

Warfare in Pre-Hispanic El Salvador

Akira ICHIKAWA*

Research on ancient Mesoamerican warfare is limited to data from the core urban centers of the Maya Lowlands, Central Mexico, and Oaxaca. However, peripheral/marginal areas surrounding these core urban centers have hitherto been overlooked in Mesoamerican warfare studies. This paper aims to identify warfare from the existing archaeological data and examine its role in the social processes in the areas on the periphery of southeastern Mesoamerica, especially in ancient El Salvador. The available data suggest that warfare may have occurred through the Late/Terminal Preclassic to the Early/Late Postclassic period in pre-Hispanic El Salvador although the ancient people did not record any instance of warfare using hieroglyphs or other iconographic representations. Further, warfare in pre-Hispanic El Salvador was responsible for stimulating social integration in the Late/Terminal Preclassic period, social transformation in the Early Classic period, and disintegration/segmentation in the Terminal Classic and Early/Late Postclassic periods.

Keywords

Warfare, El Salvador, Mesoamerica, lithic, social process

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* University of Colorado Boulder / Nagoya University / Kyoto University of Foreign Studies / Kanazawa University

I Introduction

Several studies have clearly demonstrated how ancient warfare played an important role in the pre-modern and prehistoric past and how its varied causes, magnitudes, intensities, and consequences in the human world changed across time and space (Arkush and Allen 2006; Carneiro 1970; Keeley 1996; Nielsen and Walker (eds.) 2009; Otterbein 2004; Thorpe 2003). In Mesoamerica, warfare was central to social transformation, development of social complexity, emergence/collapse of political centralized authority, political integration/disintegration, and ritual practices (e.g., Chacon and Mendoza (eds.) 2007; Brown and Stanton (eds.) 2003; Demarest et al. 1997; Hassig 1992; Morton and Peuramaki-Brown (eds.) 2019; Orr and Koontz (eds.) 2009; Scherer and Verano (eds.) 2014; Webster 2000). Although a simplistic view may not help in understanding the varied nature of Mesoamerican warfare, as pointed out in the literature, this paper broadly defines warfare as “organized violence” (Stanton and Brown 2003: 2–3).

Based on the existing literature, in the introduction, the characteristics of Mesoamerican warfare are briefly summarized. Preclassic warfare can be traced to the Middle Preclassic period (Aoyama 2017; Brown and Garber 2003), when it led to an increase in social complexity. However, the exact nature and the role of Preclassic warfare in societies require further investigation. The rich epigraphic, iconographic, and ethnohistoric records of the Classic and Postclassic periods show evidence of warfare being common in Mesoamerica, especially in the Maya Lowlands, Central Mexico, and Oaxaca. Although epigraphic research in the Maya area shows that external warfare occurred between polities or among regional polities (e.g., Martin 2020), at the same time, internal warfare within a polity or regional polity was also known to occur in different regions of Mesoamerica (e.g., Abtosway and McCafferty 2019; Bey III and Negrón 2019). Warfare could have been one of the factors not only for the emergence and reinforcement of a centralized political authority but also for its collapse (e.g., Demarest et al. 1997; Webster 2000). Further, Mesoamerican warfare has often been

emphasized for its ritual practices, such as taking humans captive for performing human sacrifice (e.g., Schele and Miller 1986). Thus, Mesoamerican warfare was motivated by a combination of political, economic, religious, or demographic, and ecological factors, and thus, the consequences, scales, frequencies, intensities, and form of warfare also varied accordingly. For example, Classic Mayan hieroglyphs depict four types of Mesoamerican warfare-related events (Chase and Chase 2003: 175–177) such as; 1) capture events (*Chuc'ah*), wherein enemies are taken captive; 2) destruction events (*Hubi*), which refer to specific goals and objectives to be achieved in warfare; 3) axe events (*Ch'ak*), interpreted as decapitation; and 4) shell-star events, which bore maximum consequences and involved territorial and political domination over another polity. These events were recorded in stone-carved monuments, indicating that materializing warfare events was important, especially for the ruling elite to reinforce their political authority.

A brief overview of the existing literature indicates that current understanding of ancient warfare in Mesoamerica has been shaped by epigraphic, iconographic, linguistic, and ethnohistoric data in combination with archaeological data recorded in large political centers in Mesoamerica, which flourished in the cultural core regions such as the Maya Lowlands, Central Mexico, and Oaxaca. However, peripheral sites/regions surrounding these large political centers have not often been considered for research on warfare. If warfare was an intrinsic part of the Mesoamerican world and its socio-politics (Demarest et al. 1997; Freidel 1986; Inomata and Triadan 2009), it should have occurred even in peripheral sites/regions. Furthermore, although scholars clearly indicate that elite warriors were actively involved in warfare (Aoyama 2005; Aoyama and Graham 2015; Webster 2000), murals at Bonampak and Chichén Itzá (both Mexico) suggest the participation even commoner combatants in warfare (Stanton 2019: 217). Therefore, this paper reevaluates existing archaeological data to explore ancient warfare and make a preliminary examination of its social implications in pre-Hispanic El Salvador, recognized as the southeastern periphery of Mesoamerica, and identify the participa-

tion of commoners in warfare.

II Regional setting

This paper focuses specifically on present-day El Salvador (Figure 1), which formed the frontier, borderland, or periphery of southeastern Mesoamerica (Sheets 2000). From the Late/Terminal Preclassic to the Late Classic period, Kaminaljuyu (Guatemala) and Copán (Honduras) were the political centers in southeastern Mesoamerica. During the Postclassic period, small kingdoms such as Mixco Viejo and Ixmche were distributed in the Guatemalan Highlands. Material evidence from the archaeological sites in El Salvador suggest that during the pre-Hispanic period, people interacted not only with those from adjacent areas but also with distant groups and built broad interaction networks over time; for example, interactions among Olmec, Maya, Teotihuacan, Pipil, and people from intermediate areas such as Nicoya could have possibly led to warfare. However, with a few exceptions (Fowler 1984; Sheets 2003), no studies have focused on pre-Hispanic warfare in El Salvador.

This paper divides El Salvador into three regions: Western, Central, and Eastern El Salvador, with each region having a regional center: Chalchuapa and Cara

Sucia (Western), San Andrés and Cihuatán (Central), and Quelepa (Eastern). The chronological correlations among these sites are as shown in Figure 2.

