

**THE DYNAMICS OF POLITICAL ECLIPSE: THE SHIFTING ROLES AND
STRATEGIES OF CLASSIC MAYA INTERMEDIATE ELITES**

by

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Submitted to the Graduate Faculty of the
Kenneth P. Dietrich School of Arts and Sciences in partial fulfillment
of the requirements for the degree of
Doctor of Philosophy

University of Pittsburgh

2021

UNIVERSITY OF PITTSBURGH
DIETRICH SCHOOL OF ARTS AND SCIENCES

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University of Pittsburgh, 2021

This dissertation assesses how the rise of the Late Classic (AD 600-900) Maya polity of Lower Dover, Belize impacted the lives of people living in the immediate vicinity. In the past, scholars have examined the emergence of higher tiers of political decision-making by comparing the fates and fortunes of commoners at the bottom of the social hierarchy with the ruling kings and queens at the top. No society has ever been solely composed of just kings and commoners. This dissertation uses the concept of the “intermediate elite” to examine the changing roles and political strategies of three low-level Classic Maya elite households and reconstruct their relationships with their subordinates over a ~2000-year period (900 BC-AD 1000). Three dimensions of ancient life are reconstructed using archaeological materials: 1) inequalities in wealth and wellbeing, 2) economic production and exchange, and 3) ritual and religion.

Investigation revealed that before the emergence of the Lower Dover polity, the autonomous local elites were all pursuing similar roles and strategies including hosting ancestor veneration ceremonies and feasts in their small ceremonial plazas. However, dynamics changed quite dramatically after the Lower Dover polity rose. While all three intermediate elites became less wealthy, their ability to secure commoner labor increased. Some intermediate elites relied on strong relationships with their subordinates and augmented their historical strategies, while others allied themselves with the emergent ruling elite at Lower Dover. These different intermediate elite strategies had clear repercussions for their commoner subordinates. Some commoners saw little to no change through the transition while others fell upon difficult times. This dissertation showcases the importance of including intermediate elites in our reconstructions of political dynamics. The intermediate elite provides a lens through which the policies of rulers were filtered before they impacted commoners.

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ACKNOWLEDGEMENTS

To begin, I'd like to acknowledge the sources of funding and support which made this dissertation research possible. Much of the costs were covered by a National Science Foundation Doctoral Dissertation Fieldwork Grant (BCS-1914638 J. Walden, and M. Bermann). I wish to acknowledge Dr. John Yellen, who was a source of support throughout the grant application process. A large amount of the radiocarbon dating work associated with this project was funded by the Rust Family Foundation. Without this financial assistance, the dissertation would not have the fine-grained temporal lens that it has. Dr. William Rust deserves thanks for his patience and help. The Belize Valley Archaeological Reconnaissance (BVAR) project provided funding for the initial Lower Dover survey and excavations at Tutu Uitz Na. A series of internal grants from the University of Pittsburgh Center for Latin American Studies, International Studies Fund, and Department of Anthropology also provided the financial basis for initial survey and excavation.

The list of people who have been pivotal in this dissertation project seems almost endless. My committee members were a source of support, inspiration, and assistance. I'd like to acknowledge my advisor Marc Bermann, whose patience, reassurance, and support have been much appreciated. Marc deserves credit for making the dissertation process as enjoyable and relaxed as is humanly possible. Dick Drennan has been a source of inspiration through the process and has always been on hand to offer advice and support. In addition to his assistance in framing the research and the statistical analyses, Dick also imparted the confidence to cohesively cobble together disparate datasets and think critically about the biases inherent in each and how to deal with these. Julie Hoggarth has been a constant source of support and assistance no matter the situation. Many of the ideas which culminated in this dissertation originated in a conversation Julie and I had about the role of minor centers in the Belize Valley as we drove to Spanish Lookout to buy ice cream (and presumably supplies). Thank you, Julie for always being there to support me. Liz Arkush has been incredibly supportive throughout the dissertation process and was especially influential in imparting the tools to think about spatial patterns in settlement patterns but also in reminding me to think about human relationships between actual people. I am one of many graduate students who have benefitted from Liz's publication writing workshop. Finally, thanks

go to Lara Putnam for serving as my external committee member, your input made me think about my research in new and novel ways and inspired my postdoctoral research. Collectively my committee members left me feeling empowered to pursue my research interests.

My doctoral research at Lower Dover was conducted between 2016 and 2019 under the auspices of the Belize Valley Archaeological Reconnaissance (BVAR) project directed by Drs. Jaime Awe, Julie Hoggarth, and Claire Ebert. I wish to acknowledge and thank Dr. John Morris and the staff at the Institute of Archaeology in Belmopan for permitting this research. I believe I echo the sentiments of hundreds of archaeologists when I say thank you to Jaime Awe for welcoming me onto the BVAR project and offering all the support necessary to complete this research. Claire Ebert has been a wonderful friend and mentor throughout the process. Claire deserves recognition for always being on hand to offer good advice, and never “saying I told you so” when I subsequently failed to heed said advice and things went utterly wrong. Claire assisted with many aspects of this project from its inception, however much of the lab analysis would not have been possible without her efforts. Mike Biggie was the best buddy to have alongside me in the field, rain or shine. Going into a major field project knowing that almost anything can go wrong is intimidating, but a whole lot less so when you have someone on hand who seems to always have a solution. Rafael Guerra played a major role in getting me set up at Lower Dover. I appreciate you taking time away from your work to help me get land access, offer advice, and protect me from wildlife. Myka Schwanke deserves recognition for all the coordination and logistics which made the fieldwork possible.

During my time at the University of Pittsburgh, I have benefitted from advice and input from several faculty members. Bryan Hanks deserves recognition for taking the time to help me out on several pivotal occasions and always being a source of support and encouragement. I’d like to thank Loukas Barton for being a mentor and friend. Much of this dissertation benefitted greatly from the skills and knowledge you imparted to me. My initial interest in archaeological ceramics was benefitted greatly from Kathy Allen’s ceramics course, which remains the most enjoyable course I’ve taken. Olivier de Montmollin was influential in the early stages of this research and shared such a broad range of ideas with me. Several important elements of this dissertation research emerged during a seminar on House societies which Dušan Borić taught as a visiting scholar. Numerous staff at the University of Pittsburgh worked to make this dissertation research possible.

Throughout my time at Pitt, Phyllis Deasy and Lynn Lantz always looked out for me and fixed things when I enrolled in the wrong courses, lost my receipts, or locked myself out. I'd like to acknowledge Joan Jackson at the Pitt grants office, Joan worked tirelessly to figure out invoices and payments to various labs, and never complained when I messed up. Carlos Peña, the anthropology library rep at Pitt deserves thanks for sourcing ebooks and pdfs during the covid pandemic. Richard Sherman at OIS has provided invaluable assistance and resolved several complicated visa situations. Alexander Martín and Aspen Greaves deserve recognition for their work getting all my ramshackle data ready for online distribution through the CCA. Prior to arriving in Pittsburgh, Ina Berg and Stuart Campbell were formative in my development as an archaeologist during my undergraduate and master's studies at the University of Manchester. Stephanie Koerner deserves gratitude and acknowledgement for setting me on this life course. I never contemplated Maya archaeology until I took Stephanie's Mesoamerica seminar in 2007.

Maya archaeology has proven to be a very socially enjoyable environment to begin my academic life. One reason for this is the number of senior scholars who go above and beyond to help and support emerging scholars like myself. Jim Garber and Kathryn Brown gave me access to both their materials and their stories from the 1990s excavations at Floral Park. The scope of this dissertation would simply not have been possible without their work, and their willingness to share their data. I am likewise indebted to Gordon Willey and colleagues who amassed the Barton Ramie materials currently curated by the Peabody Museum. Jeffrey Quilter deserves thanks for granting access to the Barton Ramie collections for this research. Laura Costello, collections steward at the Peabody Museum helped tremendously with accessing collections and analyzing materials. Katherine Meyers was instrumental in helping me access the Harvard Peabody project Barton Ramie field notes. The process of working through the collections was greatly benefitted by Errin Weller, who provided me with the data collected during her dissertation research on the Barton Ramie materials.

The laboratory component of this dissertation would not have been possible if it was not for the efforts of several colleagues. Carolyn Freiwald deserves thanks for conducting strontium and dietary isotope analysis on human remains from the Lower Dover settlement. Carolyn has been a great source of information on a truly eclectic array of subjects (*jute* deposits, VPLF burials, isotopes, populations, genetics, etc.). Christophe Helmke deciphered the limited number of

inscription bearing sherds from Lower Dover. Brendan Culleton and Maggie Davis at Penn State processed radiocarbon and were a pleasure to work with. Source analysis of obsidian was carried out by Jose Victor Gonzales Avendaño, aided by Claire Ebert and Bryan Hanks. Ellery Frahm provided calibration samples for the pXRF. Thanks go to Kirsten Green, Rosie Bongiovanni, and Ashley McKeown for conducting osteological analyses. It was always a joy to have you visit us at Lower Dover. Ian Roa compiled all the faunal data into the Lower Dover faunal database and assisted with statistical analyses. Norbert Stanchly also provided input on various difficult faunal samples. Gavin Wisner, Chrissina Burke, Katie Tappin, and Aimee Alvarado also deserve thanks for working on our faunal assemblage. Faunal analysis was greatly benefitted by access to the Stanley J. Olsen Laboratory of Zooarchaeology at the Arizona State Museum in Tucson, and the Herpetology Collection at the Carnegie Museum of Natural History in Pittsburgh.

I have benefitted from the mentorship and friendship of several brilliant archaeologists in Belize. Laura Kosakowsky certainly deserves a round of applause for teaching me ceramic analysis. Laura has been a strong advocate and has read, edited, and helped me greatly throughout the dissertation process. Holley Moyes provided me with an amazing introduction to Maya archaeology and has always looked out for me. Holley deserves recognition for saving my life and for providing housing, a total station, vehicles, equipment. Barbara Voorhies has proven a wonderful mentor who guided me through excavation and publication. Mark Robinson and Maureen Carpenter instilled a fearlessness in me when it came to trenching into monumental architecture. Scott Hutson has been a source of support. Scott's insights into settlement, households, agents, and interactions greatly benefitted this dissertation. Anabel Ford and Sherman Horn III offered many ideas and thoughts on settlement patterns and households during a pleasant day out at Lower Dover. Anabel and Scott Fedick deserve particular thanks for providing access to high-quality soils data which made the analyses included in this dissertation possible. John Whittaker helped design the lithics analysis component of this dissertation. John deserves thanks for his quick responses when sent photographs of various lithics encountered in the field. Rachel Horowitz provided wonderful input on the patterns of lithic tool production and consumption. Mike Petrozza provided access to materials and data gathered during his Master's project at Lower Dover which made our initial season easier. Sheldon Skaggs' input on all matters geological was greatly appreciated. Thanks to all the archaeologists who have been willing to share ideas and offer

insights into the material culture of Lower Dover, most notably Brett Houk, Jason Yaeger, Terry Powis, Shawn Morton, Damien Marken, Liz Graham, Panos Kratimenos, Meaghan Peuramaki-Brown, Bernadette Cap, Gabe Wrobel, Jessica MacLellan, Arlen Chase, Sarah Kurnick, Kristin Landau, Lacey Carpenter, Keith Prufer, Lucas Martindale-Johnson, Kong Cheong, Jill Jordan, Tony Beardall, Zoe Rawski, Van Kollias, Jason Whittaker, Nicholas Bourgeois, Margaret Reith, Marieka Arksey, Isaac Ullah, Jess Beck, Scotti Norman, Ellisa Bullion, and George Micheletti. Amy Thompson and Adrian Chase deserve particular thanks for their ideas and input into this project. This dissertation has benefitted dramatically from our enlightening settlement meetings.

We could not have excavated without the permission of the local landowners. Mr. Lenny Wragg, Mr. Menlo P. Dueck, Mr. Julian Sherrard, and Miss Mirna Martinez deserve heartfelt thanks for allowing us to reconstruct the local prehistory of Unitedville. Madeline, Bill, and Justin Reynolds were fantastic hosts. Over the years the Lower Dover field station became a second home and one which I have come to miss greatly. Eduardo Juan and family at “Big Boyz Garage” Cayo kept our vehicles running and were always on hand to rescue stranded folks and feed them ceviche when calamities arose. Thanks also go to Mr. Hode and Miss Nazette Burns, Miss Curly, Miss Dora, and the rest of the staff at Hodes Place.

My absolute killer field team deserves huge thanks for all their hard work and for making life so enjoyable. I met Carlos Mendez on my first day in Belize, and he has been a solid friend and mentor ever since. I have learned so much from Carlos and enjoyed so many hilarious moments, so cheers mate! Asterio Morales and Esduit Ariel Morales invested a huge amount of time, effort, and labor in this project and deserve thanks. Yijia Qiu was always on hand to quite literally brighten the darkest days. Yijia solved my (annual) lab-based calamities and was always there to help me think through complicated things in such an enjoyable way. It was a pleasure to watch Kyle Shaw-Müller develop from a field school student into a colleague, this dissertation would not be what it is without Kyle’s hard work and input in the field and lab. Anaïs Levin deserves a huge amount of recognition for analyzing 40 pigtail buckets of debitage, for always being on hand to help in whatever capacity, and keeping me sane during the latter stages of dissertation writing. Abel Nachamie was a joy to work with in the field. Abel deserves recognition for his hard work, pioneering skills, and bizarrely consistent ability to uncover the types of “ritual” features he wanted to find. Olivia Ellis worked incessantly to fix various muddles I had created. I

cannot count the number of times I finally got around to doing some laborious chore which had I put off time and time again, only to find Olivia had done it days ago of her own prerogative. Albert Abdool provided stunning artifact photographs and reminded me to relax and enjoy life when it was most necessary. Kelly Segura worked industriously in the lab, rarely complained, and provided hilariously scathing commentary. It was a pleasure to have April Martinez on board, April deserves acknowledgement for being a tremendous help with with community outreach. Special thanks also go to Victoria Izzo for being such a good friend and a wonderful help with all things burial/osteology-related.

Many wonderful field school students, volunteers, locals, and BVAR staff surveyed, excavated, and did lab work. Thanks go to Emma Messinger, Lauren Garcia, Xiang Li, Dennis Baldwin, Victoria Rick, Rudy Gonzalez, Julio Trujillo, Mary Swearingen, Krystal Dudash, Kirstine Stæhr Gregersen, Sharon Toth, Tristan Hardinger, Emely Hernandez, Natalie Mendez, Alexander Brown, Katie Preston, Grace Smith, Audrey Pappalau, Shawn and Thomas Morley, Brooks DeGenarro, Brenna Chamberlain, Jon Gonzalez, Adam King, Benjamin Byers, Kelsey Gruntorad, Katelynn Ebert, Rachel Duncan, Sasha Romih, Magdalen Gibson, Richard Stonehouse, Lloyd Wall, Michelle Bachy, Michael Jack, Cassandra Feely, Sam Hemsley, Lisa DeLance, Tucker Austin, Britt Davis, Steve Fox, Renee Collins, and Sydney Lonaker. Tia Watkins has repeatedly been there for me over the last seven years. I truly appreciate your help, support, and general silliness. Hannah Zanotto has proven a wonderful friend through the process of this dissertation. Erin Ray has been a constant pillar of support throughout the process, appearing whenever things went wrong to help out. Gabriela Saldaña deserves recognition for helping me find a little peace amongst the chaos. Keith Solmo, may you rest in peace, my friend. You certainly knew how to live life. My lasting memory is you driving into that hurricane.

A number of fellow grads made my time in Pittsburgh all the more enjoyable. Thanks go to Gabriela Cervantes, Manuel Igor Chechuskov, Gligor Dakovic, Patrick Beckhorn, Chao Zhao, Alejandra Sejas Portillo, Weiyu Ran, Peiyu Chen, Fernando Franchetti, Hugo Ikehara, Rachel Chamberlin, Lauren Herckis, Jessica Phelps, Yan Ng, Amar BK, Ljiljana Pantovic, Jose Victor Gonzales Avendaño, Francisco Garrido, Juan Carlos Vargas Ruiz, Can Yan, Adam Berrey, Camilla Sturm, Dafne Lastra Landa, Hsi-Wen Chen, Neha Dhole, Darius Bittle-Dockery, Ognjen Kojanic, Junyang Cao, Sarah Kennedy, Jennifer Farquhar, Ryan Smith, Sarah Jolly, Manuel

Calongos Curotto, Amanda Suarez Calderon, Sharon Toth, Peter Ellis, Philip Mendenhall, Courtney Besaw, and Ben Rovito. Patrick Mullins has been a great friend and has always been around to run through ideas. Jim, Nancy, and the Mullins family have made me welcome at many family gatherings. Thank you all for offering such a welcome respite from the rigors of study.

Thanks to all my family who have always welcomed me home, my brother Edward, my father Phil, Richard and Ellen Walden, and Nicki and Tom Cox and sons. I also want to thank all those who helped me recharge on my trips home; Sean Stapleton, Bernard Chiu, Joe Thurgate, Lisa Bach, Kirsty Williams, Joe Farr, Helen Doherty, Richard Stonehouse, Rhodri Lloyd, Matt Cully, Dan Moore, Hakim Lassal, Lewis Bell, Simon Gosden, Ross Bissel, Hannah Duvosin, Steph Searl, and particularly Becca Bolton, and Ash, Nathan, Jack, and Millie Ponting. My mother, Liz Walden has played a momentous role in this project. Your support and love over the last eight years kept me going on this path. Thanks for always being there.

1.0 INTRODUCTION

The goal of this dissertation is to articulate a holistic theoretical framework for investigating ancient politics by focusing on intermediate elite agency and decision-making. Paradoxically, studies of politics in ancient complex societies often fail to embrace political complexity. As an example, archaeological reconstructions of Classic Maya politics have often been dominated by questions about how a monolithic class of elites extracted resources from a larger monolithic class of commoners. While epigraphic reconstructions illuminate competing cabals of elites, archaeological approaches continue to stress the ways in which royal elites ideologically manipulated throngs of subordinates. These past approaches have primarily focused on the extremes of the political spectrum, the powerful and the powerless (de Certeau 1984). The emphasis such approaches place on apical elite strategies for controlling and extracting resources from commoner households can be seen as flipping from the micro-reductionist to the macro-reductionist with little grasp of how the two scales relate in the middle (DeLanda 2006; see also Lefebvre 2002: 139-142).

The monumental ceremonial complexes at the hearts of Classic Maya polities represent at least two ways in which ruling elites articulated with the commoner masses, requiring public labor and accommodating public ceremonies (Inomata 2006). Thus, the emphasis on relationships between rulers at the apex of society and commoners is not misplaced, just incomplete (Garrison, Houston, and Alcover Firpi 2019: 134; Lohse 2004: 119). In reality, no polity is comprised solely of just kings and commoners. Local inter-hierarchical actors like chiefs, local warlords, lineage heads, neighborhood leaders, nobility, gentry, lords, and so on are a common feature of political systems cross-culturally (Claessen 1978: 537-538; Gledhill 2000: 127). A host of intermediate elite actors would have headed intermediate social units at multiple levels of the political hierarchy (Hammel 1984: 40-41; LeCount and Yaeger 2010b: 30). The presence of intermediate elites, or the people which Max Gluckman (1968) called “inter-hierarchical” actors, is apparent in the minor centers which litter the Classic Maya political landscape, each often surrounded by a district of commoner houses (Arnauld et al. 2012; Bullard 1960; Connell 2010; Hutson 2016; Lemonnier 2012; Smith and Novic 2012). Moreover, these actors have their own motivations, agendas,

beliefs, and goals (Iannone 2003: 13). Investigation of these actors offers scope for fleshing out our understanding of political systems and providing a more holistic perspective on the emergence and persistence of polities.

This dissertation investigates how power and authority were manifested in the strategies employed by hierarchically nested social actors at multiple levels of political systems (Foias 2013; LeCount and Yaeger 2010b: 20; Marken and Fitzsimmons 2015; A. Smith 2003). For the purposes of the dissertation these actors are approached as apical, or ruling elites (Eisenstadt 1969: 6), intermediate elites (Elson and Covey 2006a), and commoners (Lohse and Valdez 2004). Examining the agency of apical elite, intermediate elite, and commoner actors, relative to one another provides a simultaneously bottom-up and top-down vision of Maya political dynamics (Brumfiel 1994a). Teasing apart complex webs of interactions among hierarchically situated agents is a difficult feat archaeologically. Victor Turner (1996 [1957]: 93) argued that social dramas provided a “limited area of transparency on the otherwise opaque surface of regular uneventful social life.” While Turner’s social dramas were short-lived quotidian affairs, the logic can be upscaled to grander socio-political events. This dissertation uses the “social drama” associated with the development of an ancient polity as a window into intermediate elite political structures. Polities can be thought of as “Frankensteinian entities”, born of a messy process involving subjugation, incorporation, and co-option (Anderson 1992: 5). The formation of a polity was a complex, historically contingent process in which pre-existing networks of agents spread across the political landscape became rewired in new and increasingly complex ways (Friedman 1994: 18-22; Mann 1986; A. Smith 2003). These conditions thus provide an ideal temporal threshold for examining the ways in which intermediate elites and commoners changed following incorporation into an emergent polity. Understanding how this process occurred requires a diachronic approach, which charts these networks of relationships between actors and assesses how they changed in relation to one another over the political *longue durée*.

Classic Maya polities can be characterized as a hierarchically nested peer-polity network, more akin to the *poleis* of Classical Greece, than to expansive territorial states and empires like the Aztec and Rome (Demarest 1992b: 141; Freidel 1986; Hutson 2016: 58-59; Marken and Straight 2007: 283; B. Price 1977; Renfrew 1986; Sabloff 1986; Wesson 1978; see also Renfrew 1975: 12-21 for early state modules). Many scholars have likened the networks of Classic Maya

polities to a city-state culture (M.H. Hansen 2000; Houk 2015: 26; Hutson 2016: 55-60). In many ways, the multiple quasi-autonomous political entities, which adhered to an overarching set of cultural norms and conventions could be considered similar to a “society of states” (see Bull 1977: 9-19; see also Martin 2020a: 369).

Ongoing decipherment of Classic period epigraphy is revealing a byzantine political system composed of hierarchically positioned elites jostling for supremacy through fluid webs of patron-client relationships (Martin 2020a, 2020b: 462; see also Carter 2016; Pohl and Pohl 1994; Tokovinine and Zender 2012). At the apex of the multiple competing political hierarchies of the Classic lowlands were royal families who derived their right to rule from institutionalized systems of divine kingship heavily grounded in ceremonial authority (Freidel and Schele 1988; Houston et al. 2003). The political success of such apical elite actors was greatly contingent on forging personal patron-client relationships with intermediate elites, to gain access to their respective clientage networks of subordinate elites and commoners (Martin 2020a; see also Freidel 1992: 121; Grube 2000; Sharer and Golden 2004). Political systems in which the relative power of competing apical elites depends upon patronizing client-elite brokers are infamously unstable. This instability arises because the apical elite ability to coerce subordinates is limited by the fear of losing clients (and their clientage networks) to the patronage of rival apical elites (Bailey 1963, 1969: 63, 146; Fourquin 1976: 128; Gluckman 1968; Simmel 2009 [1908]: 150–156; Wolf 1966: 17; for Maya examples see Carter 2016; Pohl and Pohl 1994; Robin 2012c: 330). Ethnohistoric accounts of elite patron-client relationships in the Postclassic Highlands, Yucatan, and Peten Lakes suggest the existence of a fairly decentralized political systems and the prevalence patron-client relations (Carmack 1981; Jones 1998; Okoshi-Harada 2012; Rice 2019; Roys 1957; Scholes and Roys 1948). Collectively, epigraphy, ethnohistory, and archaeology strongly suggest that intra-polity factionalism played a pivotal role in ancient Maya political dynamics, however these dynamics remain underexamined (see McAnany 1995: 25).

