

# CULTURAL DIMENSIONS OF WARFARE IN THE MAYA WORLD

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## Abstract

Archaeological studies worldwide have revealed a wide range of cultural contexts within which practices of violence and warfare have occurred. In Mesoamerica, ongoing studies have enriched our understanding of social contexts of violence and warfare in Maya societies. This expanding body of field data allows deeper exploration of the ways violence was intricately linked to different aspects of cultural life for many Maya communities. In this article, we contemplate the culturally embedded nature of violence and warfare with a specific focus on the Classic period and questions related to political strategy, ritual practices, and total warfare. We provide empirical frameworks for the study of war to address issues of ritual warfare and societal impact, and we emphasize a regional scale of analysis.

## INTRODUCTION

Ongoing archaeological studies have enriched our knowledge of cultural contexts of violence and warfare in Maya societies, particularly within the Classic period (ca. A.D. 200–1000). Highlighting current evidence from across the lowlands, this article explores general facets of organized violence within Maya cultures (Figure 1). Our goal is to complement previous arguments, developing them further in light of new evidence, and to suggest ways of reorienting and reformulating research questions. For this article, we acknowledge that scholars of the Maya continue to debate the appropriate dates for the beginning and end of the Classic period. We have chosen to use the longer ca. A.D. 200–1000 chronology to account for the continued reproduction of cultural markers associated with the Classic period in several subregions, including the northern lowlands (Bey and Gallareta Negrón 2019:138; Hoggarth et al. 2016), up through the beginning of the eleventh century.

Past arguments about Maya warfare have suggested that combat was limited in scope, constrained by norms and rules, and relatively inconsequential for the majority of the population (Demarest 1978; Freidel 1986; Schele 1984; Schele and Mathews 1991; Schele and Miller 1986; see also Hernandez and Bracken 2023). More recent approaches have indicated that aspects of warfare were quite significant for many segments of the population during various periods (Ambrosino et al. 2003; Chase and Chase 1998; Ek 2020; Hernandez and Palka 2017; Inomata 2014; Inomata and Triadan 2009; Morton and Peuramaki-Brown 2019; O'Mansky and Demarest 2007; Serafin et al. 2014; Tiesler and Cucina 2012; Webster 2000). According to Scherer and Golden (2014:57; Scherer and Verano 2014), most scholars have moved past the conventional

view “that warfare for the ancient Maya was primarily a ritual practice intended to capture victims for sacrificial displays.” In this article, we review some of these contrasting perspectives. While we do not disagree with the arguments about Maya warfare containing ritual aspects and being constrained to varying degrees by norms of behavior, we maintain that seeing warfare as restricted in terms of participation and impact downplays the possible roles that various community members could have played in making, experiencing, and avoiding war. Consistent with the view offered by Hernandez and Bracken (2023; see also Bey and Gallareta Negrón 2019; Nielsen and Walker 2009; Scherer and Verano 2014), we argue that cultural practice can illuminate the ways in which violence took on different forms within Maya societies, and how intra- and intersocietal forms of violence were instrumental in bringing about social change, both intentionally and unintentionally. Institutions that were structured by and developed in relation to violent practices, themselves associated with ideological systems, impacted political relationships.

This article addresses questions related to political strategy, ritual practices, and total warfare by outlining broad frameworks for interpretation. In what ways did communities view and use violence? Was participation limited to specific segments of populations, such as elites? What kinds of evidence is needed to evaluate contrasting claims? Studying conflict in Maya society requires “a contextual assessment of the nature of warfare in particular places and times” (Borgstede and Mathieu 2007:191). We hope this article will serve as a useful vehicle to demonstrate the myriad ways warfare can be explored through a range of data types. The process of making war stretches far beyond active battle, from anticipation of, and preparation for conflict, to the aftermath of death, destruction, conquest, or even stalemate. All these practices interrelate to other cultural activities outside of the category of warfare, for which the material remains tend to be even more ambiguous (e.g., Walker 2002).

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Figure 1. Map of Maya sites discussed in this article. Map by Seligson.

Violence was an important tool for leadership strategies, a means to strengthen legitimacy and political authority, and it was dynamically intertwined with aspects of social life. Participation in aspects of warfare was not restricted to elites, as violence was deployed toward a wide variety of goals. Following this argument, we suggest that a regional perspective offers an intriguing way to pose new questions about organized violence. Ongoing scholarship would benefit from complementing site- or settlement-specific examinations with wider, pan-regional considerations and how these patterns shifted over time. For instance, recent fieldwork (see Wahl et al. 2019) suggests Classic-period warfare sometimes took on “total” or “all-encompassing” forms. In these cases, practices, perceptions, and meanings would have moved beyond the elite warrior class and involved people across a wide spectrum of communities. Through exploration of these dimensions, we intend to dispel the argument that links between warfare and Maya societies were inconsequential for any demographic segment.

#### PERSPECTIVES ON MAYA VIOLENCE AND WARFARE: CHALLENGES AND OPPORTUNITIES

For the purposes of this article, we adopt a definition of warfare similar to Vencel’s (1984:121), conceptualizing warfare as intercommunity

armed violence. While we acknowledge the importance of intra-community violence, we believe this definition offers a productive starting point because it is inclusive of a variety of behaviors, practices, and participants, irrespective of motivations, agendas, or objectives (see Graham [2019] for a comprehensive discussion of definitions for conflict and war). This inclusivity is necessary in order for researchers to recognize the cultural variability inherent in activities related to warfare, precipitating motivations and meanings. Similarly, we see violence as taking a variety of possible forms, not all of which are readily discernible in the material record. Anthropologists have noted varieties of violence, such as structural, symbolic, cultural, latent, psychological, and others, which do not always result in direct and readily apparent bodily injury (see Kim and Kissel 2018). Adopting this view of violence has implications for the interrogation of the archaeological record. Specifically, in agreement with other scholars (Kim and Kissel 2018:29–30), we see violence as not simply a dyadic relationship between aggressor and victim, but rather as an occurrence within a social web that allows for the participation of a range of potential actors and participants, all in different roles.

Most of the available archaeological, epigraphic, and iconographic evidence regarding Maya violence and warfare dates to the Late Classic period (ca. A.D. 600–1000), centering most discussion within that era (Ek 2020; Iannone et al. 2016; Inomata and Triadan 2009; O’Mansky and Demarest 2007; Tiesler and Cucina 2012; Webster 2000). As noted by Webster (2000:81–82), in the mid-twentieth century, many scholars believed the Classic Maya were inordinately peaceful. In ensuing decades, studies of art and inscriptions indicated the prevalence and significance of rituals related to warfare. Interpretations of epigraphic and iconographic data characterized warfare as ritualized battle, as indicated by numerous stelae depicting bound war captives and battles featuring capture of enemies for sacrifice (Schele and Miller 1986; see also Earley 2023). Owing to the nature of such depictions, researchers viewed warfare as limited in scope, highly ritualized, and predominantly tied to (typically male) elites, such as rulers and other higher-status individuals of a warrior class. Moreover, many of the scenes depicted in murals and ceramic paintings emphasize the individuality of warrior costumes and fighting tactics rather than coordinated formations (Inomata and Triadan 2009:65; Tate 1992). This characterization contributed to the notion that organized violence among the Maya at this time was relatively inconsequential for non-elites, as compared to other civilizations.