The most important site in Western El Salvador is Chalchuapa. This site has more than 100 pre-Hispanic structures and more than thirty stone sculptures, including the El Trapiche, Casa Blanca, and Tazumal mound groups, situated within an area of 6 km². Chalchuapa was also one of the powerful centers from the Middle Preclassic period to the Late/Terminal Preclassic period in southeastern Mesoamerica (Boggs 1943b; Demarest 1986; Sharer 1978). Through the Terminal Classic to the Postclassic period, it is assumed that several waves of migrations from Central or Western Mexico could have occurred over the broad span of southeastern Mesoamerica, including Chalchuapa, San Andrés, and Cihuatán (Amaroli 2015; Fowler 1981; Ohi (ed.) 2000; Sharer 1978). Santa Leticia and Ataco also functioned as local ceremonial centers with monumental structures and stone sculptures known as potbelly and Izapan-style during the Late/Terminal Preclassic period (Demarest 1986; Paredes Umaña 2012). Cara Sucia, comprising the Acropolis, ballcourts, and other mounds, was another regional center that held political control over the Pacific coastal area of El Salvador. Although occupation can be traced to the Preclassic period, its apogee

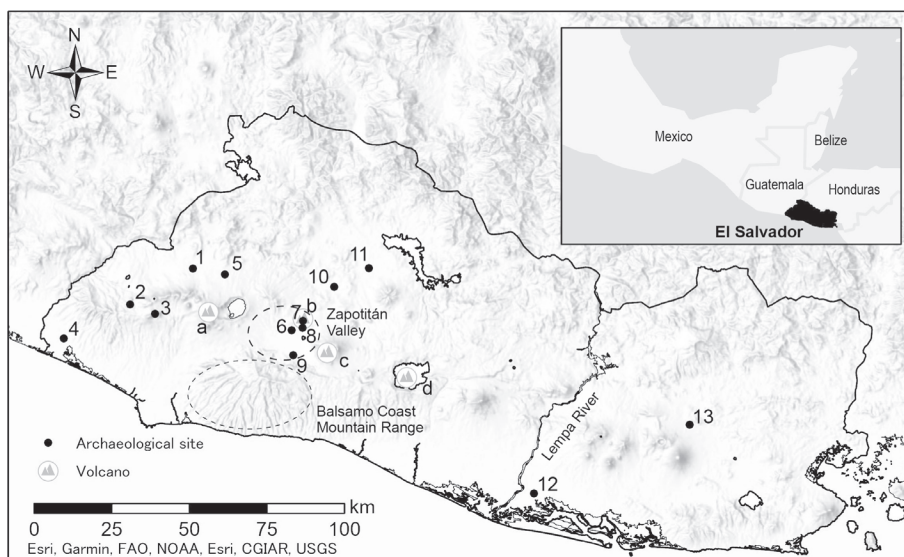


Figure 1. Map of El Salvador

Archaeological site: 1. Chalchuapa, 2. Ataco, 3. Santa Leticia, 4. Cara Sucia, 5. Finca Arizona, 6. San Andrés, 7. Cerén, 8. El Cambio, 9. Nuevo Lourdes Poniente, 10. Las Marias, 11. Cihuatán, 12. Nueva Esperanza, 13. Quelepa
Volcano: a. Santa Ana, b. Loma Caldera, c. San Salvador, d. Ilopango

	Chalchuapa Sharer 1978	Santa Leticia and Ataco Demarest 1986	Cara Sucia Amaroli 1987	El Cambio Beaudry 1983	San Andrés Author	Paraiso Basin Cihuatán Fowler and Earnest Jr. 1985	Quelepa Andrews 1976
1500						Hediondo	
1400	Ahal						
1300							
1200							
1100	Matzin				Matzin	Guazapa (Cihuatán)	
1000							
900			Tamasha	E G	Payu	Fogón	Lepa
800	Payu						
700					Xocco		Shila II
600	Xocco					?	
500					Vec		Shila I
400	Vec	Vec	hiatus ?			Ejotal	
300							
200				I			
100 AD	Late Caynac	Late Caynac	Tacachol	(I) ?	Late Caynac	Dulce	
1 BC	Early Caynac	Early Caynac			Early Caynac		Uapala
200							
300	Chul	Chul	?		Chul	Nombre	
400							
500	Kal	Kal				Conception	
600							
700							
800	Colos					Bagazo	
900							
1000	Tok						
1100							
1200							

Figure 2. Chronological correlation in the Southeastern Mesoamerica Frontier

was in the Late Classic period resulting from interactions with the Cotzumalhuapa culture that flourished in the Pacific coastal plain of Guatemala (Amaroli 1987).

Considering the central region, this paper focuses on the Zapotitán Valley and Cihuatán, which are comparatively well studied (Figure 1). The Zapotitán Valley, at an altitude of about 450 m, is surrounded by volcanic complexes such as the San Salvador, Santa Ana, and Balsamo coast mountain range. Various archaeological sites have been recorded in the valley through a general survey covering 546 km² (Black 1983). El Cambio was a Late/Terminal Preclassic site with ceremonial construction, and San Andrés was a political, economic, and religious center in the Late Classic period (Boggs 1943a). Elaborate eccentric flint, Copador polychrome, and stone-carved serpent heads found at San Andrés suggest political interactions between San Andrés and the Copán dynasty. Cerén, buried completely by the early seventh century Loma Caldera eruption, is approximately 5 km north of San Andrés. Interdisciplinary research in Cerén elucidated the daily life of Maya commoners (Sheets 1983, 2002). Cihuatán is

located in northern central El Salvador and was probably established toward the end of the Terminal Classic period. It later developed as a large urban center in the Early Postclassic period. Material evidence suggests that Cihuatán was inhabited by a Nahuatl-speaking Pipil group that had migrated from Central Mexico, or a Mexicanized local group (Fowler et al. 1987: 152).

Eastern El Salvador refers to the region east of the Lempa River, the largest river in El Salvador. Quelepa, which had forty structures, was a regional center in the Valley of San Miguel. Previous studies suggest that Proto-Lenca speakers occupied the site during the Late Preclassic period; subsequently, in the Late Classic period, Quelepa was inhabited by immigrant Mesoamerican population from the west (Andrews 1976). Interestingly, *Yugo*, *Hacha*, and *Palma*, which are often related to ballgames in Mesoamerica, have been found at Quelepa. Although problematic (Braswell et al. 1994: 176), these materials suggest interactions between people from Quelepa and those from the Gulf Coast of Mexico. There is no data about the Postclassic period in Eastern El Salvador.

III Archaeological indicators of warfare

If there are no clear written or artistic records related to warfare in a study area or period, an archaeological approach can be the only way, or at least a starting point, to explore past warfare (Arkush and Allen 2006: 6–7; Sheets 2003: 290–294) listed the following potential evidence of warfare in Mesoamerica: 1) Fortifications, 2) Art and iconography, 3) Weapons, 4) Epigraphy, 5) Osteology, 6) Artifacts, 7) Assimilation or elimination, 8) Languages and cognitions, 9) Ethnohistory and history, 10) Oral history, mythology, and religion, 11) Settlement patterns, and 12) Desecratory termination rituals. Since identification of past warfare from archaeological data alone may be difficult (Vencl 1984: 121–122), a combination of more than one type of potential warfare evidence is required.