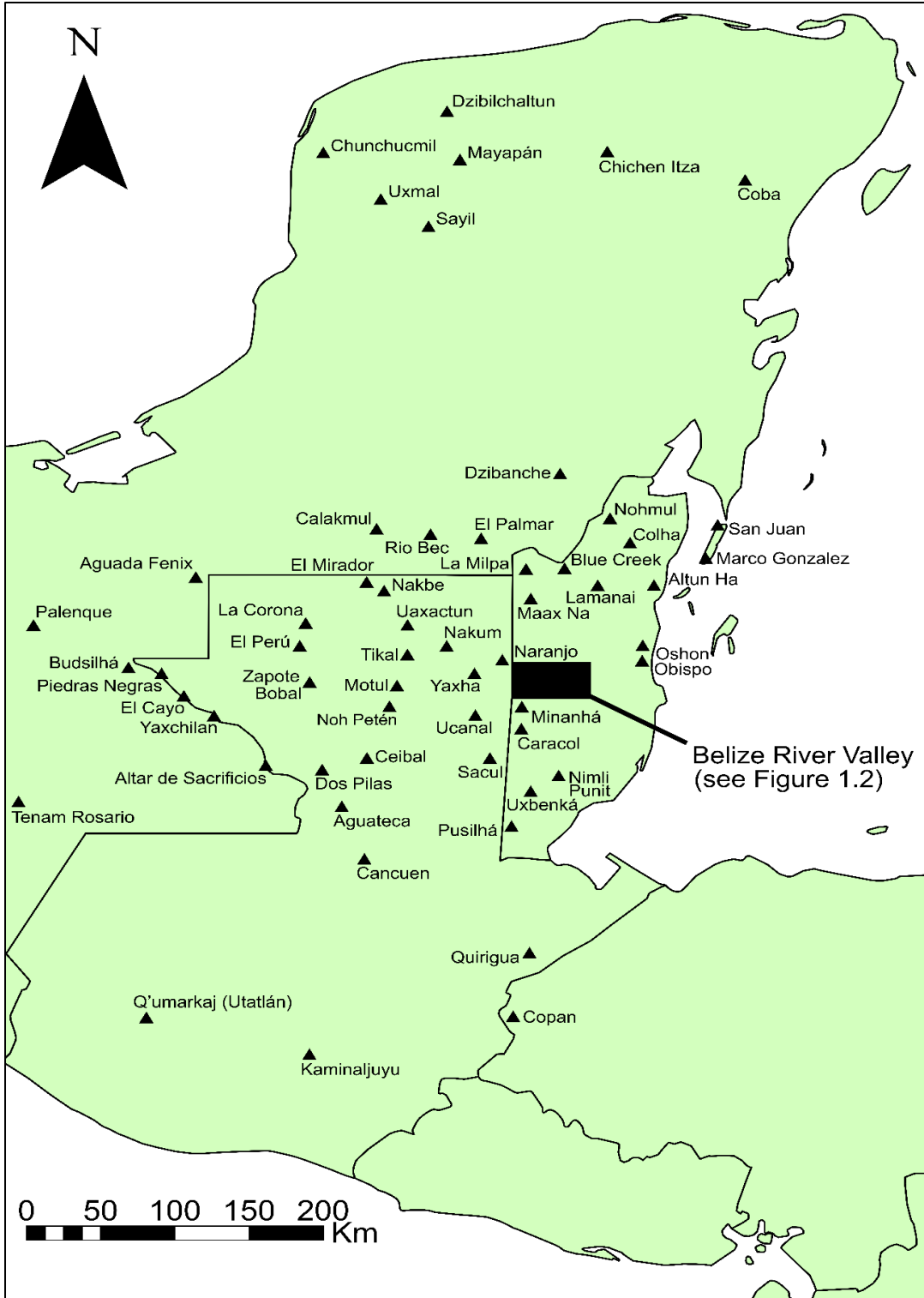


Figure 1.1 Map of Maya region showing sites mentioned in text

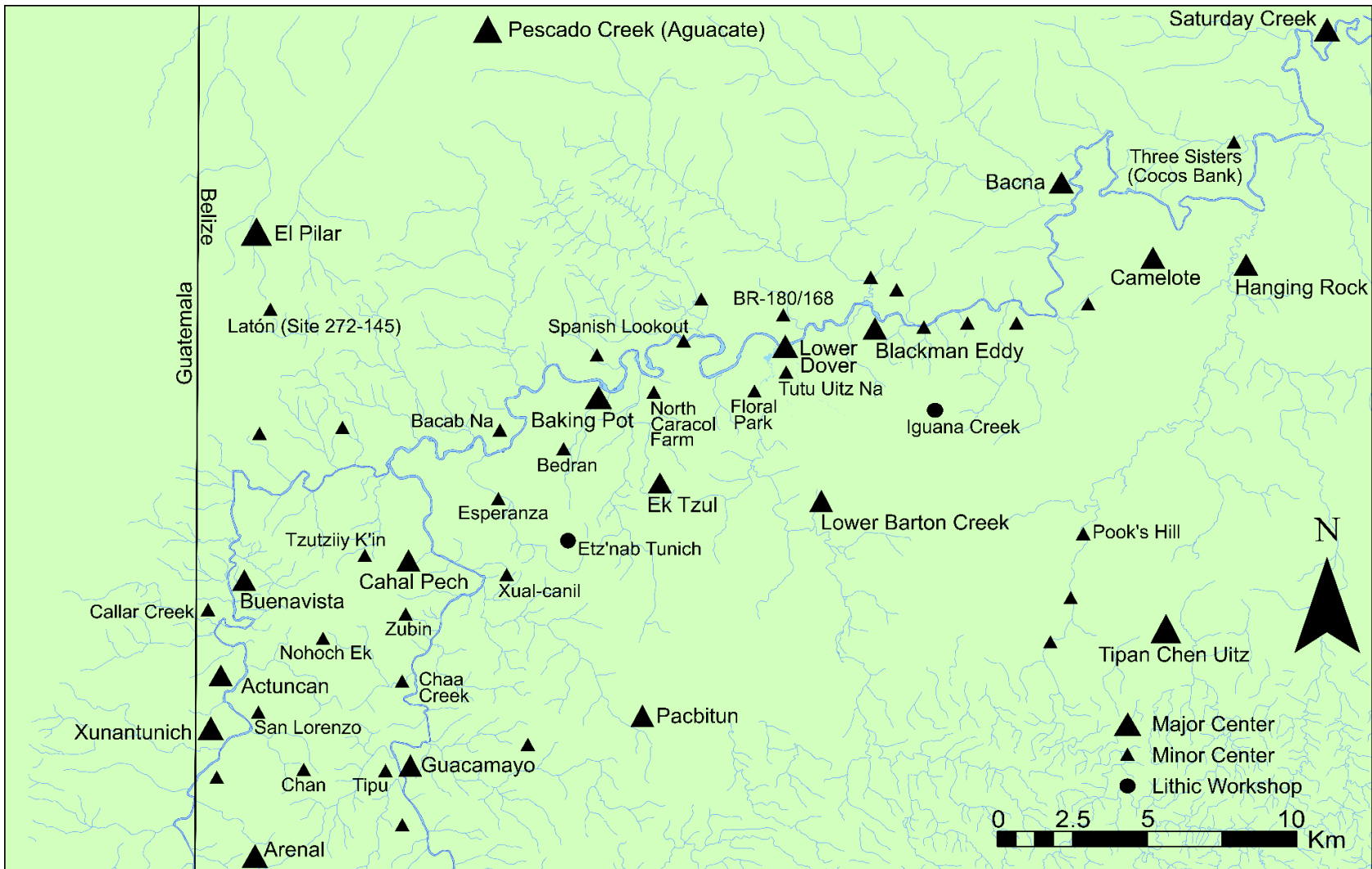


Figure 1.2 Map of the Belize River Valley with major centers shown
Minor centers and other sites mentioned in text are also shown

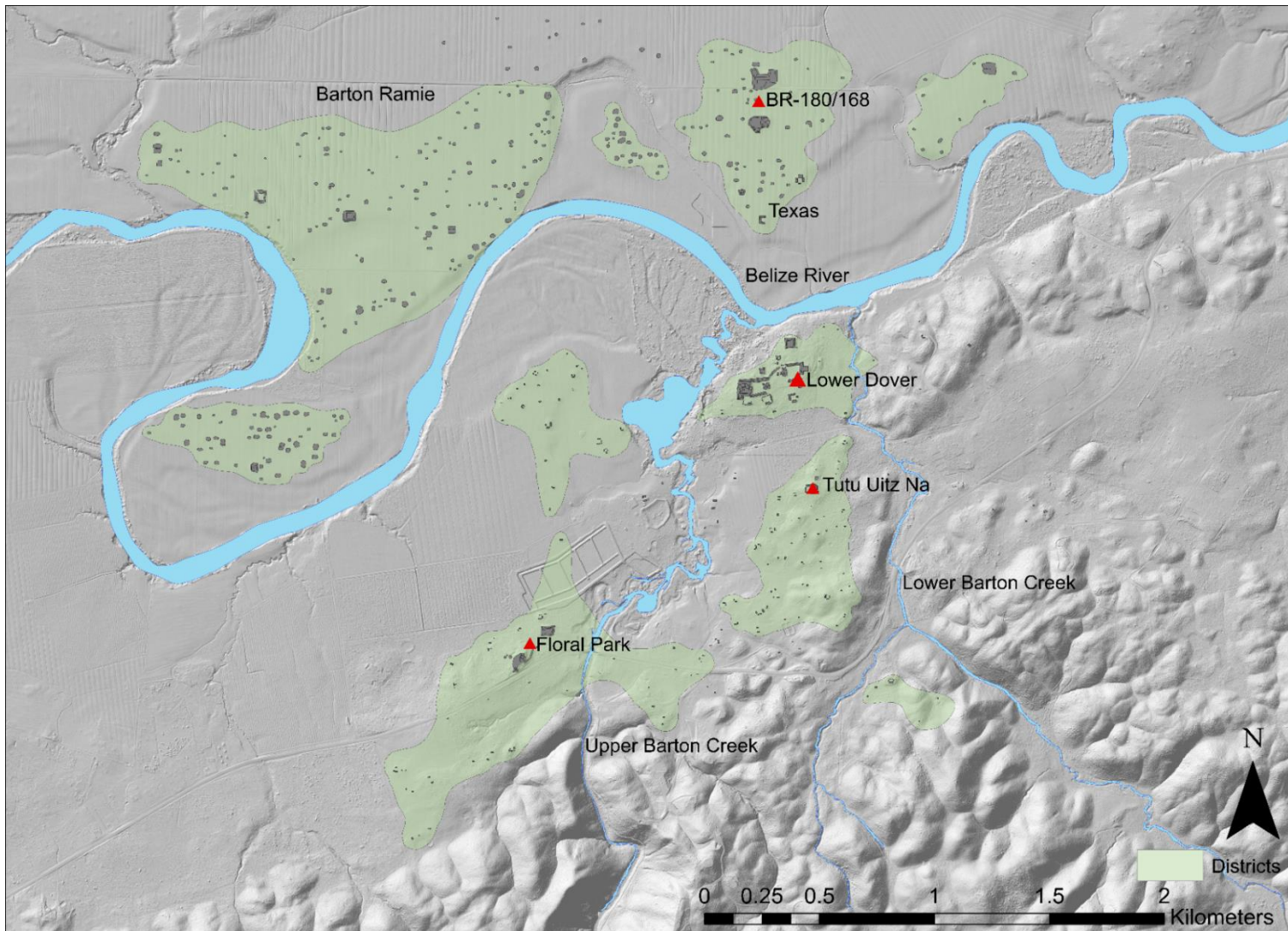


Figure 1.3 Map of the Lower Dover polity

Table 1.1 Belize River Valley Chronology.

| <i>Time Period</i> | <i>Date Range</i> |
|---------------------|-------------------|
| Postclassic | AD 900/1000–1521 |
| Terminal Classic | AD 800–900/1000 |
| Late Classic II | AD 700–800 |
| Late Classic I | AD 600–700 |
| Early Classic | AD 300–600 |
| Terminal Preclassic | AD 150-300 |
| Late Preclassic | 300 BC-AD 150 |
| Middle Preclassic | 900–300 BC |
| Early Preclassic | 1200/1100–900 BC |

The Late Classic (600-900 AD) Maya polity of Lower Dover, is situated in the Belize River Valley, in the eastern Maya lowlands (Figures 1.1 and 1.2). The Late Classic rise of Lower Dover saw the integration of the formerly autonomous local elites at Tutu Uitz Na, Floral Park, and BR-180/168, and their respective affiliated commoner residences into the polity (Figure 1.3). Each of these intermediate elite households had constituted an autonomous local leadership for over a thousand years, since the Middle Preclassic (900-300 BC) period (Table 1.1). The rise of the Late Classic polity ruled by the apical household at Lower Dover represents a clear temporal threshold for examining how hinterland social actors and their worlds changed with the emerging central Lower Dover regime (see Elson and Covey 2006b: 14). Thus, we gain an outside-in perspective on the formation of a polity (Bermann 1994; Emerson 1997; Landau 2016; LeCount and Yaeger 2010a; Longstaffe and Iannone 2011; Robin 2012a; for historical examples see Gailey and Patterson 1988; Lattimore 1962). Past transgressions and assistance would impact trust, loyalty, and feelings of indebtedness (Eisenstadt and Roniger 1986; Golden and Scherer 2013; Graeber 2014; Lederman 1986). As I discuss in subsequent chapters, certain intermediate elite strategies may limit the types of power and authority those elites could harness and the types of relationships open to them (Bailey 1969: 70; Barth 1966: 10). This research is about the changes experienced at the household level which accompanied the Late Classic rise of the Lower Dover polity, as local leaders became intermediate elites, and as small villages became integrated into dispersed urban districts.

I pursue three research questions pertinent to understanding the transformative process associated with the rise of Lower Dover. **1) How and why did the political strategies and agency of Classic Maya intermediate elites change after incorporation into a larger polity?** This first question provides an intermediate elite perspective on their eclipse by the emergent polity of Lower Dover. The dissertation outlines a series of possible intermediate elite strategies and seeks evidence of these in the material record. **2) How did intermediate elite relationships with apical elites and commoners change following the rise of the polity?** This question explores the “inter-hierarchical” or brokerage capacity of intermediate elites, in that it specifically focuses on how the strategies evident in Question 1 underlay intermediate elite cooperative or acrimonious relationships with suzerains and subordinates. **3) Why did the political agency and strategies of intermediate elites change in the way they did?** This question seeks to identify the underlying causal factors responsible for the patterns developing out of Questions 1 and 2. For instance, did distance from the Lower Dover center impact the degree to which intermediate elites were impacted by the rise of the center? Alternatively, did the size of their following and ability to deploy subordinate’s labor allow them to better negotiate their position in the ascendant polity?

To address these questions, this dissertation begins by first providing a theoretical foundation. Chapter 2 serves as a broad theoretical background that situates intermediate elite actors within models of Classic Maya political organization, and develops an agency framework for understanding intermediate elite political strategies. Chapter 3 provides a brief overview of the Belize River Valley developmental trajectory from the Archaic to the Postclassic. Chapter 4 delves into the research questions, hypotheses, and correlates. Chapter 5 outlines the archaeological methods employed to reconstruct changes in the Lower Dover area. Chapter 6 reports on the survey and excavations of the Tutu Uitz Na, Floral Park, and Texas Districts. Chapter 7 investigates changing inequalities in terms of wealth, status, and wellbeing at the three districts. Chapter 8 provides a comparative overview of changing economic patterns in terms of production, redistribution, and exchange at the three districts. Chapter 9 outlines changes in ritual at the three districts. Chapter 10 provides a discussion of the larger patterns evident in Chapters 6-9 and offers answers to the research questions posed. Chapter 11 concludes by discussing the merits and drawbacks of the approach employed in this dissertation and offers some future directions.

2.0 THEORETICAL FOUNDATION

At the theoretical core of this dissertation is an intermediate elite agency-based approach to understanding political dynamics. Section 2.1 overviews the concepts of the upward, downward, and horizontal intermediate elite faces. Section 2.2 presents the current thinking on Classic Maya political dynamics and centralization, and unitary versus segmentary models of polities. Section 2.3 situates the approach within the archaeological literature on structure, agency, and social networks. Section 2.4 examines approaches to distinguishing between coercive power and legitimate authority, and operationalizes this through analyses of labor taxation. Section 2.5 overviews the intermediate elite concept and current perspectives on Classic Maya intermediate elites. Section 2.6 summarizes the array of intermediate social units above the household and below the polity, and operationalizes them within the context of this study. Section 2.7 focuses on the emergence of polities and specifically, disembedded capitals. Section 2.8 builds on the topic of polity emergence by concentrating on the direct and indirect apical elite strategies of intermediate elite co-option. Section 2.9 introduces the different dimensions from which sources of power and authority can originate. Section 2.10 outlines intermediate elite strategies for accruing and maintaining power and authority. Finally, section 2.11 examines the underlying factors which structured intermediate elite agency and apical elite political centralization.

2.1 Intermediate Elite “Faces”

The intermediate elite concept is applied as a heuristic to shine the analytical spotlight on the lineage heads, local lords, administrators, and other agents who occupied the middle-level of the political hierarchy and played a pivotal role in local political dynamics. Following Robin (2003: 308), the intermediate elite concept is used as a way of “peopling” minor centers with actors (see also Hendon 1996: 55; Iannone and Connell 2003b: 4), not to create an unnecessary terminological shift from two monolithic categories of actors to three (see Ashmore 2003: 9). Since the 1980s, social scientists have decreasingly used the elite concept in opposition to non-elites,

and instead sought to understand how elites operated in relation to one another and overarching governmental and economic institutions (G. Marcus 1983: 12-13). The use of the intermediate elite concept is not intended to replace the elite/commoner dichotomy with a trichotomy, but is born of a motivation to analytically separate different types of elites and allow insight into their relationships with other actors (Tung and Cook 2006: 69). Intermediate elites are at the heart of discussions about political dynamics, centralization, and control of infrastructure and the economy in state-level societies because they were the inter-hierarchical agents who articulated with commoner subordinates, peer intermediate elites, and apical elite suzerains. These relationships can be conceptualized as the “faces of intermediate elites”, each “face” representing a type of relationship (Marcone and López-Hurtado 2015; Tung and Cook 2006; for intermediate elite faces see Marcone 2012). By charting how elites articulated specific faces towards peers, suzerains, and subordinates we can reconstruct whether such relationships were exploitative, collectively beneficial, or a combination of both (see Feinman 2017: 463-464). Examination of the intersection of these different faces of the intermediate elite allows an understanding of the intersection of elite and non-elite levels of organization (McAnany 1995: 91).

2.1.1 Downward Face

The activities through which intermediate elites articulated with subordinates can be construed as a “downward” face shown to commoner or lower-level elite clients. It is this downward face (of authority, generosity, etc.) that allows intermediate elites to attract and hold commoner clients, maintain their loyalty, and draw upon their support in negotiating their political position with peer intermediate elites and apical suzerains (Eisenstad and Roniger 1984; Scott and Kerkvliet 1977; Sandbrook 1972). A large and loyal following of commoners may underwrite intermediate elites’ ability to resist, cede from, and even topple apical control (Brumfiel 1994b: 92; Pohl and Pohl 1994). The proper downward face to subordinates would provide intermediate elites with a “fund of power” (Sahlins 1968: 89), comprising access to three major resources; human labor (Bailey 1969; Brumfiel 1994a; Demarest 1992b: 151; Earle 1997: 6; Lucero 2006: 2; Renfrew 1973; Ringle, Gallareta Negrón, and Bey 2020; Salisbury 1977), staple goods including basic foodstuffs and high-value crops (Baron 2018a, 2018b; Masson 2020; McAnany et al. 2002; T. Neff 2010), and high-value prestige goods available/produced locally (Friedman and Rowlands

1977; Helms 1993; Plourde 2009). It would be in the interest of intermediate elites to prevent followers from fissioning or seeking external patrons. Elites could entice loyal followers through pursuing policies which appealed to them, or coerce them through less benevolent policies (Bentley 1986: 290). These represent ends of a spectrum, and as such most elites would employ a combination of coercive/consensual policies in tandem (Conrad 1992: 160; Miller and Tilley 1984: 7, 14; see also Godelier 1986).

Following Renfrew (1974), Blanton and colleagues (1996) argued that political strategies could be situated on a spectrum ranging from network (individualizing) to corporate (group-oriented). Network strategies involve the monopolization of crucial resources, control of networks of relationships, wealth items, and esoteric knowledge. The alternative, corporate form of organization includes greater interdependence and reciprocity between social entities. Much of the variability between aggrandizing, exploitative (individualizing or network) strategies or more corporate and seemingly egalitarian (group orientated) strategies relate to how elites secured command of subordinates (Blanton 1998; Blanton et al. 1996; Gilman 1981, 2001; Renfrew 1974; Stein 1994a). Elites may have actively fostered integrative relations, brought people together, and sought to quell internal conflict to ensure a positive social environment (Peterson and Shelach 2010: 266), or could have used more nefarious practices to coerce commoners. The ability of intermediate elites to build, manipulate, and negotiate lasting patron-client relationships would strongly shape commoner articulation into a polity. Overall, investigation of the intermediate elite downward face involves understanding how changes at the commoner level were contingent on intermediate elite policies such as tax or tribute collection, or redistribution (Feinman 2017: 460; Freidel 1992: 121; Lohse 2013: 4). Reconstructing these relationships requires a solid idea of the ways in which intermediate elites impacted commoner lifeways.

2.1.2 Horizontal Face

While maintaining a positive downward face with underlings was vital for attracting commoner clients and ensuring their loyalty, articulation of a “horizontal face” with peers, deserves more attention than is traditionally given in the archaeological literature (Bailey 1969: 60, 1988; Spencer 1994; see Renfrew 1986). The horizontal face could be directed towards peer

elites situated within the same polity or farther afield. Relationships between intermediate elites vying for positions within the polity could vary depending on the prevailing political circumstances and apical elite policies. For example, apical elites might encourage costly competition among subordinate elites as a way of creating relationships of dependence. Or apical elites might practice “divide and conquer” tactics, playing intermediate elites off against one another and keeping them from acting collectively (Bailey 1969; Brumfiel 1994a). These rivalries could serve to integrate sub-segments of polities, for instance, competition between intermediate elite district heads could easily trickle down and become competition between districts themselves. This would unify commoners under the intermediate elite and serve to cement intermediate elite control of commoner subordinates. Ensuring the loyalty of clients could hinge on upstaging rival patrons through competitive displays of largesse. Factionalism and competition might also be integral to attracting the attention of apical elite patrons. By appearing loftier than other peer elites, an intermediate elite household could show themselves to be the best candidate for external patronage, which could transfer sufficient resources and status to further outcompete rivals and establish themselves in a position of power.

Other forms of horizontal relationships, which could exist between intermediate elites include alliances. Alliances with horizontally situated actors would allow intermediate elites to present a unified upward face to negotiate with apical elites (Jacobson 2001), and a unified downward face to better negotiate taxation with commoners (Gilsenan 1977: 182; see also Scholes and Roys 1948). Brumfiel (1983: 277) shows how the Late Postclassic emergence of the unified Triple Alliance overcame traditional impediments to systems of *corvée* labor in the Basin of Mexico because commoners could no longer just move to surrounding independent polities with less onerous labor burdens. Such close interactions between apical elites can occur when multiple polities are troubled by internal factional strife as horizontal alliances at the apical level can allow struggling rulers to draw on each other’s resources in exerting internal top-down control (see Cherry and Renfrew 1986: 152). Likewise, intermediate elites may ally when faced with overt abuses of power on the part of an apical elite (McAnany 1995: 141).

2.1.3 Upward Face

The third intermediate elite face is the “upward face” directed to apical rulers. A strong relationship with authoritative apical elite patrons may provide intermediate elites with legitimacy in the eyes of their subordinates. Conversely, alliance with illegitimate apical elite patrons could undermine intermediate elite legitimacy. Maintaining a strong upward face with suzerains likely involved a series of intermediate elite duties. These responsibilities include ensuring tribute and taxation was effectively passed up through tributary networks (Wright 2000), drafting labor for monumental construction and war parties (Abrams 1994), and the dissemination of broader polity-level identities (Tung and Cook 2006). When viewed cross-culturally, there are many reasons why local elites might voluntarily submit to an emergent regional power (M. Smith 1986; Hicks 1994; LeCount and Blitz 2005: 68-69). In addition to being bestowed with honorifics, Roman client-kings benefitted economically from patron-client relations, gaining access to Roman craftsmen and architects and all the finery and exotica brought into Rome through extensive trade networks (Avigad 1983; Cotton and Geiger 1996; for an overview see Jacobson 2001: 28-29). Frequently, vassalage would allow clients to draw upon the military protection of their suzerains when necessary (Dean 1985: 110). In other instances, an external patron could prove vital to resolving local elite factionalism and restoring political stability. The displays of one-upmanship associated with local-level factionalism could deplete the coffers of competing local elite households in a way that made the patronage of external rulers (with bountiful wealth and resources) an attractive prospect and viable strategy for tipping the balance of power (Redmond 1994). This can lead to a situation in which local actors become reliant on external patrons (Brumfiel 1983: 76; D’Altroy 1994; Dennis 1987). The upward face would not solely articulate with an immediate apical suzerain, but with other external apical elite patrons, including those who sat hierarchically above the immediate apical elite. Moreover, Classic Maya intermediate elites would have emically construed obligations to their ancestors, patron deities, and deities as an upward face (Baron 2016a: 111; Trigger 2003: 412-3; see also Graeber and Sahlins 2017: 10; McAnany 1995).

The benefits and drawbacks of apical elite patronage are evident in different case studies from the Classic Maya lowlands. Subordination to apical elites was often facilitated by a downward flow of privileges, advantageous hypergamous marriage unions (Martin 2020a),

military protection (Canuto and Barrientos Q. 2020: 194), valuable commodities (LeCount 1999), land grants (Taschek and Ball 2003: 385), skilled artisans like sculptors and painters (Houston 2016: 403), and the ideological benefits of alliance with a *k'uhul ajaw* (Fitzsimmons 2015; Houston et al. 2003; Houston and Stuart 1996; for a Postclassic example see Christenson 2007: 263-268). The rulers of La Corona drew upon the coercive power of their apical patrons at Calakmul to better control their own populace (Canuto and Barrientos Q. 2020: 194). The colonial period lord of Tixchel in southwest Campeche appeased the Spanish regime and not only retained his lands but extended his territory (Farriss 1984: 150). The benefits and drawbacks of apical elite patronage seem to vary between examples. For instance, Xunantunich experienced a golden age during its annexation under Naranjo (Ashmore 2010: 57), whereas Motul de San José flourished upon gaining autonomy from Tikal (Foias 2013: 90). Anthropological perspectives indicate this variability is based on a range of local factors investigated in section 2.11 (Newbury 2003: 15).

Ultimately, all three intermediate elite faces operated in articulation with one another. For instance, the construction of mortuary shrines may appease the ancestors but could escalate competitive rivalries with other intermediate elites. Expressions of noblesse oblige might ameliorate relationships with subordinates, but undermine the authority of peer elites. A strong upward face may require exploitation of subordinates to move sufficient tribute and taxation up the hierarchy, thus destabilizing the downward face.

2.2 Classic Maya Political Dynamics

Current perspectives present the Classic Maya political landscape as dominated by several larger competing peer-polities like Calakmul and Tikal. These larger polities each controlled hierarchically nested networks of multiple smaller polities bound together to form what have been called “super states” (Martin and Grube 1995; 2008), “territorial states” (J. Marcus 1973, 1983), “multipolity networks” (Feinman 1998: 96; LeCount and Yaeger 2010b: 20, 25), “mega-states” (Demarest 2004), and “regional states” (Adams and Jones 1981; G. Braswell et al. 2004). These hierarchically nested networks of polities were tied together through the types of hegemonic and

indirect political strategies usually associated with fledgling empires (Conrad and Demarest 1984; Freidel 2018; see also Runggaldier and Hammond 2016: 35).