A parallel means of downplaying the effects of warfare can be seen in larger academic discourses about “real” versus “ritualistic” forms of martial practice, especially within archaeological studies (Keeley 1996). Many scholars have tended to contrast “real” war, viewed as Western and pragmatic, versus “ritual” warfare, which is seen as idealistic and relatively insignificant in political and economic terms (Hernandez and Palka 2017:76). Writing two decades ago, Webster (2000) called for more attention to be placed on issues such as motivations for war, ritual versus territorial aims, and sociopolitical and economic effects. Implicit in Webster’s call is the mindset that warfare can involve a multitude of motivations, aims, and objectives, ranging from ideological belief systems to sociopolitical or economic gain. For us, there is no reason to discriminate between “ritual” and “real” warfare. In agreement with Webster, we see it is a spurious dichotomy.

Instead, issues of constraint and ritual should be analyzed with a deeper interrogation of how past Maya peoples made war. Could it be that ritual, restraint, norms, and formal rules generally varied

according to tactics and the combatants involved (e.g., Arkush and Stanish 2005; Solometo 2006)? For the Postclassic period of Mesoamerica, Aztec flowery wars were highly restrained contests designed, in part, to perpetuate the movement and rhythms of cosmic forces via the offering of blood. Hassig (1992), however, highlights that despite the strong ritual component and emphasis on elite prowess, flowery wars allowed rival polities to test opponents without risking a large-scale martial disaster or local autonomy. Santley and colleagues (1991) have also argued that certain iterations of the Mesoamerican ballgame can be understood as ritual warfare. Rather than conceptualizing these forms of violence as “ritual,” they should be considered instead as extensions of other kinds of organized violence, such as raiding and open battle, with which they are mutually dependent and together define the scope of active war within a society.

The issue of ritual combat highlights questions about who participates or is affected by war. As revealed in the 1940s, the Bonampak murals have long suggested elite warriors participated in combat and raiding activities, often to take high-status captives from neighboring societies to be sacrificed (Brown 2019; see also Earley 2023; Miller and Brittenham 2013). Recent bioarchaeological studies of skeletal remains have reinforced these arguments, with trauma on bones indicating high-status individuals participated in violence (Tiesler and Cucina 2012:174). Raiding activities are arguably part of a collection of warfare-related practices (see Hernandez and Bracken, this section, Hernandez [2019], and Helmke [2020] for discussions of raiding). Regardless of motivations, whenever formally organized violence occurred, was anticipated, re-enacted, or re-imagined, it likely involved and affected a variety of community members and had very “real” consequences. The raiding of settlements to take captives is just as devastating and consequential as raiding to destroy property or take control over resources. Seen in this light, warfare during the Classic period was likely to have been impactful for both elites and non-elites. Elite participation in ritualistic forms of raiding, captive-taking, and sacrifice neither preclude the participation of, nor effects upon, non-elites.

A major methodological hurdle facing Mayanists regards the degree of non-elite participation in war, as “stone monuments deal only with elite acts” (Inomata and Triadan 2009:65). Non-elite lifeways are difficult to access through traditional sources such as interpretations of artwork or architectural reconnaissance (Baron 2016; Brumfiel 1994; Johnston 2004; Robin 2013). Much work remains to be done to elucidate non-elite lifeways, despite advances in recent decades (Sabloff 2019). As many researchers have noted (Lohse and Valdez 2004; Marcus 2004; McAnany 2013; Robin 2001), there has been a growing realization that commoner life varied from one Maya settlement to the next. The issue of detecting evidence for non-elite lifeways is compounded by the aforementioned traditional perspectives that downplayed warfare as ritualistic. Consistent with calls for more attention to be placed on commoner lifeways (Marcus 2004:255), we advocate for analogous, bottom-up approaches to appreciate the import of violence and war for non-elite populations.

Practices related to warfare or concerns over it may leave very little detectable material traces (Webster 1998). O’Mansky and Demarest (2007:17) note that “the problems of preservation have certainly erased many traces of battles, while smaller-scale engagements may leave no record at all.” Webster (1998:346) argues that various phases of warfare practices occurred and all are not equally visible to archaeologists. If violence and warfare writ large are already challenging to methodologically identify, such

behaviors as they relate to non-elites are especially difficult to detect without a paradigm shift in fieldwork methods. All of this can contribute to the virtual “invisibility” of non-elite contexts, and can lead to partial or even erroneous conclusions that commoners were largely unconcerned with, or unaffected by, violence and warfare. While locating clues to commoner participation in war may prove challenging, some paths forward are described below in the section titled “Empirical Frameworks for Ongoing Research.”

Complicating matters is the enormous range of cultural variability when it comes to social roles and warfare. What has become clear in recent decades is that there is no typical kind of context or set of conditions, and actors can vary tremendously (Allen 2014; Allen and Arkush 2006; Chacon and Mendoza 2007; Golitko 2015; Keeley 1996; Kim and Kissel 2018; LeBlanc 2014; Milner 2005; Milner et al. 2013). Ethnographic and archaeological studies have found that violent practices, as connected to variable motivations and objectives, occurred in myriad ways and involved people across social strata (Kim and Kissel 2018). This range of cultural variability has implications for the archaeological recognition of violence and warfare, since some practices will be more readily discernible than others.

It is essential to consider how participation and experiences with organized violence can vary by cultural preferences, attitudes, and ethical codes (Demarest 1978). Inomata and Triadan (2009:56) point out how cultural codes and logic, held consciously or unconsciously in people’s minds, can shape their practices, values, identities, and conceptions about violence and warfare. Beyond participation in battles, they argue for the significance of “routine practices of training, discourse, and rituals of war, in which battles are imagined, re-experienced, and re-enacted” (Inomata and Triadan 2009:56). War can involve religious beliefs, perspectives on gender roles, and other cultural factors. The researchers highlight the importance of historical contexts for shaping cultural conceptions of war (Inomata and Triadan 2009:61). Even if actual outbreaks of warfare are sporadic, uncommon, or rare, daily lifeways can still be affected by perceptions of threat or cultural attitudes about violence. As noted by Inomata and Triadan (2009), the creation, reproduction, and transformation of cultural codes related to war take place not only through participation in battles, but also through various practices. Not all these behaviors will be easily visible in the archaeological record, especially if researchers do not seek them out. The upshot, then, is that we need to be open to such possibilities as we formulate and test research hypotheses.

