

Chapter 8

Danse Macabre: Death, Community, and Kingdom at El Kinel, Guatemala

Andrew K. Scherer, Charles Golden, Ana Lucía Arroyave
and Griselda Pérez Robles

Abstract We explore the inhumation (and occasional exhumation) of the dead within the framework of ritual practice at El Kinel, Guatemala. Over the course of this chapter, we argue that mortuary rites served to both (re)constitute society at El Kinel and reified that community's participation within the greater Yaxchilan polity of the eighth century AD. To make our case, we reconstruct the ideology of these mortuary practices through the study of 12 burials from El Kinel. In our analysis, we draw on data from archaeology, osteology, taphonomy, iconography, ethnohistory, and ethnography. Although the veneration of ancestors and perhaps the validation of lineage are evident in our analysis, more salient in our results is a ritual tradition that reflected localized (at the level of kingdom) interpretations of pan-Maya beliefs regarding the treatment of the dead. We conclude that in the eighth century AD, funerary rites served as an integrative mechanism within the Yaxchilan kingdom, uniting king and commoner through shared ritual practice.

8.1 Introduction

Patricia McAnany's (1995) landmark volume, *Living with the Ancestors*, established mortuary contexts as essential for advancing our understanding of Classic Maya society. According to McAnany (1995, p. 9), Classic Maya society was

A. K. Scherer (✉)

Department of Anthropology, Brown University, Box 1921, Providence, RI 02912, USA
e-mail: andrew_scherer@brown.edu

C. Golden

Department of Anthropology, Brandeis University, MS006, 415 South Street,
Waltham, MA 02454, USA
e-mail: cgolden@brandeis.edu

A. L. Arroyave · G. P. Robles

Universidad de San Carlos de Guatemala, 12 avenida 11-11, Zona 1,
Guatemala City, Guatemala
e-mail: ana_arro2@hotmail.com

G. P. Robles

e-mail: grisroble@yahoo.com

G. D. Wrobel (ed.), *The Bioarchaeology of Space and Place*,

DOI 10.1007/978-1-4939-0479-2_8, © Springer Science+Business Media New York 2014

characterized by a “persistent tension between ‘kingship’ and ‘kinship’” leading to “the distinctive role of ancestor veneration within royal dynasties.” For McAnany, the elaborate and highly public royal mortuary rites of the Classic period emerged as “an appropriation of Formative social practice that emerged within an agrarian milieu.” Since the publication of *Living with the Ancestors*, a significant body of literature has engaged with deposits of Maya human remains. However, despite McAnany’s insightfully holistic approach, much of the past two decades of research on Maya funerary deposits and ancestor veneration has bifurcated; most scholars have focused either on the ideology of royal mortuary ritual as constitutive of kingship (Bell et al. 2004; Buikstra et al. 2004; Eberl 2005; Fitzsimmons 1998, 2006, 2009; Houk et al. 2010; Weiss-Krejci 2009, 2011) or domestic mortuary rites as reaffirmations of lineage and household (Barnhart 2002; Chase and Chase 2011; Gillespie 2001, 2002; McAnany 1998; McAnany et al. 1999). As a result, there has been little testing of McAnany’s hypothesis pertaining to the tension surrounding Classic Maya ancestor veneration, in large part because there has been a lack of research that relates domestic burial practices to other local and regional ritual traditions. This chapter is as an attempt to fill that void.

We explore the inhumation (and occasional exhumation) of the dead within the framework of ritual practice at El Kinel, Guatemala. Over the course of this chapter, we argue that mortuary rites served to both (re)constitute society at El Kinel and reified that community’s participation within the greater Yaxchilan polity of the eighth century AD. To make our case, we reconstruct the ideology of these mortuary practices through the study of 12 burials from El Kinel. In our analysis, we draw on data from archaeology, osteology, taphonomy, iconography, ethnohistory, and ethnography. Although the veneration of ancestors and perhaps the validation of lineage are evident in our analysis, more salient in our results is a ritual tradition that reflected localized (at the level of kingdom) interpretations of pan-Maya beliefs regarding the treatment of the dead. We conclude that in the eighth century AD, funerary rites served as an integrative mechanism within the Yaxchilan kingdom, uniting king and commoner through shared ritual practice.

8.2 The Kingdom of Yaxchilan

The royal court at Yaxchilan was one of the dominant powers of the western Maya Lowlands. From our archaeological survey in the vicinity of Yaxchilan, it appears that much of the surrounding landscape was abandoned with the founding of the court sometime in the fourth century AD (Martin and Grube 2008, p. 118), presumably as populations aggregated around the court (García Moll 2003, 2004b; Golden et al. 2008, p. 252). Starting in the seventh century, the formerly vacant landscape was repopulated as communities (over 20 documented to date) sprung up within a 20 km radius of Yaxchilan (Anaya Hernandez 2001; Golden and Scherer 2013; Golden et al. 2008, Fig. 8.1). El Kinel appears to have been founded as part of this process (Golden and Scherer 2006; Golden et al. 2005).

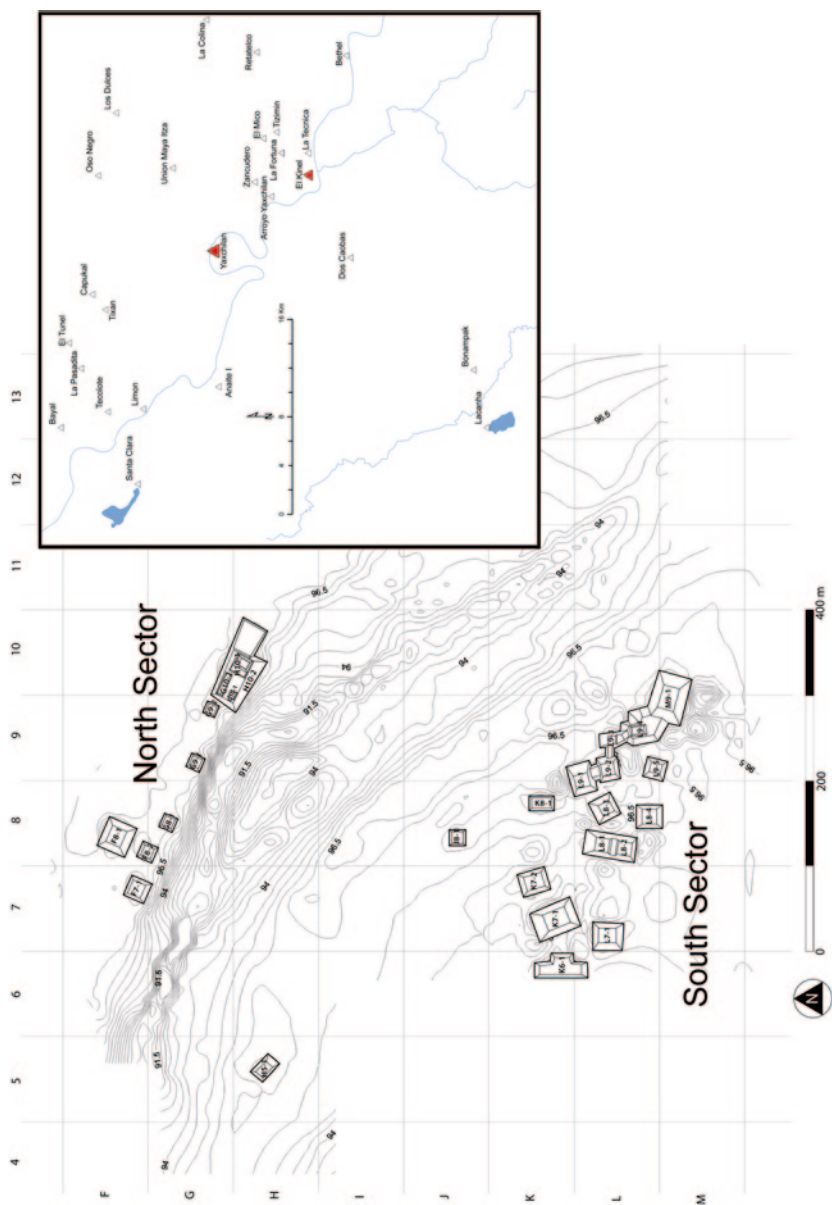


Fig. 8.1 El Kinel, Guatemala, and the greater Yaxchilan polity (*inset*) c. AD 800. (Maps by C. Golden)

The rough limits of the Yaxchilan polity in the eighth century can be reconstructed based on the location of monuments at secondary centers where inscriptions describe local lords that were subordinate to the king of Yaxchilan (Martin and Grube 2008; Mathews 1988; Safronov 2005; Tokovinine 2005). These hieroglyphically identified subordinate centers include El Chicozapote, La Pasadita, Dos Caobas, and Bonampak. Unprovenienced and questionably provenienced monuments indicate that other subordinate centers existed but remain to be identified through archaeological methods. Other Yaxchilan-affiliated centers, such as Tecolote, can be identified based on attributes of material culture and monumental architecture that are shared with Yaxchilan and distinct from other polities (Golden et al. 2008; Scherer and Golden 2009, 2012). Defensive features at La Pasadita, Tecolote, and other border sites indicate that stretches of the polity limit were collectively fortified and imply a shared body politic in the eighth century (Scherer and Golden 2009, 2014). From this we infer that significant portions of the landscape between the hieroglyphically identifiable subordinate centers and the site of Yaxchilan, the seat of its court, were politically unified as a kingdom in the eighth century.

The history and material culture of the Yaxchilan polity prior to the late seventh century remains poorly understood. Starting, however, with the reign of Shield Jaguar III in AD 681 and continuing with the reigns of Bird Jaguar IV (AD 752–768) and Shield Jaguar IV (c. AD 769–800), over 80 hieroglyphic monuments were commissioned at both Yaxchilan and its subordinate centers, affording an unprecedented look into the machinations of this Classic Maya court (Martin and Grube 2008, pp. 123–137; Mathews 1988). Warfare is a dominant theme of this sculptural program and we argue that much of these efforts were directed at controlling both the immediate landscape around Yaxchilan and access to resources and routes of travel throughout the western Maya Lowlands (Scherer and Golden 2014).

The style of the Yaxchilan monuments is one of a variety of manifestations of the distinct material culture and practices pursued within the Yaxchilan court relative to other courts in the western Lowlands (Piedras Negras, Palenque, Tonina, Sak Tz'i', and Pomona; for further discussion of these patterns, see Golden and Scherer 2013; Golden et al. 2008; Scherer and Golden 2012, 2014). As we will argue over the course of this chapter, the particularities of the material culture of the Late Classic period (AD 600–c. 810) court at Yaxchilan are merely the most obvious examples of distinct cultural practices within the greater kingdom. Elite ritual action reveals an underlying ideology that, though built upon pan-Maya tropes, reflects distinct practices within the Yaxchilan court.

Among its ritual practices, the celebration of dance was given particular prominence in the monumental corpus of Yaxchilan (Fig. 8.2). In Maya art, dance is easily recognized by the iconic bent knee pose, fluid hand gestures, and elaborate costumes (Looper 2009; Miller 1981). Textual references to dance occur widely across the Maya Lowlands during the seventh and eighth centuries (Grube 1992) and many of the costumed depictions of kings on Maya stelae likely show those kings engaged in dance or similar performance (Houston 1993, p. 92). Yaxchilan stands apart from other kingdoms, however, in the frequency of hieroglyphically



Fig. 8.2 Site R Linel 5 (drawing courtesy of Berthold Riese). Bird Jaguar IV of Yaxchilan dances at *right*, accompanied by his subordinate lord at *left*

recorded dance events, the unambiguity of dance in the iconography (in Fig. 8.2, the actors are shown engaged in dance, as opposed to standing still in costume), and the significance of dance as public ritual at both the polity capital and the subordinate centers (Helmke 2010;Looper 2009, p. 28; Tokovinine 2005).

All of the known epigraphic and iconographic references to dance at Yaxchilan are associated with the reigns of just two kings: Bird Jaguar IV and Shield Jaguar IV. Although the earliest depiction of dance at Yaxchilan is on a stela (Stela 11), most dance monuments are lintels and depict pairs of dancers: the king and his successor, the king and one of his wives, or the king and one of his subordinate lords (*sajal*). This emphasis on partnership underscores that dancing at Yaxchilan was, among other things, a process of social construction in which political relationships were reified through shared performance before an audience of fellow elites, if not the broader Yaxchilan society (Helmke 2010; Tokovinine 2005).

