

**Domestic Ritual, Architecture, and the Development of Social Complexity in the Preclassic Maya Lowlands: Excavations in Early Residential Areas at Ceibal, Guatemala**

(Revised proposal, March 2021)

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**Abstract**

The proposed project addresses the role of domestic rituals in the development of social complexity in the Preclassic Maya lowlands through investigations of early residential areas at Ceibal, Guatemala. In my previous work at the Karinel Group, one of those residential areas, I have shown that distinct domestic and public rituals created separate, though overlapping, communities from about 1000 to 350 BC. My current project expands on this research to answer questions about the social and political relationships among households at early Ceibal. Were the domestic rituals seen at the Karinel Group shared across the site? Did inequality among households develop gradually, or did the Maya maintain a relatively egalitarian society until the major shift in ritual practices around 350 BC, when domestic and public rituals became similar? I will oversee excavations in two early residential areas in order to compare the ritual architecture and deposits to those of the Karinel Group. I will pay close attention to labor investments in architecture and the degree of access/restriction of ritual spaces, as these could indicate differences in status among the households. By creating a high-resolution chronology, I will track changes in the relationships among households over time.

**Resumen**

El proyecto propuesto aborda el juego de los rituales domésticos en el desarrollo de la complejidad social en las tierras bajas mayas preclásicas por unas investigaciones de áreas residenciales tempranas en Ceibal, Guatemala. Durante unos trabajos anteriores en una de esas áreas residenciales, la que se llama el Grupo Karinel, fue mostrado que los rituales domésticos y los rituales públicos creaban comunidades distintas, aunque superpuestas, entre 1000 y 350 años a.C. El proyecto actual amplía esas investigaciones para resolver unas preguntas sobre las relaciones sociopolíticas entre las casas de Ceibal temprano. ¿Se compartían los rituales encontrados en el Grupo Karinel a lo largo del sitio? ¿Surgían gradualmente la desigualdad entre las casas, o, alternatively, mantenían los mayas una sociedad relativamente igualitaria hasta una gran transformación en las prácticas rituales alrededor de 350 años a.C., cuando los rituales domésticos y los rituales públicos se volvieron similares? Se realizarán unas excavaciones en dos áreas residenciales tempranas para comparar la arquitectura y los depósitos rituales con los del Grupo Karinel. Se estudiarán cuidadosamente las inversiones laborales en la arquitectura y los grados de accesibilidad/restricción de los espacios rituales, porque esos datos podrían indicar diferencias en estatus entre las casas. Por la creación de una cronología de alta resolución se trazará cambios en las relaciones entre las casas a través del tiempo.

## **PROJECT DESCRIPTION**

### **Introduction and Intellectual Justification**

Ritual shapes societies, because it simultaneously unites communities and fosters divisions within those communities (Bell 1992, 1997). Through ritual practices, specialists with access to restricted knowledge and spaces may – or may not – gain higher status in a society (Hill and Clark 2001; Pauketat et al. 2002; Turner 1969). Recognizing that practices at the household level contribute to social change (Bourdieu 1977; Hodder and Cressford 2004; Netting et al. 1984), and building on a rich tradition of household archaeology in Mesoamerica (Wilk and Ashmore 1988), I study the role of domestic ritual in the development of social complexity in the Preclassic Maya lowlands.

Through this work, I have contradicted a widespread assumption that public rituals must grow out of domestic predecessors and shown that ritual plays a variety of roles in social change (MacLellan 2019a). Next, I seek to create a new narrative of early Maya society that is focused on interactions among households during a long period of relative egalitarianism. This will contrast with traditional and neoevolutionist models that focus heavily on the emergence of inequality and rulership. My research addresses themes that affect present and future, as well as past, societies, giving it broad implications within and beyond archaeology. In our own society, public and domestic rituals still bring us together, while providing opportunities for tensions and inequalities to emerge. The question of how households contribute to social change, in comparison to processes taking place in the public sphere, is also widely relevant. Finally, our positions within modern nation-states may cause us to assume the development of inequality and state-level society is inevitable, or natural, while studies of early and nonwestern complex societies, like that of the Preclassic Maya, give a richer and more varied picture of the ways in which people can organize themselves.