The concept of multi-polity networks might sound a little hierarchically flat to describe an entity such as the Kaanul dynasty of Calakmul, but the term nicely characterizes larger blocs of alliances between peers, such as the San Pedro Martir River polities (Fitzsimmons 2015; Foias 2013: 89; Lemonnier 2012). Beneath these apical political centers were numerous secondary centers, which fell in and out of the aegis of larger hegemons. At the bottom of the ladder were a multitude of smaller polities, like Lower Dover, which have variously been referred to as microstates (de Montmollin 1995: 13, 249-254) and statelets (Cowgill 2004: 542). These smaller polities, which sometimes result from the collapse of larger political entities (Kristiansen 1991; J. Marcus 1989), were once considered a fly in the ointment of evolutionary typologies, because despite having low population densities, they exhibited attributes of ancient states (writing, entrenched hierarchical structures, monumental architecture). These smaller polities are now recognized as a common feature of “city-state cultures” and peer-polity networks (Carneiro 1981; Feinman 1998; M.H. Hansen 2006, 2008: 67; Hutson 2016: 59; Marcus and Feinman 1998: 6). In some respects, the importance of personal interactions between agents in these hierarchically nested patron-client networks is reminiscent of feudalism (Adams and Smith 1981; Carter 2016: 234; Leventhal 1981: 206-207; Taschek and Ball 2003: 385; Wilk 1988; Willey 1980: 261, 1981: 410-413). Although a lack of information about land tenure problematized the application of feudal models somewhat (Yoffee 1991: 296-297; see also A.F. Chase and D.Z. Chase 1996; Culbert 1991; Webster 1997). Hierarchically nested patron-client networks are sociologically ubiquitous and are by no means restricted to feudal arrangements (Bailey 1969).

The process by which these multi-polity networks expanded and contracted over time has been modeled using ethnographic, ethnohistorical, historical, and archaeological data. J. Marcus (1993, 1998, 2003) proposed the dynamic model to chart the peaks and valleys of centralization as polities’ fortunes rose and fell. The dynamic model is loosely based on the oscillation between *gumsa* and *gumlao* organization in highland Burma (Leach 1954). This dynamic is somewhat similar to the concept of chiefly cycling which highlighted diachronic shifts in centralization in chiefdoms (Anderson 1994; Friedman and Rowlands 1977; Iannone 2002; Pauketat 2007; see also Ebert 2017: Fig. 6.2). While there are many instances of waxing and waning polities in the Maya

region, this trend is overshadowed at the macro-regional scale by a linear increase in the number of political centers over time (de Montmollin 1995: 261), culminating with the Late Classic rise of multiple small centers, like Lower Dover.

2.2.1 Models of Political Centralization

Social scientists have long focused on political centralization as a measure of the extent to which decision-making became concentrated in the hands of a few people (Roscoe 1993: 114). The last few decades have seen vociferous scholarly debate about whether Classic Maya polities were centralized political systems, in which the ruling elites possessed extensive political, administrative, and economic power (A.F. Chase and D.Z. Chase 1996), or decentralized entities with apical elite control confined to the ceremonial realm, with little administrative or economic control (Ball and Taschek 1991; Demarest 1996; J. Fox and Cook 1996). Demarest (1992, 2004) applied the galactic polities and theater-state models from historically documented kingdoms in Southeast Asia to model the waxing and waning of political/ceremonial power in a “pulsating” fashion (see also Bentley 1986; Coe 1957; Hammond 1991a: 277-281; Tambiah 1976, 1977). The theater-state model from historical Bali was employed to understand the performative role of ritual in underpinning royal authority in the Maya lowlands (Geertz 1980). Another similar model was that of the regal-ritual city, which was one of three types of urban arrangement outlined by Richard Fox (1977). The regal-ritual center was a city whose sole purpose was associated with the ideological power of the ruling elite. This concept was adopted by some archaeologists who were hesitant to accept Maya cities as “true cities” and saw political power as overtly cosmological (Sanders and Webster 1988). Ball and Taschek (1991) employed Fox’s urban types to suggest that the Macal-Mopan polities of Cahal Pech, Buenavista del Cayo, and Xunantunich were part of a single polity with multiple centers. Subsequent archaeological work revealed that these centers were not contemporaneous and rose and fell over time in a manner congruent with the dynamic model (Leventhal and Ashmore 2004: 169; McGovern 2004; Ball and Taschek 2004).

A smorgasbord of political models each with particular (de)centralized connotations have been proposed to aid in interpreting variability in the organization of ancient Maya polities (Iannone and Morris 2009). Scholars also adopted unitary/segmentary models to describe

centralization (A.F. Chase and D.Z. Chase 1996; Dunham 1990; Dunham, Jamison, and Leventhal 1989; J. Fox 1994; J. Fox and Cook 1996; J. Fox et al. 1996; Houston and Escobedo 1997; Stein 1994a). The segmentary state being a transitory stage in a series of political types drawn from ethnographic work on the Alur (a non-state level society) of central Africa (Southall 1956; see also Southall 1988). Unitary states were characterized as well-integrated systems, with a strong grasp on their subjects (A.F. Chase and D.Z. Chase 1996). In contrast, segmentary states represent fragile systems, which are prone to disintegration (J. Fox 1994; J. Fox et al. 1996; Southall 1956; B. Stein 1977; G. Stein 1994a; see critique in Marcus and Feinman 1998: 7-8). R. Fox (1977) envisaged regal-ritual cities as segmentary in nature with high degrees of mechanical solidarity (the replication of functions within these segments; see Durkheim 2013 [1893]). Segmentary organization was evident among the Postclassic polities in the Guatemalan Highlands and the Yucatan (J. Fox 1994; J. Fox and Cook 1996). Proponents of a decentralized/segmentary scenario drew upon ethnographic and ethnohistorical analogy to argue that political power rested in the hands of in-compliant intermediate elites, corporate groups, and lineages which formed the “weak point” in Maya polities (J. Fox et al. 1996; Brumfiel 1994; J. Fox et al. 1996; Lohse and Hageman 2003; J. Marcus 1989, 1993: 164; Pohl and Pohl 1994; Webster 2002a).

Centralist/unitary models were largely developed from archaeological data, whereas segmentary/decentralized perspectives were fueled by analogy with less politically complex societies than the Classic Maya, or contexts in which the sources of power open to rulers were curtailed by intrusive colonial powers (A.F. Chase and D.Z. Chase 1996; Ek 2020; Feinman and Marcus 1998; M. Smith 2004; Tambiah 2013). In many respects, a similar dynamic played out in the application of territorial (A.F. Chase and D.Z. Chase 1996), and regional states models (Adams and Jones 1981; G. Braswell et al. 2004) which both envisaged larger integrated political entities, and city-state models, which highlighted the autonomy of smaller individual polities (Grube 2000; Hammond 1991a; Houk 2015: 26; Hutson 2016: 59; Iannone 2009; Morris and Ford 2005; Pyburn 1997; see also M.H. Hansen 2006, 2008; Trigger 2003; Yoffee 2005; see critique in Marcus and Feinman 1998: 8). While the original application of these models involved a belief that a single type of political organization existed for the Classic Maya, it soon became clear that multiple types of political organization co-existed simultaneously in the Classic Maya lowlands (de Montmollin 1995; Demarest 1996; Sharer 1991: 185-186). Charting this variability in political organization

between different polities has become an important research goal, although questions remain about how much governmental variability should be expected among the polities of a single culture region. For instance, Iannone and Morris (2009: 4) argue that polities within a single region are rarely structurally organized in very different ways (see Trigger 2003). That said, the poleis of Classical Greece, one of the best-understood networks of hierarchically nested peer polities, show considerable variation in broader political structure; autocracies/tyrannies, oligarchies, and democracies effectively operated shoulder to shoulder between neighboring city-states (Brock and Hodkinson 2000). However, as Iannone and Morris (2009: 5) acknowledge the high degree of uniformity in the architectural formats of Classic Maya polity capitals belies similarities in terms of political organization. This point is well taken as the disparate forms of governance in Classical Greece resulted in dramatically different urban layouts (Cartledge 1998: 3). Still, it seems fairly clear that different Classic Maya polities had variable forms of internal governance (A. F. Chase and D.Z. Chase 2009; Golden and Scherer 2013).

The concept of heterarchy, as an alternative to hierarchy, offered more possibilities for decentralized interpretations of Classic Maya polities (Scarborough and Lucero 2010; Scarborough, Valdez, and Dunning 2003). Crumley (1995: 3) defines heterarchy as “the relation of elements to one another when they are unranked or when they possess the potential for being ranked in a number of different ways,” referring to both non-hierarchical and horizontal complexity (see also Crumley 1995; see critique in Smith and Schreiber 2005: 205). While advocates of segmentary models portray intermediate elites as politically powerful junior versions of apical elites, proponents of heterarchical models proposed that the power of subordinate elites could be derived from very different sources to the ruling elites (Potter and King 1995; Small 1995; Wailes 1995). This realization drew to some degree on the work of Mann (1986), who saw power as originating from multiple sources; social, economic, ritual/ideological, and military (see also Earle 1997; Fitzsimmons and Marken 2015).

Centralized and decentralized models of Classic Maya polities both contained intermediate elites in some form, although they rarely took center stage and were never the focus of empirical investigation. The roles of intermediate elites were completely tied to whatever vision of Classic Maya society the author wished to espouse. Proponents of centralized models followed a structural functionalist logic and “did not present a well-articulated model for the structure of these polities

beyond assuming the presence of a well-developed bureaucracy” (Foias 2013: 61). As such intermediate elites became passive automatons that unquestionably served apical elite interests to integrate polities in a manner akin to “lower-order controls” in systems theory (Schortman and Urban 2003: 131; see also Culbert 1988; Flannery 1972; Wright and Johnson 1975). Proponents of decentralized, heterarchical, and segmentary models of envisioned Maya polities as fractured by highly autonomous, rebellious, intermediate elite faction leaders (lineages, corporate groups, etc.) bent on the disintegration of whatever levels of political authority lay hierarchically above them (J. Fox 1994; Pohl and Pohl 1994). Ironically these actors still evaded empirical investigation remaining faceless and abstract. Most heterarchical perspectives refrain from fully fleshing out intermediate elites and their actions, instead ascribing agency to an abstract class of “heterarchically arranged” economic actors (Bernbeck 2008: 541). Moreover, the adoption of agency approaches has largely focused on the attribution of high degrees of political agency to even the smallest most ephemeral farmsteads (see critique in Garrison, Houston, and Alcover Firpi 2019: 134).

The debate about how centralized Classic Maya polities were has fallen somewhat to the wayside (in part because of scholarly exhaustion). The roles of intermediate elites continue to function as volatile “lightning rods for arguments over the structure of total societies” (Schortman and Urban 2003: 137). However, a litmus test for an author’s views about whether Maya polities were inherently centralized or decentralized is whether intermediate elites are seen as bastions of centralized control that integrated hinterland commoners into the polity (Canuto and Barrientos Q. 2020: 172; D.Z. Chase and A.F. Chase 2017: 212; de Montmollin 1995: 198-99; Foias 2013: 69; Peuramaki-Brown 2013: 578; Yorgey and Moriarty 2012), or as hotbeds of factional dissent (Lucero 2007; Webster 2002a; see also Swenson 2019). As Iannone (2003: 5) suggests, variability in how the role of intermediate elites (relative to apical elites) has been interpreted is also structured by variability in the approaches and methods to studying minor centers, the scale of analysis, and the period under investigation. This diversity lies in the fact that intermediate elite “faces” and political strategies varied in a diachronic fashion based on the broader political context. The application of agency perspectives allows us to address these possibilities in an empirical and nuanced manner.

2.2.2 Critiques of Centralization and New Approaches

The centralization debate was critiqued for adopting generalized and polarizing perspectives that did not account for local variability, agency, and historically contingent circumstances (Iannone 2002; LeCount and Yaeger 2010b: 21; Marken and Fitzsimmons 2015; Sharer and Golden 2004). Furthermore, the type of data collected, or the scale of analysis employed played a major role in determining whether a polity was characterized as being centralized or decentralized (Canuto and Fash 2004; Demarest 1996; Foias and Emery 2012). Not surprisingly, decentralized and centralized political strategies did not parse out so simply when dealing with the archaeological record. In particular, de Montmollin (1995) showed that the apical rulers of the Rosario, Ojo de Agua, and Los Encuentros polities pursued a medley of different strategies traditionally associated with both centralized and decentralized political entities. These findings are consistent with Graham (2012: 422) who draws on modern examples to argue “centralization and decentralization may not only reflect fluctuation of political trends over time but also concurrent and competing practices” (see also Iannone 2002; J. Marcus 1998). Elite choices underpinning the pursuit of (de)centralized strategies depended more on cultural norms regarding the expression of political power. In other instances, situational factors played a major role in terms of the types of strategies elites employed. For instance, political strategies could reflect short term ad hoc solutions to immediate problems, or be structured heavily by the relative power and authority of elites compared to their subordinates, or even by elites’ historical relationships with their subordinates (LeCount and Yaeger 2010b; Morris and Covey 2006: 151; see also Covey 2003). Lastly, it remains important to question whether all elites were cognizant of particular strategies and knew how best to deploy them (Lillios 2011).

The degree of centralization also varied at different scales of abstraction (Iannone 2002: 69; Marken and Straight 2007). For instance, Classic Maya political dynamics seem fairly centralized at the pan-regional level (larger multi-polity networks), decentralized at a regional level (peer-polities), and centralized at a sub-regional level (polities). The degree of political centralization appears to vary dramatically at the micro-regional level (intermediate elite headed districts). Even polity size did not play a determinative role in structuring variability in political centralization, as similarly sized Classic Maya polities could exhibit variable levels of political

centralization (de Montmollin 1995; Hutson et al. 2008: 73; Iannone and Morris 2009: 6; Golden et al. 2008). While Maya archaeologists have long considered the possibility that larger polities were more centralized, the opposite has also been found to be true in cases where extensive polities struggled to consolidate territorial control over larger geographic extents (see Southall 1988: 81). Settlement pattern studies show that some polities were internally segmented into multiple districts focused around intermediate elite centers, while others were internally centralized with population clustering around the apical civic-ceremonial center itself (Yaeger 2010a; Thompson and Prufer n.d.; see also Kowalewski 1994).

For some Maya archaeologists, these critiques of political centralization constituted a veritable death knell to analysis of “centralization” in Maya society (Marken and Fitzsimmons 2015). However, the fact that there is overlap in the correlates of (de)centralized models, might not necessitate dumping a concept that continues to yield some insight (Gledhill 2000; Iannone and Morris 2009: 6; Kurtz 2001; LeCount and Yaeger 2010b; Sharer and Golden 2004). Models by their very nature are idealized depictions of messy realities. As such, the centralization models can be fine-tuned to overcome the “sterility” of the centralization debate through pursuit of data-driven, comparative approaches which are sensitive enough to understand the historically contingent negotiation of power and authority on multiple nested levels of political hierarchies (Schortman and Ashmore 2012; see also A. Smith 2011). This dissertation approaches centralization as an analytically useful concept and counters criticism through a four-pronged approach. **1)** Centralization is conceptualized as a spectrum not a dichotomy (de Montmollin 1988, 1989; Demarest 1996; Easton 1959; LeCount and Yaeger 2010b: 22; Steponaitis 1981). **2)** Intermediate elites are approached as active sources of political change, resistance, and stability, and their agency and strategies are empirically investigated. **3)** A diachronic practice framework is employed to delve into the realm of everyday life at a local level to reconstruct how authority was maintained through historically contingent relationships between actors (Roscoe 1993). **4)** Centralization is reconstructed through political, ceremonial, and economic dimensions, thereby recognizing that polities could be centralized in some ways but not others (Demarest et al. 2020; LeCount and Yaeger 2010a; Marken and Fitzsimmons 2015; Marken and Murtha 2017). An agency approach focusing on social actors situated at multiple nested levels of the political hierarchy offers opportunities to overcome the traditional top-down and bottom-up dichotomy (for

alternative approaches see A.S.Z. Chase 2019, n.d.). For the purposes of this dissertation, political decentralization at the polity/apical elite level and commoner/intermediate elite agency at the district level are construed as flip sides of the same coin, not as different competing paradigms for examining political dynamics.

The ongoing decipherment of Classic period epigraphy continues to inform on the instability of larger centralized hegemonies and the role of intermediate elite actors in decentralizing the political landscape (Martin 2020a). As archaeological research has increasingly shown, Classic Maya polities were far less unique and “mysterious” than previously thought, and resemble other examples of ancient states across the world (Ek 2020; Trigger 2003). At least some Classic Maya polities can now be safely characterized as urban cities (Hutson 2016), with relatively developed commercial economies and marketplaces (Hutson, Terry, and Dahlin 2017; King 2015; L. Shaw 2012), which engaged in non-ritualized warfare (Alcover Firpi and Golden 2020). What remains unclear is the balance of power and the extent of apical elite and intermediate elite control.

2.3 Agency Approaches to Examining Intermediate Elites

Agency approaches have the potential to provide fresh perspectives on political change (Clark and Blake 1994; Conkey and Spector 1984; Dobres and Robb 2000). A practice approach sees agents as simultaneously constrained by structure but also capable of changing this structure, following Sewell (2005: 143), “To be an agent means to be capable of exerting some degree of control over the social relations in which one is enmeshed, which in turn implies the ability to transform those social relations to some degree.” Many of the ideas central to a practice approach, including agency and structure were derived from the work of Giddens (1984) and Bourdieu (1977).

The agency paradigm employed here deviates from traditional agency approaches in that it deals simultaneously with actors on multiple hierarchical levels. My approach draws partly from older tenets of the processual-action school of political anthropology (not to be confused with

processual archaeology). Processual-action theorists saw political systems as arenas, in which actors arranged into coalitions and factions would pursue strategies to negotiate power and outcompete rivals (Bailey 1969; Barth 1959; Swartz, Turner, and Tuden 1966; see also Kurtz 2001: 99-112; Roscoe 1993). The agent-centric approach shifted focus from unconsciously reifying political structure to understanding the participants and forces which generated structure (Bailey 1969; see also Kurtz 2001). Proponents of this approach focused on the idealized transactional and moral bases of authority which leaders used to attract and maintain a client base (Bailey 1969: 44). For patrons, resources represented a “fund of power” crucial for attracting and maintaining clients (Bailey 1969: 43; Eisenstadt 1995: 241; Sandbrook 1972; Sahlins 1968: 89; Salisbury 1977; Schwartz 1969; for Maya examples see Arnauld, Andrieu, and Forné 2017: 33-34; Robin, Yaeger, and Ashmore 2010: 320). An explicit focus on the relationships intermediate elites formed with their commoner subordinates, one another, and their apical overlords is essential to understanding the ways in which they negotiated compliant or acrimonious relations with their suzerains (Conlee and Schreiber 2006; Marcone and López-Hurtado 2015). As Pohl and Pohl (1994: 144) state: “The degree of centralization in a polity depended on the relative power of the ruling patrilineage, subterritorial rulers, and local elites.” Consequently, monitoring the waxing and waning of intermediate elite agency over time would effectively provide a mirror image of apical elite centralization (Sanders 1989; Scott 1985, 1990; Sewell 1992: 10).

This dynamic exists at all levels of society, as commoner agency waxes and wanes so should the (de)centralization of intermediate elite policies. For this reason, macro and micro reductionist reconstructions of politics, which omit intermediate elites, cannot reconcile the disparate commoner and apical elite scales of analysis (Ek 2020; Robin et al. 2014). In the Maya lowlands, commoners have been the major focus of agency-based approaches (Lohse and Valdez 2004; Robin 2003; 2012a; for intermediate elite agency see Connell 2003, 2010; Iannone 2003; G. Marcus 1992; J. Marcus 2006; Robin et al. 2014; Yaeger 2000; 2003). Studies of commoner agency built upon household archaeology, in that focus rested on the ways in which political systems impacted the basal economic units of society (Drennan 1976; Flannery 1976b; Wilk and Ashmore 1988; Wilk and Rathje 1982; Winter 1976; Willey et al. 1965). Often such studies have seen commoners (as subalterns), to be active sources of political change (A. Joyce, Bustamente, and Levine 2001; Lohse 2007; Robin 2012b). While gauging the agency of commoners is

important for understanding how political centralization affected ordinary people, and vice versa, historical and anthropological examples indicate that commoner agency and wellbeing relate most closely to the ambitions and actions of intermediate elites (Brumfiel 1994a). Indeed, the important position of intermediate elites is precisely that of being intermediaries. This being their world and scope of action. In acting as a buffer between commoners and apical governance, and in encouraging compliance or resistance, intermediate elites play important roles in how commoners articulate with overarching leadership structures. Contemporary approaches to understanding resistance frequently envisage a monolithic class of commoners/peasants diametrically opposed to ruling elite overlords (Scott 1985, 1990; see Gledhill 2000: 67-69; Keesing 1992).

Conceptualization of resistance as a struggle between dominators and dominated can be critiqued as being hierarchically flat (Gledhill 2000: 88; Ortner 1995: 187). Historically, there are surprisingly few examples of bottom-up rebellions which occurred without some form of elite involvement (Berdan 2006: 163). Commoner dissent could be fermented by underhanded elites to usurp power from apical elites, while on other occasions, malcontented commoners who sought higher-level political change would push their intermediate elite to lead them in their plight (Fortes and Evans-Pritchard 1940: II; Gledhill 2000: 50, 92, 172-174; Gluckman 1956: 42-45; Sahlins 1972: 145-148). It seems likely that most conflict in ancient complex societies was grounded in inter-elite competition, not class conflict between social strata (Brumfiel 1994a: 10; Elson and Covey 2006: 9; Giddens 1984: 198-199, 317; McAnany 1996: 126; Webster 2002a). Intermediate elites posed a far greater threat to ongoing apical elite political control in the Usumacinta region than commoners (Golden and Scherer 2013: 408-416; see also Feinman 2017: 467). That said, commoner unrest provoked by top-down policies could boil over to the intermediate elite level, resulting in class warfare manifesting as conflict between intermediate and apical elites (Fallers 1956: 247; Hsu and Linduff 1988; Lichbach 1994; Sahlins 1968: 92-93). Instances of bottom-up commoner resistance seem to largely occur when apical control falters and repressive power is seen as weakened (Gledhill 2000: 77).

2.3.1 Intermediate Elites as “Meso-Actors”

The characteristic sociopolitical bifurcation in inegalitarian societies of commoners and elites outlined above is readily and easily mapped on to the ‘hierarchically flat’ nature of Giddens’s vision of interaction, which involved a simple dichotomy between actors and institutions (Giddens 1984: 24; see critique in Gardner 2004: 35). Among the shortcomings of such an approach is a lack of appreciation of different types of agency (Barrett 2000; Moore 2000; Parker 2000: 105-108). Agency and structure only take us so far, because the broader structure (commoner subordinates, peer intermediate elites, and apical elite overlords) needs to be construed not as institutions in the Giddensian sense, but as other agents, which were fluidly reacting to one another (Ortner 1984). Kurtz (2001: 175-177) argues for an approach that focuses on the individual agency of various state actors as opposed to using the amorphous state entity as an analytical unit in and of itself (see also Radcliffe-Brown 1940: xxiii). One way of injecting hierarchy into a practice approach involves the classification of actors into hierarchically arranged categories. Following Mouzelis (2003: 26-27), apical elites possessed the most power and authority and can be construed as “macro-actors”. Intermediate elites can be considered “meso-actors”, as these individuals were poised to play a much larger political role than commoners, who for the most part can be considered “micro-actors”. Classifying actors based on their potential to evoke political change might seem reproachable to some, but the heuristic distinction facilitates investigation of the agency of hierarchically nested actors in relation to one another (Pauketat 2007). In some respects, these criteria of macro, meso, and micro actors can be considered reflective of the agency which a single individual of varying status held. While commoners can be considered micro-actors individually, in larger numbers they were capable of implementing political change. Even apical elites could see their agency culturally constrained by traditions, which mandated that the exercise of power had to occur in certain proscribed ways to retain any semblance of legitimacy (Brisch 2008; Feeley-Harnik 1985; Weber 1964 [1947]; see also Freidel 2008; Houston et al. 2003; Walden 2017b).

2.3.2 Political Relationships and Social Networks

Mann's (1986) conceptualization of societies as "overlapping and intersecting socio-spatial networks of power" has proven fundamental to an understanding of Maya politics. Scholars increasingly see the political process as unfolding through networks of personal relationships between hierarchically nested agents situated within polities with highly permeable boundaries and inchoate territorial control (Canuto and Barrientos Q. 2020: 185; Davenport and Golden 2016; Demarest 1992b: 151; Fitzsimmons 2015; Hutson 2016: 60; Marken and Fitzsimmons 2015; Munson and Macri 2009; Schortmann and Ashmore 2004; Sharer 1993; M.L. Smith 2005). Postclassic political dynamics in the Yucatan strongly corroborate the idea that politics was spun through webs of relationships (Okoshi-Harada 2012; Quezada 2014: 5-8). Networks have become a popular heuristic construct for assessing how agents situated at diverse hierarchical levels structured political centralization, territoriality, and control of people and resources (Mizoguchi 2009; Wernke 2006; see also Latour 2005; Simmel 1950). Intermediate elites are situated in "inter-hierarchical" brokerage positions (Gluckman 1968; Peeples and Haas 2013). A network approach offers tools for conceptualizing the types of interactions intermediate elites had with other actors within society. Such interactions can then be mapped onto settlement maps of a polity by identifying patron-client and peer nodes. Once these networks have been reconstructed, then the types of interactions and relationships which occurred along them, can be examined (LeCount and Yaeger 2010b: 28-30; McAnany et al. 2002). Such an approach is useful in a relatively "small world" like Lower Dover, where the intermediate elite lineages had long historical ties with surrounding commoners (see M.L. Smith 2003). While some of the more abstract ideas associated with understanding political agency were created for understanding larger-scale political systems, they are likewise ideal for examining similar relations between far more socially proximal actors like those residing around Lower Dover.

2.3.3 Reconstructing Elite Political Strategies

Reconstructing the specific strategies elites employed to create and maintain political power and authority is a powerful way of understanding political dynamics and the persistence of systems of inequality (de Montmollin 1995: 10; Kurnick 2016a: 4; Berdan and Smith 1996; Stark

and Chance 2012). Studies of Classic Maya intermediate elites have focused more attention on strategies associated with the downward face than the horizontal and upward faces. This investigative bias is surprising given that the fruits of unequal relationships with commoners were often expended in alliances and competition with peer elites and higher-order elites. Strategies are perhaps easiest to discern when a comparative approach is taken to distinguish the divergent ways in which elites may interact with subordinates, suzerains, and each other. Diachronic comparison of elite strategies can allow us to gauge the relative success of these strategies (Lillios 2011: 280-281).