This paper is based on available archaeological data from the Preclassic to Postclassic periods in El Salvador (Amaroli 1987, 2015; Andrews 1976; Begley et al. 1997; Braswell et al. 1994; Demarest 1986; Escamilla 2015; Fowler 1981; Fowler et al. 1987; Gallardo 2000; Ichikawa 2007, 2017a, 2017b; Ichikawa and Shibata 2008; Ito (ed.) 2016; McKee 2007; Murano 2008; Ohi (ed.) 2000; Paredes Umaña 2012; Sheets 1978, 1983, 2002; Yagi 2017). These data have been obtained mainly from monument/public architecture, where elite rulers may have performed public rituals. Data on residential or domestic areas surrounding these public architectures are available only from the commoner village Cerén and the burial site La Cuchilla in Chalchuapa. Potential evidence related to warfare were uncovered from primary contexts such as public architectures, burials, caches, and bell-shaped pits. Data of settlement patterns are limited to the Zapotitán Valley (Black 1983). However, since the data cover only surface collections and are from a limited number of test pits, these data will be used as preliminary data.

Several archaeological materials such as stone sculptures, osteological remains, figurines, lithics, and other material evidence relate potentially to warfare. Nevertheless, special attention is paid to lithic, owing to a lack of systematic studies on Mesoamerican weaponry (Aoyama 2005), since the lithic, particularly obsidian, is

common archaeological evidence, like pottery, in Mesoamerican archaeology. Ethnohistoric, ethnographic, and iconographic studies in Mesoamerica suggest that although other types of weaponry, such as clubs and axes, were used, the principal weapons are 1) bifacial points used as darts, spears, or knives, and 2) small points and prismatic blade points used as arrowheads. Although there are several subtypes of these as seen from the literature, bifacial points can be classified into three main types (Aoyama 2005: 297): 1) tapered bifacial points (roughly equivalent to a pointed stem in Sheets 1978), 2) stemmed bifacial points (including corner- or side-notched stem), and 3) laurel-leaf points (stemless points). Small or prismatic blade points are classified into three types: 1) straight bases, 2) side- or corner-notched, and 3) concave bases (Figures 3–6).

However, our concern is to determine whether the specific lithic artifacts were used for warfare or hunting (Sheets 2003: 291). Kazuo Aoyama pointed out that detailed microwear analysis and the recovery context should be used to determine whether the chipped pointed tools were used for human conflict or other purposes (Aoyama 2005: 291). Additionally, he suggested that if there were a large number of possible weapons associated with public structures or elite residences and other lines of evidence, such as violent destructive events, archaeologists could make a stronger argument for warfare (Aoyama 2005: 291). Although microwear analysis is not used in this paper, some lithic artifacts discussed later were associated with public structures, burials, caches, and destructive events.

Major available lithic samples were recovered from secondary contexts, and the periods of several samples are unclear. However, if temporal distribution or diachronic changes can be shown from the possible weapons among the total lithic assemblage, they may provide important insights not only into the technical and functional changes in their lives but also into the kind of warfare conducted (e.g., Aoyama 2005; Aoyama and Graham 2015). Based on pioneering lithic research in El Salvador (Sheets 1978, 1983), lithic assemblages are classified into at least 37 types such as prismatic blades, scrapers, blades, cores, and so on.







Bifacial points		
Tapered	Stemmed	laurel-leaf
		
Small or prismatic blade points		
Straight base	Side or corner-notched	Concave base
		

Figure 3. Basic typology of lithic forms

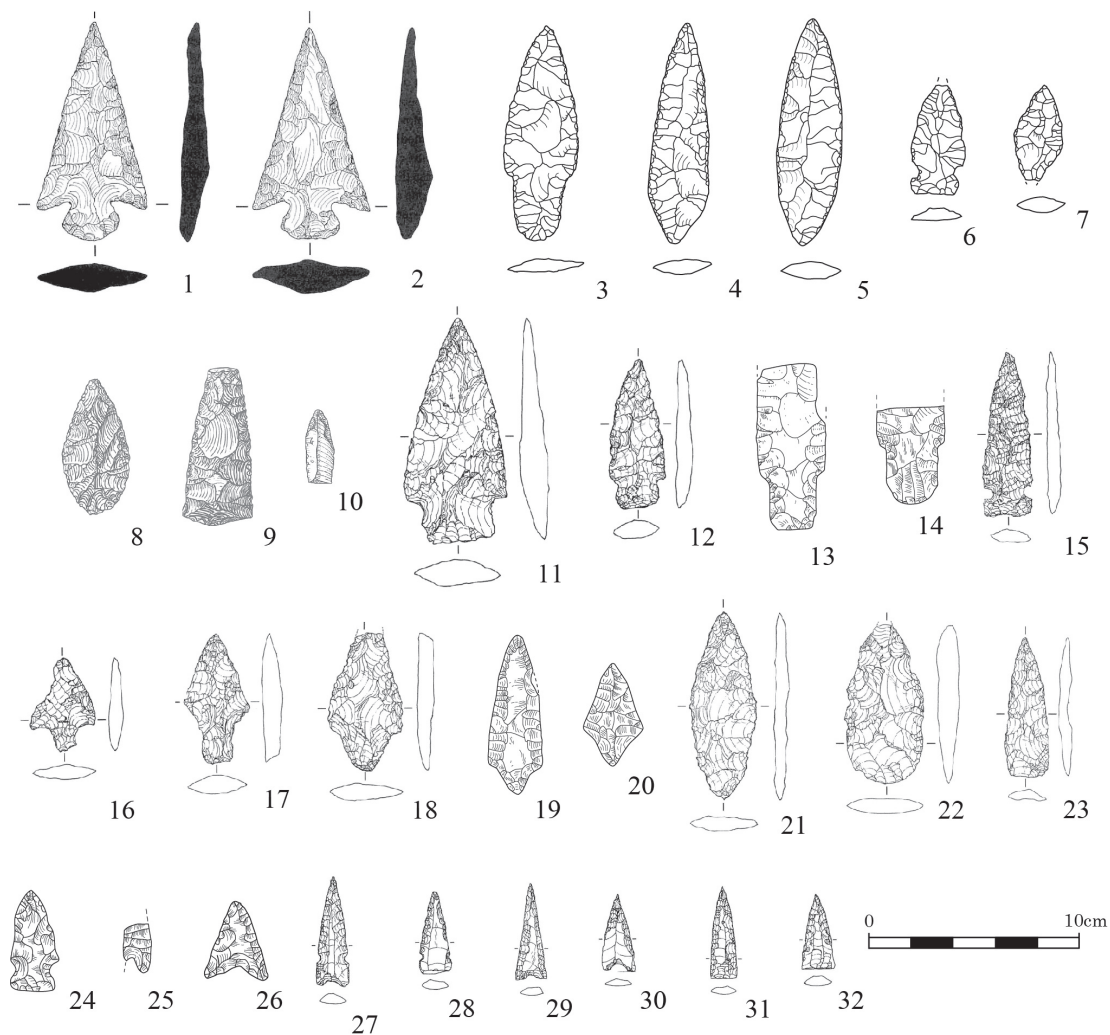


Figure 4. Lithic artifacts from the Western El Salvador

[Early Classic] 1–2. Bifacial points, [Late Classic] 3–24. Bifacial points, 25–32. Small or prismatic blade points
Providences and references: 1–2. Finca Arizona (Gallardo 2000), 3–7. Cara Sucia (Amaroli 1987), 8–10. Santa Leticia (Demarest 1986), 11–12, 15–18, 21–23, 27–32. Casa Blanca (Ohi (ed.) 2000), 13–14, 19–20, 24–26. Chalchuapa (Sheets 1978)