## SOCIOPOLITICAL USES OF VIOLENCE

Violence among the ancient Maya has long been studied as a means of characterizing their society and the relevance of warfare to inter-polity relations through time (Webster 2000). By exploring the embeddedness of politics, religion, economics, and other societal dimensions, we emphasize that links between warfare and society were not at all trivial, inconsequential, or insignificant for the Maya. In considering the sociopolitical aspects of violence and warfare in the Classic period, we address two general aspects: (1) a role in maintaining stability and social cohesion (peace), both within societies and between societies and (2) a role in leadership strategies (maintenance of power and/or reinforcement of inequalities). As such, practices of violence and warfare operated as critical mechanisms for social change over time.

Regarding the first aspect, warfare plays a key role in maintaining social stability and even peace. Seeing war and peace as purely

antithetical, as well as arguing that one or the other is the norm for human communities, is an oversimplification (Kim and Kissel 2018:164). Inherent in this kind of view is another dichotomy, one that distinguishes between cooperation and conflict. Warfare requires politicking, innovation, and cooperation among groups (e.g., Kim and Kissel 2018). As such, it can require complex forms of negotiation, coordination, and communication. It also requires collective goals, oftentimes wrapped up within shared ideologies and attitudes about appropriate forms of violence, tolerance for risks, and acceptable targets of violence. The creation and perception of enemies, moreover, entails mutually held worldviews and beliefs. All these factors point to the highly cooperative nature of warfare, demonstrating that, like war and peace, conflict and cooperation are false dichotomies, counterproductive to any attempt to fully understand societies, past or present.

Additionally, the application of physical power and force, or even the threat of such application, can have an impact on relationships within and between societies (Carneiro 2018). For the former, it can be a means to unite people against an outside group perceived as “enemy.” For the latter, it can link politically autonomous societies as “allies” against a common threat. Such interpolity alliances can have the additional effect of promoting regional stability, since any act of aggression against one polity is deterred by threat of retaliation by an alliance of polities. In that regard, warfare and the threat of it can actually promote forms of either intra-societal (internal) or regional “peace.” Essentially, then, social institutions of war might actually function as mechanisms to avoid conflict and manufacture peace through strategies of deterrence. As argued by Kim and Kissel (2018), peace is not simply the absence of warfare, but is a condition that is produced and safeguarded through elaborate social networks and mechanisms designed precisely to avoid unwanted outbreaks of violence. This framing reflects Roscoe’s (2013:275) position that political communities at war are simultaneously operating internally as “spheres of peace.”

Regarding the second aspect, warfare also plays a role in leadership strategies, wherein power is cultivated and maintained and inequalities may be reinforced. Many researchers have highlighted the political and economic aspects and motivations for Maya warfare, and studies have emphasized alliances, rivalries between societies, economic tribute, and control of exchange routes (Chase and Chase 1998; Haines and Sagebiel 2019; McAnany 2010; O’Mansky and Demarest 2007; Tiesler and Cucina 2012). Hieroglyphic notations for warfare found in Classic-period texts indicate events such as capture or destruction (Chase and Chase 1998; Rands 1952). Iconographic and epigraphic evidence suggest that, beginning in the late fourth century, the scale and intensity of warfare increased with conflicts between competing alliances and rival regional powers, such as the Mutul Dynasty of Tikal and the Kaan Dynasty of Dzibanche and Calakmul (Martin and Grube 2008; O’Mansky and Demarest 2007:20). Patterns of inter-polity alliances and warfare were quite stable, measurable in generations or sometimes centuries (Ek 2020:266; Martin and Grube 2008). By the Late Classic period, conflict may have intensified due to increased status rivalry wherein individuals competed for royal and elite positions (O’Mansky and Demarest 2007:22). Such competition took on various forms, such as architectural construction, patronage networks in exotic goods, and ritual displays, with warfare as the most violent of them (e.g., Freidel 1986; Golden 2003).

This overview outlines a clear role for the uses of violence in prestige-seeking leadership strategies, in the maintenance of political power and reinforcement of social hierarchies, and in regional

interactions. There is little doubt that wars served elite purposes, and that on the royal level, wars were undertaken to keep subordinates in line or, alternatively, to assert independence and create new dynasties (Webster 2000:95). Maya kings were closely associated with divinities when they lived, personified gods in rituals, and initiated war and portrayed themselves as participating personally in battles (Houston and Stuart 1996). These kings, in turn, were surrounded by hereditary nobles and officials for whom participation in violent actions represented one avenue through which to reap political benefit (Webster 2000), hinting at the agency of both non-elites and followers (Alcover Firpi 2020; Landau 2021). The capture of enemies appears to have been the foremost measure of military achievement among Classic Maya warriors, whose titles often referenced their capture of high-profile enemies or a tally of captives taken (Inomata and Triadan 2009:63). The epigraphic and iconographic records suggest that one of the main objectives of such captive-taking practices was ritual sacrifice, though there is evidence to suggest that sacrifice was not always the only result, and that ransom was sometimes a significant outcome (see Earley 2023; Hernandez 2023).

The Late Preclassic and Terminal Classic periods might have experienced intensification of warfare, as indicated by an increase in the instances of fortified settlements, though earlier practices may be obscured by later occupation phases (see Bracken 2023). Inomata and Triadan (2009:73) observe remarkable Late Preclassic sociopolitical transformations, marked by various activities such as the construction of enormous temple-pyramids (at centers like El Mirador), growing habitation in large settlements with monumentality, participating and witnessing mass spectacles of rituals in these places, and the growing power of rulers and priestly figures. They note the possibility of political appropriation of preexisting traditional rituals, belief systems, and practices related to violence. A classic scholarly definition of the “state” stems from a Weberian view in which the state holds a monopoly over the legitimate use of force and violence. In this sense, forms of violence are legitimate if they are state-sponsored or state-sanctioned. The uses of violence, in turn, can function to reinforce the legitimacy of the governing apparatus of a society in a rather cyclical fashion.

Along these lines, we argue that rulers would likely have used existing ideologies and practices, sometimes related to violence and power, as part of a repertoire of leadership strategies. Without shared ideologies already in place, there would be little incentive for rulers and elites to coopt such practices. Indeed, studies have shown that the practice of taking body parts as war trophies go as far back as Mesoamerica’s Middle Formative period (ca. 800–500 B.C.; Berryman 2007). Besides trophy-taking, themes of violence in public ceremonies and the central roles of community leaders were critical elements of war-related cultural complexes since the early Middle Preclassic period (Inomata 2014:46). Demarest (1992) extends this line of thinking, likening warfare to other royal events as an opportunity for elites to gather and as a source of prestige and therefore power. Demarest (1992:149) traces the similarities between the Classic Maya and historic Southeast Asian polities, referring to both as “galactic polities” or “theater states.” These designations highlight the religious ideology that formed a major foundation for political authority, along with the resulting militaristic image those in power were required to project and the inherent instability of such bases for power.

Investigations at Chan, Belize, have revealed that many of the ideological aspects of divine kingship, site sanctification, and ancestor veneration were in place in a small farming community centuries before the Classic period (Robin 2012). Additionally, the area with the first



evidence of occupation, including a burial with signs of reentry, would later become the location of Chan's Late Classic Central Group. Based on research from other sites, it is known that ideological bases of power and authority were reinforced by the elevation of common rituals involving violence into highly public and state-sponsored spheres (Inomata 2006; Santley et al. 1991). Following this logic, we might ask if performances of organized or ritual violence during the Preclassic were more commonplace than previously believed.