2.3.4 Etic and Emic Conceptualizations of Agency

Agency approaches focusing on political strategies have rightly been critiqued for bestowing modern, individualistic, goal-oriented values on ancient people. Viewing all elites as rational actors driven by an underlying urge to amass power, wealth, or resources in any way possible is problematic (Bailey 1969: 9; see critiques in Bernbeck 2008; Inomata 2016: 39; Turner 1996 [1957]). Indeed, the contemporary archaeological interest in agency is no doubt a direct result of modernist beliefs associated with freewill and individual personhood (Inomata 2016; J. Thomas 2004), however assuming that actors in the past were bereft of economical rationality is likewise problematic (Stanish and Coben 2013: 421). Some degree of concern about construing Classic Maya actors as power/goal-oriented should be assuaged by epigraphic studies, which highlight the political savvy of intermediate and apical elite agents. While not exactly Machiavellian, someone like Ix Wak Chan Lem 'Ajaw of Naranjo (Lady Six Sky) could arguably play the “political game” better than many modern politicians (Martin and Grube 2008; see also Pohl and Pohl 1994). The same conclusion could equally be drawn from ethnohistoric accounts of the factional competition between lineages in the Postclassic Yucatan (Edmonson 1982, 1986; Farriss 1984; Roys 1957). Therefore, while archaeological data provides the basis of the dissertation, my interpretation of the nature of intermediate elite strategies also draws from epigraphic, iconographic, ethnohistoric, and ethnographic sources, which lend something of an “emic” perspective. The approach adopted assumes some degree of rational action and goal orientation, but also is reflexive enough to question whether agents simply could not fulfill their prioritized goals or whether the goals were important in the first place. While the individualistic drive for power can be construed as

modernistic, in this dissertation households are considered as the primary “agent” that seek first and foremost to “perpetuate themselves” in a manner proposed by Lévi-Strauss (1987: 152).

As outlined above, the intermediate elite upward face would have involved emic obligations and relationships with ancestors and patron deities, which may have overshadowed their obligations to their subordinates or apical patrons (Baron 2016; McAnany 2013). A growing body of literature highlights the importance of considering an array of non-human agents (Grauer 2020; Harrison-Buck and Hendon 2018; Harrison-Buck 2020; Sillar 2009; for the ontological turn see Descola 2013). To arrive at a holistic understanding of political dynamics we need to understand how relationships with human, non-human, and formerly human agents played out spatially on the political and sacred landscape. Bringing non-human and formerly human actors into agency perspectives offers a more holistic picture of ancient politics.

Balancing a cross-culturally relevant anthropological approach to agency, which is simultaneously sensitive enough to take into account how political actors contemplated their own actions is a difficult feat, especially when the elites in question may have been unconscious of the overarching structural forces acting upon them (Gledhill 2000: 137), or the implications of their actions (Dietler 1990; Emerson and Pauketat 2002). Agency-based approaches carry an implicit tendency to view the final result of millennia of political strategizing as an expected and intentional outcome (Giddens 1984: 9, 14; see also Adams 1992: 207). Instead, I argue that most elite strategies were aimed at fulfilling immediate political goals (culturally defined) and resolving pressing issues (Bailey 1969: 111; Brumfiel 1983; Morris and Covey 2006: 151). Centuries of aggregated political strategizing could manifest in unintended consequences (Clark and Blake 1994; R. Joyce 2004; Schortman and Urban 2003: 134; Vincent 1978; Whitten and Whitten 1972). Political strategies were historically contingent on past behavior, and thus need to be contextualized within the particular milieu in which they were developed to evaluate their intended consequences and efficacy (Dornan 2002). This is only possible by situating strategies and actions within a broader historical framework, which is sensitive enough to understand how strategies changed over time.

2.4 Coercive Political Power Versus Legitimate Authority

The types of power or authority intermediate elites held are crucial to understanding their relationships with commoners and apical elites (Doob 1983). Elites could wield both coercive power and legitimate authority simultaneously (Feinman 2013b: 300; see also Roscoe 2013). For this reason, power and authority are best construed as two categories of relationships that elites could hold with followers (Rick 2004: 75; A. Smith 2003; Stein 1998; see also Inomata 2016). In some respects, these relationships can be mapped onto a spectrum of coercion versus consensus in political interaction (Cohen 1981: 7-8).

2.4.1 Coercive Political Power

Max Weber's (1964 [1947]: 52) definition of power is perhaps the simplest: "the ability to make others do your bidding". Most subsequent definitions involve some element of control over others (Mann 1986). This notion of elites possessing an instrumental, or coercive control "over others", which is deployable as social labor, is fundamental for distinguishing between power and authority in archaeologically reconstructed relationships (Carneiro 1970; Emerson 1997; Fleisher and Wynne-Jones 2010; Miller and Tilley 1984; Swartz, Turner, and Tuden 1966; Wolf 1999). The most extreme form of "power over" might resemble the exploitative top-down governance characterized as occurring in the debunked Asiatic mode of production (Wittfogel 1957). Exploitation and the pursuit of parasitic relations by apical elites at the top of the system could necessitate the adoption of similar policies at the intermediate elite level, ultimately leading to mass exploitation of commoners (Gledhill 2000: 74; see also Gilman 1981, 2001; Rathje 1983). Although sheer coercive power without any semblance of legitimate authority is highly unstable (Weber 1964 [1947]). More recent perspectives emphasize the relational nature of power and the fact it was embedded in structural relationships between people (McGuire 1983; see also Weber 1964 [1947]). As Foucault (1980: 236) argues "power is not an institution, a structure, or a certain force with which certain people are endowed; it is the name given to a complex strategic situation in a given society." Power relations were personal and related to different actors in specific ways, as opposed to being a commodity elites possessed and could uniformly exercise over subjects in a monolithic fashion.

2.4.2 Political Authority and Legitimacy

In contrast, authority is defined as a group's recognition of its leader's decision-making ability (Weber 1964 [1947]; see also Gerth and Mills 1960; A. Smith 2003). Following Miller and Tilley (1984) authority is often conceptualized as more akin to "power to" as opposed to "power over", and heavily based on consensus and trust in leader's abilities and intentions (Baines and Yoffee 1998; Golden and Scherer 2013). In this way, authority is somewhat similar to Mann's (1986) notion of collective power, or Fleisher and Wynne-Jones' (2010) conception of creative power, or even collective action (Blanton and Fargher 2007). As such, elites may fulfill managerial duties vital to the community. For instance, Kohler and colleagues (2012) envisage emergent leaders ensuring cooperative ventures succeed by punishing free riders. Other examples include elites fulfilling vital economic or subsistence-based managerial roles (Rathje 1971; Sanders 1977). Such responsibilities and duties might represent moral obligations to subordinates, veiled under the pretense of ethical codes of conduct (Bailey 1969). Ideational sources of power may be vital to underpinning political authority, as these would have helped leaders persuade followers of their legitimacy (Emerson 1997; Kurtz 2001; Mann 1986: 22-23). In this way, leaders who were reliant on legitimate authority as opposed to coercive power might be found in societies with a more group-orientated political system (Renfrew 1974). Weber (1964 [1947]) separated authority into three sub-types: charismatic, traditional, and legal rational. Charismatic authority involves the ability of leaders to employ their personality to compel followers to do their bidding. Ek (2020) argues persuasively that Maya archaeologists may have over-emphasized the importance of charismatic authority in reconstructions of political power. Unlike the initial emergence of trans-egalitarian elites, systems of Classic Maya kingship represent a well-established institution that was probably less reliant on base charisma (see also Kantorowicz 1957). However, traditional authority would have been important to long-standing elites because it rests on the sanctity and legitimacy of timeworn practices (Weber 1964 [1947]: 328). Lastly, legal-rational authority is based on rational bureaucratic systems.

2.4.3 Coercive Power Versus Legitimate Authority as a Spectrum

While it is heuristically useful to divide organization principles into coercive and voluntaristic, this might represent something of a false dichotomy (Feinman 2013a; Feinman 2013b: 300; see also Roscoe 2013). Power and authority are situational and grounded in human interaction. As such these concepts can better be conceived of as an axis of variation and approached as a spectrum. For instance, Robin, Meierhoff, and Kosakowsky (2012: 148) find that the Chan elite employed a blend of both network and corporate strategies simultaneously. But as Blanton and colleagues (1996) acknowledge from the outset, variable political strategies commonly co-exist. Feinman (2013b: 301) argues that understanding the processes which lead to a particular balance between these qualities, existed within a particular local context (like a neighborhood, district, or village). The goal being to attempt to tease apart the comingled carrots and sticks employed by elites. Such an approach can speak to the costs and benefits for commoners or intermediate elites to continue complying or attempt to opt-out and pursue a course of resistance.

2.4.4 The Benefits and Drawbacks of Power and Authority

Understanding how intermediate elites could deploy their followers requires distinguishing between the different political strategies they employed (Bailey 1969: 28, 36). Intermediate elite reliance on consensually mandated authority, as opposed to coercive power, could result in greater solidarity, loyalty, and the preservation of a following. In contrast, the exercise of extreme coercive power might cause followers to seek the backing of more benevolent patrons (Bailey 1969). It would be wrong to assume that a following based around legitimate authority was superior to coercive power. Leaders who were reliant on legitimate authority may be burdened with normative rules, which restricted the types of strategies open to them. Leaders' legitimacy may become so grounded in a particular ideology that they need to uphold to maintain authority, that they end up serving the ideology more than it serves them (Bailey 1969: 49-51; Geertz 1980: 133). In contrast, leaders with high degrees of coercive power, or "power over" have more scope to simply enforce their will unbounded by traditions or longstanding ideologies (Bailey 1969: 132).

2.4.5 Classic Maya Instrumentation of Power and Authority

Recent reconstructions of ancient Maya political dynamics probably over-emphasize the role of legitimate authority over coercive power in structuring relations between elites and commoners (Inomata 2004: 190). While ancient polities may not have possessed the coercive infrastructure of some modern states, coercion can be an implicit threat, and is both relational and situational, in that it depends on the relative power of one party compared to another (Foucault 1979). Bailey (1969: 27) acknowledges “The range may run from superiors to whom [an intermediate elite] is a subordinate ally to allies in the strict sense who are his equals, down to many grades of followers who are subordinate to him, but whose subordination may vary from near-equality down to a low-level where the human follower is almost as tractable and undemanding as a material object.” A case in point being the discussions surrounding whether elites could coercively relocate commoner populations from where they were living (de Montmollin 1989a: 93; Fariss 1978; Inomata 2004: 190; Restall 1999: 174-175; see also Brumfiel 1994b: 93). Following Rathje (1983), one way of assessing whether elites were reliant on coercive power or legitimate authority involves asking what were commoners getting in exchange for their labor and taxation? Understanding the degree of reciprocity, and how symmetrical the downward face of intermediate elites was, involves diachronically charting the overall wealth and wellbeing of subordinate commoners to assess the services elites provided for subordinates (Brumfiel 1994: 10; Feinman 2017; McAnany et al. 2002: 134). This approach is heavily materialistic and is somewhat problematic in contexts in which commoners may simply be devout or more willing to do without material luxuries. Some concern can be assuaged by the fact a rough idea of ritualistic behavior is also materially apparent archaeologically. Assessing changes among commoner households offers an insightful way of examining intermediate and apical elite strategies. The method for assessing these types of differences at the neighborhood, district, and polity scales is well developed (Drennan, Peterson, and Fox 2010; Hutson 2016; Peterson and Drennan 2018; Rathje 1983; M. Smith 1987, 2015).

2.4.6 Labor as a Metric of Power and Authority

Following Powis and colleagues (2020: 268), monumentality is understood not just in terms of scale, but also in terms of labor organization, energy, resource investment, and construction time. Possibly the most durable and impressive manifestation of elite political power and authority is the Classic period monumental architecture (Fash and Stuart 1991; Hendon 1991; McAnany 1996: 138-139; Schortman and Urban 2003: 134). Implicit assumptions about the scale of monumental architecture and the labor required to construct it were at the heart of older models of commoner resistance and the Classic period collapse of Maya polities (Thompson 1954: 105; see also Hosler, Sabloff, and Runge 1977). Architectural investment has long been considered a metric of wealth and status (Ashmore 1988: 161; A.S.Z. Chase 2017; Horn, Garber, and Awe 2017; Munson and Scholnick 2021; M. Smith 1987; Thompson and Prufer 2021; Thompson, Meredith, and Prufer 2018; Thompson, Feinman, and Prufer 2021; Wilk 1983; see also Tozzer 1941: 62). Cross-culturally, the incorporation of local elite actors by higher-level hegemony frequently results in local labor being siphoned off to higher-level apical projects (Morris and Covey 2006: 138). Diachronically charting the relative tempo of architectural construction and labor investment allows us to identify the eclipse and incorporation of low-level patronage networks archaeologically. As Abrams (1994: 32-35) notes, variation in Classic Maya architecture also carried important implications for quality of life. Elite masonry architecture offered substantial advantages over the average commoner dwelling in terms of fire resistance, temperature control, and insect and parasite infestations. The scale of elite architecture reflects the political power and/or authority of the resident elites. As such, understanding the amount of labor an elite could marshal provides a sound understanding of their power and/or authority relative to peers, suzerains, and subordinates. Diachronically mapping investment in architecture across the landscape and examining the role and functions of this architecture can in unison offer insight into the degree to which labor control was centralized at the apical elite level, and whether a polity was organized in a unitary or segmentary fashion beneath intermediate elites (Abrams 1994: 80-85; Murakami 2019).

Increasingly empirical approaches to examining architectural scale were developed, focusing on the area and volume (A.S.Z. Chase 2017; Ringle and Andrews 1988; M. Smith et al.

2014: 312; Turner, Turner, and Adams 1981; Tourtellot 1988), and the energetics involved in construction (Abrams 1994; Arnold and Ford 1980; Abrams and Bolland 1999; Carmean 1991; Erasmus 1965; Ford 1991; Gonlin 1993, 2004; McCurdy 2016a, 2016b, 2019). Abrams' (1994) pioneering study on architectural energetics provides a basis for extrapolating construction loads and how these relate to labor organization. Architectural energetics offers important advantages over using simple architectural volumes. The approach takes into account where materials were coming from and the labor invested in shifting them, which often is a source of greater variability in the overall labor costs than construction costs. The energetics approach generates an estimate in terms of person-days, which can be compared to local population estimates. Energetics is also the best way to assess diachronic changes in architectural constructions in contexts like the Maya lowlands where construction priorities and styles change dramatically over time. Preclassic architecture is often less visually impressive than Classic period constructions but sometimes involves similar amounts of work due to differences in the quality of construction. Preclassic structures commonly have dense cobble fills with limited amounts of midden fill capped by thick plaster floors (often the most intensive part of the construction process, see Abrams 1994: 74).

Abrams (1994: 96-108), following Udy (1959) describes two different overarching categories of labor organization, familial recruitment (familial reciprocal, familial contractual, and community contractual) and custodial recruitment (festive custodial and *corvée*). While these concepts are somewhat idealized, they are useful for reconstructing forms of labor organization. The first two familial possibilities, familial reciprocal and familial contractual involve low-level cooperative organization of labor which likely existed at the commoner/neighborhood level (Abrams 1994: 103-104; see also Thompson and Pruffer 2021: 30). This organization was probably structured in a similar way to modern practices of reciprocal labor between kin, friends, and neighbors known in Mopan Mayan as *usk'inak'in* (a day for a day; see Baines 2015: 60; Wilk 1997). Such low-level collective organization is also described ethnohistorically in the Yucatan (Tozzer 1941: 96) and ethnographically in Chiapas (Vogt 2004: 32).

Classic Maya intermediate elites employed systems more akin to the community contractual (familial), and festive custodial and *corvée* (custodial) systems. These latter three arrangements all involve increasingly unequal social relations underpinning labor organization. The most egalitarian of which is the community contractual system, which for all intents and

purposes is classed as familial in nature. This system involves much larger community-level labor forces, which would come together for specific tasks. Abrams suggests that the ethnographically documented *fagina* labor organization in the Yucatan is an example of a community contractual system (see also Redfield and Villa Rojas 1934; 6, 14).

In contrast, custodial forms of recruitment are increasingly unequal in that labor can be substituted for some other good or service rendering it a form of negative exchange (Abrams 1994: 99; Sahlins 1972: 195). Festive custodial organization involves the recipient of the labor not reciprocating their labor, but with some other type of service or good (Abrams 1994: 99; Erasmus 1956: 445). It seems likely that even low-level commoner forms of labor organization at the neighborhood level involved incipient forms of festive custodial recruitment. This is evident in high-status commoner households being constructed through pooled labor which was repaid through the hosting of feasts (Yaeger 2003a: 47). This dynamic is to be somewhat expected, as festive custodial arrangements can vary greatly in the scale of inequality, often becoming dramatically more unequal over time (Abrams 1994: 100).

The last arrangement is *corvée* labor organization, which involves obligatory labor service or tax and is extremely unequal and imbalanced. This often involves annual obligations, which are enforced through the use of coercive power. This system may emerge out of a festive custodial system (Abrams 1994: 101). Such a system is ethnohistorically described for the Postclassic Yucatec Maya (see Tozzer 1941: 86-87). Abrams (1994: 105) sees both the festive custodial and *corvée* systems as being employed by intermediate elites at Copan. Intermediate elite district heads possessed access to substantial labor for monumental construction at their centers. Apical elite polity heads likely drew upon a segmented labor force, which was accessed through patron-client relationships with subordinate intermediate elite district heads. This type of labor organization is likely responsible for the different construction techniques often noted on individual monuments, and especially *sacbeob* (Bolles and Folan 2001; Folan 1983: 82; Keller 2010: 194-196).

Arriving at an estimate of the energetics of construction labor provides a rough metric of the political power/authority of an intermediate elite household for a given time period (Abrams 1994). Ultimately construction volume does provide a good metric of the political power/authority of elites, however moving from a rough observation to establishing the underlying strategies which

made this possible is the key to distinguishing between the relative power or authority elites wielded. Coe and Coe (1956) proposed that the monumental construction at Nohoch Ek was far beyond the means of the resident elites, and had to be mandated through apical elites at a neighboring polity capital (for the opposite view point see Taschek and Ball 2003). LeCount and Yaeger (2010d: 349) note a substantial increase in the volume of Xunantunich between the early Late Classic (Samal) and middle Late Classic (Hat's Chaak) periods. However, they note that this increase could be due to: 1) the territorial expansion of the polity (to include more people), 2) internal population growth, 3) immigration into the polity, and 4) an increase in the ability of elites to extract more labor per person from the population. They ultimately argue that all these factors were at play. When coupled with reliable settlement pattern data and population estimates of the number of people living within a district who could provide the labor, an estimate of the relative labor tax rates per household can be ascertained given a dependency ratio (laboring population; see McCurdy 2016b: 66; Wood 1998). Abrams (1994: 105) suggests that elites of similar status would rarely be able to draw labor from one another's respective labor pools. However, the apical elite rulers could likely draw upon all the commoners living within the broader polity boundary for *corvée* labor, regardless of their local labor obligations. Labor rates can be compared with trends in population increase to understand whether increases in labor access was a product of elite strategies to attract more followers (leading to greater construction), or if elites were able to extract more labor from pre-existing populations (Abrams 1994: 93). Diachronic variation in terms of how excessive these rates were provides an understanding of the different types of labor organization which intermediate elite regimes could employ.

Construction of monumental architecture could feasibly be underpinned by a range of dynamics (see de Montmollin 1995: 208). On the one hand, commoners may freely volunteer their labor towards a project out of devotion (Parker Pearson and Richards 1994; Renfrew 1974). In other instances, monumental construction may reflect state sponsored schemes through which commoners were gainfully employed (Service 1978). While on the other hand, monumental construction could represent a form of exploitation (Fried 1967). Hence far from being proud of the fruits of their labor, finished monumental projects could foster feelings of oppression and serve to mobilize commoner class consciousness. An extreme example is provided by Masquelier (2002) who shows that the French colonial regime in Niger coercively recruited labor for road

construction, so much so that the roads are now construed as spiritscapes inhabited by all manner of cruel and bloodthirsty entities. While difficult, discerning the strategies which underpinned monumental construction is important for understanding the socio-political context. However, tax rates alone offer important clues as to the prevailing type of labor organization practiced at any particular time period. For instance, tax rates in excess of 30 days a year are suggestive of a *corvée* system (Abrams 1994: 101). More importantly, however, these tax rates can then be compared to independent correlates of different elite strategies, to effectively establish how unequal the system was, and what, if anything, commoners received in exchange for their labor (Abrams 1994: 97; LeCount and Yaeger 2010d: 358). Asking this question in a comparative fashion is important to understanding variability in integration and the extent of political power versus authority, but can be methodologically difficult due to basic taphonomic issues like differential preservation.

Another important line of inquiry involves the relative wealth and quality of life of the commoners who were investing labor in construction. Important correlates may be found at the intermediate elite centers themselves and the households of subordinate commoners who provided the labor. For instance, extensive evidence of feasting related paraphernalia at larger high-status commoner households and intermediate elite centers, or the presence of high-value wealth items (gifts) at commoner households could independently corroborate the existence of a festive custodial system in which commoners received something in exchange for their labor. In other contexts, commoners could have received little tangible reward in exchange for their service (see for instance Keller 2010: 194; Pauketat 2007: 274-276). In some instances, *corvée* labor might actually leave a tangible trace of trauma or wear in the bioarchaeological profile of the commoner population (Becker 2013). Another metric for gauging the exaction of onerous labor burdens on commoner subordinates involves the extent to which they were able to invest time and labor in the construction and expansion of their own dwellings (Robin, Meierhoff, and Kosakowsky 2012: 144).

Another route to distinguishing between the aforementioned scenarios involves assessing the nature of the architecture constructed. Whether the monumental architecture was a large communal project not associated with an elite residence, public ceremonial architecture associated with an elite residence, or the elite residence itself is important for extrapolating the types of labor

organization that underpinned its construction (Clark 1997: 226; Sanders 1974). Sufficient independent lines of evidence effectively allow us to tease out drastically different pictures of labor organization and situate different intermediate elite strategies of labor organization on a spectrum of publicly mandated authority to coercive power. Furthermore, assessing the degree to which top-down control was necessary to provide a sufficient workforce for the construction of monuments provides valuable insights into the political processes underlying their construction (Iannone 2003). For instance, LeCount and Yaeger (2010d: 349) compare the rapid tempo of architectural increase at Xunantunich to the rise of preceding political centers at Actuncan and Buenavista del Cayo. This comparison suggests that the much higher labor costs associated with Xunantunich probably indicates that the outside influence of Naranjo was important in obtaining more labor.

As Freidel (1986: 107) points out, the construction of monumental architecture probably reflected just one avenue through which centralized control of labor was directed. Construction labor invested in agricultural works can also provide an avenue into understanding political dynamics (Abrams 1994: 41), however, this can often be organized at lower political levels than the apical polity-level government (Erickson 2006). Unlike surrounding areas (T. Neff 2010), no evidence of agricultural terracing or raised field systems is apparent at Lower Dover, although some type of low-level ditched field system might be apparent at Floral Park (Kirke 1980). Either way, agricultural architecture is far from substantial and does not offer a solid basis for investigating labor tax. Another purpose for which control of labor was directed in most state-level complex societies was military conscription. This generalization requires further investigation, but elites could conscript commoners in the vast majority of archaic/early states (Claessen 1978). However, it remains far from clear how this operated at the district/intermediate elite level in small Maya polities. That said, the ability of intermediate elites to draw upon subordinates' labor for construction and/or agriculture may also translate well into military recruitment. The most important avenue may be the organization of war parties and armies. This is difficult to reconstruct archaeologically, but general trends in the political success of polities in warfare and the relative size of monuments gives the impression that the size of a monumental construction labor force could represent a proxy of war party or army size. One overarching issue stems from a reliance on labor for monumental construction as the sole metric of elite political power and authority. While the absence of any substantial intensive agricultural features in the region assuages some concern,

there does seem to be a general pattern in which highly centralized polities shift labor from monumental construction towards warfare, agricultural investment, or the construction of defenses. Reliance on a sole metric of power/authority would present a biased picture as a decline in monumental construction could be seen as the waning power of the state, when in fact that state was engaged in large foreign military campaigns (J. Marcus 2003b; see also Covey 2006).

2.5 Intermediate Elites

Intermediate elites often headed the constituent components of polities, forming the level of leadership at which apical governance articulated with commoners (Blankenship-Sefczek, Ball, and Taschek 2019; Brumfiel 1994b; Elson and Covey 2006; Manzanilla 2012; J. Marcus 2006; Spence 1992; Stone 1987, 2019). Intermediate elites could encourage both political change and stability because they effectively walked a political tightrope, negotiating the demands of their subordinates and superiors, while striving to maintain or augment their own power and authority (G. Marcus 1992; Conlee and Schreiber 2006: 95; Connell 2010: 313; McAnany 1996: 139; Morris and Covey 2006: 152; Schortman 2010: 379-380; Wernke 2006: 207). Rather than providing an elitist picture of society (Carson 1978), an intermediate elite focus provides a bridge between local and regional-level politics (Walden et al. 2019). Elites are defined as a minority who can affect major social and political changes due to their possession of high degrees of coercive power or legitimate authority, and control of social institutions (Giddens 1972; Hirth 1992: 19; Houston and Stuart 2001; Inomata 2001b). The intermediate elite concept moves us away from “evoking the image of a ruling, controlling few while remaining intractably vague about the precise identity, organization, or social embeddedness of such persons (G. Marcus 1992: 295)”, to a fleshed-out agent-driven approach which effectively “peoples” the nested hierarchical levels of Maya polities with agentive political actors (Robin 2003: 308).