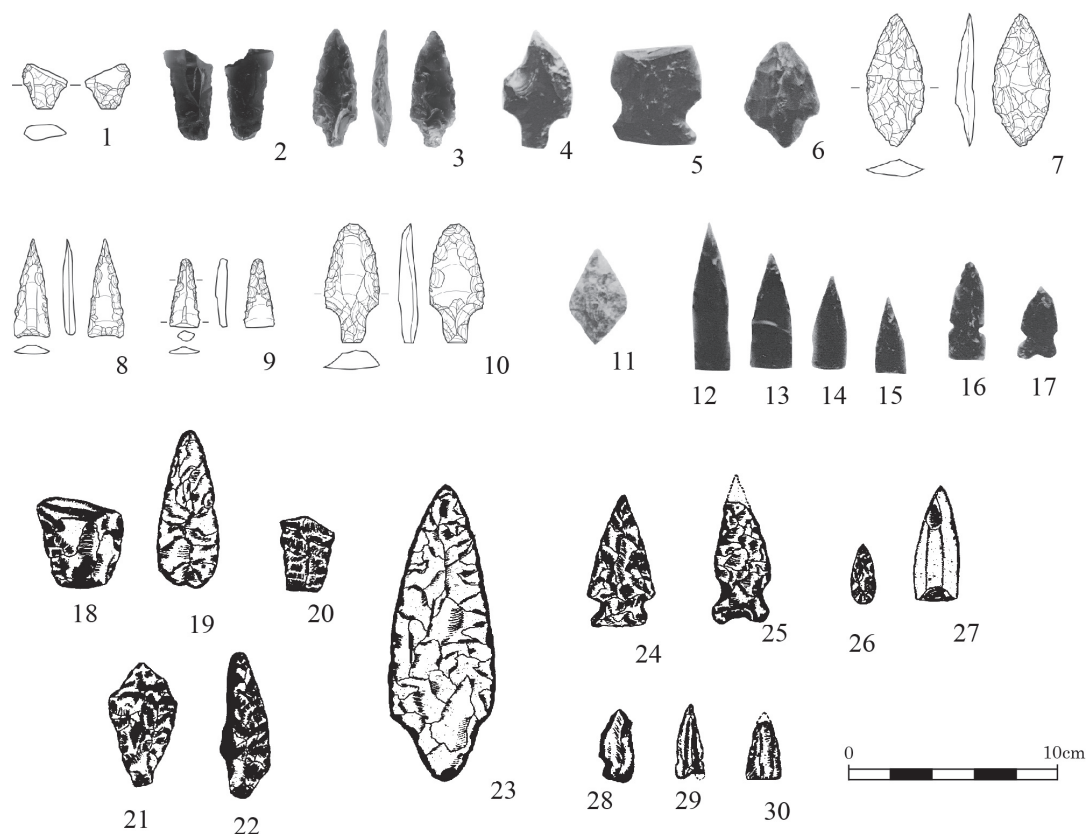


Figure 5. Lithic artifacts from Central El Salvador

[Late/Terminal Preclassic] 1. Bifacial points (?), [Late Classic] 2–7. Bifacial points, 8–10. Small or prismatic blade points, [Postclassic] 11. Bifacial points, 12–17. Small or prismatic blade points, 18–25. Bifacial points, 26–30. Small or prismatic blade points

Providences and references: 1, 7–10. San Andrés (Yagi 2017), 2–3. San Andrés (photos taken by author), 4–6, 11–17. Zapotitán Valley (Sheets 1983), 18–30. Cihuatán and Santa Maria (Fowler 1981)



Figure 6. Lithic artifacts from Eastern El Salvador

[Late Classic] 1–6. Bifacial points, 7–8. Small or prismatic blade points

Providences and references: 1–8. Quelepa (Andrews 1976)

IV Late/Terminal Preclassic period (400 BC–AD 250)

1. Western El Salvador

During the Late/Terminal Preclassic (400 BC–AD 250), social complexities grew substantially, and several apical centers emerged with monumental architecture and stone-carved monuments in Southern Mesoamerica including Izapa, Tak'alik Ab'aj, Kaminaljuyu, and Chalchuapa. Despite no evidence of potential Preclassic lithic weaponry, other potential archaeological evidence related to warfare, especially Chalchuapa, were abundant when compared with subsequent periods.

The most significant evidence suggesting warfare is the thirty-three individuals found at Structure E3-7 in the El Trapiche group at Chalchuapa (Fowler 1984). These dated to 100 BC–AD 100 and were assumed to be war captives who were non-local people, for the



Figure 7. Bound captive and elite warrior figurines from La Cuchilla, Chalchuapa, and Izapan stone-carved monuments (redrawn from Norman 1976 Figs 3.4, 3.5, and 3.9)

following reasons (Fowler 1984: 612–614): 1) the body treatment (application of hematite and wrapping of the body in bark cloth) can be considered to have social significance, such as a sacrificial ceremony, 2) absence of grave goods, 3) homogenous body position such as face-down position and possibly a bound position, indicative of ritual sacrifice, 4) body position, and disposition of the bodies suggest they were non-Chalchuapa population, 5) interred individuals were exclusively adult males, suggesting they might have been warriors, and thus, war captives. Although this fact needs further research including a reevaluation of osteological remains and isotopic analysis for verification, the possibility of these captives being local people is not discarded. Because, a face-down position and lack of grave goods were common in the Late/Terminal Preclassic mortuary practice of Chalchuapa and adjacent regions (Ichikawa and Shibata 2008; Ichikawa and Morita 2011).

Bound captive and elite warrior figurines were

recovered in a bell-shaped pit at the La Cuchilla area, located outside of the Casa Blanca monumental architectural group at Chalchuapa (**Figure 7**). According to radiocarbon dating and ceramic analysis, these figurines can be dated to around 50 BC–AD 150 (Ichikawa and Shibata 2008), which is likely contemporaneous with the war captives found at Structure E3-7. The bound figurine is in a sitting position and a cord-like object is wrapped around the neck and arms, but the figurine is not dressed, and the head is missing. The motif of the bound and non-dressed person is common in Mesoamerica representing a war captive (Dillon 1982). On the other hand, a figurine dressed in gorgeous head-dress, ear and pectoral ornaments, and an L-shaped object on the back, may represent an elite warrior. A similar L-shaped object is depicted on the stone-carved monuments (No. 3–5 and 9) at Izapa on the Pacific coast of Chiapas, Mexico. The L-shaped objects are held by supernatural deities or by the ruling elite and are considered a “club” or “scepter” and is considered a symbol of

power (Norman 1976: 82). The L-shaped object might also have been weapon or tool used for human sacrifice.