Arguably, Preclassic Maya conceptions of ritual sacrifice and attitudes about the sacred and the profane uses of violence could have been appropriated and institutionalized as Classic Maya rulers consolidated state-level power. This notion is supported by evidence indicating how Classic-period authority figures made use of practices such as sacrificing and burning of infants (e.g., Houston et al. 2015; Román et al. 2018; Scherer 2018). Related to this discussion, we can revisit ongoing discourses about the degrees to which Maya politics institutionalized warfare. Many of the scenes depicted in murals and ceramic paintings emphasize the individuality of warrior costumes and fighting tactics rather than coordinated formations (Inomata and Triadan 2009:65; Tate 1992; see also Hassig 1992; Miller 2023). For some, this degree of individuality suggests lack of coordination and institutionalization that would be hallmarks of centralized control over warfare and the existence of professional armies (Tiesler and Cucina 2012). Examples from other cultures such as the Inka (see D'Altroy 2014), however, suggest that lack of uniform costumes, equipment, or weaponry among Maya elites does not automatically mean that warfare was restricted to smaller-scale battles between high-status males.

Regarding ongoing debates about non-elite or commoner engagement with warfare, Inomata and Triadan (2009:63) argue for variability in how individuals conceptualize and engage with warfare, and such engagement need not be entirely restricted to a specific social or political class. Undoubtedly, much evidence suggests attempts at the monopolization of violence, and how elites/rulers manipulated public perceptions and consumption of violence, and related religious connotations, to suit their political aims (e.g., Baron 2016). Besides political gain, however, the spectacle of such practices may have had other effects for Maya societies, such as community cohesion. Warfare and the consumption of violent spectacles can involve a variety of observers and participants beyond warriors. Returning to the Mesoamerican ballgame, we can see ritualized combat that played out in a variety of arenas, the grandest of which were in the epicenters of major sites with accommodations for a large number of spectators (Miller, this volume; Santley et al. 1991; Scarborough and Wilcox 1991).

Warfare events may be rare, episodic, and even fleeting, but preparation for actual combat and participation in the aftermath can involve a multitude of people as well. These can include preparatory rituals, provisioning activities, logistics planning, and post-conflict ceremonies, as illustrated in the Bonampak murals. Seen in this light, it should be evident that the general invisibility of non-elites in iconography does not preclude their participation or involvement. The only way to rule them out of such activities is to test hypotheses, and unless we are open to the possibility, then we will not be asking appropriate questions.

## EMPIRICAL FRAMEWORKS FOR ONGOING RESEARCH

Given the highly variable nature of cultural practices related to warfare, issues of detection, and the wide range of potential

participants, a mixture of data types is necessary to make inferences. As researchers have observed, there are direct and indirect categories of material signatures, each replete with clues that indicate concerns over warfare or evidence for violence (Kim et al. 2015:8–15). Examples of direct markers include weapons, trauma on skeletal remains, fortification features, deliberate destruction of structures, specialized equipment (e.g., swords or armor), and iconography. Indirect markers include inaccessible or elevated habitation sites, refuges or temporary habitation sites, buffer zones, fortified frontiers, and sudden disruption of long-standing cultural patterns. Multiple, convergent lines of evidence provide the strongest argument for warfare-related concerns and practices (Kim et al. 2015:9). For instance, walls may function in a variety of social ways and may not be at all defensive. Walls combined with V-shaped outer ditches, bastions, baffled gates, parapets, and other architectural forms, however, provide compelling support for a military value (Keeley et al. 2007).

To appreciate the full scope of Maya warfare across entire populations, it is necessary to marshal all pertinent lines of evidence (see Webster [2000] for a comprehensive discussion of markers). Over recent decades, researchers have offered many innovative studies focused on the variable nature of Maya violence and warfare, with several employing cutting-edge methodologies of survey, excavation, and materials analysis (Aoyama 2005; Aoyama and Graham 2015; Bey 2003; Borgstede and Mathieu 2007; Canuto et al. 2018; Demarest et al. 2016; Freidel 2016; Golden et al. 2016; Hernandez and Palka 2017; Rice et al. 2009; Serafin et al. 2014; Tiesler and Cucina 2012; Wahl et al. 2019). Ultimately, holistic perspectives incorporating a package of data from different categories are needed to recognize the embedded nature of violence and warfare within a range of cultural, economic, political, and ideological domains. In the following sections, we briefly highlight these major categories of evidence.

## Epigraphic and Depictive Data

Epigraphic research and assessment of artistic depictions have long provided clues regarding organized violence in varied contexts of Classic-period Maya societies (O'Mansky and Demarest 2007). Iconographic depictions have provided clues about implements, tactics, and participants. Translations of glyphic texts have shed light on the history of martial campaigns, the rulers that conducted them, and the relationship between kingship and warfare (Martin and Grube 2008). In addition, glyphs and murals have offered detailed information as to the attire of combatants and the objectives of warfare, including the role of sacrifice (Schele and Miller 1986; see also Earley 2023; Miller 2023).

As archaeologists continue to unearth new examples of texts and epigraphers develop increasingly nuanced interpretations of the Classic Mayan language, we are continually refining understandings of the cultural dimensions of Maya warfare. As noted by Peuramaki-Brown and colleagues (2019:6), over 100 Maya monuments specifically discuss warfare (Kettunen 2012; Martin 2020), and studies indicate a corpus of hieroglyphic references to warfare, including specific verbs for actions such as “to tie up,” “to overthrow,” “to capture,” “to destroy,” as well as the so-called star-war glyph that appears to reference large-scale warfare. We now recognize a plethora of words related to violent attacks (Martin 2020:204–215), and epigraphic and iconographic evidence can provide a degree of insight into motivations for and results of Classic Maya warfare (Martin 2020). Of course, the insights they

provide are almost exclusively limited to the uppermost social classes who commissioned the records and were likely responsible for instigating the bulk of the violent confrontations. Further research into these media, in the form of additional consideration of known examples and analysis of relevant new finds, offers great potential for emic understanding of Maya warfare and its relationship to identity formation, political relations, and the nature of rulership.

#### Bioarchaeological Data

Human remains provide one of the most direct and information-rich data sets on interpersonal and organized violence (Knusel and Smith 2014; Martin et al. 2012; Walker 2001). Telltale indicators of combat trauma can include projectile points embedded in skeletal materials, fractures or cutmarks on bones, scalp marks on crania, and dismemberment or other signs of trophy-taking. Additionally, the nature of perimortem and postmortem injury to the body offers a separate angle of understanding combat practices and ritual related to fallen allies and/or enemies.