2.5.1 Anthropological Perspectives on Intermediate Elites

While archaeologists have only recently turned to intermediate elites as a social unit (Elson and Covey 2006; Porter 2004), political scientists, sociologists, and political anthropologists have long been wrangling with questions about the co-option of client rulers, patron-client relations, and factionalism (Giddens 1984; Harriss-White 1997; Newbury 2000; Rudolph and Rudolph 1966). Much of this anthropological perspective comes from contexts like empires, which were far more politically complex than smaller Classic Maya polities like Lower Dover. Comparative examples from these contexts are employed to provide possible correlates and hypotheses for examination (see LeCount and Yaeger 2010a: 29 for a similar approach). Anthropological study of intermediate elites as active sources of political change began under colonialism in Africa, because successful co-option of local rulers and chiefs was crucial to European governance (Gluckman 1965). Historical studies have highlighted the role intermediate elite client kings played in the expansion of the Roman Empire under Augustus (Braund 1984; Jacobson 2001; Luttwak 1976). Ethnohistorical and historical texts from the New World highlight the importance of elite co-option in the incipient Spanish empire and the Pre-Columbian Aztec and Inca empires (C. Morris 1998; Stark and Chance 2012; Trigger 2003).

Anthropologically, intermediate elites vary from politically powerless dupes who lacked any agency to agentive political brokers whose personal pursuit of power and financial gain destabilized top-down power. Often apical regimes have no standard policy for interactions with intermediate elites, and their relative agency is highly contingent on local factors. The frontier elites situated on the English borders during the 14th-16th century provide a good example of how variable relationships between apical governance and intermediate elites could be. The Medieval Marcher Lords who controlled the Welsh borderlands were granted high degrees of political autonomy by the English crown to assert control over the Marches. The Marcher Lords were allowed complete freedom to govern their subjects however they saw fit and to construct their own castles despite owing allegiance to the Crown. This high degree of autonomy ultimately backfired and the Marcher Lords accrued sufficient power and political capital to play a pivotal role in English politics as “Kingmakers” (Holden 2008; Lieberman 2010). In contrast, the 16th century northern Border Reiver families situated in the borderlands between England and Scotland

developed in a very different frontier landscape. The ongoing wars between England and Scotland resulted in this region often becoming a lawless no man's land. As a result of this dynamic, the apical rulership of both countries sought to co-opt the Reiver lords, who represented a buffer zone. Despite their infamy, the Reiver families never posed a real threat to the English Crown (Moffat 2011). The relative power of these two frontier elites is obvious archaeologically, the Reiver families lived in large fortified farmsteads and small forts, the Marcher Lords lived in some of the most impressive castles ever constructed in Britain.

2.5.2 Classic Maya Intermediate Elites

Despite the existence of large hegemonic multi-polity networks centered at Tikal and Calakmul, the ongoing decipherment of epigraphy is painting an increasingly decentralized picture of Classic Maya political dynamics. There are numerous instances of intermediate elite rulers of secondary centers conspiring to overthrow their overlords and establish themselves as autonomous apical elites (Foias 2013;Looper 1999; LeCount and Yaeger 2010b; J. Marcus 2006; Martin and Grube 2000). In some instances, intermediate elite households situated well within the territories of larger polity capitals also allied themselves with external powers. El Palmar fell under the suzerainty of Calakmul, but this did not prevent the *lakam* (neighborhood/district heads) living at the Guzmán group within the El Palmar polity erecting a hieroglyphic staircase expressing strong ties with Copan (a rival of Calakmul; Tsukamoto 2020, 2014: 61-62; Tsukamoto et al. 2015: 200).

Advances in epigraphic decipherment has allowed the reconstruction of Classic Maya intermediate elite titles. Epigraphic sources document a range of intermediate titles including *ajk'uhuun* (worshipper, scribe or political mediator), *chak tok wayaab'* (a priestly position), *sajal* (provincial lord), *b'aah sajal* (head sub-lord), and *sajalob'* (those beneath him), and *lakam* (a neighborhood-level official; Beliaev 2004; Estrada-Belli et al. 2009: 246–48; Jackson 2013, 2015: 245–8; Lacadena 2008: 269; J. Marcus 2006: 216; Tokovinine 2013; Zender 2004: 224–25). The intermediate elite concept is relative and situational and accounts for fluid relationships between hierarchically nested actors. For instance, *k'uhul ajaw* often filled 'apical' roles, but if they fell under the hegemony of a *kaloomte'* (heads of large multi-polity networks) they could be considered intermediate between the *kaloomte'* and the *sajals* and *ajk'uhuuns* beneath them (Foias

2013). Ethnohistorically documented Postclassic intermediate titles include the *hol pop* (head of the banquet), *azmen uinic* (people of middling status), and *ah kuch kab* (council member or collector of tribute; Barrera Vásquez 1980; Roys 1943, 1957; Tozzer 1941). *Ah kuch kabs* were ward or barrio representatives, and were responsible for hosting feasts, assembling war parties, and passing tribute up to the *hol pop*, who passed it onto *batabs* (Coe 1965: 103; Farriss 1984: 241; Roys 1939: 40). McAnany (1995: 92-93) likens the role of the *ah kuch kab* and associated lineage to the *calpulli* of Central Mexico and argues that these individuals coordinated agricultural production on lineage lands.

The official roles and duties associated with titles were generally ritualistic in nature, including scattering offerings, fire drilling, conjuring, playing ball, and performing dedications to the ancestors (see Jackson 2015: Table 9.1). Elites holding the *chak tok wayaab'* title could commission civic-ceremonial architecture (Beliaev 2004; Estrada-Belli et al. 2009: 246–48). The prevalence of intermediate elite ritual duties in the epigraphy is likely a reflection of the priority afforded to ritual in the epigraphic record. For this reason, intermediate elites likely have fulfilled other roles, not reflected in the epigraphic record. Most titles were likely multifaceted positions associated with intermediate elite actors and not with a priestly, warrior, or scribal class (Jackson 2013; but see Zender 2004). For instance, the *ajk'uhuun* title has been interpreted as “One who keeps, guards” or “One who worships, venerates” (Jackson and Stuart 2001: 226; Zender 2004: 194), and may also be a scribal title via the logographic reading of *aj-k'uh-huun* (Coe and Kerr 1998: 91–96; Houston 1993: 130–34). There are however many examples of *ajk'uhuuns* bearing more than one courtly title during their lives. Kelen Hix of Toniná was both an *ajk'uhuun* and a *ti'huun*, Ahkmo' of Yaxchilan was an *ajk'uhuun* and a *sajal*, and Mak'an Chanal of Copan simultaneously held the *ajk'uhuun* title and a local lordship- “Lord of Koxop” (Jackson 2013; Martin and Grube 2000: 206). This suggests that instead of being specialized priests or scribes, most intermediate elites were downscaled lords with smaller domains and followings.

Epigraphic data illuminate the hegemonic networks of Classic Maya polities. Indirect strategies of incorporation involving client elites in brokerage positions were more common than direct policies of annexation (Carter 2016; J. Fox 1994; Rice 2009; Sharer and Golden 2004: 41; see also Bailey 1969: 59). The profusion of intermediate elite ritual titles in some parts of the Maya lowlands might represent one way that apical elites sought to incorporate intractable intermediate

elites. Offering intermediate elites high-status honorifics with a narrowly restricted array of associated duties could over time curtail their roles and prohibit them from filling apical elite shoes (Jackson 2013; see also Bailey 1969: 81). More powerful multi-polity networks like Tikal and Calakmul seem not to have used certain titles and generally bestowed fewer titles on client elites. This truncation of titled positions suggests powerful apical elites did not need to honor client elites (Carter 2016: 235; Foias 2013: 155, 225; Jackson 2013: 86-87). Secondly, titles and positions appear to have become more common in the Late Classic period, when political systems were becoming increasingly unstable (Foias 2013). Intermediate elite positions were sometimes hereditary. The *sajal* title was sometimes retained by intermediate elites even after the death of the *ajaw* who appointed them. A good example of this dynamic being the K'utim family who were the *sajals* of El Cayo, a secondary center of the Piedras Negras polity (Golden et al. 2008: 253; Jackson 2013: 41). The opposite was true at the adjacent polity of Yaxchilan, where the apical elites reallocated titles following the death of an incumbent in office (Chinchilla and Houston, 1993; Golden et al. 2008: 253; see also Munson and Macri 2009: 433). Royal visits by apical elites to intermediate elite centers were common and may reflect some decentralization of power, but certainly offered opportunities for “demonstrating sovereignty to skeptics” (Geertz 1985: 25; see also Canuto and Barrientos Q. 2020: 179; Helmke 2019; Helmke, Awe, and Grube 2010: 109; Houston 1993; Hutson 2016: 172; Pohl and Pohl 1994: 153). Archaeological Perspectives on Classic Maya Intermediate Elites

Archaeology provides an alternative viewpoint on political organization. Maya archaeologists have traditionally associated minor centers with nobility who possessed less wealth, status, and power than the paramount rulers who resided in the major centers (Bullard 1960: 369; Conlon and Powis 2004: 72; Ford 1981: 158; Haviland 1981; Maca 2015: 168; McAnany 1995: 104; Thompson 1931; Willey et al. 1965: 580). The inhabitants of these complexes have been referred to as hinterland elites (Lucero 1994), community leaders (Robin, Yaeger, and Ashmore 2010), neighborhood leaders (Hutson 2016), lineage heads (McAnany 1995), provincial elites (LeCount and Yaeger 2010a), outlying elites (Tsukamoto et al. 2015: 200), middle-level elites (Connell 2010: 293), minor leaders (Willey et al. 1965: 580), and elite personages (Ford 1981: 158). Higher-level intermediate elites like *sajals* who controlled subordinate centers also had scaled-down “micro courts” which were alike to their suzerains courts at polity capitals (Webster

2002: 158). Minor centers are often located at the epicenters of large clusters, or districts of commoner settlement (Adams and Smith 1981; Arnould et al. 2012: 209; Ashmore 1981b: 51; Bullard 1960: 357; Canuto and Fash 2004; Eberl 2014; Fash 1983; Folan et al. 2009: 68; Freter 2004; Guderjan 2007: 68; Hare and Masson 2012: 241; Hutson 2016: 80; ; Iannone 2004; Kintz 1983a, 1983b; Kurjack 1974: 80-89; Lemonnier 2012: 194; Lohse 2013; Robin et al. 2012b: 114; Tourtellot 1983; Willey 1956; Willey et al. 1965: 580; Willey and Leventhal 1979; Yaeger 2000, 2010b: 245). These intermediate elite-headed districts often contain multiple smaller commoner neighborhoods (Hutson 2016; M. Smith 2011).

Most archaeological divisions of status involve an understanding of the scale of elite architecture. That said, emic criteria for elite status in the Classic period likely involved linguistic and genealogical qualifications. It remains unclear whether the Classic Ch'olti'an language was an elite lingua franca or a unified language system, but if it was the latter then this likely represented one status criterion (Houston, Robertson, and Stuart 2000; see also Baron 2016a: 9). Reconstructing the genetic history and kinship is becoming increasingly possible. For instance, Blankenship-Sefczek, Ball, and Taschek (2019) found that apical elites likely did not intermarry with intermediate elites and commoners at Buenavista del Cayo.

The intermediate elite-headed districts evident in the Classic period settlement patterns are reminiscent of the loosely subordinate lineages which surrounded the Postclassic K'iche' capital of Q'umarkaj (Utatlán; Carmack, 1981: 161; see also G. Braswell 2003). The seats of these lineage entities were referred to as *nimja* or “big house”, a term, which encompassed both the sizeable physical residential structure and the lineage (Carmack 1981: 157). Intermediate elites also lived within political capitals as is evident from the elite residential architecture adjacent to apical elite palaces and civic-ceremonial architecture (Hammond 1982; Marken and González Cruz 2007). Following Houston and Inomata (2009: 167), these are referred to as “aulic” elites (see also Adams and Smith 1981: 342; A.F. Chase 1992: 41; Elson 2006; Haviland 1981; Murakami 2016). Perhaps the biggest difference between aulic and hinterland intermediate elites lies in the hinterland elites' possession of a commoner base and the means to articulate a downward face towards them. Aulic elites, while similarly wealthy, often lack associated clusters of commoner subordinates and sometimes lack the types of ceremonial architecture necessary to

articulate with subordinates. The often-truncated range of structures apparent at aulic elite households suggests that they acted as courtly retainers.

This middle level of the settlement hierarchy has seen ample attention in the Belize River Valley (Bullard 1960: 359–360; Coe and Coe 1956; Connell 2003; Driver and Garber 2004; Willey et al. 1965: 561, 572–573; Yaeger 2003a). Despite this focus, little consensus has been reached regarding the range of variability these centers exhibit in terms of layout, features, residential function, and role (Haviland 1981; Iannone and Connell 2003; Iannone 2004). Archaeological reconstruction of the activities which occurred in Classic Maya intermediate elite contexts include markets and commercial exchange (D.Z. Chase and A.F. Chase 2003, 2015; Dahlin et al. 2007), trade (McAnany, Berry, and Thomas 2003; Masson 2003), water management (Iannone 2003; Scarborough and Lucero 2010), agricultural management (Iannone 2003, Connell 2003, 2010; Conlon and Moore 2003; Conlon and Powis 2004; Chase and Chase 2003), ritual activities (Iannone 2003, Connell 2003, Tourtellot, Everson, and Hammond 2003), border control (Driver and Garber 2004; Tourtellot, Everson, and Hammond 2003), feasting (Connell 2003, 2010; Tourtellot, Everson, and Hammond 2003; Yaeger 2000), and craft production (Masson 2003). This broad diversity in intermediate elite roles likely reflects different degrees of integration, and the agency of the intermediate elites themselves.

2.6 Intermediate Social Units

Classic Maya settlement patterns are famously dispersed however clusters of settlement are often discernable (Ashmore 1981; Prufer and Thompson 2014). These seem to cluster into city or polity entities at the macro scale, but within these are an array of nested intermediate levels of clustering. Frequently, smaller clusters formed neighborhoods situated around high-status neighborhood head households, and larger clusters formed around intermediate elites, which represent districts (Bullard 1960; Prufer et al. 2017; Thompson, Meredith, and Prufer 2018; Smith and Novic 2012; Walden et al. 2019).

Over the last forty years, a vast array of intermediate social units have been employed archaeologically. The popularity of such units may reflect a frustration with top-down versus bottom-up approaches and a growing awareness of the gaps in our scales of analyses (de Montmollin 1988; 1995: 10-11; Clarke 1977: 11-15; Fitzsimmons and Marken 2015; Fash 1983; Flannery 1976a; Hageman and Lohse 2003: 109; Hayden and Cannon 1982). The application of hierarchically nested intermediate social units allows us to examine bottom-up and top-down relationships at each level of the political hierarchy (A.S.Z. Chase n.d.; see also Brumfiel 1994b: 92). These units allow polities to be broken apart into their constituent components to investigate the degree to which households were interdependent/integrated (de Montmollin 1989a: 17-25). Following the logic outlined by de Montmollin (1989a), social entities with high levels of mechanical redundancy are more associated with segmentary political units whereas unitary or well-centralized political entities should have low levels of redundancy (see also Durkheim 2013 [1893]). This view dovetails with the notion that economic units with high degrees of interdependence can foster the emergence of factions (Brumfiel 1994a).

Some intermediate social units map conceptually onto simple spatial patterns, while others are more abstract, rendering their application more complex (Elson and Covey 2006). Households, neighborhoods, districts, cities, and polities form nested spatial scales, which are pretty ubiquitous across the world (Keith 2003; M. Smith 2010). These scales generally map onto clusters of dispersed Classic Maya settlement (Prufer and Thompson 2014; M. Smith 2011; Smith and Novic 2012). In contrast, other more abstract ideas like the Lévi -Straussian (1982, 1987) “House” model, lineage organization, factions (Brumfiel 1994a), or socially constructed communities (Yaeger 2000) cannot be simply mapped onto spatial clustering but require a more nuanced understanding of the archaeological record. As such these units of analysis are more useful to “think with” than to attempt to identify with precision in settlement pattern data (Watanabe 2004).

Following Hutson (2016), identification of the focal nodes at multiple levels of the political hierarchy allows the delineation of the “interstitial” areas where networks of hierarchically differentiated actors intersected (see also Arnauld et al. 2017: 18; Dunham, Jamison, and Leventhal 1989). These focal nodes could represent elite residences and associated ceremonial architecture, high-status commoner residences with downscaled ceremonial architecture, reservoirs/aguadas, trails, fields, caves, or any other space in which people may congregate for a range of reasons.

These focal nodes offer opportunities to model the geospatial social “catchments” (see for instance Renfrew 1973; Steponaitis 1981). The significance of smaller focal nodes, like intermediate elite centers has long been recognized in Maya archaeology. As Willey (1984: 255-256) describes “These special patio-groups and buildings of residential clusters in a sense replicate the form and presumed functions of the Lowland Maya centers. In the centres, patio-arrangements, or, more properly, courtyard arrangements, consist of much larger structures, of pyramids topped by temples and adjoining multi-roomed palaces on high platforms. To a degree, a distinction between residential units and the public buildings of the centres appears to be one of scale, and there is a gradation from one to another.”

2.6.1 Households

Despite the commonly held view that early Maya archaeologists were largely interested in elites (Taylor 1948: 52), household scale investigations began in the late 1800s and continued in some form throughout the twentieth century (Gordon 1896, Hewett 1912, Ricketson 1931; E.H. Thompson 1892; J.E.S. Thompson 1940: 140; Wauchope 1934, 1938; see also A.F. Chase and D.Z. Chase 2019: 6). The real paradigm shift occurred with the work of Willey and colleagues (1965) at Barton Ramie who were overtly focused on residential architecture and were attempting to answer some of the questions which contemporary archaeologists pursue in their excavation of commoner residences.

The household formed the basal economic, ritual units, and political unit in ancient Mesoamerica (Flannery and Winter 1976; Hirth 1993; Wilk and Ashmore 1988; Wilk and Rathje 1982). Most archaeological agency approaches are concerned with household groups as opposed to individuals because households are more easily recognizable archaeologically and their architecture and assemblages speak to relative levels of wealth, status, wellbeing, and activities (Rathje 1983). Indeed, the household may form a more logical unit when considering agency in the past anyway, given the fact that most decision-making occurred at the kin group scale, not the individual (Hammel 1984: 40-41). Garrison, Houston, and Alcover Firpi (2019: 134) critique the populist stance through which some researchers address commoner agency. These approaches have likely overinflated the degree of autonomy and political power commoners likely possessed

due to the frequent use of peasant resistance models developed in Southeast Asia (Scott 1985, 2009). Indeed, existing data for commoner/elite interactions for the Maya lowlands may in actuality support a more predatory model in which geographically circumscribed commoner farmers were easily exploited by emergent elites (*sensu* Gilman 1981; see also Carneiro 1970). Empirical methods to deliberate between these possibilities are very much needed.

Household approaches are typically associated with studies of commoners (Lohse and Valdez 2004; Pyburn 1998; Robin, Yaeger, and Ashmore 2010), but higher-status intermediate and apical elite households have seen their share of study as well. These higher-status household units may have upscaled ceremonial and economic infrastructure reflective of *oikoi* (Foias 2013). Numerous critiques of the elite/commoner dichotomy suggest that this distinction may better be conceptualized as a continuum (see A.S.Z. Chase 2017: 37; Blackmore 2012; Carmean 1991: 163; Hutson 2020a; Inomata 2016; Palka 1997: 303).

Most Classic Maya households involved multiple small residential platforms with pole and thatched structures aligned to the cardinal directions around a central patio space (Ashmore 1981: 47-51; Tourtellot 1983: 42). The central patio space served as the locus for domestic production, household-level ritual, and feasting, and other activities (Ashmore 2003: 11; Gonlin 2007; Plunket 2002; McAnany 1995: 105; Walker and Lucero 2000). These residential units were surrounded by a house lot, which comprised orchards, gardens, middens, and other spaces which more broadly encompassed the activity areas associated with a household (Killion 1992; see also Ashmore 1981: 48; Becker 2001).

2.6.2 Neighborhoods and Commoner Neighborhood Heads

One social grouping larger than the household is the neighborhood (Gómez-Chávez 2012; Hutson 2016; Manzanilla 2009, 2012; Pacifico and Truex 2019; M. Smith 2010, 2011; Winter 1976). Classic Maya neighborhoods comprise around five to twenty commoner households clustered together (Blackmore 2007, 2008; Hendon 2012; Kintz 1983a; Peuramaki-Brown 2014; Pyburn et al. 1998; Robin 2003: 330-331; Willey 1956). Bullard (1960: 367) first identified units comparable to neighborhoods, and labeled them “clusters”. Neighborhoods result from the

aggregation of people into spatially discrete residential units with high degrees of social propinquity and heightened face-to-face interaction (Hutson 2016: 74-76; Kintz 1983b: 181; Kurjack 1974: 93; M. Smith 2010, 2011). Neighborhoods are roughly comparable to ethnographically documented multi-household corporate social groups (Collier 1975; Fash 1983; Hill and Monaghan 1987; Levi 2014; Tax 1937; Tozzer 1941; Vogt 1969, 1976; Wisdom 1940). In theory, neighborhoods could shrink or grow over time, perhaps expanding to become districts (see Chapter 2.6.3). The distance interaction principle suggests that people located spatially close to one another interacted more (Feinman and Nicholas 2012; Murdock 1949, Peterson and Drennan 2005). Although some cautionary exceptions to the distance interaction principle are evident in the Maya lowlands (Okoshi-Harada 2012: 291; Vogt 1976: 99). Following Feinman and Nicholas (2012: 149), a range of types of “social glue”, such as ritual, feasts, or economic cooperation could hold such neighborhoods together (see also Keith 2003).

A second approach for delineating neighborhoods includes identifying focal nodes, which represent central places that acted as a magnet in settlement aggregation and facilitated the types of face-to-face interactions which underpin neighborhoods (Hutson 2016: 73-80; see also Keith 2003: 66). Ethnographically, the Maya neighborhoods in Chiapas, known as *sna* cluster around waterholes (Vogt 1976). There has been a growing realization that inequalities are manifest even at lower levels of the settlement hierarchy (Lamb 2020: 317; Thompson and Prufer 2021). While most Classic Maya neighborhoods appear to be mixed status, some examples of single status neighborhoods exist (Ensor 2013; Guderjan 2007: 88-89; Pyburn 1998). Often focal nodes represent the residences of high-status commoners who acted as neighborhood heads which fulfilled a series of central place functions (Ashmore 1981; Blackmore 2008; Drennan 1988: 284; Hoggarth 2012; Lemonnier 2012; Prufer et al. 2017; Walden et al. 2020a). As Willey (1984: 255) describes “Patio-groups are, in turn, often found in clusters of from five to twelve. In such clusters, one patio-group, usually in a central location in the cluster, is larger than the others and has one mound or building that is more imposing than any of the others in that patio-group or the cluster”. High-status commoner neighborhood head households in the Belize River Valley had downscaled ceremonial architecture including such as eastern mortuary shrines and patios of sufficient capacity to incorporate surrounding commoners, and evidence of gatherings, rituals, and feasts (Blackmore

2012; Hoggarth 2012; Robin 2012c: 314; Walden et al. 2019; Yaeger 2000; Yaeger 2003a: 47; see also de Montmollin 1988; Gonlin 2007; Lamb 2020: 318).

McAnany (1995: 99) argues that the absence of eastern ancestral shrines at a good number of smaller patio groups at Tikal suggests that the occupants of these residences were tied to larger commoner residences by kinship ties, and possessed labor obligations to the more dominant households (see also Becker 1971: 198-200). In essence, these neighborhoods probably functioned as commoner corporate/extended kin groups with political, economic, and ceremonial functions (Hageman 2004; Hayden and Cannon 1982; Houk and Zaro 2015; Prufer and Thompson 2014; Willey 1984: 257; Vogt 2004). The high-status commoner households at neighborhood epicenters might reflect ancestral residences, surrounded by descendants who fissioned from the original household. Examples of similar units include the smaller Aztec *calpulli*, or the Andean *ayllu* (Carrasco 1971: 363; Smith and Novic 2012: 5-6; Van Zantwijk 1985: 24-26). *Calpulli* heads interfaced with higher-level patrons, be it in a bottom-up capacity representing the interests of the collective, or in a more top-down role to ensure obligations to this patron were met (Brumfiel 1994b: 91; Carrasco 1978: 37). It was common for *calpulli* to have a patron deity and a shrine devoted to them (Carrasco 1971: 364-5). Commoner membership in corporate groups with a distinct head household who represented the interests of the collective would increase their bargaining power in interactions with elites (Brumfiel 1994b: 92).

2.6.3 Districts and Intermediate Elite District Heads

A district or ward, is generally considered a residential area larger than a neighborhood with a particular social or administrative identity (de Montmollin 1995: 8; Hutson 2016: 86; J. Marcus 2004: 273-276; M. Smith 2010). Districts can reflect top-down administrative units (A.S.Z. Chase 2016a), or more bottom-up social entities (Hutson 2016; M. Smith 2010, 2011; see also Postgate 1992). The districts at Lower Dover likely represent social districts, because they existed prior to the formation of the polity and were only administrative in the sense that top-down control was piggybacked onto them with the rise of the polity (Hutson 2016; see also Blanton and Fargher 2012). Districts often contain multiple neighborhoods, usually encompassing between thirty and eighty commoner households, and are comparable to the larger Aztec *calpullis* (Smith

and Novic 2012: 5-6). These larger *calpullis* represented the primary taxation unit, collectively owned communal land, and also provided services such as schools (M. Smith 2013: 52). While the distinction between districts and neighborhoods is analytically useful, M. Smith (2010, 2011) notes that emic terms for such units are often the same, or similar (examples include *calpullis*). One reason this might be is that the district might represent a neighborhood which has simply grown over time.