Regardless of the large number of lithic artifacts recovered from the Preclassic context, there are no bifaces and small or prismatic blade points in the lithic assemblage. Moreover, there is no potential evidence related to warfare in Ataco, Santa Leticia, and Cara Sucia.

2. Central El Salvador

Although there has been an increase in data collected from the Preclassic period in the Zapotitán Valley over the last two decades (Begley et al. 1997; Ichikawa and Guerra 2018; McKee 2007), only seven fragmented bifaces dating to possibly the Late/Terminal Preclassic period were reported from the valley (McKee 2007; Yagi 2017). These bifaces were found at villages such as Nuevo Lourdes Poniente and San Andrés, and not at a site with monumental architecture such as El Cambio. It is difficult to assess the form, size, and other details of the bifaces owing to lack of information (see **Figure 5.1**).

3. Eastern El Salvador

The earliest occupation of Quelepa dates to the Late Preclassic period (200 BC–AD 200). There was an only low platform in that period. A high percentage of Izalco Usulután ceramic (60% of the decorated pottery), which is a representative ceramic type in Western El Salvador during the Late/Terminal Preclassic period, indicates that Quelepa had closer cultural ties with Western El Salvador. In terms of lithics, only nineteen obsidian, mainly prismatic blades, were recovered from the Preclassic context. Further, no potential evidence related to warfare were seen in Eastern El Salvador in the Preclassic context.

4. Late/Terminal Preclassic warfare

The thirty-three war captives for human sacrifice and the bound figurines in Chalchuapa suggest that in the Late/Terminal Preclassic period, capture events were important practices in society, possibly to reinforce the local political authority. Additionally, the participation of different social groups in these events may provide an

opportunity for their integration. As supportive evidence, Kaminaljuyu and Izapa, contemporaneous powerful centers in Southeastern Mesoamerica, report a sacrificial scene and captives in stone-carved monuments (Henderson 2013), indicating that capture events and human sacrifices were important components of the Late/Terminal Preclassic society and their elite rulers in Southeastern Mesoamerica. Elite warriors must have played an important role in warfare. Nevertheless, bound captives and elite warrior figurines found at domestic space in Chalchuapa could indicate that capture events were perpetrated toward not only elite rulers but also commoners.

Elite warrior figurines provide some insights into Preclassic weaponry, a topic not well developed in recent debates on Mesoamerican warfare. As mentioned earlier, the L-shaped object may be a “club” or a “scepter” used as a symbol of power or for warfare. Although bifacial points had already been manufactured in the Zapotitán Valley during the Late/Terminal Preclassic period, it is difficult to assess them because they lack primary context.

V Transition period between Preclassic and Classic period (AD 150–400)

Toward the end of the Terminal Preclassic period or the beginning of the Early Classic period (AD 150–400), several destructive events occurred in Chalchuapa. Monument 1, depicting a possible ruler with hieroglyphic panels, and Monument 3, known as a stylized jaguar head sculpture, both found in front of Structure E3-1 of the El Trapiche group, were destroyed possibly on intention (Sharer 1978 vol. I: 155). These monuments were found clearly covered by primary Ilopango volcanic ash, around 20 cm thick, indicating that these were not disturbed by later activities. The hieroglyphic panels of Monument 1 were hardly decipherable due to cracking. The stylized jaguar head sculpture was broken as well.

Possibly contemporaneous with the destructions of the stone-carved monument, public architectures were also destroyed. Excavation of Structure C3-6 at the Casa Blanca group of Chalchuapa (Structure 5c in Ohi (ed.)

2000) revealed a fragmented wall of mud-plaster and several holes in the floor under the primary Ilopango volcanic ash (Murano 2008). Since a brown layer can be observed between the Ilopango volcanic ash and these features, it is more likely that it collapsed before the eruption rather than under the direct impact of the eruption. The renewal of this public architecture did not occur until the Late Classic period. It is important to note that during the transition from the Preclassic to the Classic, there was a shift in the ceremonial architecture group at Chalchuapa from El Trapiche and Casa Blanca toward Tazumal, with a drastic change in architectural style, layout, and orientation (Ichikawa 2017a: 176). Such evidence may point to intentional destruction of the stone-carved monuments and other public architecture during warfare in the transition toward Tazumal.

Teotihuacan influence can be considered key to the drastic change in cultural components. Interestingly, five green obsidian bifacial points, probably used for darts, were reported from Finca Arizona, located in the city of Santa Ana (**Figure 4.1-2**) (Gallardo 2000). The source of green obsidian is exclusively from Pachuca, Mexico, indicating that the green obsidians were imported from outside El Salvador. The bifacial points are corner-notched stem and triangular blades, which are different from the other bifacial points reported in El Salvador. The size on average is 9.66 cm in length, 4.58 cm in breadth, and 1.28 cm in thickness. These materials were found under the Ilopango volcanic ash layer, indicating that they date to before AD 400–540 (Dull et al. 2001; Dull et al. 2019). Considering the timing of the Teotihuacan expansion to other adjacent regions (Braswell 2003), the green obsidian could date to the Early Classic period, probably before AD 400.

Teotihuacan influence had an impact on other political centers, such as Tikal, Copán, and Kaminaljuyu (Braswell (ed.) 2003), and stimulated creation of a new political order in the broader region of Mesoamerica. This phenomenon may have caused an increase in social tensions or conflicts between different groups to create a new social order by reinforcing the prestigious external elements of each group. The monumental core of the Tazumal group clearly has a different site layout, architectural style, and orientation. Furthermore, the erection

of stone-carved monuments, which was important in the Preclassic period, ceased. This abrupt material change is often interpreted to be a consequence of warfare (Sheets 2003: 292). Given these sudden changes in material culture and Teotihuacan influence could lead to the assumption that warfare was responsible for the social transformation.

Although some sites including San Andrés, Nueva Esperanza, and Quelepa existed during the Early Classic period, Central and Eastern El Salvador show no evidence related to warfare.

VI Late/Terminal Classic period (AD 600–900/1000)

1. Western El Salvador

The end of the Late Classic period through the Terminal Classic period saw the destruction of public architecture in Western El Salvador. Structure C3-6 of the Casa Blanca group at Chalchuapa may have been destroyed by fire, as seen from the burnt floor and fragmented walls (Structure 5a in Ohi (ed.) 2000: 44). Since there is no evidence of a renewal project after this event, Structure C3-6 may have been abandoned after the fire event. In the Tazumal group at Chalchuapa, the main central staircase of a great architectural complex known as Structure B1-1 was totally destroyed, and in its stead, Structure B1-2, of another style of public architecture was constructed directly in front of Structure B1-1, likely to prevent access to the previous main architectural complex. Further, destruction of public architecture by fire has been observed in the Acropolis of the Pacific coastal center Cara Sucia (Amaroli 2015: 254).

