Utah.
 1999 *Los zoques antiguos de San Isidro*. Consejo Estatal para la Cultura y las Artes de Chiapas : Gobierno del Estado de Chiapas, Tuxtla Gutiérrez, Chiapas.
- Lowe, Gareth W. and Pierre Agrinier
 1960 *Mound 1, Chiapa de Corzo, Chiapas, Mexico*. Papers of the New World Archaeological Foundation. New World Archaeological Foundation, Brigham Young University.
- Lowe, Lynneth S.

- 1998 *Salvamento Arqueológico de la presa de Mal Paso, Chiapas: Excavaciones Menores*. Universidad Nacional Autónoma de México, Mexico City.
- Marcus, Joyce and Kent V. Flannery
 1994 Ancient Zapotec Ritual and Religion: an Application of the Direct Historical Approach. In *The Ancient Mind: Elements of a Cognitive Archaeology*, edited by C. Renfrew and E. B. W. Zebrow, pp. 55-74. Cambridge University Press, New York.
- McDonald, Andrew J.
 1983 *Tzutzuculi: A Middle-Preclassic Site on the Pacific Coast of Chiapas, Mexico*. Papers of the New World Archaeological Foundation 47. New World Archaeological Foundation, Brigham Young University, Provo, Utah.
 1999 Middle Formative Pyramid and Platform Complexes in Southern Chiapas, Mexico: Structure and Meaning. Unpublished Dissertation, Anthropology, University of Texas, Austin.
- Miller, Donald E.
 2014 *Excavations at La Libertad, a Middle Formative Ceremonial Center in Chiapas, Mexico*. Papers of the New World Archaeological Foundation. 64. New World Archaeological Foundation, Brigham Young University., Provo, Utah.
- Monaghan, John D.
 2000 Theology and History in the Study of Mesoamerican Religions. In *Supplement to the Handbook of Middle American Indianas, vol. 6: Ethnology*, edited by V. R. Bricker and J. D. Monaghan, pp. 24-49. University of Texas Press, Austin, Texas.
- Moore, Jerry D
 1996 The Archaeology of Plazas and the Proxemics of Ritual: Three Andean Traditions. *American Anthropologist* 98(4):789-802.
- National Oceanographic and Atmospheric Administration, (NOAA)
 2013 *Magnetic Field Calculator. Electronic Document*, <http://www.ngdc.noaa.gov/geomag-web/>, July 19.
- Navarrete, Carlos
 1960 *Archaeological Explorations in the Region of the Frailesca, Chiapas, Mexico*. Papers of the New World Archaeological Foundation 7. New World Archaeological Foundation, Brigham Young University, Provo, Utah.
 1985 Un escrito sobre danzas zoques antes de 1940 *Tlacocán* 10:499-456.
- Perez de Lara, Jorge and John Justeson
 2006 *Photographic Documentation of Monuments with Epi-Olmec Script/Imagery*. Foundation for the Advancement of Mesoamerican Studies, Los Angeles.
- Peterson, Fredrick A. and John E. Clark
 2014 *A Brief Reconnaissance of Three Chiapas Municipalities*. Papers of the New World Archaeological Foundation 73. New World Archaeological Foundation, Brigham Young University, Provo, Utah.
- Pitarch, Pedro
 2010 *The Jaguar and the Priest*. University of Texas Press, Austin, Texas.
- Reilly, F. Kent