In the Classic Maya lowlands, Bullard (1960: 367) first identified units comparable to the district and described them as “zones” with multiple residential clusters situated around minor centers (see also Smith and Novic 2012: 4). There is abundant evidence of district-scale clusters of commoner residences around intermediate elites in the Maya lowlands (see Chapter 2.5.3 above for references). Based on the distance interaction principle this suggests a degree of interaction between intermediate elites and commoners (Peterson and Drennan 2005; Drennan, Berrey, and Peterson 2015; Murdock 1949). Willey and colleagues (1965: 579-580) suggest that “this overall design of Maya settlement of community units arranged in an ascending hierarchy suggests a parallel structure of organization in society, of similarly ascending foci of authority with minor leaders in minor centers and paramount rulers governing from major centers.” The co-occurrence of elite and commoner housing in Maya districts has long been considered indicative of internal horizontal cleavages permeating society (Folan et al. 2009: 68). Some rare instances of purely elite districts do exist though (see Guderjan, Baker, and Lichtenstein 2003: 85; Guderjan 2007: 59). In some instances, intermediate elites might be present in commoner clusters but not actively engaged in relationships with commoners (Connell 2010; Kurnick 2016b; see also Lemonnier 2012: 191). The ethnographic units known as *sian otot* are comparable to districts in that they comprise 60-80 households and around 200-300 people focused around a larger single larger community center (see Fash 1983; Freter 2004; for the ethnographic concept see Wisdom 1940). These intermediate elite headed districts likely arose from direct strategies of attracting and maintaining retinues of followers (de Montmollin 1989a: 90; Hutson 2016: 171; Inomata 2004: 190; Lemonnier 2012; see also Child and Golden 2008; Houston et al. 2003). Ethnohistoric evidence of elites attracting a client base is provided by Landa who describes how the son-in-law of a high priest of Mayapán successfully fissioned and attracted a substantial population around his new community (Tozzer 1941: 40).

At Lower Dover, discernable focal nodes were apparent at the centers of three of the larger districts at Tutu Uitz Na, Floral Park, and BR-180/168. These focal nodes served a greater array of central place functions than high-status commoner neighborhood head households. District-level intermediate elite focal nodes possessed reservoirs, large residential structures, and ceremonial architecture like causeways, ancestral structures, and public plazas. That said, the Tutu Uitz Na, Floral Park, and BR-180/168 centers had pole and thatch superstructures set on masonry platforms. These structures resembled up-scaled commoner residences more so than the corbelled vault palatial residences of apical elites (Walden et al. 2019). The occupants of these households owned ceramics with glyphic inscriptions and high-status jade and marine shell jewelry. These centers were the seats of high-status lineages and not communal public architecture constructed by surrounding commoners (Walden and Biggie 2017; Walden et al. 2018, Walden et al. 2020c). Like the commoner neighborhood heads, district-level intermediate elites would have represented the interests of the district in interactions with apical elites at the polity-level, but likewise, as clients of the apical elites, these intermediate elites would have possessed a top-down role ensuring that taxation and other obligations to the apical rulers were met (Brumfiel 1994b: 91). The hierarchically nested nature of the Classic Maya polity is reflected in the schematic shown in Figure 2.1. This hypothetical polity comprises 15 neighborhoods each containing five households (yellow) and a neighborhood head (green). Some neighborhoods were likely more affluent or politically important than others. Each set of five neighborhoods are arranged into a district that comprises 25 households and five neighborhood head households situated beneath a single intermediate elite (blue). These districts are arranged into a polity headed by an apical elite (red).

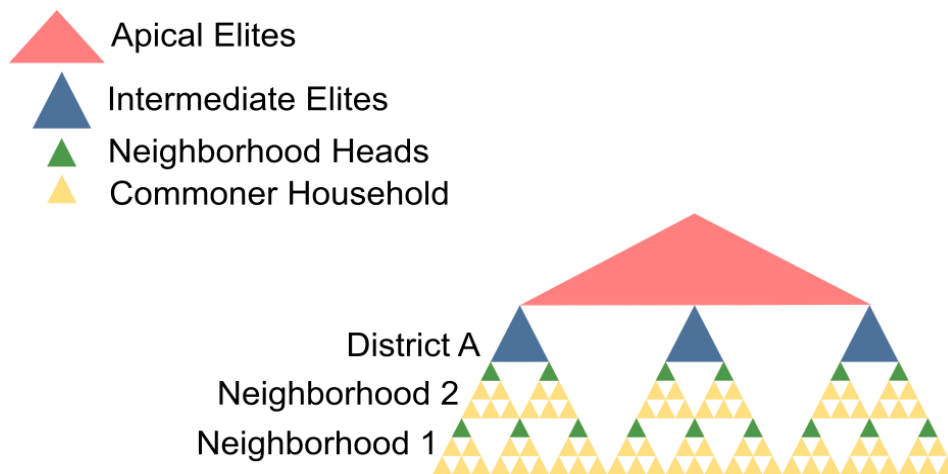


Figure 2.1 Schematic of district and neighborhood organization

2.6.4 Lineages, Houses, Imagined Communities and Factions

Five models of Classic Maya social organization prevail; the two-class model, the three-class model, ranked lineages, stratified lineages, and house societies (Fash 1983; McAnany 1995; Reed and Zeleznik 2015; Webster 1998; 2002). These models differ by degrees and are far from mutually exclusive. These forms of organization probably changed temporally and varied between polities (Duncan and Hageman 2015; Hyde 2014; Watanabe 2004). These models present radically different political arrangements, which speak to the permeability of status group membership and social mobility. Analyses of biological kinship based on dental similarities indicate that individuals interred in the same tomb were likely related (Hammond, Pretty, and Saul 1975). This shared kinship extends to burials in adjacent commoner residences at Copan (Rhoads 2002: 167, 215). However, tracing these patterns has been difficult in most of the lowlands. Reed and Zeleznik (2015) present a series of material correlates for examining these models using traditional settlement data. This method largely involves detecting where the largest gulfs existed in terms of unequal access to wealth and resources in the socio-political hierarchy.

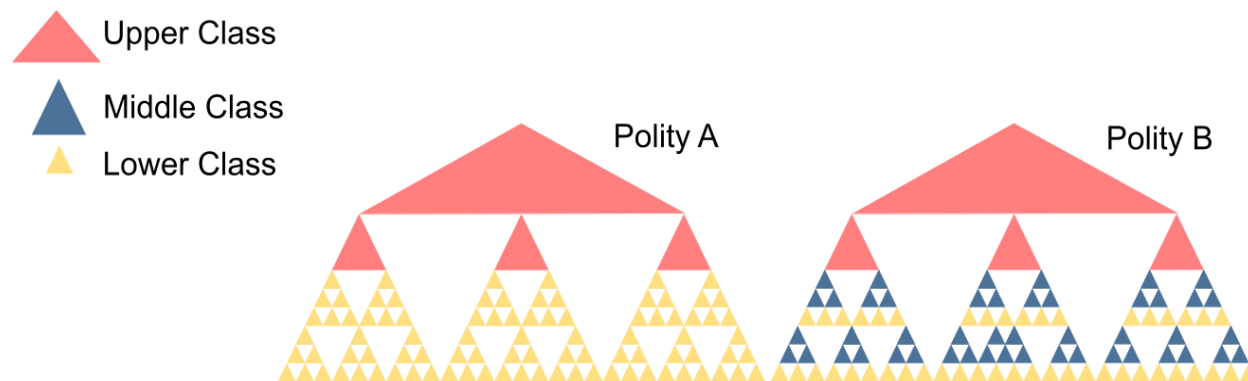


Figure 2.2 Schematic of the two (Polity A) and three-class (Polity B) models

Proponents of class models envisage either two overarching classes of nobles and commoners (J. Marcus 1992; 2004), or three classes, including a middle class (A.F. Chase 1992; A.F. Chase and D.Z. Chase 1992; see also Roys 1943). Generally, classes are seen as internally crosscut by a range of gradations in terms of wealth and status. The two-class and three-class models both envisage a centralized state, in which kinship played a minor role, but with sizeable gulfs between classes (Reed and Zeleznik 2015: 178; Webster 2002b: 442, 2002a: 144; see Blankenship-Sefczek, Ball, and Taschek 2019). Wealth thresholds (measured in tomb volume) at

the city of Caracol are indicative of a three-class system with a burgeoning middle class (A.F. Chase 1992: 40). It seems highly plausible that a class system operated at larger cities where a combination of geographic circumscription and elite power prevented commoners from voting with their feet and moving, thus eroding the traditional intermediate elite lineage/factional segmentary structures which persisted at smaller polities (see McAnany 1995: 150; see also A.F. Chase, D.Z. Chase, and Haviland 1990: 500-501). For this reason, it seems unlikely that strict class divisions existed in the Belize River Valley polities. The intermediate elite-headed districts suggest an arrangement of competing lineages. Figure 2.2 shows how these separate classes may be split within the Maya polity depicted in Figure 2.1., Polity A represents a two-class model in which apical and intermediate elites form an upper class (red) and commoners for a lower class (yellow). Polity B shows a possible three-class arrangement in which apical and intermediate elites form an upper class, high-status commoners form a middle class, and low-status commoners form a lower class. All manner of arrangements are possible in terms of the thresholds of class inclusion.

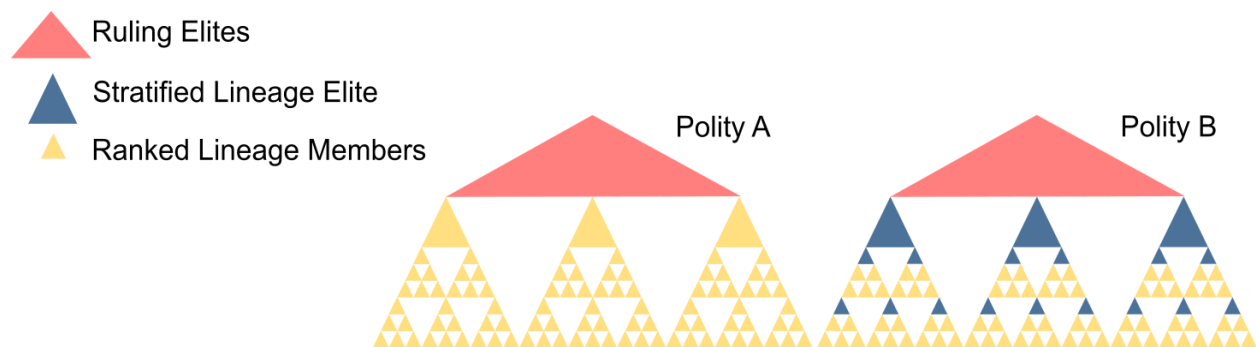


Figure 2.3 Schematic of the ranked (Polity A) and stratified lineage (Polity B) models

Generally, two lineage models are considered in the Classic Maya lowlands, both types of lineage contained both elites and commoners as was ethnohistorically documented in the Yucatan (Roys 1943: 35). The stratified lineage model envisages vague, and potentially weak crosscutting vertical relations between hierarchically arranged commoners and elites (Reed and Zeleznik 2015: 179; Webster 1998). Connections between classes would be grounded more in economic factors than kinship, in a manner comparable to factions (Bailey 1969; Brumfiel 1994a; Pohl and Pohl 1994), or corporate groups (Hayden and Cannon 1982). Following Goodenough (1951: 30-31), corporate groups are “groups that function as individuals in relation to property”. In general, commoner membership in segmentary style kinship organizations like lineages, clans, or Houses is considered to have reduced friction between commoners and the elites at the apex of such

entities, and instead created cleavages between commoners who were members of different conical kinship entities (Brumfiel 1994a; Webster 2002a). The stratified lineage model envisages more centralized power at the apex of lineages, with elites who were biologically and socially distant from lineage members in a manner not dissimilar from the two-class model. These units were likely geographically circumscribed and might correlate with districts delineated in the settlement patterns (Fash 1983; Hageman 2004). These lineages could extend vertically as far as the apical elite ruling family.

Like the stratified lineage model, the ranked lineage model involves large hierarchical kinship groups with commoners at the base and elites at the apex. Ranked lineages differ from stratified lineages because hypergamous marriage between commoners at the bottom and elites at the apex is expected (Reed and Zeleznik 2015: 178; Webster 2002a: 144-145). Kinship ties between low-status commoners and elites could result in elites having kin-based economic obligations to their subordinates, enhancing commoner agency (Webster 2002b: 442). Ranked lineages could extend to the apical elite ruling family. Figure 2.3 shows the ranked lineage model on the left, which involves all ranked lineage members shown in yellow. In contrast, the stratified lineage model is shown on the right with the intermediate elite lineage heads shown in blue. These schematics present the apical elite as class endogamous for simplicity's sake, in reality, the apical elite could represent the head of one particular lineage.

McAnany (1995: 111) argues that lineages were the crucibles of inequality. These units likely controlled land and chains of inheritance of land tenure (McAnany 1995: 96). The existence of nested neighborhood and district units in the Maya lowlands likely reflected nested kinship groups, with districts likely representing lineage-level entities manifested in the settlement pattern (see McAnany 1995: 104; see also Ensor 2013). While the relative size of lineages varies dramatically (Carmack 1981: 105, 162; Haviland 1968: 110), Classic Maya districts commonly fall within the range of expected lineage sizes.

The concept of the “House” or “House societies” was proposed by Lévi-Strauss (1982, 1987: 151-4) to explain anthropologically documented instances of societies routinely breaking kinship rules, such as the adoption of fictive kin or alternating matrilineal or patrilineal descent, with the overarching goal of self-preservation (see also Bailey 1969: 30; Bourdieu 1977). Lévi-

Strauss (1982: 174) described such organization as a “corporate body holding an estate made up of both material and immaterial wealth, which perpetuates itself through transmission of its name, its goods, and its titles down a real or imaginary line, considered legitimate as long as this continuity can express itself in the language of kinship or of affinity and, most often, of both”.

“House” societies are seen as a transitional stage between traditional ranked or stratified lineages to a class-based system (Levi-Strauss 1982: 186). The “House” model was based on the medieval noble houses of Europe, which routinely flaunted kinship rules with the goal of political self-preservation (Lévi Strauss 1987: 152). This is often considered an alternative to the lineage model and involves social organization focused around a physical house (Duncan and Hageman 2015; Hageman 2004; Sanders 1989). Kinship rules associated with membership are lax, allowing the incorporation of fictive kin and non-related clients, and multiple patterns of descent and post marital locality (Arnauld et al. 2012; Arnauld, Michelet, and Nondédéo 2013; Beck 2007; Gillespie 2000a, 2000b; Hendon 1991, 2010; Hutson, Magnoni, and Stanton 2004; R. Joyce 2000b; Webster 2002a: 145; Weiss-Krejci 2004).

While advocates of the “House” model have often distinguished it from the lineage model, the two models are not mutually exclusive (Watanabe 2004; see also M. Smith and Schreiber 2005: 206-207). In essence, proponents of both models share a similar segmentary vision of Maya polities involving multiple local hierarchical structures with intermediate elite heads and commoners sharing a common identity and vying with one another. Hypogamous marriage alliances and the bestowment of fictive kinship could endow patron-client relations with greater unity and solidarity (Bailey 1969: 48, 52-53). The extent to which these lineages were entirely comprised of people who were biologically related to one another, or incorporated fictive kin and constituted “Houses” in the Lévi-Straussian sense is unclear. However, the fact that multiple generations of elite household members were interred in increasingly elaborate mortuary shrines with increasing potential for public involvement shows that intermediate elite lineages self-identified as such. Debate exists as to whether the “House” model applies to the upper echelons (Hageman 2016), or lower echelons of Classic Maya society (Houston and McAnany 2003: 37-38). Larger intermediate elite households would be more likely to absorb genetically unrelated people to fulfill certain economic tasks pertinent to the perpetuation of the lineage, and over time these individuals may be incorporated as fictive kin (see McAnany 1995: 107). There is some

debate about the extent to which “House” membership crosscut status groups, although in the Maya lowlands population clustering around most intermediate elite ceremonial centers suggests commoners were integrated into both the construction of ceremonial architecture and the ceremonies which subsequently occurred within (Arnauld et al. 2012; Peuramaki-Brown 2013: 585; M. Smith 2011: 54).

The archaeology of communities has grown dramatically over the last four decades (Peterson and Drennan 2005; Schwartz and Falconer 1994; Canuto and Yaeger 2000). Building somewhat on the ethnographic concept of the community in traditional peasant studies (Redfield 1989), scholars have become increasingly interested in communities as emic socio-spatial units. Following Anderson (1980), the idea that communities were socially constituted around shared identities has proven popular in archaeology (Hutson et al. 2008; Knapp 2003; Isbell 2000, Varien and Potter 2008; Yaeger 2000; Yaeger and Canuto 2000). Yaeger and Canuto (2000: 6) argue “there must exist physical venues for the repeated, meaningful interactions needed to create and maintain a community.” As such, public ceremonial plazas and monumental architecture would play an important role in commoner integration into a collective imagined community. Shared experiences may have reduced class differences and fostered a greater sense of community solidarity between elites and commoners within their respective districts. The formation of local-level imagined communities could foster solidarity, and avoid issues like anomie (Hutson 2016).

A growing body of literature exists on coalescent communities and the pressures people face when they quickly aggregate, and the ways in which these pressures are relieved (Kowalewski 2006, 2013; see also Arkush 2018; Birch 2013; Duffy et al. 2013; Fargher, Blanton, and Heredia Espinoza 2010). The creation of an imagined community is one solution to reducing in-group conflict associated with increases in demographic density (scalar stress; see Johnson 1982; see also Alberti 2014; Bandy 2004; Coward and Dunbar 2014; Peterson and Shelach 2010). Other solutions involve leaders who can arbitrate conflicts, and punish freeriders (Kohler et al. 2012). Ethnohistoric perspectives suggest Postclassic intermediate elites may have resolved disputes and ensured commoner access to resources (Farriss 1984; Pohl and Pohl 1994: 140; Roys 1943: 178). The fact that intermediate elites may have played a hand in making denser aggregations “livable” is of clear political importance. Integration at the community level could involve active disintegration at other scales (Lamb 2020: 319). There is no reason to think that communities,

neighborhoods, or other intermediate social units were inherently friendly spaces, in some instances their perpetuation was reliant on continued conflict and strife (Hendon 2010: 99; Hutson 2016: 71; Pacifico 2014, 2019).

Archaeological investigation of factions has been hampered by issues surrounding their identification (Smith and Schreiber 2006: 10; Kurtz 2001: 11). McAnany (1995: 126) argues persuasively that factions have gone underexplored in Maya archaeology much to the detriment of our understanding of the political landscape. This dissertation reflects an attempt to better situate our understanding of Classic Maya political dynamics within the literature on factionalism. Hutson (n.d.) suggests that neighborhoods and districts, which are headed by elites and engaged in economic competition, can represent factions (Dahlin and Ardren 2002; Lucero 2007: 407). Brumfiel (1994a: 4) defines factions as “structurally and functionally similar groups, which by virtue of their similarity, compete for resources and positions of power and prestige” (see also Sandbrook 1972; Siegel and Beals 1960: 396). Factions have been conceptualized as antithetical to corporate groups. However, both are grounded in transactional bases of power and authority, and nested corporate group relations could underpin the existence of factions (Bailey 1969: 52; Brumfiel 1994a: 4). Factions are organized along segmentary lines, with individual transactional patron-client relationships existing between the leader and other faction members. This arrangement can be inherently unstable as clients seek better patrons (Bailey 1969: 54). These patron-client relationships need not be entirely economic and may become grounded in shared identities and ritualized traditions that bolster cohesiveness and the loyalty of clients (Bailey 1969: 28, 48-56). Social scientists have debated the extent to which factions represent a form of social pathology, which impeded or generated social change (Bailey 1969: 51; Bujra 1973; Schwartz 1969; Silverman and Salisbury 1977). Archaeologists have largely seen factionalism as underpinning political turmoil and collapse (Cowgill 1979; Earle 1987; Pohl and Pohl 1994: 152; for an alternative see Schwartz 1969).

The value of these various intermediate social units and the dynamics associated with them lies less in their identification on the ground and more in their use as heuristic constructs for investigating the vertical and horizontal cleavages which permeated Classic Maya polities. The district/neighborhood vocabulary is used to describe the residential units, while the “House” and lineage models are useful for thinking about how the intermediate elites at their epicenters may

have behaved. The socially constructed community concept is useful for understanding how districts were glued together through shared practices and ritualization. The literature on factions offers insights into how multiple competing elite-led social units might integrate followers and extract resources to outcompete one another. The hierarchical nesting of multiple neighborhoods headed by high-status commoners, into larger districts headed by intermediate elites suggests a segmentary structure, which may reflect factions (Blanton and Fargher 2012: 42; Brumfiel 1994a: 8; Kowalewski 1994: 129–133; Nash, n.d.; Sanders and Webster 1988: 53; Webster 2002a).

2.6.5 The Late Classic Polity

The Late Classic Lower Dover polity can be envisaged as a semi-autonomous territorial unit focused around the polity capital of Lower Dover (see also Chapter 3.4.2; Guerra and Awe 2017). Bullard (1960) referred to units comparable to polities as “districts” in his scheme. Following Ferguson and Mansbach (1996: 34), polities are defined as hierarchical organizations with a distinct identity and the ability to organize labor and resources for political ends. The term polity is particularly applicable to the smaller micro-states (de Montmollin 1995), principalities (Renfrew 2011 [1972]: 369), or statelets (Cowgill 2004: 542; see also Cowgill 2003; Marcus and Feinman 1998: 10) apparent in nested peer polity networks, which have the trappings of statehood but smaller populations (Renfrew 1986: 2). However, it is largely unclear how autonomous smaller Maya polities were. The term polity is now often applied to political units which were quasi-autonomous (Guderjan 2007: 10; A. Smith 2003). Without the assistance of epigraphic statements of control, it is quite difficult to ascertain which polities controlled others in the Maya lowlands.

Classic Maya political expansion was overtly hegemonic and reliant on “indirect” political strategies which left little tangible evidence of control (unlike the sorts of imperialism associated with Rome or the Inka; see LeCount and Yaeger 2010b: 32, 2010d: 361; see also Somerville, Schoeninger, and Braswell 2016: 148). In these examples, subordination was prioritized over absorption. Control involved patronage relationships with the rulers of subordinate polities, who themselves continued to govern their polity and control their own clients in the same manner as if they were entirely autonomous (see Calnek 1982: 56; Lohse and Valdez 2004: 5). Furthermore, the dynamic waxing and waning of larger polities left smaller ones constantly drifting in and out

of their control in such a manner that left little tangible archaeological evidence of such control (Cherry and Renfrew 1986: 150; Voorhies 1989). This situation is further complicated by the nature of internal control. Rulership of multiple nuclei cities with several similarly sized palaces may have flipped between competing internal elite factions each with their own external patrons (Baron 2016a: 126; J. Marcus 1983: 204-206; for the multiple nuclei model see Chapter 2.7).

Lower Dover shares many similarities with the other small Maya polities of the Upper and central Belize River Valley. These polities consistently have populations of 3000-6000 people and are probably more akin to towns than cities as such. The Lower Dover polity had a truncated trajectory, forming at the end of the Early Classic and persisting until the Terminal Classic (Guerra and Awe 2017). This shorter polity lifespan is fairly common among the major centers of the region, Actuncan, Blackman Eddy; Las Ruinas de Arenal, Buenavista del Cayo, Early Xunantunich, and Xunantunich all exhibit periods of relative success and decline (Brown et al. 2017; Garber et al. 2004b; Leventhal and Ashmore 2004; Yaeger and Brown 2019: 23-24). This is in stark contrast to Baking Pot and Cahal Pech which both formed in the Preclassic and persisted throughout the regional trajectory (Ashmore 2010: 63; Awe 2013; Hoggarth 2012).

There seems to be some disagreement over the extent to which the fates and fortunes of commoners were tied to apical elite rulers. Leventhal and colleagues (2010: 8) argue that there was some degree of connectivity between the upper and lower echelons of society. However, Yaeger and Brown (2019: 25) argue that despite the rise and fall of polities, most hinterland populations remained relatively stable throughout the entire developmental trajectory and that commoners merely became integrated into newer higher-level political entities, which may have been closer or further than their predecessors. This latter stance corroborates Haviland (2003: 140) who argues that the population of Tikal saw little change during the period around AD 500-700, despite military defeats and political issues at the apical level. Much of the population was integrated into smaller neighborhood clusters of less than twenty residential groups (Blackmore 2012; Yaeger 2010b: 244), and larger urban districts situated around intermediate elite actors associated with minor centers (Connell 2003, 2010; Leventhal 1983: 68; Robin 2012b). Intermediate elite headed district units like Chan, Tutu Uitz Na, Floral Park, Texas (Barton Ramie), Settlement Cluster C, Zubin, North Caracol Farm, and Chaa Creek, were highly resilient and were largely active throughout the regional developmental trajectory (Walden et al. 2019). It seems

likely therefore that intermediate social units were potentially more politically important and served to hold commoner populations in place despite the dynamic cycling of power between major centers.

Nearby polity capitals like Cahal Pech and Baking Pot display many indicators of political autonomy, like royal burials, emblem glyphs, and carved monuments (Audet and Awe 2004: 57-58, 2005: 359; Awe 2008, 2013; Helmke and Awe 2012; Leventhal and Ashmore 2004; Yaeger and Brown 2019). Generally, the Belize River Valley seems to represent a complex “interstitial” region where the political control of larger hegemon overlapped at times and left a vacuum at others (Dunham, Jamison, and Leventhal 1989; Connell and Silverstein 2006). While the Lower Dover capital has been less intensively investigated than its peers, the Lower Dover apical elite seem, like their peers at other Belize River Valley polities, to have enjoyed at least some degree of political autonomy (Guerra and Awe 2017). The Lower Dover center is considered the capital of the Lower Dover polity (see Walden et al. 2019). We know that Lower Dover and the other Belize Valley polities likely fell under the aegis of Tikal, Naranjo, Caracol, or possibly even Lamanai at various points in time (A.F. Chase 2004; Helmke and Awe 2012). As Iannone and Morris (2009: 3) note, as the largest political center in the region, El Pilar also exerted political influence over the Belize River Valley, although this may too have been as a client of a larger external hegemon (Ford 2004: 249-250; Ford and Horn 2017). Riverine access to the Caribbean and the good quality alluvial soils on the valley floor no doubt incentivized external hegemon to incorporate Belize River Valley rulers into their patronage networks (LeCount and Yaeger 2010d: 339).