### **Research Objectives**

In the proposed project, I will investigate the role of domestic rituals in the development of complex societies through excavations in early residential areas at the Maya site of Ceibal, Guatemala (Figure 1). I will identify changes over time in ritual architecture and deposits during the Preclassic period (c. 1000 BC - AD 300). Ceibal is the ideal location to study the role of ritual in the development of Maya society, because it was founded as a ceremonial center at the very beginning of sedentary life in the Maya area (Inomata, MacLellan, and Burham 2015; Inomata, MacLellan, Triadan, et al. 2015). At Ceibal, it is possible to track changes in both public and domestic rituals from the time when the Maya first started living in permanent dwellings, using pottery, and relying on agriculture to the appearance of the first Maya rulers.

Although most studies of the origins of ancient Maya society focus on the development of hierarchies, there is relatively little evidence of inequality at early Maya settlements. Taking a heterarchical perspective (Crumley 1995), I investigate the ways in which early Maya society was organized both hierarchically and non-hierarchically. At early Maya sites in northern

Belize, burials have been used to track emerging inequality (Hammond 1999; McAnany 1995); however, outside that area, Preclassic Maya burials are rare and show no pattern of social differentiation. In order to identify potential levels of inequality, I will estimate labor invested in architecture at different households (Abrams 1994). (This is different from measuring the size of dwellings, which is not clearly linked to status in the Maya area.) For example, at the epicenter of Ceibal, the labor invested in large basal platforms that supported at least one residential group suggests that a few households may have held a special status in the community as early as 750 BC (Triadan et al. 2017). Access to energetically expensive building methods, such as lime plaster, could also indicate a higher status household. I will also examine relative accessibility and restriction of ritual architecture. As Jerry Moore argues in a study of Andean public buildings, increasing distance between performer and audience, along with decreasing accessibility of performance spaces, facilitates the development of socio-political hierarchies (Moore 1996). Conversely, more inclusive rituals on low and open structures create more egalitarian relationships in a community.

Through previous investigations at the Karinel Group (Figure 2), an early residential area at Ceibal, I have shown that Preclassic Maya public rituals did not evolve out of domestic predecessors (MacLellan 2019a, 2019b, 2019c). Rather, from about 1000 BC to 350 BC, distinct domestic and public rituals existed in tension, creating separate sociopolitical relationships within early Maya society. By 500 BC, multi-scalar (household and suprahousehold) rituals were being enacted on contemporaneous circular platforms (Aimers et al. 2000; Hendon 2000) in different parts of the Karinel Group (Figure 3). While both round structures at the Karinel Group are low and open, they differ greatly in labor investment and space available for an audience. The simpler platform is located within a domestic patio, an area constrained by dwellings, and would have allowed only a small audience. The more elaborate, plastered circular platform is located away from the patio group, in an open area, and it suggests that groups larger than an extended family (but smaller than that which gathered in the public plaza), came together in residential areas for events such as dances or feasts. The responsibility for hosting and conducting rituals may have rotated among households, building non-hierarchical, reciprocal relationships, as is described in ethnographies of modern Maya communities. I also find that a major shift in ritual practices took place across the lowlands around 350 BC, when domestic and public rituals became more centralized and more similar. At that point, the Karinel Group's circular platforms were buried.

The proposed research addresses questions raised by my previous work about the social and political relationships formed and transformed through ritual practices at early Ceibal. If household rituals created a separate, though overlapping, set of communities from those formed in the public plaza, then what was the nature of the relationships among households? Did inequality among households develop gradually, as some scholars suggest, or did the Maya maintain a relatively egalitarian society until the abrupt shift in ritual practices around 350 BC? To address these questions, I am planning new excavations and laboratory analyses for 2021.

### **Relation to Larger Research Program**

This project is part of a larger research program at Ceibal, the Ceibal-Petexbatún

Archaeological Project (CPAP). My colleagues Dr. Takeshi Inomata, Dr. Daniela Triadan, and Dr. Melissa Burham have received funding from the National Science Foundation (NSF) for the concurrent project “Preceramic to Preclassic Transition in the Maya Lowlands” at Ceibal. The four of us, along with Guatemalan co-director Flory Pinzón, will apply for a joint permit from the Instituto de Antropología e Historia (IDAEH) and share expenses. For example, Pinzón’s salary will be covered by the NSF grant. My research was conceived independently, but it furthers CPAP’s main goal of understanding the development of complex society in the Maya area. Inomata, Triadan, Burham, and Pinzón support this application, and Pinzón will help oversee both research projects. I have received \$5000 for my research from the American Council of Learned Societies (ACLS).