The dances themselves are poorly understood and involved deity impersonation (usually by the king) and the use of a variety of objects including the “flap-staff,” “basket-staff,” “bird-staff,” jaguar paw scepter, *k’awil* (God K) scepter, and snakes (Grube 1992;Looper 2009, p. 28–44). The dances were associated with important

events (accessions, solstices, and period ending celebrations) and were textually identified by the objects that were held (Grube 1992), underscoring both the specificity and diversity of meaning for dance performances. Some of the dances involved bloodletting which, combined with the act of deity impersonation, indicate that dance could be used to access or conjure supernatural beings and ancestors. MatthewLooper (2009, p. 28–44) provides the most complete synthesis of the Yaxchilan dance monuments, calling special attention to the triad of dance lintels that appear in each of Structures 1, 33, and 42. As Looper shows, these lintels were all commissioned during the reign of Bird Jaguar IV and operated in concert with one another as part of a grand performed narrative that involved the king, his successor, his wives, and his most loyal sublords. Structures 1 and 42 flank Structure 33, the principal construction in Bird Jaguar IV's reign, and together form a line oriented 120° east of north.

The alignment of buildings to 120° along with 30°, 210°, and 300° east of north were the primary cardinal orientations employed in settlement design along the Usumacinta River (Scherer and Golden 2012, p. 28). These architectural orientations are otherwise uncommon in the southern Maya Lowlands during the Classic period where orientations closer to true north, south, east, and west were preferred (Ashmore 1991; Ashmore and Sabloff 2002). The 120° axis was especially favored at Yaxchilan and its subordinate communities. The Main Plaza of Yaxchilan exhibits this orientation, as does the playing alley of one of Yaxchilan's two ballcourts (Structure 67). The 120° orientation had ritual significance as indicated by its favored use in the orientation of burials at the site. The two royal burials excavated from below the floor of Structure 23, likely Shield Jaguar III and his wife Lady K'abal Xook, were oriented with their heads to the northeast (120°; García Moll 2004a). Although data are still forthcoming, a review of the preliminary site reports indicates that the majority of Yaxchilan's burials were also oriented 120° (García Moll and Juárez Cosío 1986).

Other characteristics of interments at Yaxchilan include: (1) the placement of inverted, perforated tripod dishes over the faces of the decedents, (2) the placement of additional bowls, dishes, and cylinder vases upright at the head-end of the burials, and (3) burial architecture consisting of finely made, masonry tombs and crypts, located below the floors and stairways of multidoored temples. The placement of royal burials below the floors of temples, as opposed to within or in front of pyramids, is especially distinctive of Yaxchilan mortuary tradition in the Late Classic period relative to other Maya kingdoms.

8.3 Beyond the Court: El Kinel, Guatemala

Until future publication and fieldwork are completed at Yaxchilan, our understanding of the site beyond its royal court remains limited. Nevertheless, as a result of archaeological fieldwork elsewhere in the polity, a broader image of Late Classic period material culture and practice is emerging (Golden 2003; Golden and Scherer 2006, in review; Golden et al. 2008, 2005; Scherer and Golden 2009, 2012, 2014;

Tovalín Ahumada and Ortiz Villarreal 1999, 2006). Among the most thoroughly investigated of Yaxchilan's subsidiary communities is the site of El Kinel, located 14.5 km upstream from Yaxchilan on the Usumacinta River (9.6 km in a straight overland route).

El Kinel was first reported by Paulino Morales (Morales 2000a, b, 2001; Morales and Ramos 2002) and later a team led by Scherer, Golden, and Rosaura Vásquez mapped and excavated the site (Fig. 8.1, Golden and Scherer 2006; Golden et al. 2006; Golden et al. 2007; Houston et al. 2006; Scherer et al. 2007; Vásquez et al. 2005, 2006). El Kinel is located in the agricultural fields of the modern community of La Técnica, Guatemala, about 2.4 km west of the town center. Occupation at El Kinel dates predominantly to the Late and Terminal Classic periods, whereas settlement at the nearby site of La Técnica (located underneath the modern community) is Late Preclassic. Settlement at El Kinel is clustered into two groups: the North and South Sectors.

The North Sector of El Kinel is located on a low bluff over a kilometer away from the Usumacinta River. The South Sector sits closer to the river on its floodplain. The alignment of the structures in the North Sector is typical of communities elsewhere in the Yaxchilan polity and favors the 120° orientation. The South Sector, however, is more densely clustered and lacks the rectilinear arrangement of structures in the North Sector. Architecture in the South Sector consists of large platforms constructed from artificially mounded floodplain sediments. The South Sector platform superstructures had stone foundations and the mound's facades were likely covered in stone, though much of the surface stone has been removed for modern construction. Excavations into the platforms revealed buried substructures with stone wall foundations. A number of the South Sector platforms are connected by walkways, also built of riverine sediment. The North Sector buildings are more typical of Maya constructions in that they do not have large sediment-filled platforms and instead consisted of low platforms with irregular stone fill.

The two sectors are divided by an artificial ditch-and-berm feature. Informants from the local community indicate the ditch was present prior to the settlement of the town in the 1970s. Today, the ditch regularly floods, separating the South Sector from the mainland to the north. Excavations into the berm in 2006 revealed post-holes that may be the remnants of an ancient palisade, though we cannot rule out a modern fence line.

The most significant find from El Kinel was a stone monument (Monument 1, most likely a small stela) that was recovered by members of the community when road construction clipped part of Structure H10-2 in the North Sector (Escobedo 2001; Houston et al. 2006, Fig. 5). The text of Monument 1 indicates the protagonist is the penultimate Yaxchilan king, Shield Jaguar IV, and the calendar round date appears to correspond to the year AD 790 (Houston et al. 2006, p. 91). The ruler carries a spear and fan and is dressed in what appears to be a paper cloak, quite unusual for regal costuming; typically only captives are shown garbed in paper. The text indicates that the scene depicts a period ending dance that was, as with other Yaxchilan dance monuments, associated with the act of bloodletting. The small size of the monument, the manner in which the king is depicted, and the sculpture's

location at such an apparently minor site as El Kinel, are all highly unusual relative to other sculpture in the Yaxchilan kingdom.

Ceramics recovered from the two sectors of El Kinel suggest overlapping dates of occupation with different periods of abandonment. The materials recovered thus far from the South Sector date exclusively to the Late Classic period (c. AD 600–830). In contrast, an abundance of Terminal Classic trade wares (c. AD 830–930), including Altar Fine Orange and Tres Naciones Fine Gray materials, were recovered from the North Sector, indicating that occupation persisted there for decades after the abandonment of the South Sector.

Two scenarios thus seem feasible for the settlement history of El Kinel. One possibility is that El Kinel was occupied by two distinct groups of inhabitants who may have coexisted for only part of the site's history. The ditch-and-berm that separates the two sectors may indicate conflict between the occupants of the North and South Sectors. The presence of Monument 1 in the North Sector may suggest that it had more direct ties to Yaxchilan. Alternatively, the two sectors may reflect different settlement foci of the same community. The movement away from the river and onto the bluff coupled with the construction of the ditch-and-berm may have related to escalating conflict in the late eighth and early ninth centuries, coincident with the collapse of the royal court at Yaxchilan (Scherer and Golden 2009, 2013, 2014). To test these scenarios and to better understand the nature of community and kingdom at El Kinel, we turn to data from the excavation and analysis of burials at El Kinel.

8.4 Mortuary Archaeology and Human Osteology at El Kinel

Twelve burials have been excavated at El Kinel (Table 8.1). Burial 1 was recovered by Paulino Morales in 2001. The remaining 11 burials were excavated by the authors during the 2006 and 2007 field seasons. Burial excavation was overseen by Scherer who conducted all field and laboratory skeletal analyses. Skeletal analyses were performed using standard osteological procedure (Buikstra and Ubelaker 1994). Burials 1, 11, and 12 were recovered from the North Sector of El Kinel. Burials 2, 3, 5, 6, 7, 8, 9, and 10 were excavated in the South Sector. What follows is a brief summary of those burials, beginning with the earlier-dated South Sector. For more information, including detailed skeletal inventories, a complete pathological summary for each individual, and data pertaining to cranial and dental modification, see the original osteology reports that are available online (Scherer 2006, 2007).

8.4.1 South Sector

Excavations in the South Sector focused on the L9–3 platform. Unfortunately, the surface of the platform was not preserved so we cannot comment on the nature of its superstructure, though we assume it was a residence or a related domestic structure.

Table 8.1 Burials of El Kinel, Guatemala

Burial	Location	Sex	Age
1	North sector: unmapped (Morales' group C)	Female?	20–50 years
2	South sector: Structure L9–3	Indeterminate	2–4 years
3	South sector: Structure L9–3	Indeterminate	6–12 months
4	South sector: Near Structure L9–3	Male?	35–50 years
5	South sector: Structure L9–3	Male	20–30 years
6	South sector: Structure L9–3	Male?	30–40 years
7	South sector: Structure L9–3	Indeterminate	2–4 years
8	South sector: Structure L9–3	Indeterminate	6–12 months
9	South sector: Structure L9–3	Indeterminate	8–16 months
10	South sector: Structure L9–3	Male	16–20 years
11	North sector: Structure H10–1	Indeterminate	Adult
12	North sector: Structure G9–2	Female	16–20 years

Seven burials were recovered from within the L9–3 platform: Burials 2, 3, 5, 6, 7, 8, and 9. An additional interment, Burial 4, was excavated from the raised walkway that connects L9–3 to the adjacent L9–4 platform.

Burial 3 (Fig. 8.3) was located about 60 cm below the floor of the superstructure and contained the remains of a 6- to 12-month-old infant. The child was placed in a well-made masonry crypt with walls of vertically set stones that was capped by a limestone *metate* (grinding stone) fragment. The body was placed in an extended supine position with the arms extended and the head oriented to the southeast (120°). The left leg, though missing the feet and the lower portions of the tibia and fibula due to poor preservation, appears to have been extended. The right leg was flexed over one of stone slabs that capped another burial (Burial 2) that was located directly below Burial 3. There were no burial offerings. Woven periostitis is present on the endocranial surface of both parietals and lesions consistent with active porotic hyperostosis are visible on the squama of the occipital.

Burial 2 (Fig. 8.4) was located immediately below Burial 3. The limestone slabs that comprised portions of the floor of Burial 3 constituted the roof of Burial 2. The remainder of the cist consisted of a space hollowed out from the earthen matrix of the L9–3 platform. The grave contained the remains of a two to four-year-old child. The body was placed in an extended supine position, the head oriented toward the southeast (120°), and the left leg was slightly flexed with the knee “pointing” laterally and the plantar aspect of the left foot facing the right ankle. There were no burial offerings. The distal portion of the right tibia exhibits a thin layer of woven periostitis.