Bioarchaeological research by Tiesler and Cucina (2012) on human remains has presented interesting patterns on the variability of violent practices throughout Maya history. The data allow us to test hypotheses related to changes in specific tactics, such as adaptations to innovations in weaponry, and the involvement of elites versus commoners in given contexts. Tiesler and Cucina (2012: 174) argue how their osteological sample points to armed raids of settlements, and that they “appear to have been as common in the small hinterland communities as in the urban seats of political power.” Furthermore, “[t]hese [raids] affected females and also minors to a considerable degree, indicating the high social cost the general population had to pay” (2012:174). Such indications from the bioarchaeological record can be combined with region-wide, landscape data to offer a larger picture about the ways in which warfare could occasionally be significant for commoner populations.

Recent studies by Serafin and colleagues (2014) have demonstrated a range of tactics and forms of conflict in northwest Yucatan. Using analysis of perimortem cranial trauma on remains of women and men, the researchers note different patterns of warfare being dependent upon terrain type. Specifically, the results suggest greater reliance on open combat and less on raids in this region, possibly due to the flat, open nature of northwest Yucatan. The presence of perimortem trauma on both women and men suggests surprise raids on settlements were also occurring. Interestingly, males appear to have more healed injuries than females across all periods, and they are concentrated on the left side of the anterior of the skull, suggesting the use of shock weapons by right-handed individuals in face-to-face combat. The results from this comprehensive study serve as a reminder of the cultural variability inherent in Maya warfare, as the practicalities of raiding make it effective in the denser foliage and more undulating terrain of the southern lowlands and highlands. These differences have implications for what kinds of evidence will be accessible (or inaccessible) within the archaeological record. For example, defensive considerations and the variable uses of fortifications, walls, ditches, bastions, refuges, or other features would have been dependent, in part, upon the nature of threats and specific tactics and conducts of war. Moreover, the cases of trauma on skeletal remains caused by arrow wounds or spears almost certainly underestimate the actual incidence of such violence, given the

likelihood that such weapons delivered to soft tissue may leave no marks on bones (Milner 2005; Serafin et al. 2014).

#### Weaponry

Much of our knowledge about Classic-period weaponry stems from depictions in art of high-status warriors and is supported by some lithic finds (Alcover Firpi 2020; Aoyama 2005; Aoyama and Graham 2015; Inomata and Triadan 2009; O’Mansky and Demarest 2007; Webster 2000). Of the various types of evidence for war, it is especially important when considering weaponry to note that many kinds of equipment were made with perishable materials, such as wood or cotton for padding. Lithic implements include close-range weapons such as spears and clubs, and projectile weaponry such as atlatl darts and clay sling stones. Lances (thrusting weapons with long wooden shafts and chipped stone heads) were the weapon of choice among both the Preclassic and the Classic Maya (Aoyama and Graham 2015). Atlatl darts are also present in the Classic-period record but are not as common as lance heads. Arrowheads do not appear in the Maya lowlands until the Terminal Classic, and then only in certain places. A salient point made by Aoyama and Graham (2015) is that changing patterns of production, usage and tactics with weapons had less to do with resource acquisition (e.g., hunting) than with their role in competition or conflict (see also Aoyama 2005). Assessing the targets of these weapons, whether human or prey animal, can be aided by immunological protein analysis of recovered projectile points (Meissner and Rice 2015).

Studying aspects of production and uses for implements can highlight cultural changes in the practices of war, as well as in socio-political configurations. For instance, Bassie-Sweet (2019) shows how choices in raw materials for weapons, such as flint and obsidian, can reflect beliefs about supernatural power. Certain materials were imbued with the supernatural. Consequently, sourcing studies could be quite revealing about regional interactions and who might possess restricted access to exotic, perhaps supernaturally potent trade materials.

Studies of weapons can inform our knowledge of the range of participants in logistics as well as in actual combat. Besides high-status elites, were there lower-status or part-time warriors from the commoner populace? If so, did they participate at different times of the year, such as the agricultural off-season (see Martin [2020: 215–228] for discussions of seasonality and Maya warfare), and were they using less specialized implements (see Chapman [1999] for a discussion on tools and weapons)? Terrain types, along with cultural preferences, can influence decisions about tactics and weaponry. In other societies throughout history, cultural logics about honor and attitudes about combat have shaped choices in adopting or rejecting military tactics and weaponry (Perrin 1979). Discussing the persistence of handheld spears, Inomata and Triadan (2009:70) suspect the lack of adoption for the atlatl as a new technology stemmed from a combination of practical needs, such as fighting in forested areas, and cultural attitudes glorifying hand-to-hand combat.

Experimental archaeology can help test specific hypotheses. What is the effective firing range for projectile weaponry? How might those data help interpret tactics and defensive features, such as spacing between suspected bastions and watchtowers? Robust models of investigation are provided by Keeley and colleagues (2007:67–79). Producing such quantitative datasets and then juxtaposing them against a backdrop of terrain types (e.g., open

landscapes, forested areas, elevated sites, and so forth) can offer clues about preferences in military actions. Ballistics testing could inform uses of projectile weaponry in various contexts, as well as the uses of shock weapons (such as clubs and lances) in close proximity (Dyer and Fibiger 2017). Datasets from innovative studies such as those by Aoyama (2005) and Aoyama and Graham (2015), which analyzed variations within thousands of point types across Maya temporal periods, can be a highly productive foundation for experimental ballistics testing. Were certain designs and raw materials more effective as war points than others? And what can these data tell us about changing logics and customs for Maya warfare over time? Because Maya weapons were personal extensions of the people who used them, they can be seen as materializations of deep-seated cultural, social, political, and cosmological beliefs. As such, a change in the form of a weapon or its hafting or material, “is not simply a technological change—it is a sea change” (Aoyama and Graham 2015:36).

#### Settlement- and Site-Specific Evidence

Warfare studies no longer center solely on confirming the presence or absence of fortifications, and instead have turned to more complex understandings of landscape modification and use. Recent analyses of light detection and ranging (LiDAR) data from northern Peten demonstrate a region-wide concern with defense that goes beyond site circumscription. For example, researchers have identified potential networks of mutually visible “watch towers” and the positioning of possible lookout sites in defensible locations with maximal viewsheds (Canuto et al. 2018; Garrison et al. 2019; Houston et al. 2019). What once seemed like only a handful of Maya settlements with clear signs of fortifications (c.f., Gat 2015:114) may shift dramatically in the coming years thanks to aerial LiDAR. Previously, a lack of fortifications was viewed as evidence for lack of “total war” during the Classic period. This paucity, however, in cases may be the result of archaeological visibility or a lack thereof. Besides monumental fortification features, practices of total warfare can be inferred from other indicators, such as destruction of architecture or of entire settlements. For example, Dahlin’s (2000) study of the Chunchucmil site highlights the construction of a barricade followed by attack, overrun, and abandonment, and sites with barricades still standing indicate wars of annihilation rather than wars of conquest or subjugation.