### **Research Methods, Work Plan, and Qualifications of Researchers**

This project will entail investigations of two previously identified early residential areas at Ceibal, Structures 21 and 79 (Figure 2) (Tourtellot 1988). A 4x4 m area will be excavated down to the natural soil, or bedrock, in each of these large platforms. Excavation units may be expanded, depending on the findings.

I will compare ritual architecture (e.g., circular platforms) and deposits (e.g., caches, burials) to those of the Karinel Group. Shared ritualized practices among households would demonstrate the negotiation of a community separate from that which was created at public performances in the Central Plaza. The degree of accessibility of ritual spaces, along with labor investment in architecture, will show whether differences among households relate to inequality or to other divisions, such as membership in small ritual societies. Greater restriction and greater labor investment would indicate a household of higher status. If no differences are seen, then relatively egalitarian relationships among households will be inferred. I will track changes in the relationships among the three households over time. I am particularly interested in the period around 350 BC, when the major shift in ritual practices occurred.

For this research, I will employ eight experienced excavators from the Q’eqchi’ Maya community of Las Pozas and one Guatemalan student archaeologist. Emma Messinger, a doctoral student at the University of Pittsburgh, will participate as a volunteer. Messinger already has extensive field experience in Belize, but this project will help her develop a dissertation project.

The archaeological materials recovered from the excavations are crucial to understanding ritual practices and social processes at early Ceibal. My expertise and that of my collaborators will allow for the analysis of all materials. I will oversee the creation of a fine-grained chronology through stratigraphic control, radiocarbon dating, and detailed ceramic analysis. Using the software OxCal 4.4, Bayesian statistics will be applied to narrow calibrated radiocarbon date ranges based on stratigraphic relationships (Bronk Ramsey 1995, 2009; Inomata et al. 2017). Other specialists will oversee the analyses of animal bones and shell (Dr. Ashley Sharpe, Smithsonian Tropical Research Institute), stone tools (Dr. Kazuo Aoyama, Ibaraki University), human remains (Dr. Juan Manuel Palomo, University of Arizona), and

paleobotanical remains (Dr. Hiroo Nasu, Okayama University of Science).

My collaborators and I have all worked at Ceibal for many years, as part of CPAP. I conducted five seasons of fieldwork at Ceibal (2011-2015), in addition to many months of lab analyses in Guatemala City, to collect my dissertation data. For the years 2013-2015, Burham and I co-directed field operations for CPAP, in the absence of Inomata and Triadan. Palomo served as the Guatemalan co-director in 2013. Pinzón has been co-director since 2014.

### **Revised Schedule**

All necessary permits will be secured by the end of August 2021. The field season will begin January 10, 2022 and end March 4, 2022. Most laboratory work, including ceramic analysis, will take place during the field season, but some analyses may continue until December 2022, depending on the schedules of the relevant specialists. Radiocarbon samples will be submitted to the University of Arizona AMS Laboratory for dating by April 2022. I will submit a report on the field season to IDAEH by May 2022. Artifacts should be turned in to IDAEH by January 2023.