More than forty individuals were found in front of Structure C3-1 in the Casa Blanca group at Chalchuapa (Structure 1 in Ohi (ed.) 2000, 69–71). Among these some appeared injured, and others had only a skull, suggesting decapitation. Radiocarbon dating indicates that these multiple burials date to AD 760±40 (Ohi (ed.) 2000: 223). The presence of Copador polychrome vessels, which were an indicator of the Late Classic period (AD 600–900), and the final phase of Structure C3-1 indicates that the multiple decapitations occurred around the same time as the destruction of Structure

C3-6. Although it is still speculative, the destruction of public architecture and the multiple decapitations were possibly executed by a brutal group of the Classic period (Ohi (ed.) 2000: 239). Morphometric analysis of the dentition of these individuals shows a wide variation among them; they are genetically different from the Preclassic ones found at Chalchuapa (Ichikawa and Morita 2011), suggesting that the group was a mix of local and non-local people. In other words, one could conclude that the locals and the non-local group engaged in warfare.

The number of bifaces and small or prismatic blade points show an increase during the Late/Terminal Classic period. In the Tazumal mound group of Chalchuapa, six bifacially retouched fragments were found (Yagi 2017: 67). At the coastal center Cara Sucia, no systematic analysis of obsidian artifacts has been performed (Amaroli 1987: viii–55), but more than 1050 artifacts were recovered during the 1982–1983 excavation season reporting ten bifaces, which may correspond to the Late Classic context (Figure 5.3-7). In Santa Leticia, seven bifaces and three prismatic blade points were reported (Demarest 1986: 48) (Figure 5.8-10).

2. Central El Salvador

Despite an extensive general survey (Black 1983), clear evidence of fortification in the Valley is lacking. As observed in Western El Salvador, there is evidence of destruction of public architecture. In the Acropolis of San Andrés, evidence of the burnt floor of a palace was recorded in the final occupation floor (Amaroli 2015: 255). Further, in the low platform located east of the Acropolis, a fragmented wall and a damaged floor have been recorded, suggesting the destruction of public structures (Díaz et al. 2013).

In the Zapotitán Valley, twenty-five bifaces and nine small or prismatic blade points dating to the Late/Terminal Classic period were found. A total of ten bifacial points and three prismatic point blades were uncovered from the primary regional center San Andrés (Figure 5.2-10). Most of the bifaces ($n = 13$) were found at hamlet sites located in mountainous areas such as Minas de Plomo and Las Pacayas, approximately 8 km north of San Andrés. On the contrary, a majority of

prismatic blade points ($n = 5$) was found in large or small villages with mounds, such as Los Montículos and Trespo, near Cerén. In Cerén, there were no bifaces and small or prismatic blade points. Considering the spatial distribution of the lithic artifacts and their small size, Payson Sheets doubts whether these lithics were used in warfare; instead, he suggests they could have been used for hunting (Sheets 2003: 291).

3. Eastern El Salvador

There is no contextual evidence related to warfare such as a drastic change in architectural style or destruction of public architecture or sculpture. However, obsidian artifact samples in the Late Classic at Quelepa ($n = 416$) are larger than those in the previous periods (Figure 6). A total of ten bifaces and three prismatic blade points were reported in the Late Classic context. One of the bifaces was associated with Cache 22 found at Structure 29. In the collection of chipped-stone samples of the Late Classic from Quelepa, the percentage of bifaces and prismatic blade points was higher than that found from other sites in the study area. Due to the lack of thinning flakes, it is assumed that all bifaces found at Quelepa may have been imported from Copán or other sites (Braswell et al. 1994: 185).

4. Late/Terminal Classic warfare

The destruction of monumental architectures occurred in several centers during the end of the Late Classic and the Terminal Classic period. Later, these regional centers were abandoned, or they declined. The increase in the number of bifaces and prismatic blade points might be related to these destructive events. If so, this suggests that warfare may have been one of the factors responsible for social disintegration. Interestingly, this phenomenon is consistent with the famous “Classic Maya collapse” of the Maya Lowlands. Although the process of Maya collapse is complicated, the intensification of warfare among the centers was one of the triggers leading to it by populational, ecological and political factors (e.g., Webster 2000).

Since the end of the Late Classic period and the Terminal Classic period, several waves of migration from Central or Western Mexico or other areas in

Mexico were recorded (Amaroli 2015; Fowler 1981; Ohi (ed.) 2000). Morphometric measurements on skeletal remains found at Structure C3-1 at the Casa Blanca group of Chalchuapa provide supportive evidence for the presence of non-local people. Specifically, there is a clear increase in small or prismatic blade points indicating that the use of arrows and bows became more common than in previous periods. These suggest that the waves of migration intensified social tension between locals and new groups, thus leading to warfare; this seems more plausible than the explanation of internal population pressure or ecological degradation causing increase in warfare in the Maya Lowlands.

VII Early/Late Postclassic period (AD 900/1000–1524)

1. Western El Salvador

The most significant archaeological context that may be related to warfare is the extraordinary volume of obsidian artifacts and debitage found in front of Structure C3-6 at the Casa Blanca group of Chalchuapa (Ichikawa 2007; Ohi (ed.) 2000). This extraordinary obsidian concentration area covered 18 m². The surface level of this obsidian concentration is about 50 cm higher than the floor level of Structure C3-6, which is the final construction phase. In other words, the extraordinary obsidian disposal event clearly occurred long after the disuse of Structure C3-6. The unslipped and unsmoothed ceramic assigned as the Joateca ceramic group (AD 1200–1500) found in this context is supportive evidence for the timing of the event. The obsidian dump of nearly 60 cm thickness was filled with more than 200,000 small flakes and debitage, 3,127 scrapers, 353 prismatic blades, twenty-four bifacial points, and one macroblade.

Interestingly, this obsidian dump covered a plain stela that was established in the Late/Terminal Preclassic period. Further, another part of this plain stela was found outside the area with extraordinary obsidian concentration. This indicates that more than ten centuries after the establishment of plain stela, subsequent people intentionally destroyed the plain stela and covered it with a large number of obsidian artifacts and debitage.

The bifacial points associated with this destructive event could be considered as weapons used in warfare related to this destructive event.

Burial 6, found on the eastern side wall of Structure C3-6 of the Casa Blanca group at Chalchuapa, is another potential archaeological context related to warfare (Ohi (ed.) 2000: 75). The stratigraphic location and the Joateca ceramic group indicate that this burial dates to the Late Postclassic period. This burial was interred with 20 obsidian prismatic blade points, which might have been used as arrowheads (**Figure 4.27-32**). Considering that the individuals were buried around public architecture at around the same time as the destructive event of plain stela, which was replaced with extraordinary obsidian, it is possible that these prismatic blade points may have been used as weapons.