- 1990 Cosmos and Rulership: The Function of Olmec-Style Symbols in Formative Period Mesoamerica. *Visible Language* 24(1):12-24.
- 1995 Art, Ritual, and Rulership in the Olmec World. In *The Olmec World*, pp. 27-46. Art Museum, Princeton University in association with Harry N. Abrams, Princeton N.J.
- 1999 Mountains of Creation and Underworld Portals: The Ritual Function of Olmec Architecture at La Venta, Tabasco. In *Mesoamerican Architecture as a Cultural Symbol*, pp. 14-39. Cambridge University Press.
- Reilly, F. Kent, Merle Greene Robertson and Virginia Fields
- 1994 Enclosed Spaces and the Watery Underworld in Formative Period Architecture: New Observations on the Function of La Venta Complex A. In *The Seventh Palenque Roundtable 1989*, pp. 1-14. Pre-Columbian Art Research Institute, San Francisco.
- Ricketson, Oliver G.
- 1933 Excavations at Uaxactun. *The Scientific Monthly* (July):72-86.
- Schele, Linda and David Friedel
- 1990 *A Forest of Kings: The Untold Story of the Ancient Maya*. William Morrow and Company, Inc., New York.
- Sharer, Robert and Loa Traxler
- 2006 *The Ancient Maya*. 6th Edition. Stanford University Press, Redwood City, California.
- Solari, Amara
- 2014 Plaza, Atrium, and Maya Social Memory in Sixteenth-Century Itzmal. In *Mesoamerican Plazas: Arenas of Community and Power*, edited by K. Tsukamoto and T. Inomata, pp. 193-212. University of Arizona Press, Tucson, Arizona
- Šprajc, Ivan, Carlos Morales-Aguilar and Richard D. Hansen
- 2009 Early Maya Astronomy and Urban Planning at El Mirador, Peten, Guatemala. *Anthropological Notebooks* 15(3):79-101.
- Sullivan, Timothy D.
- 2009 The Social and Political Evolution of Chiapa de Corzo, Chiapas, Mexico: An Analysis of Changing Strategies of Rulership in a Middle Formative through Early Classic Mesoamerican Political Center. Ph.D. dissertation. Department of Anthropology, University of Pittsburgh, University of Pittsburgh, Pittsburgh, Pennsylvania.
- 2012 Strategies in the Foundation of the Middle Formative Political Center of Chiapa de Corzo, Chiapas, Mexico. In *Arqueología Reciente de Chiapas: Contribuciones del Encuentro Celebrado en el 60º Aniversario de la Fundación Arqueológica Nuevo Mundo*, edited by L. S. Lowe and M. E. Pye, pp. 31-44. 72 ed. Papers of the New World Archaeological Foundation. New World Archaeological Foundation, Brigham Young University, Provo, Utah.
- 2013 Dinámicas de transformación en el ritual y autoridad política desde el Formativo Medio hasta el Formativo Terminal en Chiapa de Corzo, Chiapas, México In *Religion maya: rasgos y desarrollo histórico* edited by A. Sheseña, pp. 33-60. Unicach, Tuxtla Guitierrez, Chiapas, Mexico.

- 2015 Shifting Strategies of Political Authority in the Middle Formative through Terminal Formative Polity of Chiapa de Corzo, Chiapas, Mexico. *Latin American Antiquity* 26: 452-472.
- Thomas, Norman D.
 1990 Elementos pre-colombinos y temas modernos en el folklore de los zoques de Rayón. In *Los zoques de Chiapas*, edited by A. Villa Rojas, pp. 219-235. Dirección General de Publicaciones del Consejo Nacional para la Cultura y las Artes, Mexico City, Mexico.
- Treat, Raymond C.
 1986 *Early and Middle Preclassic Sub-Mound Refuse Deposits at Vistahermosa, Chiapas*. Electronic Reproduction ed. Notes of the New World Archaeological Foundation, no. 2. New World Archaeological Foundation, Brigham Young University, Provo, Utah.
- Trigger, Bruce G.
 2003 *Understanding early civilizations: a comparative study*. Cambridge University Press, Cambridge; New York.
- Vogt, Evon Z.
 1964 Ancient Maya and Contemporary Tzotzil Cosmology: A Comment on Some Methodological Problems. *American Antiquity* 30(2):192-195.
 1977 *Tortillas for the Gods: A Symbolic Analysis of Zinantaneco Rituals*. Oklahoma University Press, Norman, Oklahoma.
- Wolf, Eric R.
 1990 Distinguished Lecture: Facing Power-Old Insights, New Questions. *American Anthropologist* 92(3):586-596.
 1999 *Envisioning Power: Ideologies of Dominance and Crisis*. University of California Press, Oakland, California.
- YoSoyELNAGUAL
 2012 *Festividades de la Virgen de la Candelaria en Copoya, Chiapas, Mexico*, <https://www.youtube.com/watch?v=9ILvSB2aAKs>, 6/10/2016.

Notes

¹ This is speculative: only one test pit was excavated into Mound 2, and produced predominantly Late Classic

Sullivan, Timothy D.

- 2016 Processional Ceremonies in the Formative Period Chiapas Central Depression, Chiapas, Mexico. In *Processions in the Ancient Americas*, edited by S.T. Evans, *Occasional Papers in Anthropology* No. 33: 27-51. Department of Anthropology, Penn State University.

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