### **Publication and Dissemination Plan**

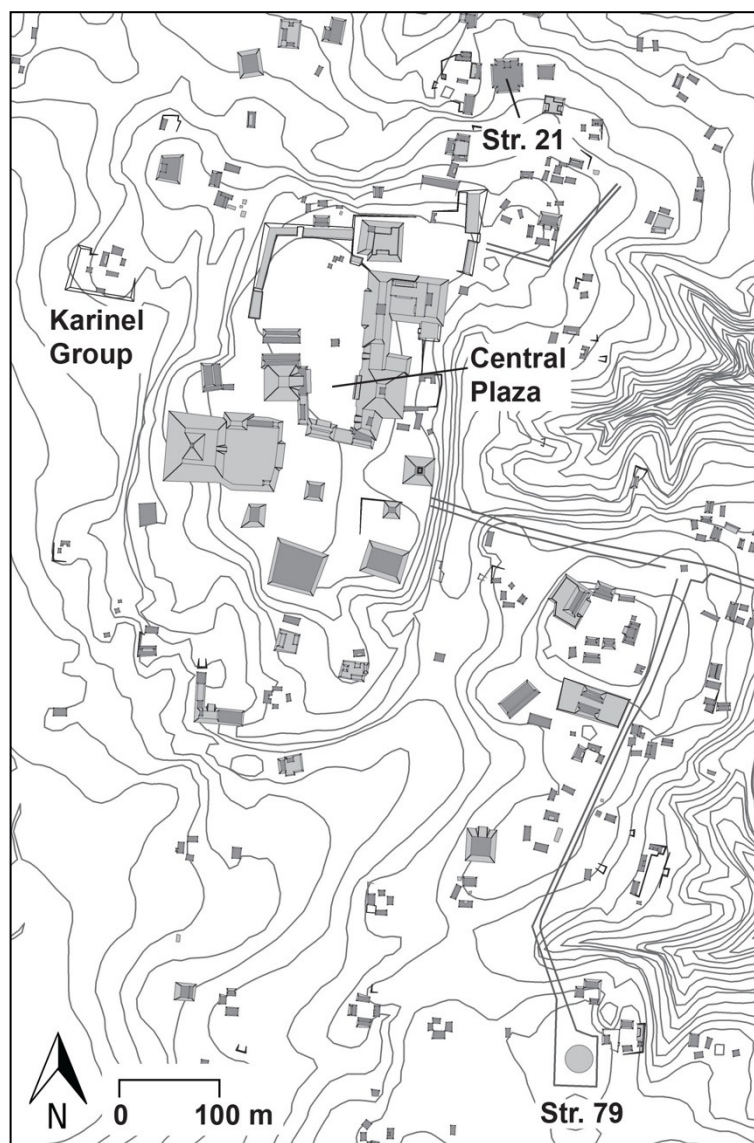
This project will result in multiple peer-reviewed articles in journals such as *Latin American Antiquity*, *Antiquity*, *Journal of Anthropological Archaeology*, *Cambridge Archaeological Journal*, and *Ancient Mesoamerica*. I will give conference presentations in Guatemala (Simposio de Investigaciones Arqueológicas) and the United States (SAA Annual Meeting). Data will be archived by the Digital Archaeological Record (tdar.org). Excavated materials will be curated by IDAEH in Guatemala City and will serve as reference collections for the scholarly community.

In addition, I will continue an archaeological outreach project in schools in the Q'eqchi' Maya town of Las Pozas, near Ceibal (MacLellan et al. 2020). The goals of this program are to a) share archaeological research with local and descendant people, b) encourage the preservation of cultural and natural resources, and c) inspire students to develop skills useful in careers related to heritage.

## LOCATION MAPS AND FIGURES



**Figure 1.** Map showing the location of Ceibal and other early sites in the southern Maya lowlands.



**Figure 2.** Map of central Ceibal with the locations of structures mentioned in the text (Smith 1982). The proposed excavations will take place at Structures 21 and 79.





**Figure 3.** Preclassic round structures excavated at the Karinel Group (photos by MacLellan and Inomata) (MacLellan 2019b). Top left: very early round structure or altar dated to c. 750-700 BC. Bottom left: Structure Sutsu was unplastered and located in a domestic patio. Right: the plastered Structure 47-Sub-3 was located in an open area used for suprahousehold rituals.



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## PUBLICATIONS AND OUTPUTS

This project will result in publications and other research products. Articles will be published in peer-reviewed journals, such as *Antiquity*, *Latin American Antiquity*, *Ancient Mesoamerica*, *Journal of Anthropological Archaeology*, *Journal of Field Archaeology*, and *Cambridge Archaeological Journal*.

My results will be presented in Spanish and English at archaeology conferences in Guatemala (Simposio de Investigaciones Arqueológicas) and the United States (SAA Annual Meeting.) The proceedings of the Guatemalan conference will be published in Spanish.

I am also preparing a proposal for a book on the role of ritual in early Maya society, and this research project will strengthen that future manuscript.

The data from this project will allow me to design a larger, multi-year research project at Ceibal. This work will help me craft a competitive application for funding from the National Science Foundation to support that endeavor.

My data will be archived by the Digital Archaeological Record (tdar.org), in order to make them accessible to colleagues. Excavated materials will be curated by IDAEH (Salon 3 facility, Guatemala City) and will serve as reference collections for the international scholarly community.

The results will also be disseminated via an archaeological outreach project in schools in the Q'eqchi' Maya town of Las Pozas, near Ceibal. I hope to expand the existing program to other communities in the area.

This work will also result in important training and experience for one Guatemalan undergraduate student and one Ph.D. student from the United States.