Burial 5 (Fig. 8.5) was located approximately 1 m to the south of Burials 2 and 3. The body of a 20- to 30-year-old male individual was interred in an extended supine position with each arm placed over the corresponding pelvis. The left and right medial malleoli and feet were in contact, suggesting the body may have been wrapped in a burial shroud. The body was oriented with the head to the southeast (120°). The young man was placed in a depression excavated in the L9–3 sediment

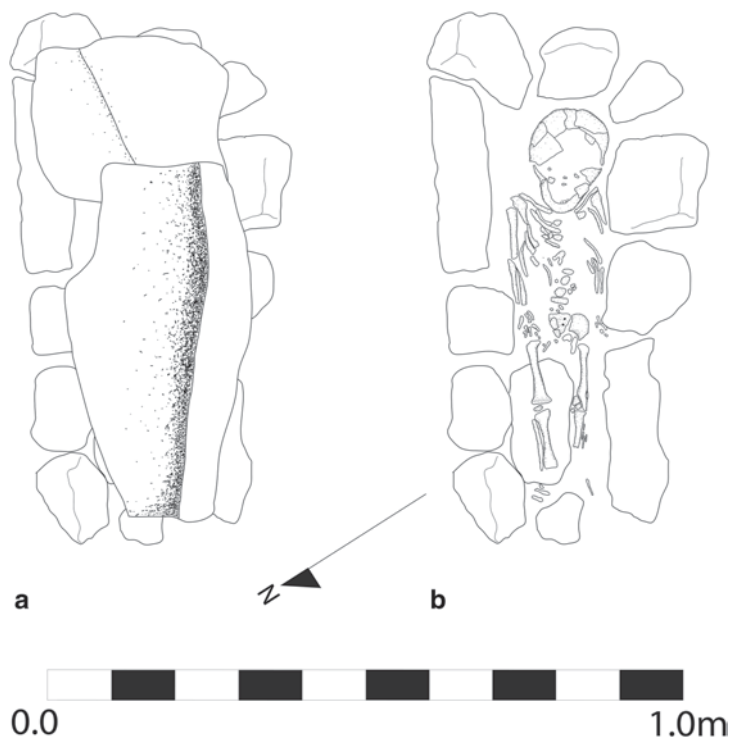


Fig. 8.3 El Kinel Burial 3; with metate fragment lid (a) and after the removal of the lid (b). (Drawings by A. Scherer and G. Pérez Robles)

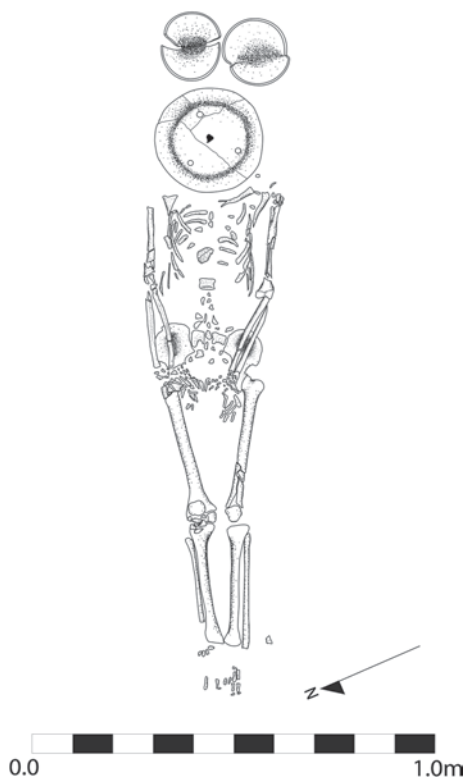
fill and covered by a series of irregular limestone cobbles. An inverted tripod plate with a perforated base (Zopilote Smudged Black, Late Classic period) was placed over the face of the individual. Two resist-reserve-painted polychrome bowls were placed just to the southeast of the head. Other possible burial goods include a large chert flake located over the thorax, a quartz cobble found near the left os coxa, and a black river stone near the right distal femur, though these objects may have been intrusive from sediments above. All of the diaphyses of the long bones of the legs exhibit symmetrical areas of mixed woven and sclerotic periostitis, suggestive of a systemic infection.

Burial 6 was located half a meter north of Burials 2 and 3 within Structure L9-3. Unfortunately, the burial was looted a few years prior to our work. The presence of disturbed limestone slabs indicates Burial 6 was either a cist or a crypt interment. Among the human remains, we found fragments of three complete Late Classic vessels (including one Tinaja Red bowl) that were once part of the burial assemblage. It is unknown if any other objects were included in the burial. Human remains consisted of a badly fragmented, partially complete skeleton of a 30- to 40-year-old probable male individual. The diaphyseal surfaces of the femora, tibiae, and humeri exhibit mixed woven and sclerotic periostitis (the fibulae are absent). Thickening

Fig. 8.4 El Kinel Burial 2.
(Drawing by A. Scherer and
G. Pérez Robles)



Fig. 8.5 El Kinel Burial 5.
(Drawing by A. Scherer and
G. Pérez Robles)



of the periosteal and endosteal surfaces (with visible vessel tracks) is apparent on both femora. A rib fragment also exhibits sclerotic periostitis. The diffuse presence of periostitis suggests a systemic infection.

Burial 7 was located less than a meter east of Burials 2 and 3 but just below the surface and at a much higher stratigraphic level within the L9–3 platform fill. All that was recovered were some of the teeth and a cranial fragment of a two to four-year-old child below a fragmented overturned tripod dish. A small bowl and wide mouth vessel were placed next to the overturned dish. The entire assemblage was capped by a large fragmented overturned bowl. The remainder of the burial, including the rest of the skeleton and any burial architecture, was destroyed as a result of looting and mining of the surface of L9–3 for usable stone in modern construction. Although the original burial orientation is unknown, the placement of the ceramic vessels suggests the head was likely in the southeast (as with most other burials at El Kinel).

Burial 8 was encountered about 1.5 m to the northwest of Burials 2 and 3 and was located near the surface of the platform in the same stratigraphic layer as Burial 7. The body consists only of the teeth, mandible, and cranial fragments of a 6- to 12-month-old infant. Again, the absence of the skeleton is likely due to recent disturbance as a result of the burial's proximity to the surface, in this case compounded by gopher activity as evidenced by a series of burrows that cut through the burial. Similar to Burial 7, the teeth were covered by a fragmented tripod dish. Adjacent to the dish was a small bowl. The fragmentary remains of at least one or possibly two large bowls covered the entire assemblage. Again, the arrangement of the vessels is suggestive of a southeast orientation for the burial.

Burial 9 (Fig. 8.6) was located just below the surface of the L9–3 platform, to the northeast of Burial 8. The body was placed into the sediment fill of the platform and covered by small limestone blocks that likely comprised part of the floor of the final superstructure. Unfortunately, a bulbous tuber grew through the center of the burial and destroyed portions of the skeleton. The body was placed in a supine position with the head to the southeast (120°). The right leg may have been flexed similar to the left leg in Burial 2, though it was impossible to determine with certainty due to the disturbance. An overturned fragmented polychrome bowl was placed over the thorax. Underneath the bowl, resting near the left os coxa was a basalt grinding stone (*mano*). The cranial vault fragments exhibit active porotic hyperostosis and two parietal fragments exhibit reactive bone on their endocranial surfaces.

Burial 10 (Fig. 8.7) was found within a buried substructure (L9–3-sub 1) within the L9–3 platform. Unfortunately, we only had the opportunity to uncover a stone wall of that substructure and its form and extent are unknown. What is clear, however, is that the face of the substructure was oriented 120° and likely formed the basal wall for a structure built primarily of perishable material. Burial 10 appears to have been placed on the floor of an interior room of L9–3-sub 1 before the L9–3 platform was raised over the dismantled and buried structure. The crypt was constructed with walls of vertically set small stone slabs and was capped by larger stone slabs. The crypt floor was sediment. Burial 10 predates all of the other burials that we recovered in L9–3. The crypt contained the body of a 16- to 20-year-old male individual, interred in an extended supine position with the arms crossed over the body. The

Fig. 8.6 El Kinel Burial 9.
(Drawing by A. Scherer and
G. Pérez Robles). A *mano*
was located underneath
the smashed vessel, near the
thorax

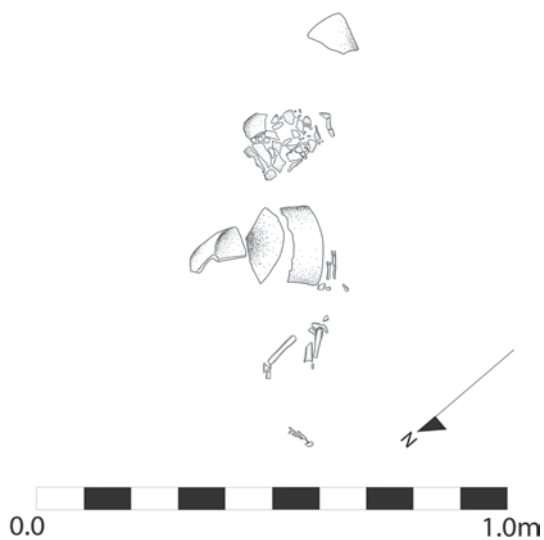
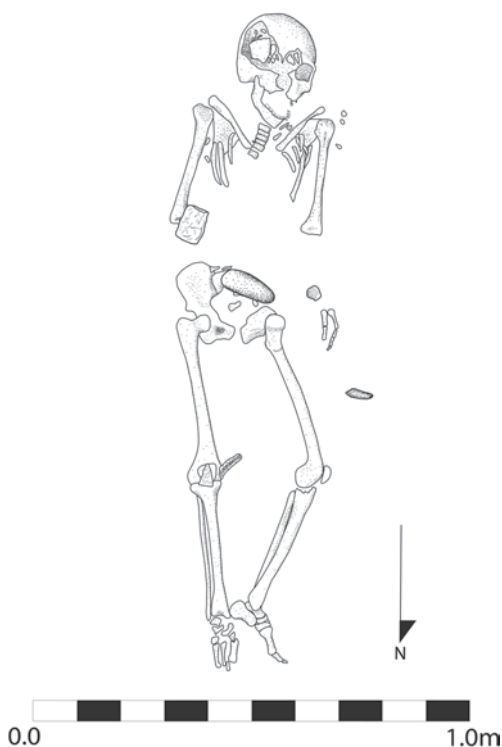


Fig. 8.7 El Kinel Burial 10.
(Drawing by A. Scherer and
A. L. Arroyave)



Fig. 8.8 El Kinel Burial 4.
(Drawing by A. Scherer and
A. L. Arroyave)



head was oriented to the southeast (120°). The position and tight articulation of the skeletal elements suggest that the body was wrapped in a shroud. A Late Classic period eroded polychrome tripod dish (from the Palmar-Saxche ceramic group) with a perforated base was placed over the face of the individual. The supports of the vessel had been snapped off prior to interment. The roof and walls of the lower portion of the crypt were missing, though a few blocks of the wall remain to suggest that it once existed. Also missing are the tibiae, fibulae, bones of the feet, and the left patella (the right patella was recovered between the two distal femora). The lack of cut marks on the distal femora indicates that the body was interred complete and that the lower legs were removed when the crypt was disturbed. This raises the possibility that the burial initially existed as an above-ground crypt, similar to above-ground crypts at Palenque (Scherer 2012), before the entire building (with crypt) was covered by the later construction. Both femora exhibit well-healed periostitis. The mesial half of the crown of the right first mandibular molar was destroyed by a large caries, exposing the pulp chamber. Associated with this tooth is a large abscess with significant alveolar resorption. Combined, these oral pathologies may relate to the cause of death.

Burial 4 (Fig. 8.8) was located in the walkway between the L9-3 and L9-4 platforms, below a floor that consisted of a mix of river cobbles and smaller stones. An abundance of pottery sherds and other domestic debris was located above the floor, perhaps deposited coevally with the abandonment of the structure. The body of a 35-

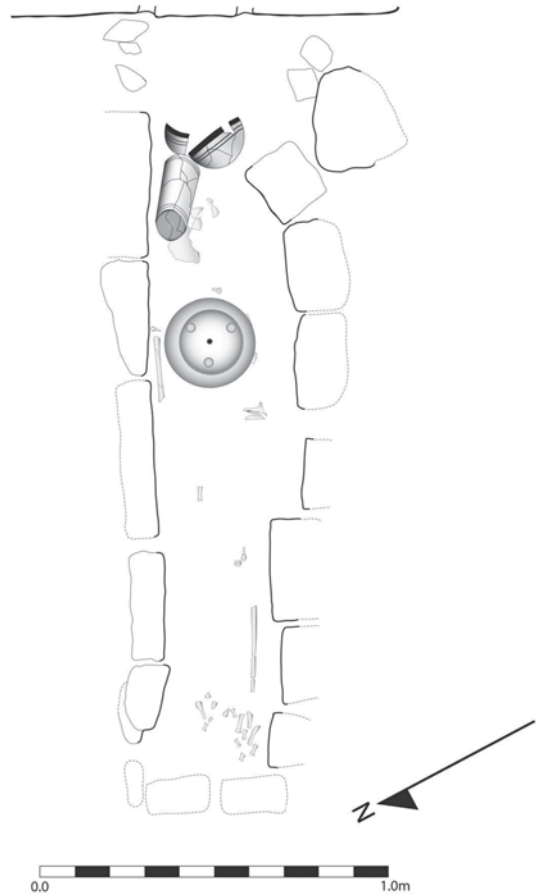
to 50-year-old probable male individual was placed directly within the sediments of the walkway without a formal burial facility. The individual was placed in a supine position, though the body was not lying flat. Rather, the lumbar and pelvic regions were at a greater depth than the upper torso, head, and legs. The right leg was extended and the foot was resting flat on its plantar surface (presumably shifting forward following decomposition of the soft tissue of the ankle joint and compression of the sediments). The left leg was flexed, with the knee “pointing” laterally and the plantar surface of the left foot facing the right ankle. The deeper location of the lower back and pelvis appears to have accommodated flexion of the left elbow with the left hand resting lateral to the left os coxa. The right arm seems to have been flexed with the right hand placed over the pelvis. Both radii and ulnae are missing as are the carpals (except the right hamate and capitate), the sternum, the lower vertebral column, and the left ilium. The metacarpals and phalanges of both hands were, however, present and articulated. The lack of cut marks on the skeleton indicates these bones were removed after the initial interment.