Maya centers as early as the Middle Preclassic show evidence of large-scale, deliberate destruction of major architecture (Webster 2000:75). With careful study, researchers can distinguish between “termination” rituals unrelated to warfare and actual destruction due to war (Inomata 2003; Inomata and Webb 2003; Pagliaro et al. 2003). When evidence of arson or destruction is combined with other markers, such as defensive features or mass burials of killed individuals, then warfare can be inferred. A recent study by Wahl and colleagues (2019) provides intriguing data demonstrating destruction of the Witzna settlement in the late seventh century A.D. Multiple lines of evidence, including sediment core data and excavations, show a massive fire event, coincident with an epigraphic account describing an attack and burning of Witzna in A.D. 697. The findings challenge theories that total warfare was limited to the Terminal Classic period. It also challenges the notion that total warfare stemmed from environmental stresses of the Terminal Classic and increased competition for limited resources. The case helps to reorient thinking from considerations of rivalry between elites to rivalry between populations of a more intercity nature. Of

course, a single case does not necessarily inform us about frequencies of total war throughout the entire Classic period. It does, however, remind us to be open to diverse strategies employed in war.

#### A REGIONAL APPROACH: LINKING SITES AND DATA STREAMS

Maya martial practices, tactics, and uses of weaponry may have varied not only through time but by region, owing to differences in cultural preferences as well as terrain and topographic features. Given recent advances in remote-sensing techniques, we now have the opportunity to revisit interactions between settlements in a wider regional setting. Maya sites with obvious martial architecture are not currently numerous, and those showing signs of actual destruction are even rarer. If we rely solely on such site-specific data, we might miss the proverbial forest for a preoccupation with the trees. Along these lines, Garrison and colleagues (2019) argue that centripetal, court-centered views tend to draw boundaries and separations with outlying rural areas even when all parts of a society are much more intricately linked. Citing work by Lucero and colleagues (2015), they suggest that a more suitable approach involves the idea of “conurbation,” which sees an integrated totality of landscapes across a continuous expanse. Similarly, Sabloff (2019) notes there has been a long tradition of looking at wider, regional settlement patterns to better understand Maya civilization. With such perspectives in mind, we advocate a consideration of organized violence on a more regional scale. Do regional data permit us to recognize “intersite zones” (O’Mansky and Demarest 2007:27), frontier zone defensive works, refuges, buffer zones, military outposts, and other such features?

Important clues can be gleaned from the epigraphic record. Considerations of Maya settlements in north-Central Belize by Haines and Sagebiel (2019) highlight changing political landscapes and how aggression played a role, particularly for the sites of Ka’kabish and Lamanai. The researchers do so by combining clues from ceramics and epigraphy. The work of Tokovinine (2019) illustrates the effectiveness of using Maya inscriptions to highlight links between places and warfare on a macro level, and how such studies allow glimpses into indigenous attitudes. The research offers intriguing evidence for changing views of martial landscapes over time, with the seventh century seeing the highest relative frequency of narrative contexts indicating conquest warfare, with emphasis on places rather than individuals (Tokovinine 2019:100).

In an analysis of fortification systems in the Petexbatun region, O’Mansky and Demarest (2007) highlight evidence for changing patterns of warfare and political change. At the Tecolote site in Guatemala (ca. A.D. 600–900), there are indicators of a series of stone walls and hilltop watchtowers, in which the former appear to have been the foundations for wooden palisades. Scherer and Golden (2009) see the site-core and its associated walls and watchtowers as part of an integrated polity-wide defense system, with some sites along the polity’s northern frontier operating as staging grounds for attacks into a rival kingdom’s territory. Bey and Gallareta Negrón (2019:138) have identified likely checkpoints and lookout towers along polity boundaries in the Bolonchen District of the Puuc region. In all these cases, the material record is consistent with clues from epigraphy in suggesting the social significance of warfare in a pan-regional setting.

A regional approach can synthesize new datasets from innovative methodologies of data collection, such as those generated from LiDAR. Such data can help researchers uncover more

information about the majority of the Maya populace, helping us to understand lifeways beyond the major temples, palaces, and plazas at the heart of cities (Garrison et al. 2019; Holmes 2019). In 2016, the Pacunam LiDAR Initiative mapped 2,144 km<sup>2</sup> of natural terrain and archaeological features over several distinct areas, revealing interconnected urban settlement and landscapes with extensive infrastructural development (Canuto et al. 2018). The regionally robust findings uncovered unexpected networks of roads and fortifications and challenged conventional views about the Maya lowlands containing small city-state centers ruled by warring elites. Instead, they suggested a regional network of densely populated cities with complex integrative mechanisms (Canuto et al. 2018:1).

These data reflect substantial infrastructural investment in features like causeways to facilitate movement and interaction between centers, alongside investment in fortifications and other defensive features to restrict access to particular areas. Built networks of fortifications were found in over 30 discrete sites, and in most cases, defenses consisted of more than just perimeter walls. Large-scale LiDAR surveys northeast of El Zotz in Guatemala identified a series of intervisible citadels that represent an extensive defensive system (Garrison et al. 2019; Houston et al. 2019). They reveal how substantial investments in landscape and surveillance were mixed with a multitude of uses within the areas of the city-state. The data show an articulated landscape with specialized agricultural systems and associated settlements, combined with a regional system of infrastructure and fortification features (such as La Cuernavilla). Moreover, sites like Kanalna and the El Achiotal promontory appear to be potential refuges. This wider view underscores high degrees of political coordination across territories, as well as possible concerns over outbreaks of war within those variable landscapes.

Regional approaches to conflict can synthesize and contextualize data from artifact categories that are not typically associated with questions about warfare. For example, Barrett and Scherer's (2005) work at Colha, Belize, shows how transitions in lithic production can complement other datasets to reveal connections between warfare and site destruction. For the Late and Terminal Classic periods, Bey (2003) demonstrates how analyses of ceramic production and style can shed light on disruptions to cultural patterns, which may reflect forms of intra-societal or intersocietal friction, conflict, or even outright conquest. Data from material analyses from various sites, when combined in a pan-regional manner, can thus reveal choices in trade routes, exchange partners, possible alliance networks, and concerns over threats.

Other kinds of analyses can also be extremely helpful, such as the arrangement of sites within a region and the distances between fortified settlements within. Innovative work by Webster (1998, 2000:99) measures linear distances between paired protagonist Classic centers and determines that the upper end of the range is approximately the distance (108 km) between Tikal and two of its major enemies, Calakmul and Dos Pilas. Such data, combined with inscriptions about warfare events, can tell us about logistical needs for moving warrior groups as well as strategies and tactics. They can help predict where to find potential battlefields, frontier defenses, outposts, staging areas, and other sites and features (see Chase and Chase [1998] for discussion of marching distances). Moreover, these kinds of studies are relevant for questions about the full range of stages and participants that warfare entailed. The ongoing incorporation of geographic information systems methods, including "line-of-sight," "cost-surface," and other agent-centered analyses, can be used to produce data about optimal routes

of travel and visibility across broad areas, thus helping us to better situate warfare practices in a pan-regional manner (McCool 2017). These methods can increasingly be combined with LiDAR survey data to comprehensively test assertions about interregional interactions and even the possibilities of total warfare.