In terms of lithic artifacts, there are several bifaces and small or prismatic blade points. In the Early/Late Postclassic period, forty-six biface points and thirty prismatic blade points were found. Further, another seventy bifaces and forty-three prismatic blades points were reported by Sheets (1978), possibly dating to these periods.

2. Central El Salvador

San Andrés in the Zapotitán Valley is assumed to have declined in the Terminal Classic period. Subsequently, after the El Boquerón eruption that occurred around AD 1050 (Ferrés et al. 2011), a non-local group, presumably from Central Mexico, may have settled at San Andrés, leading to the presence of a Mixteca-Puebla style polychrome and a drastic change in architectural style and technology (Begley et al. 1997; Ichikawa 2017b). Nevertheless, there is no potential contextual evidence associated with warfare in San Andrés. One prismatic blade point and four biface points were recorded from San Andrés.

The lithic collections recovered from the Zapotitán Valley (Sheets 1983) provide important data regarding obsidian distribution in the valley. Although it is difficult to date these samples, after the general survey, four bifaces and sixteen prismatic blade points could correspond to later periods based on site descriptions (**Figure 5.11-17**). A majority of the prismatic blade points ($n =$

11) were found in the large village Azacualpa, around 15 km southwest of San Andrés and located geographically in the corridor from the Pacific coast toward the Zapotitán Valley.

The important Early Postclassic center Cihuatán and Las Marias was an established Central Mexican immigrant group or/and a Mexicanized local group, as seen by architectural form and religious representations such as Tláloc, Xipe Tótec and Ehécatl (Amaroli 2015; Fowler 1981). Recent investigations have revealed that a destructive event around AD 1150 abruptly destroyed Cihuatán (Amaroli 2015: 299–301). The final occupation of Structure Q-40 was associated with many burnt fragmented walls and floors. According to available data (Fowler 1981), a large number of bifaces and small or prismatic blade points were found from Cihuatán; in fact, eighty-six bifacial points and seventeen prismatic blade points were found from Cihuatán and Las Marias (Figure 5.18-30). The destruction of public architecture and a high number of potential lithic weapons suggest that Cihuatán might have been destroyed by warfare.

Interestingly, during the Early Postclassic period, the number of small sites located on mountain tops increased in the Balsamo coast mountain range (Amaroli 2015: 295; Escamilla 2015). These sites were established in the narrow area of mountain tops and consisted of small platforms or low mounds, suggesting their use for spotting human movement from afar. Although a mountain top location invokes symbolic meanings (Escamilla 2015), it would also include a defensive purpose. There is no more detailed information, but projectile points (probably bifaces) were found at those mountain top sites suggesting an increase in the threat of attack.

3. Early/Late Postclassic warfare

The Early/Late Postclassic period may have seen an increase in social turmoil due to the threat of attack from outsiders. Warfare between locals and outsiders may have forced social disintegration and segmentation. It has been assumed that Cihuatán was established and developed by a Mexican immigrant group or/and a Mexicanized local group (Amaroli 2015; Fowler 1981) during the Early Postclassic period. However, compared

with other centers such as Chalchuapa and San Andrés, Cihuatán was a short-lived center and abandoned because of a fire. The large number of bifaces and small or prismatic blade points in the monumental core indicate that social tensions and conflicts between inhabitants were more frequent here than in other centers. Further, the increase in the number of mountain top sites in the Balsamo coast mountain range suggest an increase in the threat of attack from outsiders. Geographically, the Balsamo coast mountain range lies on the route connecting the Pacific coast and the Zapotitán Valley and other interior sites of El Salvador. Quite possibly, controlling access of unfamiliar groups into the valley was an indispensable task for the local people. Although it is difficult to assess the spatial distribution of obsidian in the Zapotitán Valley by a general survey, the concentration of obsidian in the mountain site may be coincidental with the waves of immigrants from Central Mexico.

The extraordinary obsidian dump associated with the destruction of Late Preclassic plain stela in the Late Postclassic period might have erased the deep social memory embedded in monumental landscape at the Casa Blanca group of Chalchuapa. During the Postclassic period, clay pipes and copper bells, possibly originating from Central or Western Mexico, were found at Chalchuapa. These material cultures had not existed previously in Chalchuapa. Furthermore, ethnohistorically diverse linguistic and cultural groups such as Pipil, Xinca, Chortí, and Pokomam settled in Western El Salvador (Amaroli 2015; Sharer 1978), suggesting that this multi-linguistic and multi-cultural climate could have led to warfare between them and social segmentation.

VIII Discussion and Conclusions

Data from El Salvador indicate prevalence of warfare in the peripheral/marginal regions of Southeastern Mesoamerica from the Preclassic through the Postclassic period. Evidence was predominantly localized in Western and Central El Salvador during the Late/Terminal Preclassic, the Late/Terminal Classic, and the Postclassic period. However, there has been no clear

evidence previously suggesting warfare in Eastern El Salvador, possibly because archaeological investigations have not been conducted since the 1980s, when there was increasing attention to warfare.

1. Preclassic warfare

This paper presents the case of Preclassic warfare in Mesoamerica, which is an underdeveloped topic in the literature. Ritual killing of war captives became common in the Classic period. Although shell ornaments found at Ceibal represent decapitation in the Maya Lowlands, they can be traced to the Middle Preclassic period (Inomata et al. 2010). This paper confirms that the ritual killing of war captives in peripheral areas can be traced to the Late/Terminal Preclassic period, as indicated by the osteological data relating to monumental architecture at Chalchuapa. capture events, which probably reinforced the political authority of the ruling elite and the participation of different social groups in these events that may have led to social integration. Mesoamerican warfare is generally recognized as elite-centered warfare, but captive and elite warrior figurines found at the domestic space in Chalchuapa indicate that commoners may have been involved in the war more than previously thought. Further, Preclassic weaponry is hardly known, but this paper suggests that a “club” or a “scepter” may have been used as a symbol of power or/and for warfare, especially capture events.