Unlike most other burials at El Kinel, the body was oriented with the head to the south (180°). A cluster of objects was found in the sediment just above the bones of the lower abdomen and included a *mano*, a chert axe, a large chert flake (near the left hand), and large ceramic sherds. Other objects found around and in the sediments directly above the body include two bone needle fragments, a figurine head, a chert projectile point (over the right knee), two small speoethems, a bone tool (possibly for weaving; next to the right leg), a polished river stone (likely used in ceramic manufacture; lateral to the left femur), a piece of pumice, two ocarina fragments, a worked flat stone, and additional large ceramic fragments. The bone needles may have been part of the garments worn by the individual. However, we do not believe the body was wrapped and, as we will discuss in the section that follows, we believe the limbs were intentionally arranged more or less in the position described here. Most of the other burial goods, particularly those clustered in the sediments above the abdomen, were likely placed after the burial was reexposed and the bones of the radii and ulnae were removed. The femora, tibiae, and fibulae exhibit striate, sclerotic bone across significant portions of their diaphyseal surfaces consistent with a healed bacterial infection.

8.4.2 North Sector

Only three burials were recovered from the North Sector: Burial 1, 11, and 12. Burial 1 was excavated from a group east of the mapped portion of the site, southeast of the H10–2 platform (Morales labeled this architectural complex Group C). The body was placed in an extended supine position, with arms at the side. Aside from a cist around the head, there was no formal burial facility (Morales and Ramos 2002, p. 159). The body was oriented with the head to the southeast (120°). The adult skeleton is perhaps female, though the poor preservation prohibits a definitive sex determination. An inverted tripod dish (Infierno Negro; Late Classic period) was placed over the head and four other vessels were placed in the pectoral region. Although clearly a primary interment, the skeleton was only partially complete and

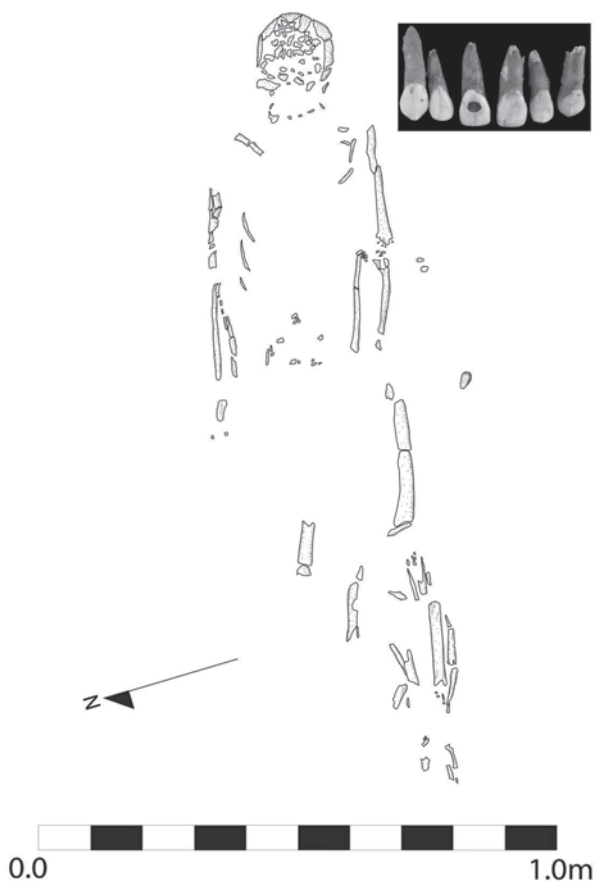
Fig. 8.9 El Kinel Burial 11.
(Drawing by C. Golden)



the excavators noted the absence of the teeth, tibia, and bones of the feet. Scherer confirmed the absence of these elements as well as the fibulae during his osteological analysis. Both femora exhibit well-healed, sclerotic periostitis.

Burial 11 (Fig. 8.9) was interred below the floor of Structure H10–1. The burial consisted of a masonry crypt with vertically set, cut limestone blocks, capped by a series of four limestone slabs, and with a floor of rough plaster. Unfortunately, the skeleton was largely disintegrated, which is a common problem with many of the well-made crypts in the Yaxchilan polity that retain an open space even centuries after their construction. The contents of such burial chambers are subject to annual cycles of inundation (rainy season) and desiccation (dry season), which promotes the fragmentation of the bone. In contrast, skeletal preservation is much better for bodies interred directly into sediments, as in the South Sector, where levels of humidity are more constant over the year. Complicating matters, well-made crypts like Burial 11 were attractive places for rodents who built nests within, gnawed on the deceased, and perhaps dined on the food that presumably occupied the bowls

Fig. 8.10 El Kinel Burial 12. (Drawing by A. Scherer and F. Quiroa). *Inset photograph* of maxillary anterior teeth (by A. Scherer). The drawing does not include the perforated dish that was located over the head



and dishes inside of the crypts. In Burial 11, we recovered an abundance of Toltec cotton rat (*Sigmodon toltecus*) remains corresponding to a minimum of 81 individuals (based on a count of left mandibles; Ashley Sharpe, personal communication, 2012). Despite the disturbance and poor preservation, portions of the cranium, dentition, right humerus, left os coxa, left fibula, hands, and feet were recovered. The distribution of the skeletal fragments of this adult of unknown sex indicates the body was interred in an extended position with the head oriented toward the southeast (120°). An inverted perforated tripod dish (Zopilote Smudged Black; two tripods removed, similar to Burial 10) was recovered in the center of the burial. Two stacked polychrome bowls and a highly eroded polychrome cylinder vase were recovered from the southeastern (head) end of the burial.

Burial 12 (Fig. 8.10) was identified during the excavation of a test pit into the G9-2 platform. The burial facility was an irregular crypt that consisted of a series of stone blocks placed around the body and covered by stone slabs that formed part of the floor of the G9-2 superstructure. Two metate fragments, one of limestone and the other of basalt, were found near the “foot end” of the crypt. The body of a

16–20-year-old female individual was interred in an extended supine position; the arms were at the individual's sides and the head was to the southeast (110–120°). Unfortunately, the legs were badly disturbed by what appears to have been the activity of tree roots, though human agency cannot be ruled out. A perforated inverted tripod dish with a red-slipped and smudged interior was placed over the face. A carnivore (canid or felid) tooth was found among the bones of the right hand and a polished river stone was located lateral to the left femur (similar to Burial 4). Striate periostitis consistent with a healed bacterial infection was visible on both femora and tibiae. The right maxillary incisor exhibits a hole drilled in its labial surface for an inlay (Fig. 8.10 inset). However, no inlay was recovered and the perforation is large and irregular as a result of cariogenic activity within the perforation. All of the other anterior teeth are present but no other teeth were modified. Classic Maya dental modifications are invariably symmetric with antimeres modified in a similar fashion. That the other teeth are unmodified may indicate that dental modification was a sequential process at El Kinel and that this person died before later alterations could be made. Alternatively, the drilling of the central incisor may have gone awry; the artisans perforating too deeply into the root chamber such that the modification of the other teeth was aborted. Certainly, it is telling that this individual died at an age when dental modification is typically performed—late adolescence or early adulthood. The infected tooth may relate to the cause of death for this individual.

8.5 From Community to Kingdom

Over the past few decades, bioarchaeology in the Maya area has been predominantly focused on issues of subsistence and health, particularly as they relate to social inequality and questions of the Classic period political collapse (e.g., Cucina and Tiesler 2003; Saul 1972; Storey 1997, 1999; White 1997; White et al. 2001; Whittington 1992, 1999; Whittington and Reed 1997; Wright 1997a, b, 2004; Wright and White 1996). A study of just 12 skeletons can contribute little to that discourse where large, diverse samples are needed. The data presented here are suggestive of widespread morbidity at El Kinel, as evidenced by the ubiquity of periostitis and porotic hyperostosis in the skeletal sample. Nevertheless, the prevalence of these disease processes is of little surprise for this preindustrial society and we can say little regarding the relationship of morbidity to mortality, inequality, and changing social processes at El Kinel. On one hand, the evidence of skeletal infection in all of the burials at El Kinel, with its low population size and density, should prompt us to question the association between morbidity and urbanism among the Maya. On the other hand, most cases were of *healed* pathologies unrelated to death. Only in the cases of Burial 10 and 11, where significant dental pathologies were observed, can we even hazard a guess as to what behaviors and conditions may relate to the death of the individuals.

Questions of morbidity, social inequality, and population dynamics aside, the excavation and analysis of the 12 burials at El Kinel provide an unprecedented glimpse

Table 8.2 Attributes of mortuary practice at El Kinel, Guatemala

Burial	Sector	Orientation	Treatment of the body	Inverted vessel	Other notable burial objects
1	North	120°	Lower legs removed	X	Four vessels placed around the pectoral region
2	South	120°	Flexed left leg		—
3	South	120°	Flexed right leg		Metate lid
4	South		Lower arms removed		Mano, chert flake, and other objects placed near pelvis
5	South	120°	Wrapped?	X	Two bowls at head; chert flake at thorax
6	South	?	?	?	Multiple ceramic vessels
7	South	120°?	?	X	Two ceramic vessels near head
8	South	120°?	?	X	Small bowl near head
9	South	120°	?	X	Mano near pelvis
10	South	120°	Lower legs removed, wrapped?	X	Mano or hammerstone in crypt wall
11	North	120°	?	X	Three ceramic vessels near the head
12	North	120°	?	X	Metate fragments near legs

into aspects of Classic Maya ideology, ritual practice, and social construction at both the level of community and kingdom. Though the sample is small, the demographic profile includes male and female individuals, and adults and children. The nonadult sample is high: 41.7% (5/12) of the burial sample, which could relate to poor early childhood health or an uneven distribution of child burials across the site, or is simply an artifact of the small burial sample size at El Kinel. Whatever the case, it is revealing that the mortuary rites at El Kinel show little bias by sex or age.

Indeed, when we begin to synthesize the mortuary data at El Kinel what emerges is an assemblage of practices that cross-cut distinctions of status, age, and sex (Table 8.2, see also Table 8.1). These persistent ritual actions underscore a perpetuated tradition of community practice and ideology at El Kinel. It is, however, insufficient to simply outline the shared practices and assume that the ancient Maya of El Kinel were social automatons, interring their dead in the “El Kinel way.” Rather, we must contextualize these actions and probe their meaning, especially in light of El Kinel’s position within the Yaxchilan kingdom.

For example, the use of masonry crypts at El Kinel recalls the more elaborate crypts and tombs of Yaxchilan noted earlier. More important, however, was the pervasive ritual practice at El Kinel of orienting bodies to a ritual axis of 120° east of north, a tradition clearly inspired by the polity capital of Yaxchilan and one that linked the community of El Kinel to the greater kingdom. The 120° ritual axis was employed not only at Yaxchilan but at many of its subordinate sites (e.g., Tecolote) and was also used at El Kinel to orient architecture in both the North Sector and the South Sector, the latter evident by the uncovered wall of Structure L9–3-sub 1. At El Kinel, the bodies of all but one of the South Sector burials, Burial 4, were oriented 120°.