Evidence of Tikal’s influence on the region is most notable at the end of the Early Classic period. A ruler of Tikal presided over the accession of the king of Pacbitun in AD 485 (Helmke et al. 2006; Helmke 2019: 34). Other possible links with Tikal involve a shell gorget from Buenavista del Cayo (Yaeger and Brown 2019: 26), and the prevalence of *talud-tablero* architecture and early Classic Teotihuacan style vessels at Baking Pot (which suggest a link to Tikal due to its alliance with Teotihuacan; Colas et al. 2002; Hoggarth et al. 2016; Ricketson 1931; see Chapter 3.2.6). Neighboring polities in Guatemala, such as Ucanal fell under the aegis of Tikal at this time (Laporte and Mejía 2002: 34-39). By the end of the Early Classic, there is growing epigraphic evidence of Caracol influence at Baking Pot in the form of inscriptions on ceramic vessels (Helmke

2019: 35). This correlates well with evidence of Caracol style finger bowl caching, the placement of severed finger bones in caches at Baking Pot (Audet and Awe 2005; Awe and Helmke 2005: 44; A.F. Chase 2004: 328-330; D.Z. Chase and A.F. Chase 1998: 308-310, 319, Fig. 5; Dillon, Brunner, and Pope 1985; see McCauley 2019: 83 for a different interpretation). It seems that the rulers of Pacbitun and Minanha operated under the aegis of Caracol around this time (Healy, Hohmann, and Powis 2004; McCrae and Iannone 2011: 192; see also Ashmore 2004: 54). Evidence of Caracol influence might be evident at Pacbitun in terms of a preference for multiple interments (Skaggs and Powis 2019: 176).

Lower Dover's position in the central Belize River Valley potentially meant it fell under the sway of Caracol during the early Late Classic, but was then contested following the defeat of Caracol in AD 680 by K'ahk' Xiiw Chan Chaahk of Naranjo, and subordinate client rulers from Ucanal and Xunantunich (Helmke 2019: 68; see also Connell and Silverstein 2006). Evidence of Naranjo's hegemony over the valley at this time is apparent at Cahal Pech and particularly strong at Xunantunich, which was likely co-opted by the center (LeCount and Yaeger 2010d: 340). A jadeite plaque from Nim Li Punit in southern Belize describes its owner as the offspring of a royal marriage between the king of Naranjo and a woman of the royal lineage of Cahal Pech (Prager and Braswell 2016: 271). Elsewhere in the Belize River Valley, the distribution of high-quality ceramics produced in palace schools at Naranjo probably represent gifts from patrons to client rulers, possibly given at important diacritical feasts (Helmke 2019: 37-40; Houston, Stuart, and Taube 1992; LeCount and Yaeger 2010d: 342).

Evidence of Caracol influence resurges in the valley following AD 680, suggesting that Naranjo's hegemony was not absolute. Interestingly, evidence of finger bowl caching persists throughout the Late Classic, despite the heavy influence of Naranjo in the region. This practice is documented later in time at both Lower Dover (Guerra and Romih 2017) and Cahal Pech (Awe 2013; Cheetham 2004). Although this coincides with the expansion of Caracol in the region as evidenced by Caracol Stela 21, which likely records the capture of Chanal Chak Wak of Pacbitun in AD 702 (Helmke 2019: 36; see also Skaggs et al. 2017). Caracol may have been able to better gain a foothold in the Belize River Valley at this time because Naranjo became weakened. The resurgence of Tikal (following its defeat of Calakmul in AD 692) left Naranjo doubly pinched by Tikal and Caracol. The Naranjo ruler Yax Mayuy Chan Chaak was defeated and captured by the

Tikal king Yik'in Chan K'awiil in AD 744 (LeCount and Yaeger 2010d: 362; Martin and Grube 2008: 49, 78-79). Certainly, by the mid 700s, Caracol's fortunes had reversed and it was once again a dominant power. Caracol captured the kings of Ucanal and B'ital by AD 800 (Martin and Grube 2008: 97). The same however appears to be true of Naranjo also. A Holmul style vase naming the Naranjo ruler K'ahk' Ukalaw Chan Chaak from this period was found at Baking Pot (Audet and Awe 2005), and a sherd with the Naranjo emblem glyph was found at the Hershey site in the Sibun Valley dating to this period (Harrison-Buck 2007: 46; McAnany et al. 2002).

The Lower Dover apical elite may have been clients of the Late Classic Xunantunich regime (LeCount and Yaeger 2010d: 361), which would have effectively brought the polity under the control of their hegemon at Naranjo. While it is likely this control consisted of tribute exactions, and the furnishing of labor or warriors, elements of political control may have been more symbolic. The civic-ceremonial architecture at Lower Dover, and several other Belize River Valley polities, is only around a quarter of the size of the architecture at Xunantunich, which may suggest Xunantunich functioned as a regional paramount for a short duration in the Late Classic period (see also Willey 1956: 778). The presence of Terminal Classic royal burials at both Cahal Pech and Buenavista del Cayo seemingly indicates that as power at Xunantunich waned both of these older polities became increasingly more politically powerful (Awe 2013; Yaeger and Brown 2019: 24-25). A similar trend is also visible at Actuncan, which exhibits a Terminal Classic resurgence following the collapse of Xunantunich (Mixer 2017).

Despite a growing regional epigraphic corpus, there is a paucity of carved monuments and glyphic texts in the Belize River Valley compared to adjacent regions. This is often considered to reflect the smaller size of the polities (Helmke 2019: 31). However, smaller secondary and tertiary centers of comparable size to the polities of the Belize River Valley do have carved monuments in some other regions of the Maya world (Golden and Scherer 2013). Generally, despite being small, the Belize River Valley corpus does contain some of the earliest (Late-Terminal Preclassic) carved monuments in the Maya lowlands (Awe, Grube, and Cheetham 2009; Cheetham 2004; McGovern 2004: 57).

There is not much clear evidence of control of the Belize River Valley polities by external hegemon. The statements of political autonomy that Belize River Valley apical elites made in the

face of possible suzerains suggests that political relationships were hegemonic, and top-down policies likely involved indirect patron-client relationships (LeCount and Yaeger 2010: 40; see Freire 2015 for suzerainty concept). It remains possible that the boldness of these statements of power and autonomy may reflect an underlying insecurity (Schortman 2010: 379; see also J. Marcus 1992). The fact that various types of exotica and wealth items associated with Caracol and Naranjo appear at the polity capitals but evidence of more substantial political control is lacking suggests the rulers of Belize River Valley polities were loosely bound into the clientage networks of external patrons situated at these cities (Audet and Awe 2005). While polychrome ceramics associated with Naranjo are frequently found at client centers (Helmke 2019: 37-40; Żrałka et al. 2020: 467-8), few have been found at Lower Dover. Generally, this paucity of strong evidence of external control validates the application of the apical elite concept to the Belize River Valley polities when examining their internal political organization. While there is potential for the policies of higher-level overlords to have a trickle-down effect at the household level, it seems unlikely that the royal family at Caracol or Naranjo played an overt role in tribute demands, household economies, or local-level politics at Tutu Uitz Na or Floral Park (see argument in Sharer and Golden 2004: 41).

An alternative interpretation is that the Belize River Valley polities were allied together in a bloc, which could resist top-down incursions from larger regional hegemon. Precedence for this type of organization is apparent at the San Pedro Martir River polities of La Florida (Namaan), and Zapote Bobal, El Pajarral and La Joyanca (Hix Witz; see Foias 2013: 89, 155; Tokovinine and Zender 2012). Another example could be the loose network of polities in Southern Belize which potentially evaded top-down patronage of external suzerains (G. Braswell 2007; G. Braswell and Prufer 2009: 51). A similar Postclassic example could be Roys' (1943) Type C polities which represented an acephalous network of centers (see also LeCount and Yaeger 2010b: 26; Sabloff 1986; Sagebiel 2006; Sharer and Golden 2004: 40). Hutson (2016: 59) argues that such networks of allied peers could effectively impede top-down control by prospective external suzerains. This scenario might explain the lack of evidence of warfare apparent along the Belize River Valley compared to other regions of the Maya lowlands, and might explain why Belize River Valley apical elites could project an air of autonomy (Awe 2013). Tentative evidence for such a scenario is provided in the glyphic text on the KomKom vase from Baking Pot. Decipherment of this

inscription suggests an alliance between the rulers of KomKom (Buena Vista del Cayo) and Baking Pot, which facilitated the sacking of larger external centers like Yaxha (Helmke, Hoggarth, and Awe 2018; see also Yaeger et al. 2015). Another example of an alliance is described in Panel 2 at Xunantunich, which suggests a triple alliance between the center and the centers of Te'nib' and Took'nib' that potentially lie in the Naranjo region (Helmke, Awe, and Grube 2010: 107). Still, the apparent lack of evidence for conflict even during periods when external hegemony controlled at least some of the polities is rather profound. At no point in the trajectory is there strong evidence for the sorts of proxy wars which develop along frontiers like in the 8th century Petexbatun (O'Mansky, and Dunning 2004), or between the frontier elites of Yaxchilan and Piedras Negras (Golden et al. 2008; Scherer and Golden 2009; see also Connell and Silverstein 2006).

2.7 *Synekism*, Urbanization, and the Dynamics of Political Eclipse

A common trajectory in the evolution of polities sees a political center emerge and grow through time, with subordinate centers developing around it as the polity grows in scale (Adams 1966; Service 1975: 290-308). An alternative, perhaps less common trajectory of polity formation has been referred to as *synekism* (Soja 2000: 12-13; see also Marcus and Flannery 1996: 139-146). This involved the disembedded imposition of an emergent city on a pre-existing settled landscape with local-level political systems (A. Smith 2003; for disembedded capitals see Blanton 1976; Santley 1980; Willey 1979). Studies in urbanism have highlighted this divergent trajectory at cities like Venice, which began as 14 autonomous communities, which only later coalesced into a coherent capital and political whole (Blanton and Fargher 2012). Archaeological investigation has revealed that the ancient city of Tell Brak in northern Syria saw earlier residential clusters coalesce into a single center (Ur, Karsgaard, and Oates 2007; see also Kowalewski 2006). While Maya polities could follow a range of different spatial formats, Lower Dover adheres fairly well to the multiple nuclei model (J. Marcus 1982, 1983: 204-206; Marcus and Sabloff 2008; Robichaux 2004; Robin 2012c: 332; see also Bullard 1960: 368-369; Cheetham 2004: 141-142). Although the various nuclei do not constitute functionally comparable units as should be expected with this model (Guderjan 2007: 68), but are a single large polity capital and multiple secondary centers. Still, in contrast to Lower Dover, the neighboring polity of Baking Pot seems to have formed as

multiple nuclei with settlement clustering around intermediate elite residences in the hinterlands. Here, however, the political power and authority of these elites was completely eclipsed by the Baking Pot apical elite early in the regional trajectory, ultimately leading to a situation where the multiple nuclei were integrated into a single much larger center which acted as a centripetal force on demography and commanded the lion's share of commoner labor (see Chapters 6 and 7).

2.7.1 The Rise of Late Classic Maya Polities

The Late to Terminal Classic periods saw the rise of many new semi-autonomous political centers (de Montmollin 1995: 261-262). In some instances, these centers arose from processes of balkanization, in which a larger regional polity broke down as its member polities sought autonomy from it. This dynamic saw intermediate elites at secondary centers free themselves of their external hegemony and set themselves up as in situ suzerains. A textbook example of this dynamic is K'ahk' Tiliw Chan Yopaat of Quirigua who in AD 738 defeated his suzerains at Copan (Looper 1999; see also J. Marcus 1993: 165). Another good example involves Sacul gaining autonomy from Ucanal in the late eighth century (Carter 2016; see also Martin and Grube 2008), or Nakum breaking from Tikal in the Terminal Classic (Żrałka et al. 2020). In other instances, such as Minanha and Tipan Ch'een Uitz, a "cadet lineage" of roving elites likely fissioned successfully from a pre-existing polity, and established new polities (Andres et al. 2014; Ianone 2005, 2009: 38; Morton, Andres, and Wrobel 2019; see also Dunham, Jamison, and Leventhal 1989; Garrison and Dunning 2009; Irish and Braswell 2015). Others, such as Ixkun (Carter 2016) represent external impositions sponsored by paramount centers on occupied landscapes (Inomata 2004). The clearest example of this dynamic is Bajlaj Chan K'awiil, sent by Tikal to found a royal court at Dos Pilas in AD 648 (Martin and Grube 2008: 56). Calakmul countered this powerplay, who then sent a vassal to found a court at Cancuen in AD 651 (Kistler 2004: 1-3). Numerous examples of dynastic founders being sent from farther afield to found a polity exist, the most famous being K'inich Yax K'uk' Mo' of Copan, who likely originated at Caracol (Stuart 2007). Sometimes a more complicated chain of events unfolds, Ceibal for instance, existed as a secondary center of the Dos Pilas polity (Schele and Mathews 1991, 1998: 179-183), before establishing itself as regional suzerain in AD 830, while being "overseen" by Ucanal lord Kan Ek' Jo' Pet (Halperin et al. 2020: 483). LeCount and Yaeger (2010d: 352) note the possibility that emergent

Late Classic polities like Xunantunich and Minanha offered opportunities for larger polities, in this case, Naranjo and Caracol respectively to co-opt/command a polity and use it as a base to expand into a region (see also Iannone 2005). In theory, Lower Dover could have operated in a similar, albeit downscaled fashion.

The notion that Lower Dover could represent at top-down external imposition makes logical sense given our knowledge of the factors, which underpinned such dynamics elsewhere in the Maya lowlands at this time. The foundation of new polities or courts on important economic corridors represented an important political strategy for the rulers of polities like Calakmul and Tikal (Demarest et al. 2014; McAnany 1995). Indeed, it seems likely that the foundation of Dos Pilas and Cancuen were partly driven by a desire to control the flow of jade and obsidian (Demarest et al. 2020; see also Tokovinine and Beliaev 2013: 174-184). Lower Dover's position on the Belize River (a vital trade corridor), at the epicenter of three local elite centers, near highly productive farmland suitable for the growth of cacao at Barton Ramie (Willey et al. 1965), suggests similar motives may have underlain its formation (Guerra and Awe 2017).

Some polities formed rapidly, through local-level processes of coalescence, and have been labeled "boomtowns" (Peuramaki-Brown and Morton 2019). The handful of studies examining the political dynamics associated with this process highlights the variability apparent between late forming political centers and between such late forming centers and earlier polities, which arose through concurrent increases in political hierarchical and demography (Emery and Foias 2012; LeCount and Yaeger 2010a; Schortman, Urban, and Ausec 2001). Generally, all of these polities show quite dramatic increases in monumental architecture in a short period of time, which may reflect a broader cross-cultural pattern associated with the initial burst of construction associated with a new political entity (see for instance Cherry 1978: 431; J. Marcus 2003a). Following their Early Classic emergence, Tikal and Piedras Negras exerted centripetal forces attracting vast swathes of commoners (D.Z. Chase, A.F. Chase, and Haviland 1990: 500; Child and Golden 2008: 77; Webster and Houston 2003: 147). Late Classic centers like Dos Pilas, Aguateca, and Xunantunich attracted population but not to the same extent as their earlier counterparts (Inomata 2004; Yaeger 2010b). This may in part be because some of these late forming "greenfield" centers were impositions placed on the local landscape by external hegemony (Martin and Grube 2008: 57). Hutson (2016: 54) compares the developmental trajectory at Xunantunich to Dzibilchaltun,

another late-forming but longer-lived political center, and argues that greater aggregation might have occurred at Xunantunich had the polity not collapsed prematurely (see also Kurjack 1974). Despite the sparsely populated immediate core of Xunantunich, in-migration into the polity was high. Freiwald (2011b: 94) shows that 47% of sampled individuals from Xunantunich were non-local, a surprisingly high percentage compared to surrounding polities. These incoming migrants did not settle in the immediate core but were funneled into pre-existing districts (Yaeger 2010b). Xunantunich dwarfed its satellites, which were located up to 10km from the center (Connell 2003; Robin, Yaeger, and Ashmore 2010; Yaeger and Robin 2004).

As a late-forming polity that unified pre-existing, autonomous local elites into a single polity, Lower Dover provides another example of a polity that arose along this divergent developmental trajectory (Guerra and Awe 2017). In contrast to Xunantunich, the Lower Dover intermediate elite households were architecturally larger relative to the center and were located within a 2 km radius. In his study of Postclassic-colonial political organization in the Yucatan, Roys (1943, 1957) highlighted three types of polities; centralized hierarchical systems with at least three tiers of internal administration (Type A), similar entities with only two levels of internal administration (Type B) and loose acephalous confederacies (Type C; see also Farriss 1984: 148, 241). J. Marcus (1993) highlights how temporally fluid these types were. The trajectory at Lower Dover probably reflects something akin to a Type C transitioning into a Type A/B polity. The civic-ceremonial center was established on a large constructed platform in what was probably previously uninhabited swampland lying at the confluence of Upper and Lower Barton Creeks and the Belize River. This location was an ideal place to establish a disembedded capital, as it was epicentral to the three local elite regimes (for the analogous example of Aguateca see Inomata 2004: 186-187). Furthermore, the locale is immediately adjacent to two canoe navigable waterways, the Belize River, which formed a conduit joining the Peten and Upper Belize Valley to the Caribbean, and Upper Barton Creek which ran downstream from the Maya Mountains to the south. Upper Barton Creek connected Lower Dover to the small Lower Barton Creek polity and Pacbitun, which is 6 km west of Upper Barton Creek (Kollias 2016; Willey et al. 1965: 30).

2.7.2 The Dynamics Underlying the Rise of Lower Dover

The construction of the Lower Dover civic-ceremonial center and the emergence of the polity associated with it only occurred in the Late Classic (Guerra and Awe 2017). Currently, it remains unclear whether Lower Dover represents **(a)** an external intrusion on the landscape by an apical elite from elsewhere, either forcibly or through invitation (de Montmollin 1995: 35; Southall 1956: 181-188), **(b)** the arrival of a roving court of elites which had absconded from a larger polity in a fashion which left them without the support of that higher-level patron (Iannone 2006), **(c)** the autochthonous paramountcy of a single local elite household, possibly under the patronage of an external apical elite regime (D.Z. Chase and A.F. Chase 2014: 144), **(d)** a confederation of local elites that resulted in the building of a new central ruling center (Ashmore 2010; Carmack 1981: 3-8; LeCount and Yaeger 2010b; Restall 2001), or **(e)** some combination of these scenarios (LeCount and Yaeger 2010d: 350; B. Thomas 2004: 313). A protracted period of political rivalry between the Lower Dover local elites could have effectively opened the door to an external hegemon to step in, mediate political tensions, and gain sufficient traction to establish themselves in an apical elite position (Brumfiel 1994a: 8; Lewellen 2003: 119-130), or play one faction off against another to secure power (Elson and Covey 2006b: 8; Hicks 1994; see also LeCount and Yaeger 2010d: 359). The support of an external apical elite patron could have been an attractive prospect to a local elite wishing to tip the scales in their favor and accede to paramountcy (Arnauld et al. 2012; Goody 1966). This possibility seems somewhat unlikely as if a single local elite rose up then we might expect them to have greatly enhanced their minor center, effectively transforming it into a major center. Still, there are many reasons why they might choose to relocate, especially to a locale that is equidistant between minor centers and offers greater strategic control.

Alternatively, the threat of external involvement/invasion/control could catalyze the suppression of internal rivalries and factionalism, and unify local elites into an autochthonous confederacy (possibly through intermarriage) which would also augment control of subordinates and buffer external threats (Brumfiel 1994a: 9; Cawkwell 2005: 90; Cherry and Renfrew 1986: 154; Salmon 1982: 27). If this was the case then it might make logical sense for the emergent dynasty to found a new center strategically and symbolically between the three. It is also possible that the system of local elite rule before the rise of Lower Dover was the result of a concerted effort

on the part of the local elites to maintain some degree of leveling which actively prevented the accumulation of excessive political power in the hands of one local elite lineage (Graham 2002; see also Clastres 1987; Parkinson and Gyucha 2012). The five scenarios outlined above are examined from a hinterland perspective by charting the success of the local elites diachronically, the research will show which pre-existing local elites gained or lost in terms of wealth and status following Lower Dover's rise. For instance, if all the intermediate elites benefitted uniformly following the rise of Lower Dover, this may suggest they all played a role in its fluorescence, however, if one intermediate elite benefitted to the detriment of the others, this would suggest asymmetrical involvement in the polity's ascension.

All of these possibilities have Classic and Postclassic analogs. Generally, competitive factional situations see the elevation of one successful faction above the others, or the imposition of rule by an external power that effectively takes advantage of the factional competition (Bernbeck 2008; Brumfiel 1983: 278, 1994a, 8; Lewellen 2003). Competition might be greater in contexts like chiefdoms in which political power was less based on coercive power and more on authority (Goody 1966; Sahlins 1968: 92). Currently, there is a clear lack of coercive power in the Lower Dover hinterland before the Late Classic rise of the polity. This factional stalemate between the three autonomous local elite households would probably grant greater agency to commoners (Fallers 1956: 247; Fourquin 1976: 128; Fortes and Evans-Pritchard 1940; J. Marcus 2006: 237; Wolf 1977). Brumfiel (1983: 265) argues that as the power and authority of ruling elites grew over time, a broader array of political strategies opened up to them, including more coercive forms of control. This seems to be true at Late Classic Lower Dover.

Confederacies were more apparent in the Postclassic period; examples include the K'iche' polity centered at Q'umarkaj (Utatlán, see Carmack 1981: 3-8), and Mayapan (Roys 1962, 1967). While epigraphic and iconographic data increasingly speaks of the importance of paramount rulers in the Yucatan (Foiás 2013: 157; Grube and Krochock 2007), Postclassic rulers rarely occupy the same dominant position in art and iconography as they did in the Classic period (Kowalski 2007; Milbrath and Peraza Lope 2003). The lack of royal burials, presence of multiple large palaces, and the relative accessibility of these palaces does also support the idea of some type of council rule (Liendo Stuardo 2003; Schmidt 2007). Ringle and Bey (2001) acknowledge that *mul tepal* would probably have involved an apical ruler who held court with several highly politically agentive

intermediate elites. A hallmark of such council-based governance is the *popol nah*, or council house (see Fash et al. 1992). Evidence of some type of council governance is increasingly apparent in the Late Postclassic period. A *popol nah* was attached to the royal palace at Noh Peten (Jones 1998: 83-107; see also Bey and May Ciau 2014). Instances of multiple groups from different regions coming together to found a polity exist. Milbrath and Peraza Lope (2003) argue that Mayapan may have been founded by the Xiu's from the western Yucatan, elites from Chichen Itza, and a group from the east coast of the Yucatan. While there are far fewer examples of Classic period confederacies known archaeologically and epigraphically, the possibility that such a system existed at Lower Dover should be entertained.

Rafael Guerra's ongoing doctoral research on the civic-ceremonial center of Lower Dover will no doubt provide much clarification on the formation processes of the center (Guerra n.d.; Guerra and Awe 2017). Currently, the limited number of deep excavations through the sizeable ceremonial architecture at Lower Dover means that it remains somewhat possible, but unlikely, that Lower Dover could have represented a fourth local elite minor center in the Early Classic, which itself rose to paramouncy through autochthonous developments. If such a situation were proven true, this dissertation data could then be used to assess political competition between these four centers, in the period preceding the rise of the central polity capital.

2.8 Perspectives on Intermediate Elite Co-option

An overview of the direct and indirect strategies of incorporation used by apical elites in the Classic Maya world is provided to contextualize the milieu in which intermediate elites were operating. These strategies could also be employed by intermediate elites in their dealings with subordinates (LeCount and Yaeger 2010a).

2.8.1 Indirect Control and Patron-Client Relationships

The most indirect, or hegemonic strategy of political incorporation involves the parasitic adoption of pre-existing infrastructure and the co-option of intermediate elites (Lewellen 2003;

see also Breeze 1988). A lack of pre-existing infrastructure or elites can stymie incorporation to some degree, although clients could effectively be created from scratch by elevating locals (Goody 1966: 40). Patron-client relations are defined as a “vertical dyadic alliance ... between two persons of unequal status, power or resources each of whom finds it useful to have as an ally someone superior or inferior to himself” (Landé 1977: xx; cited in Stokes 2011: 649). This definition has been chosen because it does not emphasize the mutually beneficial nature of patron-client relationships. Following Newbury (2003: 3), patron-client relationships could be involuntary and heavily asymmetrical, effectively varying from the “mailed fist to the velvet glove”. While often being interpreted as an indirect means of incorporation, patron-client relationships can proliferate long after the point of annexation (Copland 2003; Newbury 2003: 2-7; see also Kettering 1986). Patron-client relations could even reverse so the patron becomes subordinate to their clients (Lemarchand 1977: 291-292). Indirect strategies could vary between the bestowment of honorifics (the carrot) and hostage-taking in the form of moving local elite offspring to the polity capital for “education” (the stick, see Martin 2020b: 468; Tozzer 1941: 24; for other examples see Jacobson 2001: 26; C. Morris 1998; Stark and Chance 2012).

2.8.2 Direct Control, Annexation, and Intermediate Elite Replacement

Through the precarious process of cutting out intermediate elite middlemen, apical elites can consolidate a firmer hold on their subordinates and centralize political power to a higher degree (Bailey 1969: 151). Severing intermediate brokers from the political sphere often requires substantial political power, resources, and logistical organization. Often removing an intermediary broker would mean interceding directly with their subordinates to maintain control of their entire clientage network to ensure the continued upward flow of tribute and taxation (Bailey 1969: 78, 150-151; Beals 1962). Solutions include preemptively poaching a broker’s client base from under them, replacing them with an external agent, or “raising men from the dust” to replace the original broker, but neither are simple (Goody 1966: 40; see also Bailey 1969: 79; Berdan 2006: 158-159; Covey 2006: 132; D’Altroy 1992; M. Doyle 1986). Removing intermediaries could be problematical depending on their relationships with other apical elites. Especially problematic were contexts in which intermediaries held political authority derived from long-held divinely mandated positions. Unless these intermediaries could be successfully delegitimized from their

position, then their removal could undermine collective local identities and generate mass resistance (Bailey 1969: 17; Kertzer 1988: 288). In some instances, existing intermediaries may present too many problems, which would also require the creation of new intermediate elites, or subtly recasting pre-existing intermediate elites with specialized roles. This transition from segmentary or mechanical replication of roles to organic organization would prohibit intermediate elites from stepping directly into the shoes of apical elites quite so easily (Bailey 1969: 80, 167).