2. Classic warfare: perspective from peripheral region

In the Maya Lowlands, Central Mexico, and Oaxaca, warfare was common and played an important role in the political lives of the people during the Late Classic period (Brown and Stanton (eds.) 2003; Morton and Peuramaki-Brown (eds.) 2019; Webster 2000). Although regional centers such as Chalchuapa, Cara Sucia, San Andrés, and Quelepa developed in the Late Classic period and interactions grew among them, potential evidence related to warfare is scarce. These centers may have had political relations with the Copán dynasty (Card and Zender 2016), but there is no potential evidence related to warfare. Given these, the political authority and power of centers in the peripheral region

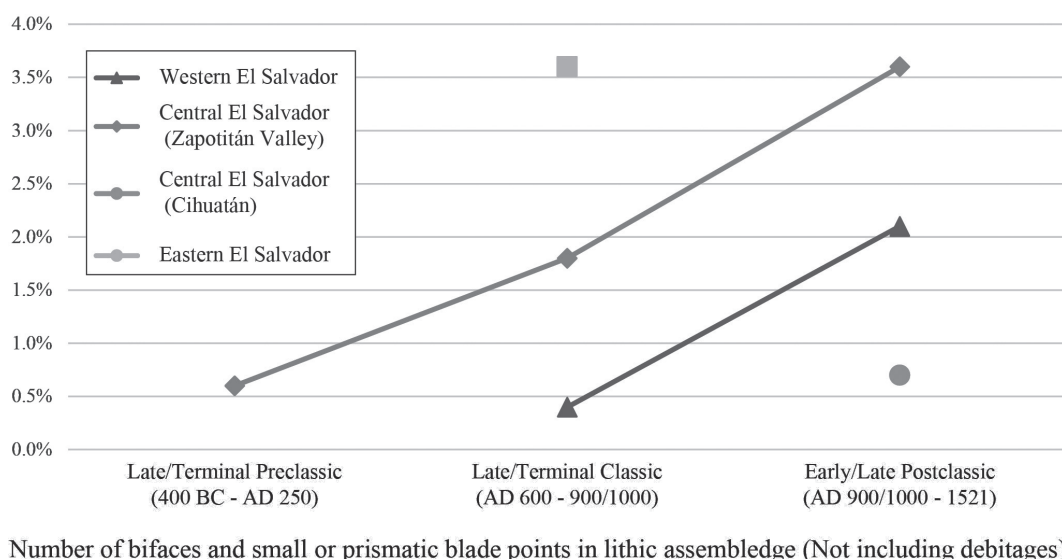
during the Late Classic period might have been relatively stable.

It is interesting to note that although there were stone-carved monuments in pre-Hispanic El Salvador, the representation related to warfare as commonly seen in large urban centers in Mesoamerica is completely absent. Unlike the dynasties in the Maya Lowlands, the ruling elites in the peripheral region may have used different strategies to reinforce their political authority. Although further discussion is difficult, these differences indicate that the recognition and role of warfare may be different in large urban centers and peripheral ones. In addition, hieroglyphic and iconographic studies provide important insights into the history of warfare, but this paper demonstrates that the nature and role of Mesoamerican warfare needs to be understood more by focusing on archaeological evidence.

It has been assumed that internal population pressure and/or environmental degradation might be one of main factors for the increase in warfare during the Late/Terminal Classic period in the Maya Lowlands (Webster 2000). Some of the warfare that occurred in the Maya Lowlands is called “total warfare,” indicating the complete destruction of a hostile city (Wahl et al. 2019). However, high population densities, environmental degradation, and total warfare in pre-Hispanic El Salvador during the Late/Terminal Classic period have not been identified so far. The increase in warfare evident in ancient El Salvador during the Late/Terminal Classic period may therefore be related to social turmoil and conflict caused by several waves of migrants from the Central Mexico or other regions of Mexico. This external population apparently dismantled local traditions and forced social disintegration and segmentation. Given these differences, the reasons for the destruction of public architecture in pre-Hispanic El Salvador could be different from those of the Maya Lowlands.

3. Temporal distribution of potential lithic weapon in the peripheral region

The temporal distribution pattern of potential lithic weapons, especially bifaces and small or prismatic blade points, in pre-Hispanic El Salvador is roughly consistent with the pattern observed in other regions of



Number of bifaces and small or prismatic blade points in lithic assemblage (Not including debitage)

	Western El Salvador	Central El Salvador		Eastern El Salvador
	Chalchuapa	Zapotitán Valley	Cihuatán	Quelepa
Late/Terminal Preclassic	0/4985	7/1137	-	0/15
Late/Terminal Classic	6/1315	34/1984	-	13/361
Early/Late Postclassic	76/3692	25/698	128/15036	-

Figure 8. Percentage of possible lithic weapons among the entire set of lithic artifacts

Mesoamerica (Figure 8) (e.g., Aoyama 2005). Bifaces and small or prismatic blade points are not common in the Preclassic period; they show an increase through the Late/Terminal Classic to the Postclassic period. This pattern may also coincide with the increase in warfare and its significance in the Mesoamerican world (Aoyama 2005) indicating that the tactics and behaviors associated with warfare in pre-Hispanic El Salvador occurred on the same lines as that of other Mesoamerican societies. However, as mentioned above, the motives and consequences of warfare could have been different. These differences were probably driven by the historical, socio-political, cultural, and ecological contexts of each region.

4. Involvement of commoners in warfare

Active involvement of the elite is common in Mesoamerican warfare, but the involvement of commoners is not well-known (Brown and Stanton (eds.) 2003; Morton and Peuramaki-Brown (eds.) 2019). As mentioned earlier, this paper suggests that warfare may have involved the elite and the commoners as can be deduced from the Preclassic war captives and elite warrior figurines in the domestic space. On the other hand, the lack of potential lithic weapons in the lithic

assemblage of the Late Classic village Cerén provides another insight into the involvement of commoners in pre-Hispanic warfare. Cerén lies in the flood plain of the Zapotitán Valley and if the bifaces and small or prismatic blades were used for hunting, as part of their daily life, why did commoners not have indispensable tools in the residences or storage rooms? Why were all the hunting tools left in the hunting field? Bifaces and small or prismatic blade points in the Zapotitán Valley during the Late/Terminal Classic and Postclassic periods were concentrated at the monumental core San Andrés and the villages located in the mountainous area. This specific spatial distribution combined with other phenomena, such as the destruction of public architecture and increase in the number of mountain top sites, lead us to speculate that these lithic tools could have been used for warfare. Commoners possibly living on the mountain villages might have been prepared for the threat of attack from outside the valley. To verify this, systematic research, including general survey, excavations in the residential areas and sites in the mountainous region, and microwear analysis of lithic artifacts, are needed. Such a study would contribute to understanding how ancient commoners were also involved in warfare practices.

5. Conclusions

This paper offers an overview of existing archaeological evidence through the Preclassic to the Postclassic period that potentially relates to warfare in pre-Hispanic El Salvador. Although chronological resolution needs to be refined in future work, a significant finding is that potential evidence of warfare is concentrated in specific periods such as the Late/Terminal Preclassic, Late/Terminal Classic, and the Early/Late Postclassic. These multiple lines of evidence indicate that warfare played an important role in the long term for social integration, transformation, and disintegration/segmentation of pre-Hispanic societies in El Salvador. The study confirms that warfare studies contribute to understanding social tensions and contradictions, which may have been the triggers for social change within the societies in the peripheral sites/regions.

All the interpretation presented here is preliminary because the available data used in this paper are partial; previous investigations possibly overlooked any sign of warfare, as the topic is given scant attention. The author hopes that future research pays more attention to warfare in peripheral sites/regions for a broader perspective on warfare practices in Mesoamerica.

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