As mentioned above, warfare can involve a disparate range of activities not associated with actual combat, including logistics, provisioning, and transport. Accordingly, it would be productive to examine other contexts and related artifacts that may be connected to preparations for raids or battles or post-conflict events (such as those seen in the murals of Bonampak). This type of framework could be very useful in broadening our understanding of warfare's variable contexts, and would bring to the surface the roles of a range of agents from different demographic categories. Similar to studies in other world areas, discussions of Maya warfare have generally centered on the role of male elites, thus relegating women and children to the domain of victim or passive participant. Examining a fuller range of potential participants facilitates a better understanding of practices of violence and warfare as embedded within a wider web of social practices and ideologies, and can help reorient our research questions and promote novel hypotheses to test (Houston 2018; Reese-Taylor et al. 2009; Sabloff 2017; Wren et al. 2018).

#### COMBINING SECULAR AND RELIGIOUS DOMAINS

If warfare requires cooperation and shared beliefs, then our understanding of Maya warfare requires consideration of the "emic" or the cultural insiders' perspectives (Brown 2019). Researchers have long seen the connection between Maya rituals of sacrifice and religious systems, seeing a panoply of cultural practices associated with ideologies and attitudes about violence and warfare. Many researchers have highlighted the animacy of the Maya cosmos (Brady and Ashmore 1999). Are there ways to consider the animacy of artifacts and architecture in practices of warfare and how belief systems might be reflected (Carballo 2016:3–4; Walker 2009)? Can we see clues from various contexts, such as architecture or ritually charged objects meant to defend against spiritual threats? These sorts of studies offer finer resolution in our considerations of agency and culture when it comes to violence (Nielsen and Walker 2009).

Rather than treating religion, beliefs, and institutions as epiphenomenal in the conduct of war, Nielsen and Walker (2009:3) argue for their importance as motivating factors. Similarly, Hernandez and Palka (2017) offer intriguing discussions about "divine protection," citing evidence of fortification features that not only sheltered people and territory from external threats, but also guarded sacred places (e.g., cliffs, islands, caves, and temples). Hernandez and Palka (2019:33) argue for the significance of ritual landscapes and sacred sites, citing how such locations were defended because the future of the community and communication with tutelary deities rested on their preservation. Furthermore, the authors point out that the protection and desecration of sacred places in Mesoamerica were related to covenants or agreements between people and the resident spiritual forces in ritual landscapes. In that sense, warfare was inextricably linked with human sacrifice and ideologies of the sacred. Most commoners and elites likely shared these views of the sacred, as indicated by the presentation of captives and their sacrifice as "a mass spectacle in the plazas and temples of ancient Maya sites" (Hernandez and Palka 2019:33–34).

As observed by Berryman (2007:378), the field reports for many Maya sites refer to "problematic deposits" including isolated crania,



headless bodies, caches of mandibles, or otherwise dismembered individuals, materials suggesting rituals of human sacrifice. Such osteological materials are consistent with the abundant imagery depicting sacrifice and trophy-taking, and analyses can contribute to knowledge about Maya warfare. In a recent study, Chinchilla Mazariegos and colleagues (2015) discuss a burial context found at Tikal dating to the fifth century in which the burial is connected to ritual sacrifice of two individuals and hints at mythical associations. Using a blend of archaeological, taphonomic, and isotopic analysis to reconstruct the ritual behaviors that resulted in the formation of the partially cremated primary burial, the authors demonstrate how a multidisciplinary approach can illuminate links between myth, ritual, and human sacrifice.

Studies of other sacred contexts and landscapes are similarly instructive, including caves, cenotes, lakes, and pools (Lucero and Kinkella 2015). Sacrificial offerings, sometimes in the form of humans, were placed at many of these sacred sites. Caves are documented as ritual locations for the Maya from the distant past through the present, and ethnographic and ethnohistoric data in comparison with archaeological findings indicate the continuity of symbolism of and ritual practice within these settings (Woodfill 2019). The findings signal the importance of sacred spaces for Maya cultural practices and highlight an avenue through which to glimpse actions beyond the centers of urban spaces. Assuming the possibility ritual sacrifices occasionally involved violence perpetrated on individuals from outside communities, there may be productive ways to consider links between ideology and warfare.

The archaeologically visible details of ritual sacrifice point to deeper socially embedded aspects of the practice. How can attitudes about acceptable choices in sacrificial victims help us understand political and social relationships within and between communities? How were raiding activities associated with religious motivations or public displays of ritual sacrifice? How were religious interests thus tied to political or economic concerns? The visibility of commoners within ritually violent activities reveals both interpolity conflict as well as intra-societal relationships and politics. The material data can illuminate possible forms of class conflict, factional friction, inequality, or structural violence (Bernbeck 2008; Blanton et al. 1996; Brumfiel 1994; Farmer et al. 2006; Galtung 1990; Gilman 1991; Kusimba 2006). Researchers can combine streams of complementary data such as bioarchaeological markers on human remains, iconography, residential patterning, and others to formulate larger pictures about internal conflicts. With the evidence for high-status captives being taken for ransom and ritual sacrifice, it may also be productive to consider other motivations and contexts for the capture and social integration of people from other categories of outsiders. Houston (2020) has proposed that perhaps concentric walls that were constructed over preexisting buildings within settlements might have been used to enclose marketplaces. The barricades around markets would have deterred attackers and also functioned to keep captives from escaping. Future studies of the Classic period would benefit from greater focus on the dynamics of captive-taking for both “secular” and “religious” domains (Cameron 2011; Collins 2002).

Given the growing amount of cutting-edge research on human sacrifice, it would be interesting to view cases in a larger context of social change and interregional warfare. Such studies can be connected to changing attitudes about community identities, insiders versus outsiders, along with variable perceptions of sacred locations. All these topics inform larger connections between religious practices, belief systems, and intra- and intercommunity

relationships. A culturally holistic approach to warfare helps us appreciate the sometimes-subtle links between rituals, beliefs, and socioeconomic activities related to violence (Brown 2019:xvi).

## CONCLUSION

Variable aspects of warfare and violence can be recognized from a host of material indicators, including settlement patterns, human remains, iconography, weapons, and other signatures. We see much potential for expanding knowledge about Maya societies through examinations of warfare, owing to its culturally embedded nature. According to Aoyama and Graham (2015:5), the culture of warfare, including “the weapons used, the fighting techniques honed, the men and women involved, the rituals employed and especially the rules of engagement and how ‘winning’ is measured—is a major key to the nature of the society waging a war.” To that sentiment, we would add that institutions and practices related to violence and warfare can help us understand interactions related to the maintenance of social cohesion, stability, and peace. Overall, we emphasize the culturally embedded nature of warfare and see its effects in shaping both intra- and intersocietal relationships. Of course, acknowledging this embedded nature does not necessarily mean conflicts were frequent or rampant. The acknowledgment simply sees related attitudes and practices as likely impactful at different times for a range of people. Concerns over warfare, and for the avoidance of conflict, were not restricted to a limited set of contexts and agents.