Carolyn Tate (1992, p. 112) notes that the 120° orientation (or more accurately, 115–6°) at Yaxchilan marks the position at which the sun rises on the eastern horizon on the winter solstice. Tate suggests that the “winter solstice was the time and direction for the commemoration of the deceased” at Yaxchilan (Tate 1992, p. 114). Surprisingly, Tate generated her hypothesis without any reference to burials at the site but instead relied on the orientation of buildings and sculpture at Yaxchilan that pertained to the veneration of ancestors. For the Classic Maya, east was associated with the color red, the sun (denoted by the *k'in* sign in text and image), and the Sun God, especially his emergence at dawn from the Underworld (Stone and Zender 2011, p. 62). Among the modern Yucatec Maya, the souls of the deceased are believed to follow the pathway of the sun on its journey to paradise (Sosa 1985, p. 430), specifically a flowery place that Karl Taube (2004, p. 70–73) sees as pervasive in Classic Maya perceptions of the afterlife. In the iconography of the Yaxchilan kingdom, ancestors appear as celestial beings (the ancestor cartouches) on Yaxchilan stelae (Tate 1992, pp. 59–62) and in the murals at Bonampak. Like the sun, ancestors did not dwell permanently in the darkness of the Underworld but rose to the celestial paradise above. The winter solstice, as the shortest day of the year, marked an especially auspicious day to celebrate such transformations; the day was a turning point when the Sun God began to spend less time in the Underworld and more time in the solar paradise above. That the 120° ritual axis was built into the design of communities throughout the Yaxchilan polity underscores the importance of ancestors in place-making and the degree to which communities were organized around shared ritual action.

The notion of the soul descending into the Underworld to rise again as a celestial body finds obvious parallel with the mythological narrative of the death and rebirth of the Maize God, as illustrated on the sarcophagus lid of K'inich Janaab Pakal at Palenque and described in the K'iche' *Popol Vuh* (Christenson 2007). This myth, and more broadly the life cycle of maize and plants in general, ordered the Maya's understanding of life, death, and the afterlife (e.g., Christenson 2010; Fitzsimmons 2009; Martin 2006; Quenon and Le Fort 1997; Taube 1985, 2004, 2010; Žračka et al. 2011). In Classic Maya art, this myth is commonly depicted as the Maize God's resurrection through a crack in the earth, most often stylized as a turtle shell (e.g., the “Resurrection Plate” from the Museum of Fine Arts, Boston, K1892). The Classic Maya variably understood the surface of the earth as either a turtle carapace, the back of a crocodile, or a quadrilateral space oriented to the cardinal directions. The latter perspective pertains to the Maya conception of space as either ordered, as embodied by the *milpa* (maize field), or wilderness, as exemplified by the forest (Gossen 1974; Taube 2003; Vogt 1992, pp. 58–59).

Many of the distinct aspects of the El Kinel burials reflect localized interpretation of these Maya beliefs. Maya milpas and houses (with their central hearths) were and are ritually centered with a quadripartite division of space (Redfield and Villa Rojas 1962, p. 114; Taube 2003, 2012). Inverted perforated dishes within Maya burials followed the same logic. Popular belief holds that such objects among the Maya and other Amerindian societies are the remains of “ritually killed” ceramics (e.g., Lucero 2010, p. 142). This assumption, however, does not explain why in-

verted vessels are more often perforated while other ceramics within the graves are typically untouched. Rather, the perforated ceramic vessels that were placed over the heads of the deceased (Burials 1, 5, 7–10, 12) or in the middle of graves (e.g., Burial 11) operated to ritually center the burial space and established an *axis mundi* linking the dead to the celestial realms (see Taube 1998, 2005; 2010 for general discussions of Maya center-making and supernatural passageways). The Classic Maya *axis mundi* was often conceptualized as a world tree, maize, the Maize God, or confections of the three (Taube 2005, pp. 25–29). That the inverted, perforated vessels are all tripod dishes is not coincidence; the three vessel pedestals recall another aspect of center-making in Maya worldview: the three-stone hearth (Taube 1998, pp. 432–446). A remarkable variant of the use of a ceramic vessel for center-making was recovered in a Late Preclassic burial at K'axob, Belize. Rather than perforated, the interior of the K'axob dish was painted with a *k'an* cross, denoting the quadripartite division of space, and was marked by a red dot in its center (Headrick 2004, Fig. 16.2).

At El Kinel, the inverted orientation of the vessels recalls the turtle carapace as surface of the earth, much as the center perforation is reminiscent of the crack from which the Maize God emerged. However, the dish may also have solar connotations relating to underworld emergence in the sacred ideology at El Kinel. Recall that the vessels, overlaying the heads of the deceased, were placed in the east. *Elk'in* is the Classic Maya word for east, the “sun’s exit,” and is written as the composite of the sun-marked incense bowl (*EL*), the sun sign (*K'IN*) and, frequently, the phonetic complement *ni* (Stone and Zender 2011, p. 63). Iconographically, the *k'in* bowl (and similar solar receptacles) was associated with censuring, offering, and sacrifice. Functionally, dishes in Maya iconography were equally employed for ritual as they are for holding foods. The word for plate or dish in the Classic Maya inscriptions, *lak* (Houston et al. 1989, p. 91), may have been incorporated with the word for sun, *k'in*, to become the Yucatec Maya word for east, *lak'in* (Bricker 1983, p. 347). Alternatively, the Yucatec *lak'in* may be derived from *elak'in*, in which case the association with ceramic vessels and east may again originate with the use of the *EL* incense bowl. Whatever the case, it is unlikely that the iconographic and epigraphic association of sun-marked ceramic receptacles with east and the Yaxchilan practice of orientating dish-covered heads to the rising sun on the winter solstice is coincidence. Such conflation of symbolism and similar wording relates to the Maya predilection for punning—creating multiple layers of meaning that link the immediately visible (e.g., a plate) to the comic, arcane, and abstract. In this context, the association of ceramic vessels with the solar east may relate to a general association between ceramics and fire: they are forged in flame, placed over fire during cooking, and used to serve hot foods.

The practice of placing inverted perforated vessels over the faces of the deceased, oriented to 120°, is not unique to El Kinel and has been noted elsewhere in the polity, at both Yaxchilan and at Tecolote. Though this burial orientation is distinct to the Yaxchilan kingdom, perforated inverted dishes were used in burials elsewhere in the Maya lowlands. Nevertheless, the use of perforated inverted dishes is particular to the Yaxchilan polity relative to other western kingdoms. Of the

122 burials excavated at Piedras Negras (many by Scherer), such an offering was never encountered (Escobedo and Houston 1997, 1998, 1999, 2001, 2005). No such burial has been reported from the domain of either Palenque (Ruz Lhuillier 1991) or Chinikiha (Núñez Enríquez 2012). An interesting variant of the practice was found in the Yaxchilan Structure 23 tombs attributed to Shield Jaguar III and Lady K'abal Xook; instead of a perforated bowl, a large perforated mollusk shell was placed over the face of the king and queen (García Moll 2004a, pp. 269–270).

As at El Kinel, vessels tend to be clustered near the eastern end of the burials at Yaxchilan and may have contained food to accompany the dead on their celestial journey, as practiced by some modern Maya communities (Vogt 1969, p. 218). The inclusion of food within the interments would help explain the rodent problem in Burial 11 at El Kinel and elsewhere in the Yaxchilan polity. Another commonality between the El Kinel burials and the royal tombs at Yaxchilan is the type of vessels placed in the grave, which are most frequently black tripod dishes (especially the type Zopilote Smudged Black). Such vessels were recovered from a number of the burials at El Kinel and the tombs from Yaxchilan Structure 23, and can also be seen on display in the museum at Frontera Corozal, Mexico, presumably from burials excavated in the region. The dark color may be meant to signify either the earth or underworld from which the deceased will emerge.

The recovery of *manos* and *metates* in Burials 3, 4, 9, and 12 (and perhaps the ground stone implement from Burial 10) had little to do with the occupational identities of the individuals (babies do not usually grind maize in Maya society). Instead, the objects are likely meant to relate to the widespread Maya belief that they are the “true people,” made from maize (Christenson 2010) and that the cycle of their lives can be equated with that of maize (Carlsen and Prechtel 1997; Christenson 2007, p. 130). The notion of grinding the dead at El Kinel recalls a passage from the K'iche' *Popol Vuh*: “It is good that they [the brothers, Hunahpu and Xbalenque] should die. And it would be good if their bones were ground upon the face of stone like finely ground maize flour” (Christenson 2007, pp. 177).

By being ground like maize, the brothers ensured their rebirth and were thus able to return to defeat the lords of the underworld and enact the rebirth and resurrection of their father, One Hunahpu, the K'iche' equivalent of the Classic period Maize God. In the K'iche' myth, the brothers foreshadowed their death and made explicit this metaphor of maize when they said to their grandmother, “This is the sign of our word that we will leave behind. Each of us shall first plant an unripe maize in the *center* of the house. If they dry up, this is a sign of our death. ‘They have died’ you will say when they dry up. If then they sprout again, ‘They are alive,’ you will say, our grandmother and our mother” (Christenson 2007, p. 160, emphasis added). The symbolic linkage of the life and death of people with maize is widespread, today as it was in the Classic period (Carlsen and Prechtel 1997). As an interesting parallel, a sculpture on display at the Baluarte de San Miguel, Campeche shows a sacrificial victim splayed on a *metate* (Houston and Scherer 2010, Fig. 6).

The axe found in Burial 4 may also pertain to belief in Maya mythologies of life and death. Iconographically, axes are associated with the deity Chahk, bringer of rain and lightning. Referencing a series of vessel scenes in which the Maize God,

accompanied by a lightning wielding Chahk, rises from the turtle carapace, Karl Taube (2009, p. 48) points out “that the act of lightning striking the earth is music making on a cosmic scale, with thunder resounding from the carapace of the earth turtle. When the maize god emerges, he rises out of the thundering earth in dance.” Michel Quenon and Geneviève Le Fort (1997, p. 898) suggest that it is the axe/lightning wielding Chahk that cracks the turtle carapace from which the Maize God emerges or, as in some scenes, dances forth (Taube 2009:Fig. 5e). The placement of axes within Maya burials is rare, though not without precedent. At Yaxchilan, the tomb attributed to Shield Jaguar III contained an impressive axe with a monolithic blade and handle knapped from Central Mexican obsidian (García Moll 2004a). The large chert flakes recovered in Burials 4 and 5 may have had similar connotations.

In most modern Maya languages, skulls and bones are referred to as seeds (and vice versa; Christenson 2007, p. 129) and, as demonstrated in the K’iche’ myth above, there was a particular connection between bones and maize. In Classic Maya art, the fertility of bones is underscored by depictions of the Maize God resurrecting from inside of a skull (again, see, e.g., the “Resurrection Plate” from the Museum of Fine Arts, Boston, K1892). However, skulls and bones are polyvalent in Maya worldview and operated as symbols of death, embodiments of ancestors, trophies of enemies, ritually charged objects, and raw materials for the manufacture of tools and other objects (Fitzsimmons 2011).

Thus, understanding the missing bones in Burials 1, 4, and 10 is no easy matter. Considering that the bodies are from formalized interments with no evidence for perimortem violence, we rule out trophy-taking or similar matters of war. Furthermore, it is unlikely the bones were retained from a particularly socially significant member of the household (i.e., a lineage head) considering that one of the individuals from whom bones were retained was only 16 to 20 years old (Burial 10). Rather, we suspect that the retention of bones at El Kinel relates to the notion that bones were spiritually charged objects that could be emblematic of rebirth/resurrection. Nevertheless, a concern with respect is evident in the manner by which the bones were carefully removed so as to leave the rest of the burial intact. The power of the bones may relate to conceptions of liminality; they were elements that were brought back to the world of the living from the realm of the dead. Yaxchilan Lintel 25 (c. AD 723) provides an important royal precedent for such practice; Lady K’abal Xook uses an unidentified skull to conjure a Yaxchilan patron, Aj K’ahk’ O’ Chahk, who may be a manifestation of her husband, the king, Shield Jaguar III (Martin and Grube 2008, p. 125; Mathews 1988, p. 169). Elsewhere in the kingdom, a missing cranium (of a later date) was noted in a 2010 Instituto Nacional de Antropología e Historia press report of an elite burial from Bonampak. That the cranium was still in place within the Bonampak burial indicates the likelihood the cranium was removed after the original interment, similar to the process at El Kinel. As another possible parallel, two dancers from Room 3 of the Bonampak murals each hold an axe with a handle that appears to be a human long bone, possibly a femur (Looper 2009, plate 2).