Despite growing recognition among Mayanists that warfare was neither infrequent nor restricted to the “ritual” sphere, the debate continues regarding the significance and “totality” of warfare. Given existing research gaps about the actual tactics, recruitment, deployment, and other aspects of warfare (Tiesler and Cucina 2012:162), there is tremendous room for further study along numerous dimensions. We conclude by commenting on two prevailing perspectives about Maya warfare, namely the notion that warfare was intense mostly in the Late Classic period (coincident with climate change), and the argument that raiding activities do not reflect institutionalized violence.

Regarding the first conventional perspective, studies of ancient warfare in different world regions have tended to emphasize ecological conditions (Keeley 2001; LeBlanc 2003, 2007) and warfare’s contributing role for the decline or collapse of societies (Tainter 2006). Related theories see environmental conditions, such as climate change and protracted droughts, as critical factors leading to competition over scarcer resources, ultimately underwriting violence, political turmoil, decline, and/or collapse. Intensification of warfare has been implicated in the decline and so-called collapse of Maya societies in the Late Classic (Demarest 2013; Demarest et al. 2016; Turner and Sabloff 2012). While we do not challenge links between environment, militarism, and massive social change during the Late Classic, we argue that care must be taken to not overly rely on the environment as a primary factor.

Whereas some researchers see intensification of warfare as symptomatic of challenges Late Classic Maya societies were facing, such as droughts, we suspect organized violence was culturally significant throughout the Classic period. Warfare was not simply a response to external stimuli. Warfare can happen for a host of reasons, and sometimes those motivations and social contexts will not be readily apparent. By accepting this perspective as a starting point, and by searching for more subtle clues about the roles of violence within Maya societies, we can come up with novel ways to approach organized violence.

Again, we see a need to recognize forms of group violence as either overtly or subtly embedded in social institutions and cultural practice. Rather than using a simple framework to document the presence or absence of warfare, we advocate approaches to identify perceptions, rituals, and political strategies that employed aspects of physical force and violence. Ultimately, violence and the avoidance of it were intertwined with Maya beliefs, politics, economies, and relationships between communities. Accordingly, social topographies become just as vital to elucidate as environmental milieus and topographies.

A second prevailing view about Maya warfare pertains to a paucity of evidence indicating professional armies and massive confrontations on battlefields. For Tiesler and Cucina (2012:174), the combined bioarchaeological and contextual evidence currently available is insufficient to suggest a specialized standing army in the Maya region, and they suggest practices of “armed raids of settlements rather than any institutionalized mass violence exerted between professional armies” (Tiesler and Cucina 2012:174). We agree with the assessment that evidence currently supports settlement raiding as a common model. We argue, however, raiding activities can constitute institutionalized warfare whether or not they involve standing armies. For instance, raiding may have been occasionally motivated to secure specific commodities vital for important ritual feasts (e.g., exotic raw materials; see Junker [2018] for a discussion). Or, raids could have functioned as part of competitive interactions, such as destroying the capacity of rival producers thereby eliminating an economic competitor or weakening them. Even forms of modern warfare involving countries with standing

armies employ mixed strategies and tactics, as well as units that vary in size, composition, and micro-level, mission objectives. Raids are still organized undertakings and can be sponsored and organized by political apparatuses.

This brings us back to a central argument of our article, that participants and victims of organized violence are not restricted to professional or part-time warriors, to males, or to elites. We can see differential engagement with warfare and its effects in historic and modern eras, and argue that such variations in forms of conflict would have involved people of different demographics within Maya societies. Moreover, we see no reason to reject the possibility that total warfare occurred during the Classic period, however infrequently. Ongoing research can test the hypothesis that total warfare and violence against “soft”/civilian targets was an occasional tactic and component of some strategies, and pertinent evidence should be sought out. This is consistent with calls by researchers for more inclusive findings and research that cover both elites and non-elites (McAnany 2017; Sabloff 2019).

“We must grapple with its many faces to move toward a more holistic understanding of Maya war” (Scherer and Golden 2014: 58). With new tools currently available for field and laboratory studies, an array of techniques can be applied to the study of Maya warfare that will likely reveal a wider range of cultural practices and attendant participants. Though by no means exhaustive, we hope this consideration of Maya violence and warfare can help inspire new kinds of questions and while furnishing food for thought as researchers continue to grapple with the “many faces” and agents of Maya war.

## RESUMEN

En Mesoamérica, los estudios en curso han enriquecido nuestro conocimiento de los contextos culturales de violencia y guerra en las sociedades mayas, particularmente durante el Período Clásico (c. 200–1000 d.C.). Destacando la evidencia actual, este artículo explora los aspectos generales de la violencia organizada en las culturas mayas. Nuestro objetivo es complementar los argumentos anteriores, desarrollarlos más dado a nueva evidencia y sugerir formas de reorientar y reformular las preguntas de investigación.

Los investigadores, en algunos argumentos anteriores sobre la guerra maya, han sugerido que esta forma de conflicto estaba restringido a ciertos segmentos o tendencias demográficas de la población, de alcance y naturaleza limitados; esto, debido a que estaba restringido por normas y reglas, y era relativamente intrascendente para la mayoría de la gente. En contraste, otros investigadores han argumentado que ciertos aspectos de la guerra fueron bastante significativos para distintos segmentos de la población durante varios períodos temporales. En este artículo, revisamos algunas de estas perspectivas opuestas. Sostenemos que ver la guerra como algo restringido en términos de participación e impacto minimiza los posibles papeles que varios miembros de la comunidad podrían haber desempeñado al hacer y vivir la guerra. Argumentamos que la práctica cultural puede iluminar la manera en que la violencia tomó diferentes formas en las sociedades

mayas, y cómo las formas de violencia intra- e intercomunidad fueron fundamentales para lograr el cambio social (ya sea intencional o no).

Hay innumerables tipos de datos y marcos conceptuales en las que se puede explorar la guerra. El proceso de hacer la guerra se extiende mucho más allá de la batalla activa, desde la preparación para el conflicto en anticipación, hasta las secuelas de la muerte, destrucción, conquista, o incluso un punto muerto. Todas estas prácticas se interrelacionan con otras actividades culturales fuera de la categoría de guerra. Debido a las complejas actitudes y usos de la violencia, la participación en aspectos de la guerra no se limitó a las élites. Siguiendo este argumento, también sugerimos que una perspectiva regional ofrece una forma interesante de plantear nuevas preguntas sobre el carácter de la violencia organizada entre comunidades. Al explorar la guerra, las investigaciones en curso se beneficiarían de complementar los estudios específicos del sitio o asentamiento con consideraciones más amplias y panregionales y permitiría además investigar cómo estos patrones cambiaron con el tiempo. La investigación reciente que utiliza datos de teledetección, por ejemplo, va a ser vital para mejorar nuestra comprensión del conflicto a escala regional. Concluimos discutiendo los marcos y datos que se pueden utilizar para generar hipótesis sobre la guerra y su impacto entre las sociedades Mayas.

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