At least two of the dead from El Kinel, from Burials 5 and 10, appear to have been wrapped in burial shrouds. The body in Burial 10 was wrapped with the arms

crossed over the chest. The crossed arm posture is common in Maya iconography, perhaps relating to submission or deference. Nevertheless, we do not believe it has the same connotations here. Evidence for burial wrapping has been found on occasion elsewhere in the Maya Lowlands and a significant parallel of a skeleton with crossed arms is the body attributed to Lady K'abal Xook of Yaxchilan (García Moll 2004a, p. 269). Rather, the bundling of Maya corpses likely relates to broader Mesoamerican tradition of wrapping and containing spiritually charged objects, including human remains (Guernsey and Reilly 2006).

Perhaps the most enigmatic trend in the burials of El Kinel is the flexed legs of Burials 2, 3, and 4. Although the flexure in Burial 3 may have been unintentional, caused by the placement of the leg over the lid of Burial 2, the mirror posture of Burials 2 and 4 is not a coincidence as it replicates the iconic position for dance in Classic Maya art (Looper 2009, p. 88; Maler 1911, pp. 134–135; Miller 1981). The child in Burial 2 had his or her left knee slightly flexed and left toe pointing “down.” The child’s right hand rested on the hip while the left hand was brought to the chest. As a point of contrast, this one-hand-up, one-hand-down posture was not encountered in the 124 burials excavated at Piedras Negras (Coe 1959; Escobedo and Houston 1997, 1998, 1999, 2001, 2005), yet has many parallels in the depiction of dance in Classic Maya art (see images in Looper 2009 or the Kerr Maya Vase Database, particularly the Maize God on K8540). As for the flexed leg of the young man in Burial 4, the tight articulation of the bones of his feet indicate he was likely wearing footwear when he was interred. One of his hands rested on his pelvis while the other was at his side. Considering the placement of his left hand, one wonders whether he was holding a perishable staff or some other object typically used in Maya dance.

As discussed previously, sociopolitical ties in the Yaxchilan kingdom were reified through ritual dance involving the king and his courtiers. Unfortunately, the diversity of dance rituals portrayed in the iconography of Yaxchilan does little to facilitate interpretation of the El Kinel burials. Nevertheless, we suspect the Yaxchilan lords’ preoccupation with dance informed the mortuary rites at El Kinel. But, why dancing in the grave?

The answer again lies in Maya myths of maize, life, and death and especially beliefs pertaining to the quintessential dancer of Maya lore: the Maize God. As Mary Miller (1992, p. 159) suggests, “in nature, maize plants sway to and fro, their crisp, green leaves moving like limbs of the human body; the Maize God, too, is in motion, often seeming to dance and sway.” The Maize God’s role as a principal dancer can be traced at least as far back as the Late Preclassic as shown in the murals of San Bartolo. As Karl Taube (2009, p. 49) suggests, “dancing maize gods closely related to courtly life, and reflected the beauty, health and abundant wealth of the ruler. However, in dance, the maize god could also symbolize the resurrection of the deceased ruler as corn growing from the earth.” We suggest that the myth of a dancing, resurrecting Maize God had currency beyond the courts and was embodied in the burials at El Kinel. It is possible that the young age of the dead in Burials 2 and 4 prompted their association with the youthful Maize God whose myth celebrates the triumph of life over death.

8.6 Conclusions

We posit that the burials of El Kinel embody pan-Maya beliefs pertaining to life and death yet were translated through local ideology. Among the most salient mortuary rites performed at El Kinel was the orientation of burials to 120°, the interment of some individuals with maize grinding implements, the burial of others with perforated inverted ceramic dishes, the removal of skeletal elements, and the positioning of limbs to replicate the idealized posture of dancers. Rather than simply revealing novel manifestations of Maya worldview, however, the data from El Kinel provide fundamental insight into the role of ritual practice in the construction of community and kingdom in the Late Classic period Yaxchilan polity.

Many of the mortuary rites detailed in this chapter were practiced by the residents of the Late Classic period inhabitants of the South Sector and the later inhabitants of the Terminal Classic period North Sector. The temporal division between these two time periods roughly corresponds to the collapse of the royal court at Yaxchilan. Among other things, the demise of kingship in the Middle Usumacinta River basin resulted in an opening up of trade, presumably as old limits on travel dissolved (Golden et al. 2012). However, with the collapse of the courts came polity fragmentation, including the demise of the landscape system of fortification employed by the lords of Yaxchilan to protect the kingdom (Scherer and Golden 2009). The resulting uncertainty may have prompted the abandonment of the South Sector, even as occupation continued and flourished in the North Sector of El Kinel.

The continuity in ritual practice across the two sectors, as evidenced in the mortuary deposits, suggests that the inhabitants of El Kinel continued to identify with the Yaxchilan polity even after the demise of its court, as further underscored by the placement of Monument 1 within the North Sector. Bear in mind, however, that Monument 1 was manufactured in the years prior to the court's collapse and predates much of the documented occupation of the North Sector. We suggest the monument was reset in the North Sector (perhaps from the South Sector, or elsewhere in the polity) as a memorial to a then-defunct court to which the inhabitants of El Kinel still identified as an important source of meaning and identity.

Aspects of the mortuary ritual, especially the concern with the 120° sacred ritual axis, further reveal that throughout its occupation, the inhabitants of El Kinel pursued shared ritual practice with the lords of Yaxchilan. One of the novel contributions of McAnany's landmark book *Living with the Ancestors* was the exploration of how the mortuary record might be used to explore the relationship between royal kingship and nonelite kinship among the Classic Maya. What we see in the mortuary record at El Kinel is the adoption of ritual ideology and practice that originated with the court at Yaxchilan and was unique to that kingdom. In this case, shared ritual practice was a mechanism through which kingdom was "imagined" (Anderson 1991).

One of the most significant assertions that we have made over the course of this chapter is that the mortuary ritual at El Kinel embodied elements of the myth of the Maize God and solar symbolism. To date, the massive body of literature on the Classic Maya emphasizes that ritual practice surrounding this deity was the

purview, if not monopoly, of the royal courts. There is little doubt that the Maya kings embodied aspects of the Maize God and invoked imagery of the sun, in both life and death. However, if our interpretations are correct, Maya nonelites also drew from this ideological well for inspiration in their own ritual practices; commoners, too, could emerge from the turtle carapace of the world's surface to rise as young maize.

It is entirely possible that Maya dynasts actively cultivated these shared practices as they pursued social coherency across their kingdoms. Nevertheless, we do not mean to suggest that shared ritual practice operated as a perfect mechanism for society building à la Émile Durkheim (2001) or Alfred R. Radcliffe-Brown (1945). Rather, we concur with Catherine Bell (1992, p. 216) and see mortuary rites and other forms of ritual practice as domains of negotiation that could operate in a diverse, and sometimes contradictory, fashion. Just as ritual practice can be employed to consolidate society's beliefs around dominant power structures (i.e., Maya royal courts), it may be employed to direct the faith of society away from such axes of power. For McAnany (1995), royal ancestor veneration was a cooption of earlier nonelite forms of ritual practice—a grassroots system remade for the interests of the elite. On the other side of that coin, we see mortuary rites at El Kinel as evidence of a willing adoption of royal ritual practice among nonelites. At the height of the court's power, shared ritual practice reinforced a coherent image of the Yaxchilan kingdom as a unified community. What is so compelling about the case of El Kinel is that this shared ritual practice remained meaningful, even as the court itself withered away.

Acknowledgments We thank the community of La Técnica for permitting us to carry out our research at El Kinel. We would like to acknowledge the contributions of our research team, particularly our codirector, Rosaura Vásquez, and those who participated in the 2006 and 2007 field seasons: Selket Callejas, Betsy Marzahn-Ramos, Juan Carlos Meléndez, Mauro Montejo, Fabiola Quiroa, and Claudia Valenzuela. Our work depended on the invaluable assistance of our local guides and excavation collaborators from the community of Santa Rita, especially Julián Aju Hitos, Pánfilo Regino Hernández, and Ambrosio Hernández Ixcayau. Our work at El Kinel was conducted with support from the Foundation for the Advancement of Mesoamerican Studies, Inc. (# 05027), the NSF Senior Research Grant Program (BCS-0715463), the H. John Heinz III Charitable Trust Grants for Latin American Archeology, and the Norman Fund and the Jane's Fund for Faculty Travel of the Latin American Studies Program at Brandeis. We thank the Defensores de la Naturaleza for their support and assistance, and IDAEH and CONAP for permission to carry out our research in and around the Parque Nacional Sierra del Lacandón. Marc Zender and Gabriel D. Wrobel provided valuable comments on an earlier draft of this paper. All errors and omissions are ours.

References

- Anaya Hernandez, A. (2001). *Site interaction and political geography in the Upper Usumacinta region during the Late Classic: A GIS approach*. International Series 994. Oxford: British Archaeological Reports.
- Anderson, B. (1991). *Imagined communities: Reflections on the origin and spread of nationalism*. London: Verso.

- Ashmore, W. (1991). Site-planning principles and concepts of directionality among the ancient Maya. *Latin American Antiquity*, 2(3), 199–226.
- Ashmore, W., & Sabloff, J. A. (2002). Spatial orders in Maya civic plans. *Latin American Antiquity*, 13(2), 201–215.
- Barnhart, E. L. (2002). Residential burials and ancestor worship: A reexamination of Classic Maya settlement patterns. In V. Tiesler Blos, R. Cobos, & M. Greene Robertson (Eds.), *La organización social entre los Mayas prehispánicos, coloniales y modernos* (pp. 141–158). Mexico City: Instituto Nacional de Antropología e Historia, Mexico.
- Bell, C. (1992). *Ritual theory, ritual practice*. Oxford: Oxford University Press.
- Bell, E. E., Sharer, R. J., Traxler, L. P., Sedat, D. W., Carrelli, C. W., & Grant, L. A. (2004). Tombs and burials in the Early Classic acropolis at Copan. In E. E. Bell, M. A. Canuto, & R. J. Sharer (Eds.), *Understanding Early Classic Copan* (pp. 131–158). Philadelphia: University of Pennsylvania Museum of Archaeology and Anthropology.
- Bricker, V. R. (1983). Directional glyphs in Maya inscriptions and codices. *American Antiquity*, 48(2), 347–353.
- Buikstra, J. E., Price, T. D., Wright, L. E., & Burton, J. H. (2004). Tombs from Copan's acropolis: A life history approach. In E. E. Bell, M. A. Canuto, & R. J. Sharer (Eds.), *Understanding Early Classic Copan* (pp. 191–212). Philadelphia: University of Pennsylvania Museum of Archaeology and Anthropology.
- Buikstra, J. E., & Ubelaker, D. H. (1994). *Standards for data collection from human skeletal remains*. Arkansas Archeological Survey Research Series No. 44. Fayetteville: Arkansas Archeological Survey.
- Carlsen, R. S., & Prechtel, M. (1997). The flowering of the dead. In R. S. Carlsen (Ed.), *The war for the heart and soul of a Highland Maya town* (pp. 47–67). Austin: University of Texas Press.
- Chase, D. Z., & Chase, A. F. (2011). Ghosts amid the ruins. In J. L. Fitzsimmons & I. Shimada (Eds.), *Living with the dead: Mortuary ritual in Mesoamerica* (pp. 78–101). Tucson: The University of Arizona Press.
- Christenson, A. J. (2007). *Popol Vuh: The sacred book of the Maya. The great classic of Central American spirituality, translated from the original Maya text*. Norman: University of Oklahoma Press.
- Christenson, A. J. (2010). Maize was their flesh: Ritual feasting in the Maya Highlands. In J. E. Stall & M. Carrasco (Eds.), *Pre-Columbian foodways: Interdisciplinary approaches to food, culture, and markets in ancient Mesoamerica* (pp. 577–600). New York: Springer.
- Coe, W. R. (1959). *Piedras Negras archaeology: Artifacts, caches, and burials*. Museum Monographs 18. Philadelphia: University Museum, University of Pennsylvania.
- Cucina, A., & Tiesler, V. (2003). Dental caries and antemortem tooth loss in the Northern Peten area, Mexico: A biocultural perspective on social status differences among the Classic Maya. *American Journal of Physical Anthropology*, 122, 1–10.
- Durkheim, É. (2001). The elementary forms of religious life (trans: C. Cosman). Oxford: Oxford University Press.
- Eberl, M. (2005). *Muerte, entierro y ascensión. Ritos funerarios entre los antiguos Mayas*. Libros Científicos. Tratados 21. Mérida: Universidad Autónoma de Yucatán.
- Escobedo, H. L. (2001). Anexo I: Notas sobre el monumento de la cooperativa técnica agropecuaria, La Libertad, Peten. In P. M. Morales (Ed.), *Prospección arqueológica del sitio El Kinel, La Libertad, Petén: Temporada 2001* (pp. 14–15). Guatemala City: Informe Final Entregado al Instituto de Antropología e Historia.
- Escobedo, H. L., & Houston, S. D. (Eds.). (1997). *Proyecto arqueológico Piedras Negras: Informe preliminar no. 1, tercera temporada, 1997*. Guatemala City: Informe Entregado al Instituto de Antropología e Historia de Guatemala.
- Escobedo, H. L., & Houston, S. D. (Eds.). (1998). *Proyecto arqueológico Piedras Negras: Informe preliminar No. 2, tercera temporada, 1998*. Guatemala City: Informe Entregado al Instituto de Antropología e Historia de Guatemala.

- Escobedo, H. L., & Houston, S. D. (Eds.). (1999). *Proyecto arqueológico Piedras Negras: Informe preliminar No. 3, tercera temporada, 1999*. Guatemala City: Informe Entregado al Instituto de Antropología e Historia de Guatemala.
- Escobedo, H. L., & Houston, S. D. (Eds.). (2001). *Proyecto arqueológico Piedras Negras: Informe preliminar No. 4, cuarta temporada, 2000*. Guatemala City: Informe Entregado al Instituto de Antropología e Historia de Guatemala.
- Escobedo, H. L., & Houston, S. D. (Eds.). (2005). *Informe de las intervenciones en la Estructura K-5 de Piedras Negras*. Report Presented to the Dirección General del Patrimonio Cultural y Natural de Guatemala, Guatemala City.
- Fitzsimmons, J. L. (1998). Classic Maya mortuary anniversaries at Piedras Negras. *Ancient Mesoamerica*, 9, 271–278.
- Fitzsimmons, J. L. (2006). Classic Maya tomb re-entry. In P. R. C. Colas, G. Le Fort, & B. Liljefors Persson (Eds.), *Jaws of the underworld: Life, death, and rebirth among the ancient Maya* (pp. 35–42). Acta Mesoamericana, 16. Markt Schwaben: Verlag.
- Fitzsimmons, J. L. (2009). *Death and the Classic Maya kings*. Austin: University of Texas Press.
- Fitzsimmons, J. L. (2011). Perspectives on death and transformation in ancient Maya society. In J. L. Fitzsimmons & I. Shimada (Eds.), *Living with the dead: Mortuary ritual in Mesoamerica* (pp. 51–77). Tucson: The University of Arizona Press.
- García Moll, R. (2003). *La arquitectura de Yaxchilan*. Mexico City: Instituto Nacional de Antropología e Historia.
- García Moll, R. (2004a). Shield Jaguar and Structure 23 at Yaxchilan. In M. E. Miller & S. Martin (Eds.), *Courtly art of the ancient Maya* (pp. 268–270). San Francisco: Fine Arts Museums of San Francisco.
- García Moll, R. (2004b). Yaxchilan: Evolucion interna. In A. Benavides, L. Manzanilla, & L. Mirambell (Eds.), *Homenaje a Jaime Litvak* (pp. 287–316). Mexico City: Instituto Nacional de Antropología e Historia.
- García Moll, R., & Cosío, D. J. (1986). *Yaxchilán: Antología de su descubrimiento y estudios*. Colección Científica, Serie Arqueología, No. 152. Mexico City: Instituto Nacional de Antropología e Historia.
- Gillespie, S. D. (2001). Personhood, agency, and mortuary ritual: A case study from the ancient Maya. *Journal of Anthropological Archaeology*, 20, 73–112.
- Gillespie, S. D. (2002). Body and soul among the Maya: Keeping the spirits in place. *Archeological Papers of the American Anthropological Association*, 11, 67–78.
- Golden, C. (2003). The politics of warfare in the Usumacinta Basin: La Pasadita and the realm of Bird Jaguar. In M. K. Brown & T. Stanton (Eds.), *Ancient Mesoamerican warfare* (pp. 31–48). Walnut Creek: Alta Mira Press.
- Golden, C., & Scherer, A. K. (2006). Border problems: Recent archaeological research along the Usumacinta River. *PARI Journal*, 7(2), 1–16.
- Golden, C., & Scherer, A. K. (2013). Territory, trust, growth and collapse in Classic period Maya kingdoms. *Current Anthropology*, 54(4), 397–435.
- Golden, C., Scherer, A. K., Muñoz, A. R., & Hruby, Z. (2012). Politics, boundaries, and trade in the Classic period Usumacinta River Basin. *Mexicon*, XXXIV(1), 11–19.
- Golden, C., Scherer, A. K., Muñoz, A. R., & Vásquez, R. (2008). Piedras Negras and Yaxchilan: Divergent political trajectories in adjacent Maya polities. *Latin American Antiquity*, 19(2), 249–274.
- Golden, C., Scherer, A. K., & Vásquez, R. (Eds.). (2006). *Proyecto Regional Arqueológico Sierra Lacandon: Informe preliminar number 4*. Report Presented to the Instituto de Antropología e Historia de Guatemala (IDAEH), Guatemala City. <http://usumacinta-archaeology.blogspot.com/p/publications.html>.
- Golden, C. W., Scherer, A. K., & Muñoz, A. R. (2005). Exploring the Piedras Negras-Yaxchilán border zone: Archaeological investigations in the Sierra del Lacandón, 2004. *Mexicon*, XXVII(1), 11–16.
- Golden, C. W., Scherer, A. K., Vásquez, R., Arroyave, A. L., Meléndez, J. C., Pérez, G., Quiroa, F., & Marzahn-Ramos, B. (2007). La frontera actual, la frontera antigua: Resultados de la

- temporada de campo 2006 en El Parque Nacional Sierra del Lacandón. In J. P. Laporte, B. Arroyo, & H. E. Mejía (Eds.), *XV Simposio de Investigaciones Arqueológicas en Guatemala, 2006* (pp. 279–292). Guatemala City: Museo Nacional de Arqueología y Etnología.
- Gossen, G. H. (1974). *Chamulas in the world of the sun: Time and space in Maya oral tradition*. Prospect Height: Waveland Press.
- Grube, N. (1992). Classic Maya dance: Evidence from hieroglyphs and iconography. *Ancient Mesoamerica*, 3, 201–218.
- Guernsey, J., & Reilly, F. K. (Eds.). (2006). *Sacred bundles: Ritual acts of wrapping and binding in Mesoamerica*. Barnardsville: Boundary End Research Center.
- Headrick, A. (2004). The quadripartite motif and the centralization of power. In P. A. McNany (Ed.), *K'axob: Ritual, work, and family in an ancient Maya village* (pp. 367–378). *Monumenta Archaeologica* 22. Los Angeles: The Cotsen Institute of Archaeology (University of California).
- Helmke, C. (2010). The transferral and inheritance of ritual privileges: A Classic Maya case from Yaxchilan, Mexico. *Wayeb Notes*, 35, 1–14.
- Houk, B. A., Robichaux, H. R., & Valdez, F. (2010). An early royal Maya tomb from Chan Chich, Belize. *Ancient Mesoamerica*, 21(2), 229–248.
- Houston, S. D. (1993). *Hieroglyphs and history at Dos Pilas: Dynastic politics of the Classic Maya*. Austin: University of Texas Press.
- Houston, S. D., Escobedo, H. L., Golden, C. W., Scherer, A. K., Vásquez, R., Arroyave, A. L., Quiroa, F., & Meléndez, J. C. (2006). La Técnica and El Kinel: Mounds and monuments upriver from Yaxchilan. *Mexicon*, XXVIII, 87–93.
- Houston, S. D., & Scherer, A. K. (2010). La ofrenda máxima: El sacrificio humano en la parte central del área Maya. In L. López Luján & G. Olivier (Eds.), *Nuevas perspectivas sobre el sacrificio humano entre los Mexicanos* (pp. 167–191). Mexico City: Instituto Nacional de Antropología e Historia.
- Houston, S. D., Stuart, D., & Taube, K. A. (1989). Folk classification of Classic Maya pottery. *American Anthropologist*, 91(3), 720–726.
- Looper, M. (2009). *To be like gods: Dance in ancient Maya civilization*. Austin: University of Texas Press.
- Lucero, L. J. (2010). Materialized cosmology among ancient Maya commoners. *Journal of Social Archaeology*, 10(1), 138–167.
- Maler, T. (1911). *Explorations in the Department of Petén, Guatemala, Tikal: Report of explorations for the museum*. Memoirs of the Peabody Museum of American Archaeology and Ethnology, Harvard University. (Vol. 5, No. 1). Cambridge: Peabody Museum, Harvard University.
- Martin, S. (2006). Cacao in ancient Maya religion: First fruit from the maize tree and other tales from the underworld. In C. McNeil (Ed.), *Chocolate in Mesoamerica: A cultural history of cacao* (pp. 154–183). Gainesville: University Press of Florida.
- Martin, S., & Grube, N. (2008). *Chronicle of the Maya kings and queens*. (2nd edn.) New York: Thames & Hudson.
- Mathews, P. (1988). *The sculpture of Yaxchilan*. Ph.D. dissertation. New Haven: Yale University.
- McAnany, P. A. (1995). *Living with the ancestors: Kinship and kingship in ancient Maya society*. Austin: University of Texas Press.
- McAnany, P. A. (1998). Ancestors and the Classic Maya built environment. In S. D. Houston (Ed.), *Function and meaning in Classic Maya architecture* (pp. 271–298). Washington, D.C.: Dumbarton Oaks Research Library and Collection.
- McAnany, P. A., Storey, R., & Lockard, A. K. (1999). Mortuary ritual and family politics at Formative and Early Classic K'axob, Belize. *Ancient Mesoamerica*, 10, 129–146.
- Miller, M. E. (1992). The image of people and nature in Classic Maya art and architecture. In R. F. Townsend (Ed.), *The ancient Americas: Art from sacred landscapes* (pp. 158–169). Chicago: The Art Institute of Chicago.
- Miller, V. E. (1981). *Pose and gesture in Classic Maya monumental sculpture*. Ph.D. dissertation. Austin: University of Texas.

- Morales, P. (2000a). *Registro de Estela 1, de El Kinel, La Libertad, Petén*. Guatemala City: Informe presentado al Instituto de Antropología e Historia.
- Morales, P. (2000b). Sitios arqueológicos de reciente descubrimiento en los municipios de San Andrés y La Libertad, Petén. In J. P. Laporte & H. L. Escobedo (Eds.), *XIV Simposio de Investigaciones Arqueológicas en Guatemala* (pp. 482–495). Guatemala City: Museo Nacional de Arqueología y Etnología.
- Morales, P. (2001). *Prospección arqueológica del sitio El Kinel, La Libertad, Petén: Temporada 2001*. Guatemala City: Informe Entregado al Instituto de Antropología e Historia.
- Morales, P., & Ramos, C. E. (2002). Prospección arqueológica en El Kinel, La Libertad, Petén. In J. P. Laporte, H. L. Escobedo, & B. Arroyo (Eds.), *XV Simposio de Investigaciones Arqueológicas en Guatemala, 2001* (pp. 154–165). Guatemala City: Museo Nacional de Arqueología y Etnología.
- Núñez Enríquez, L. (2012). Las sepulturas. In R. Liendo Stuardo (Ed.), *Proyecto Arqueológico Chinihiá: Informe, cuarta temporada, 2011* (pp. 178–224). Report Submitted to the Instituto Nacional de Antropología e Historia, Mexico, D.F.
- Quenon, M., & Le Fort, G. (1997). Rebirth and resurrection in maize god iconography. In B. Kerr & J. Kerr (Eds.), *The Maya vase book: A corpus of rollout photographs of Maya vases*. (Vol. 5., pp. 884–902). New York: Kerr Associates.
- Radcliffe-Brown, A. R. (1945). Religion and society. *Journal of the Royal Anthropological Institute of Great Britain and Ireland*, 75, 33–43.
- Redfield, R., & Villa Rojas, A. (1962). *Chan Kom: A Maya village*. Carnegie Institution of Washington Publication 448. Chicago: The University of Chicago Press.
- Ruz Lhuillier, A. (1991). *Costumbres funerarias de los antiguos Mayas*. Mexico City: Universidad Nacional Autónoma de México.
- Safronov, A. (2005). Yaxchilan wars in the reign of 'Itsamnaaj B'alam IV (771—ca. 800). 1385. In P. Eeckhout & G. Le Fort (Eds.), *Wars and conflicts in Prehispanic Mesoamerica and Andes* (pp. 50–57). (BAR International Series no. 1385) Oxford: British Archaeological Reports.
- Saul, F. P. (1972). *The human skeletal remains of Altar de Sacrificios: An osteobiographic analysis*. *Papers of the Peabody Museum of Archaeology and Ethnology*, (Vol. 63, No. 2). Cambridge: Harvard University.
- Scherer, A. K. (2006). Bioarqueología de El Kinel, La Técnica, y Zancudero. In C. W. Golden, A. K. Scherer, & R. Vásquez (Eds.), *Proyecto Arqueológico Sierra del Lacandón, Informe Preliminar No. 4, Cuarta Temporada 2006* (pp. 83–94). Report presented to the Instituto de Antropología e Historia de Guatemala (IDAEH), Guatemala City. <http://usumacinta-archaeology.blogspot.com/p/publications.html>.
- Scherer, A. K. (2007). Bioarqueología de El Kinel, temporada de campo 2007. In A. K. Scherer, C. Golden, & R. Vásquez (Eds.), *Proyecto Regional Arqueológico Sierra del Lacandón: Informe Preliminar No. 5* (pp. 186–201). Report presented to the Instituto de Antropología e Historia de Guatemala (IDAEH), Guatemala City. <http://usumacinta-archaeology.blogspot.com/p/publications.html>.
- Scherer, A. K. (2012). The Classic Maya sarcophagus: Rebirth and renewal at Palenque and Tonina. *RES: Journal of Anthropology and Aesthetics*, 61/62, 242–261.
- Scherer, A. K., & Golden, C. (2009). Tecolote, Guatemala: Archaeological evidence for a fortified Late Classic Maya political border. *Journal of Field Archaeology*, 34(3), 285–304.
- Scherer, A. K., & Golden, C. (2012). *Revisiting Maler's Usumacinta: Recent archaeological investigation in Chiapas, Mexico*. San Francisco: The Pre-Columbian Art Research Institute.
- Scherer, A. K., & Golden, C. (2014). War in the West: History, landscape, and Classic Maya conflict. In A. K. Scherer & J. W. Verano (Eds.), *Battlegrounds and battered bodies: War in Pre-Columbian America*. Washington, D.C.: Dumbarton Oaks Research Library and Collection, pp. 57–92.
- Scherer, A. K., & Golden, C. (2013). Water in the West: Chronology and collapse of the Classic Maya river kingdoms. In G. Iannone (Ed.), *The great Maya droughts in cultural context* (pp. 224–248). Boulder: University of Colorado Press.

- Scherer, A. K., Golden, C., & Vásquez, R. (Eds.). (2007). *Proyecto Regional Arqueológico Sierra Lacandon: Informe preliminar number 5*. Report presented to the Instituto de Antropología e Historia de Guatemala (IDAEH), Guatemala City. <http://usumacinta-archaeology.blogspot.com/p/publications.html>.
- Sosa, J. R. (1985). *The Maya sky, the Maya world: A symbolic analysis of Yucatec Maya cosmology*. Ph.D. dissertation. Albany: State University of New York.
- Stone, A., & Zender, M. (2011). *Reading Maya art: A hieroglyphic guide to ancient Maya painting and sculpture*. New York: Thames & Hudson.
- Storey, R. (1997). Individual frailty, children of privilege, and stress in Late Classic Copán. In S. L. Whittington & D. M. Reed (Eds.), *Bones of the Maya: Studies of ancient skeletons* (pp. 116-126). Washington, D.C.: Smithsonian Institution Press.
- Storey, R. (1999). Late Classic nutrition and skeletal indicators at Copán, Honduras. In C. D. White (Ed.), *Reconstructing ancient Maya diet* (pp. 169-183). Salt Lake City: University of Utah Press.
- Tate, C. E. (1992). *Yaxchilán: The design of a Maya ceremonial city*. Austin: University of Texas Press.
- Taube, K. A. (1985). The Classic Maya maize god: A reappraisal. In V. M. Fields (Ed.), *Fifth Palenque round table, 1983* (pp. 171-181). San Francisco: The Pre-Columbian Art Research Institute.
- Taube, K. A. (1998). The jade hearth: Centrality, rulership, and the Classic Maya temple. In S. Houston (Ed.), *Function and meaning in Classic Maya architecture* (pp. 427-478). Washington, D.C.: Dumbarton Oaks Research Library and Collection.
- Taube, K. A. (2003). Ancient and contemporary Maya concepts about field and forest. In A. Gómez-Pompa, M. F. Allen, S. L. Fedick, & J. J. Jiménez-Osornio (Eds.), *The Lowland Maya area: Three millenia at the human-wildland interface* (pp. 461-494). New York: Food Products Press.
- Taube, K. A. (2004). Flower mountain: Concepts of life, beauty, and paradise among the Classic Maya. *RES: Anthropology and Aesthetics*, 45(Spring), 69-98.
- Taube, K. A. (2005). The symbolism of jade in Classic Maya religion. *Ancient Mesoamerica*, 16, 23-50.
- Taube, K. A. (2009). The Maya maize god and the mythic origins of dance. In G. L. F. Le Fort, R. Gardiol, S. Matteo, & C. Helmke (Eds.), *The Maya and their sacred narratives: Text and context in Maya mythologies* (pp. 41-52). Acta Mesoamericana, Vol. 20. Markt Schwaben: Verlag.
- Taube, K. A. (2010). Gateways to Another World: The symbolism of flowers in Mesoamerica and the American Southwest. In K. Hays-Gilpin & P. Schaafsma (Eds.), *The land brightened with flowers: The Hopi Iconography Project* (pp. 73-120). Flagstaff: Museum of Northern Arizona Bulletin.
- Taube, K. A. (2012). Creation and cosmology: Gods and mythic origins in ancient Mesoamerica. In D. Nichols & C. Pool (Eds.), *The Oxford handbook of Mesoamerican archaeology* (pp. 741-751). Oxford: Oxford University Press.
- Tokovinine, A. (2005). The dynastic struggle and the biography of a *Sajal*: "I was with that king". In P. Eeckhout & G. Le Fort (Eds.), *Wars and Conflicts in Prehispanic Mesoamerica and the Andes* (pp. 37-49). BAR International Series, no. 1385. Oxford: John and Erica Hedges Ltd.
- Tovalín Ahumada, A., & Ortiz Villarreal, V. M. (1999). Ofrendas de Bonampak en contextos funerarios. In J. P. Laporte & H. Escobedo (Eds.), *XII Simposio de Investigaciones Arqueológicas en Guatemala, 1998* (pp. 583-599). Guatemala City: Museo Nacional de Arqueología y Entología.
- Tovalín Ahumada, A., & Ortiz Villarreal, V. M. (2006). Bonampak más allá de sus murales. La gran plaza. *Lakamha'*, Año 5/Segunda Época, 19, 3-6.
- Vásquez, R., Scherer, A. K., & Golden, C. (Eds.). (2005). *Proyecto Regional Arqueológico Sierra Lacandon: Informe preliminar number 3*. Report presented to the Instituto de Antropología e Historia de Guatemala (IDAEH), Guatemala City. <http://www.sierralacandon.org/resources-pubs.html>.

- Vásquez, R., Scherer, A. K., Golden, C., Houston, S. D., Quiroa, F., Meléndez, J. C., & Arroyave, A. L. (2006). En el reino de Pájaro Jaguar: Reconocimiento arqueológico en el área sur de la Sierra del Lacandón, Petén. In J. P. Laporte, B. Arroyo, & H. Mejía (Eds.), *XIX Annual Simposio de Investigaciones Arqueológicas en Guatemala, 2005* (pp. 795–804). Guatemala City: Museo Nacional de Arqueología y Etnología.
- Vogt, E. Z. (1969). *Zinacantan: A Maya community in the Highlands of Chiapas*. Cambridge: The Belnap Press of Harvard University.
- Vogt, E. Z. (1992). *Tortillas for the gods: A symbolic analysis of Zinacanteco rituals*. Norman: University of Oklahoma Press.
- Weiss-Krejci, E. (2009). El papel político de los muertos entre los antiguos Mayas de Tikal. *Los Investigadores de la Cultura Maya* 17, 1, 129–142.
- Weiss-Krejci, E. (2011). The role of dead bodies in Late Classic Maya politics: Cross-cultural reflections on the meaning of Tikal Altar 5. In J. L. Fitzsimmons & I. Shimada (Eds.), *Living with the dead: Mortuary ritual in Mesoamerica* (pp. 17–52). Tucson: The University of Arizona Press.
- White, C. D. (1997). Ancient diet at Lamanai and Pacbitun: Implications for the ecological model of collapse. In S. L. Whittington & D. M. Reed (Eds.), *Bones of the Maya: Studies of ancient skeletons* (pp. 171–180). Washington, D.C.: Smithsonian Institution Press.
- White, C. D., Pendergast, D. M., Longstaffe, F. J., & Law, K. R. (2001). Social complexity and food systems at Altun Ha, Belize: The isotopic evidence. *Latin American Antiquity*, 12(4), 371–394.
- Whittington, S. L. (1992). Enamel hypoplasia in the low status Maya population of prehispanic Copan, Honduras. In A. H. Goodman & L. L. Capasso (Eds.), *Recent contributions to the study of enamel developmental defects* (pp. 185–206). Journal of Paleopathology Monographic Publications No. 2. Chieti. Italy: Associazione Antropologica Abruzzese.
- Whittington, S. L. (1999). Caries and antermortem tooth loss at Copán: Implications for commoner diet. In C. D. White (Ed.), *Reconstructing ancient Maya diet* (pp. 151–167). Salt Lake City: University of Utah Press.
- Whittington, S. L., & Reed, D. M. (1997). Commoner diet at Copán: Insights from stable isotopes and porotic hyperostosis. In S. L. Whittington & D. M. Reed (Eds.), *Bones of the Maya: Studies of ancient skeletons* (pp. 157–170). Washington, D.C.: Smithsonian Institution Press.
- Wright, L. E. (1997a). Ecology or society? Paleodiet and the collapse of the Pasiön Maya Lowlands. In S. L. Whittington & D. M. Reed (Eds.), *Bones of the Maya: Studies of ancient skeletons* (pp. 181–195). Washington, D.C.: Smithsonian Institution Press.
- Wright, L. E. (1997b). Intertooth patterns of hypoplasia expression: Implications for childhood health in the Classic Maya Collapse. *American Journal of Physical Anthropology*, 102, 233–247.
- Wright, L. E. (2004). Osteological investigations of ancient Maya lives. In C. W. Golden & G. Borgstede (Eds.), *Continuities and changes in Maya archaeology* (pp. 201–216). New York: Routledge.
- Wright, L. E., & White, C. D. (1996). Human biology in the Classic Maya collapse: Evidence from paleopathology and paleodiet. *Journal of World Prehistory*, 10, 147–198.
- Žračka, J., Koszkuł, W., Martin, S., & Hermes, B. (2011). In the path of the maize god: A royal tomb at Nakum, Petén, Guatemala. *Antiquity*, 85(329), 890–908.