The most direct forms of control and annexation might see the complete dismantling of existing governmental infrastructure and the complete replacement of a political system with an external one. The initial expansion of the Aztec empire into what would become its core region saw the annexation of eight political confederations, which often involved the removal of intractable intermediate elites (Hodge 1996: 42-43). Generally, compliant intermediate elites still often retained an important role following annexation though (see also Covey 2006; D'Altroy 2002). Often this just involved the replacement of informal patron-client relationships with titled positions with specific roles. Moreover, lower-level state infrastructure would remain intact (Grosboll 1993). Often annexation was only pursued as a course of action when it was deemed necessary. Apical elites may encourage competition among intermediate elites to prevent them from colluding and renegotiating power relations through the formation of lateral coalitions (Conlee and Schreiber 2006; D'Altroy 1992; Grimal 1992; Law 1977; C. Morris 1998). More powerful and authoritative apical regimes would have had more tools at their disposal. For instance, the bestowment of titles and honorifics by an illegitimate or politically weak elite would seem patronizing, but titles bestowed on intermediate elites by more politically powerful apical regimes would grant prestige. In other instances, apical elites may collude with intermediate elites to suppress a problematic intermediate elite faction (Fortes and Evans-Pritchard 1940: 11). Schreiber (2001: 74) lists three archaeological correlates of apical direct control. These include the restructuring of local political systems and infrastructure, economic change to support the taxation burdens associated with a higher tier of political decision-making (see also Earle and Smith 2012), and changes in ritual activities to project polity-level identities and top-down ideological narratives associated with apical elites. The use of ritualization, public engagement, and moral narratives are especially important to coercive regimes that wish to repair their image and ground it in magnanimity (Ranger 1980: 350-355).

2.8.3 Contextualizing Direct and In-direct Incorporation

There has been a tendency to associate indirect strategies with decentralized polities and direct strategies with centralized territorial polities (Hassig 1999). Decisions about whether to pursue direct or indirect strategies were more often determined by what situationally beneficial for a particular regime (Parker 2012). This dynamic lay at the heart of the Julio-Claudian shift from client kingship policies to annexation. The Roman policy of client-kingship conferred the prestigious title “friend of Rome” and no associated tribute burden, which ameliorated the crises of authority such intermediate elites faced at home if branded the puppets of a foreign power (Jacobson 2001: 26; Luttwak 1976; see also Newbury 2003: 15). Roman client kingdoms were situated on frontiers with bellicose neighbors or in areas, which were politically unstable (for a similar example with Aztec client states see M. Smith 1996). Apical elite policies curtailed the political agency of intermediate elites through isolation to reduce collusion with local populations. The aforementioned Roman client kings were all of royal blood but from different regions to those they governed (Jacobson 2001: 25). However, as holders of rare and prestigious titles, the client kings became an increasingly insular group, leading to an ill-fated gathering of client kings in Tiberias in 44 BC. This intermediate elite collusion triggered the Roman dismantling of the client system and the annexation of client kingdoms. The increasing political complexity of the empire or the fact it was “territorial” were by-products of local situations (Jacobson 2001: 34). While the relative political power of a regime determines what types of strategies are open to it, sometimes, indirect strategies are the most parsimonious form of control (Newbury 2000). Anthropology as a field represents an indirect strategy to the extent that it served as a tool for colonial rulers to learn about and co-opt local regimes (Gardner and Lewis 1996; Gledhill 2000). Direct and indirect strategies should be situated within their political contexts to understand why they were employed, not simply taken as signposting a type of political organization (Bailey 1969: 74).

2.8.4 Apical Elite Strategies of Incorporation

LeCount and Yaeger (2010a) is a touchstone for the examination of co-option and incorporation in the Classic Maya lowlands. LeCount and Yaeger (2010b: 30-39) outline a spectrum of four incorporation strategies which range from indirect to direct: **1**) patron-client

relations; **2)** dependent alliances; **3)** independent alliances; and **4)** formal control or direct annexation. This spectrum serves as a heuristic handrail for moving from political strategies to overt theories of (de)centralization (M. Doyle 1986). Table 2.1 outlines the political strategies associated with different types of political incorporation (state finance extraction is based on M. Smith 2014). LeCount and Yaeger (2010a) employ this scheme to successfully reconstruct political relationships on multiple levels of the Xunantunich polity. While epigraphy speaks to the political strategies of the loftiest apical elites, archaeological investigation shows these political strategies were also employed by lower-level elites, like the rulers of Xunantunich.

Table 2.1 LeCount and Yaeger’s (2010: 30-40) Types of Incorporation.

| | <i>Patron/Client</i> | <i>Independent</i> | <i>Dependent Alliance</i> | <i>Annexation</i> |
|-----------------------------------|----------------------|---------------------------------|--|----------------------------|
| Type of Strategy: | Indirect | Indirect/direct | Direct/indirect | Direct |
| Level of Intrusion: | Minimal | Slight | Substantial | Extreme |
| Basis of Relationship: | Mutually beneficial | Asymmetrical | Military incorporation | Military incorporation |
| State Finance: | Reciprocal gifts | Infrequent tribute | Regular taxation | Regular taxation |
| Archaeological Correlates: | High-value gifts | Foreign titles and status items | Externally imposed changes, military intrusion | Governance, deconstruction |

2.8.5 The Direct Incorporation of Xunantunich by Naranjo

Evidence of direct strategies of annexation is rare in the Maya Lowlands. After employing more indirect methods of incorporation to extend patronage over Belize River Valley polity rulers in the early Late Classic (Helmke and Awe 2012; LeCount and Yaeger 2010d: 351; see also Houston, Stuart, and Taube 1992), Naranjo began using more direct methods of incorporation. Perhaps the most well-documented example is the annexation of Xunantunich. In the Early Hats’ Chaak phase (AD 670-740) the Naranjo apical elite employed a more direct strategy of incorporation to co-opt the rulers of Xunantunich as intermediate elites (probably a dependent alliance or annexation). Naranjo’s control at Xunantunich is apparent in the truncation of the royal

court and the lack of statements of autonomy (Leventhal 2010: 79; Yaeger 2010a: 157; following Martin 2001). The Xunantunich rulers suffered reduced access to wealth items but saw their ability to command labor increase substantially, presumably strengthened by their relationships with Naranjo (Ashmore 2010: 57; LeCount and Yaeger 2010: 353-54, 359; Yaeger 2010a: 158). A likely royal individual interred in a tomb within Structure A9 (Burial 2) had a local strontium isotope signature and was interred with wealthy funerary assemblage including polychrome vessels from Naranjo and chunks of an epigraphic inscription removed as war booty by Naranjo and Xunantunich following their defeat of Caracol (Awe et al. 2019). This tentatively suggests that the Xunantunich regime was a local elite household raised to paramountcy under the aegis of Naranjo (see LeCount and Yaeger 2010d: 368). However, this remains far from clear as this individual was likely a second or third-generation member of this elite lineage, and as such might be expected to have originated in the Belize River Valley. Generally, the presence of wealth items like palace school vases at Late Classic Xunantunich was fairly low (LeCount 2010: 216). Moreover, jade and other prestige goods were rarely interred in caches, except for eccentrics fashioned from exhausted obsidian cores (J. Braswell 1998; Jamison 2010: 123, 138-139).

LeCount and Yaeger (2010d: 353-54, 359) argue that Naranjo forbade access to ostentatious wealth items. However, the absent items are not just sumptuary items such as jade masks and ceremonial maceheads, which conferred political status, but also generic wealth items like polychrome ceramics which are frequently found in commoner households and often were distributed through gift-giving and commercial exchange (Hirth 1998; Powis 2004: 66; Webster and Gonlin 1988: 187; Willey et al. 1965: 350-51). An alternative explanation involves the increased flow of these items upward to Naranjo as tribute. The more direct rulership of Xunantunich by Naranjo also meant that fewer prestige items were gifted “down the line” from patrons at Naranjo (LeCount 2010: 230). Direct control may also have prohibited the establishment of relationships with other external patrons, restricting the flow of prestige items from external sources. This situation seemingly changed with the decline of Naranjo, at this point Xunantunich regained its autonomy and sought new external relationships (Helmke, Awe, and Grube 2010: 121). Scherer (2015: 63-65) describes Late Classic royal tombs at Piedras Negras with ceramic beads painted green to resemble jade. Potentially the flow of jade into Piedras Negras was cut off by rivals. After breaking from Tikal, newly independent apical elites at Motul de San José like

Yajawte' K'inich (the Fat Cacique) pursued horizontal relationships with the San Pedro Martir River polities (Halperin and Foias 2010); a hypergamous marriage alliance with Yaxun Bahlam IV of Yaxchilan (Martin and Grube 2008); and relationships with patrons at Dos Pilas and Calakmul (Tokovinine and Zender 2012).

2.8.6 The In-Direct Incorporation of Intermediate Elites by Xunantunich

In contrast to Naranjo, the Xunantunich ruling elite employed indirect strategies in their interactions with hinterland intermediate elite district heads at Chaa Creek (Connell 2003; 2010), San Lorenzo (Yaeger 2000; 2003), Chan (Robin et al. 2012, 2014), and Callar Creek (Kurnick 2016b). These intermediate elites were incorporated and offered numerous gifts and feasts (Ashmore et al. 2004; LeCount 1999; LeCount and Yaeger 2010d: 354, 366; Yaeger 2000; 2003). In the Postclassic Yucatan, personal relations between elites and the ability to broker power on multiple political scales was fundamental to district and neighborhood integration (Okoshi-Harada 2012). Sometimes apical elites would attempt to homogenize the elite class by creating a shared identity (Brumfiel 1994b). Foias (2013: 227) suggests that the Ik' style ceramics functioned to create an elite identity because they show the ruler and secondary elites on a far more equal footing than the stone monuments of the Motul polity. A similar sharing of practices might be apparent at Xunantunich with the *patolli* game which was played within the *audiencia* chambers at Plaza A-III, where rulers met intermediate elites (LeCount and Yaeger 2010d: 355), and in intermediate elite *audiencias* and residences across the hinterlands (Connell 2003: 30-31; Robin, Meierhoff, and Kosakowsky 2012: 142, 146; Walden and Voorhies 2017: 208–213; Yaeger 2010a).

The indirect strategies that the Xunantunich elite used to incorporate hinterland elites varied between minor centers. Connell (2010: 313) argues that Xunantunich loosely incorporated the Chaa Creek intermediate elites through alliance, as integration strategies were mainly felt at the intermediate elite and not the commoner level. Domination by the Xunantunich elite saw intermediate elite ceremonial plazas fall out of use, and the intermediate elite households relocated to high-status residences with little potential for hosting public ceremonies (Connell 2003, 2010). Another interpretation could be that the original local elites had proven too intractable and had been replaced by high-status commoners who could act as more malleable intermediate elites

(Goody 1966; for Maya examples see Chinchilla and Houston 1993: 56; Houston and Stuart 2001: 73; LeCount and Blitz 2005: 68). The discontinuation of ancestor veneration may have diminished the moral authority of the intermediate elites in the eyes of their subordinates, but eased integration into an emerging polity-level identity focused on the ruling dynasty at Xunantunich. The Chaa Creek elites were richly compensated for their compliance, and their ceding of their former public ceremonial roles; the intermediate elite Plantain Group had corbelled vault architecture, which was probably constructed by stonemasons from the capital, and the artifact assemblage contained numerous prestige items (Connell 2010). Yet, close alliance with the Xunantunich elite was ultimately the downfall of the intermediate elite at Chaa Creek, as regional conflicts manifested themselves at the local level (Connell and Silverstein 2006; Robin, Yaeger, and Ashmore 2010: 319; see also Conlee and Schreiber 2006). The collapse of the apical regime at Naranjo seemingly had a similar effect on the Xunantunich rulers (LeCount and Yaeger 2010d: 364). This dynamic suggests that political fates and fortunes could become intertwined in complex ways when intermediate elites drew upon the power of their suzerains in interactions with their subordinates (see Yaeger 2003a: 46). By pursuing this course of action, subordinates no doubt saw intermediate elites as complicit in the types of coercion associated with their overlords.

At San Lorenzo incorporation hinged upon the construction of SL-13, a top-down integrative focal node designed to assimilate the district into the Xunantunich polity through ritual activities (Yaeger 2000, 2003). San Lorenzo is far closer to the Xunantunich civic-ceremonial center than the other intermediate elite districts, and the decision to construct top-down architecture to incorporate the district, as opposed to co-opting pre-existing local elites living at SL-22 and 23, might be reflective of more direct consolidation of a core area. Chan flourished following its incorporation by Xunantunich (Robin 2012a). Chan Nòhol, a subsidiary neighborhood of the broader Chan community saw little change or involvement by the Xunantunich elite (Robin 2004; Ashmore et al. 2004; Robin et al. 2010; Yaeger and Robin 2004). This suggests that following their co-option by Xunantunich, the Chan intermediate elites continued their pre-existing brokerage roles interfacing with commoner clients. In contrast, the Callar Creek intermediate elite saw their district population depleted as their land became a buffer zone between the competing polities of Buenavista del Cayo and Xunantunich (LeCount and Yaeger 2010b: 347). While occupation at the center continued into the Late Classic period, there

is little evidence of intermediate elite interactions with commoners living in the vicinity (Kurnick 2016b).

2.9 Dimensions of Power and Authority: Economy and Ritual

Sources of power are typically construed into separate heuristic spheres such as ceremonial, economic, military, or administrative (Earle 1997; Mann 1986). Waning states might lose control of these sectors, although it likewise seems possible that rising polities may never appropriate them. A lack of state control could lead to the emergence of a decentralized broker state in which apical governance is reliant on patron-client/brokerage relationships with intermediate elites and commoners who controlled aspects of the economy or religion (Lloyd 1965: 98).

2.9.1 Economic Bases of Power and Authority

Studies of ancient economies are currently emerging from the legacy of Karl Polanyi (1944, 1957) who posited that redistribution, reciprocity, and administered trade proliferated in pre-capitalist/archaic contexts, not markets and commercial exchange (Adams 1992; Halperin 1984; Oka and Kusimba 2008; M. Smith 2004). Polanyi's stance was based on justifiable misgivings about allowing modern commercialized exchange to color our perspective of the past. While, the difference between market exchange and administered political economy has long been considered one of degrees (Parsons and Price 1971: 187, 189), the last two decades have seen extensive focus on reconstructing commercial exchange systems in the ancient New World (Blanton 2013; Garraty and Stark 2010; Hirth 2020; Hirth and Pillsbury 2013). The growing awareness that commercialized exchange existed does not rule out the existence of political economies, these are not mutually exclusive alternatives. Following Blanton and colleagues (1996: 3), political economy can be defined as "the interactions of types and sources of power." Economic control would have allowed intermediate elites to create a fund with which to attract clients, mobilize labor, compete with peers, and negotiate with suzerains (Brumfiel 1994a; Hirth 1992: 25-26; McAnany et al. 2002: 125; Winter and Pires-Ferreira 1976). The political economies of

ancient states have been characterized according to various heuristic types such as prestige goods/wealth finance and staple goods/staple finance economies (D'Altroy and Earle 1985; Earle 1997; Friedman and Rowlands 1977). Wealth finance was traditionally associated with network political systems, whereas staple finance was more associated with corporate political systems (Blanton et al. 1996; Rice 2009).

While Classic Maya elites have long been characterized as mainly reliant on ritual, or ideological sources of power (Demarest 1992a, 2004; Freidel 1992), it is becoming clear that economic sources of power and authority played a fundamental role at some places. For example, both the ruling apical elite and intermediate elites at Late Classic Cancuen appear far more reliant on production and exchange than ritual (Demarest et al. 2020; Kovacevich 2007). This corroborates the idea that multiple power sources were available to Classic Maya rulers (Scarborough, Valdez, and Dunning 2003). Tourtellot and Sabloff (1972) separated Classic Maya economics based on the division between monolithic classes of commoners and elites, this involved elite participation in a prestige goods economy through which luxury goods were circulated to elite patrons and clients, and commoner participation in a utilitarian economy (Ball 1993; Blanton et al. 1996; Hammond 1991a: 260; Masson and Freidel 2012; Rice 1987). However research over the last few decades has revealed this situation to be far less clean-cut (Foias 2013: 141). Advocates of heterarchical approaches argued that many important commodities were extracted and moved entirely outside of hierarchical elite control (Potter and King 1995; Rice 1987). Traditional models of Maya economics follow a world-systems perspective in envisaging a core associated with elites who themselves created or extracted luxury items from the commoner periphery (Rathje 1972). In reality, in many cases it remains unclear whether commoners (wealthy or otherwise) or intermediate elites controlled local aspects of the economy (McAnany 2002; Whitecotton and Pailes 1986: 186).

While Polanyi's ideas about commercialized exchange were dominant, some archaeologists considered marketplace exchange to have existed in the Classic Maya lowlands (see for instance Blanton et al. 1993; Hammond 1991a; Fry 1979). Ethnohistoric sources reveal that Postclassic Maya plazas were used as marketplaces in addition to ceremonial spaces (Tozzer 1941). In the last decade, attention has shifted dramatically from craft specialization and elite finance to the identification of marketplaces and commercial exchange (J. Braswell 2010; Cap

2015; Dahlin et al. 2007; Freidel 2020; Jones 1996; King 2015, 2020; L. Shaw 2012; Wells 2006; West 2002). Following Hutson (2016: 62), commercial development can be characterized as “the degree to which goods are exchanged at marketplaces.” Commercial exchange should be characterized not as a dichotomy but as a continuum of intensity (Masson and Freidel 2012; M. Smith 2004). Marketplaces have been identified in the plazas of civic-ceremonial centers at Chunchucmil (Dahlin et al. 2007, 2010), Calakmul (Carrasco Vargas and Cordeiro Baqueiro 2012; Martin 2012), Tikal (Jones 1996), Ma’ax Na (L. Shaw and King 2015), Sayil (Wurtzburg 1991), Motul de San José (Bair and Terry 2012), and Caracol (A.F. Chase et al. 2015). Examples of marketplace facilities in the Belize River Valley include the East Plaza at Buenavista del Cayo (Cap 2015, 2020) and the Lost Plaza at Xunantunich (Cap 2019, 2020; Keller 2010: 201-203). Common features of Belize River Valley marketplaces include separate chert and obsidian tool production stands where the final touches were put to lithics, textile selling/spinning locales, and stands selling organic foodstuffs (Cap 2015, 2019, 2020; Heindel, Cap, and Yaeger 2012; Keller 2010: 203). It seems probable that elites would have regulated and taxed exchange, charged stallholders, if not patronized and controlled marketplace exchange (Cap 2019: 119; Hirth 2010; Masson and Freidel 2012: 207; Yaeger 2010b: 243). This makes logical sense given the fact that the elites commissioned and lived in close proximity to the plaza spaces in which markets were held (Guderjan 2007: 20; see also Inomata 2006).

The distribution of similar ceramic styles has often been attributed to the expansion of economic systems during periods of political centralization (Rice 1981, 1987). Bounded ceramic spheres have been associated with spatially bounded market exchange units (Hirth 1998; C. Smith 1974). High degrees of standardization of a single ceramic type across contexts likewise provides corroborating evidence of a limited number of production locales producing items for broader consumption (A.S.Z. Chase and A.M.Z. Chase 2015). Marketplace exchange has been used to explain the uniformity of ceramic production spheres within specific polities (Golden et al. 2020; see also Fry 1979), although similar patterns could be generated by unified potting traditions associated with a polity identity (LeCount 2010; Reents-Budet et al. 2012). Scarborough and Valdez (2009) argue that local markets were likely controlled by the producers themselves; in many instances, this would probably have been intermediate elite district heads. Few studies have investigated the presence of marketplaces at minor centers (for exceptions see Cap 2008; A.F.

Chase et al. 2015; Dahlin et al. 2010). It remains likely that downscaled marketplace facilities existed at the district and neighborhood levels though (Hutson 2016: 61).

Equifinality exists when it comes to identifying the correlates of market exchange, tribute, and other forms of redistribution (Dahlin et al. 2010; Garraty and Stark 2010). As King (2015: 9) points out, a single item could move through multiple different forms of exchange (see also L. Shaw 2012). Markets commonly existed alongside a range of other forms of non-commercial exchange in the Postclassic Yucatan (Tozzer 1941: 92, 97), and other preindustrial economies (Berdan 1977, 1985; Knapp and Cherry 1994; Isaac 2013). Foias (2002) shows that Postclassic lords drew funds from slave-operated orchards, taxation from commoners, upward gifts from clients, and some control of long-distance exchange. The extent to which market exchange proliferated over other forms of redistribution such as gift-giving may have varied between regions, polities, or even districts (King 2015; LeCount 2004). Despite the growing awareness of the importance of commercialized systems and marketplace exchange in the Maya region, tribute and gift-giving co-existed alongside the commercial economy (D.Z. Chase and A.F. Chase 2020: 134; Freidel 2020: 10; King 2020: 14).

Sheets (2000) outlines three scales at which exchange would have occurred, the polity or regional scale, the settlement scale, and the household scale. Some examination of economic organization at the household level has occurred to date (Douglass 2002; Gonlin 1994; Webster and Gonlin 1988). Hypothetically, at Lower Dover, a commoner household could obtain items through barter/reciprocal lateral relationships with other households (Stanish and Coben 2013), through gift-giving/clientage networks with commoner neighborhood heads, intermediate elites, or apical elites, or through commercialized exchange associated with traveling merchants or marketplaces at the district or the polity-level (Eppich 2020; King 2020; see also Masson and Freidel 2012). Understanding the extent to which economic institutions above the household scale played a role in quotidian household economics offers a solid way of assessing the relative self-sufficiency of households (VandenBosch, LeCount, and Yaeger 2010: 273). Although reaching an understanding of the degrees of economic interdependence between households is often problematized by small sample sizes or an overemphasis on households situated in atypically important resource locales (Shafer and Hester 1983). That said solid evidence exists in the Belize

River Valley of low-level specialization in chert tool production at the commoner neighborhood level (VandenBosch, LeCount, and Yaeger 2010: 276).

Classic Maya political power seems more focused on control of people and labor than on land and material resources (A.F. Chase, D.Z. Chase, and M. Smith 2009; Demarest 1992b: 151; Lucero 2006). This may relate more to “wealth in people” than “wealth in things” (Fleisher and Wynne-Jones 2010). However, “wealth in things” was often necessary to create the relationships necessary to possess “wealth in people.” Intermediate elites therefore probably played an important economic role in terms of redistributing high-value items which were either produced or sourced far away, or were locally produced, but were costly to make (Brumfiel 1994: 6; Drennan 1976: 357; Emery and Aoyama 2007; Foias 2002; Robin et al. 2015). In some instances, elites were personally crafting or putting the finishing touches on prestige items (Ball 1993; Halperin and Foias 2010; Inomata 2001a; Kovacevich 2015). These items would have represented redistributable material wealth for patrons to attract clients and build coalitions, while the items would simultaneously be symbolic of such relationships (Brumfiel and Earle 1987; D’Altroy and Earle 1985). The nature of relationships between apical elites and intermediate elites, and intermediate elites and commoners can be archaeologically reconstructed in terms of how symmetrical exchange was (Brumfiel 1994a: 10). For instance, an elite regime with coercive power might not need to offer much in the way of gifts, whereas a weaker regime might rely heavily on the redistribution of prestige goods to brokers to ensure the upward flow of taxation and resources.

2.9.2 Ideology, Ritualization, and Theatricality

Following Foucault’s (1979) argument that spectacle was vital to the construction of power in pre-modern states, archaeologists have come to view monumental ceremonial architecture present at political centers of Maya polities as institutional apparatus for generating and legitimating political power (Demarest 2004; Inomata 2006; Tsukamoto and Inomata 2014). There is no a priori reason to suspect that reliance on ritual power resulted from a lack of economic control (*sensu* Demarest 1992a: 12); highly politically and economically centralized polities, like modern nation-states heavily employ political ritual to generate national identities (Kertzer 1988). Large public rituals have long been considered the primary way in which Classic Maya rulers

ideologically created and legitimated their political power and authority over a subordinate commoner class (Demarest 1992b: 147, 2004; Freidel 1992: 116; Freidel and Schele 1988; Inomata 2006; Schele and Freidel 1990). Underlying this approach is the notion that ritual and ideology are the tools that a state entity uses to justify (or obscure) the oppression of the masses (Althusser 2008; Godelier 1986; see critiques in Bell 1992; Kertzer 1988).

Following critiques of dominant ideology theses (Abercrombie et al. 1980), Lohse (2007) questioned how receptive the broader Maya population was to such ideology. Like inscriptions and scenes on monuments, ritualization can convey elite public transcripts (Golden et al. 2008; Marcus and Fisher 1986: 61), however, it would be incorrect to presume that these public transcripts were intended solely to placate the lower echelons of society (Kertzer 1988: 178). Public ceremonies also allowed intermediate elites to muster their followers and parade their strength in the face of their peers and suzerains (Barth 1959: 119-122). Ritual has long been considered to fulfill ideological and social functions (Bell 1992: 16), such as generating social solidarity (Durkheim 1974 [1911]: 51; Radcliffe-Brown 1952: 157); affirming communal unity and resolving social conflict (Turner 1966); venting angst and engendering catharsis at the prospect of political domination (Gluckman 2013 [1963]); and fusing the lived and imagined worlds (Geertz 1973: 112-113).

Bell (1992: 191, 211) states that it is important to consider who is controlling a ritual, and how they gain from it, how the ritual might constrain their power and authority, how the ritual involves and dominates participants, and how this domination is negotiated and resisted. Studies of “rituals of resistance” have highlighted the ways in which ritual can create solidarity and identity at the sub-group level (Hall and Jefferson 2003 [1976]). Collective ritualization could bolster apical elite ideologies and aid the creation and dissemination of a polity-level identity. Jones (1997: 13) views identity formation as being grounded in “shifting, situational, subjective identifications of self and others, which are rooted in ongoing daily practice and historical experience, but also subject to transformation and discontinuity”. This view emphasizes the diachronically changing nature of identity and the fact it is grounded in group experiences. Often the ritualized creation and maintenance of identity and social solidarity at the sub-group level creates oppositions between similar groups, or even society at large (Kertzer 1988; see also Lamb 2020: 320). While generating group cohesion and stalling the formation of class consciousness at the local level, ritualization

could therefore drive an ideological wedge between a group and others, and undercut higher-level identities, political narratives, and social solidarity at larger scales (Bell 1992: 125; Habermas 1986: 44; Kertzer 1988: 69, 75). Recently, theorists have pointed to the transformative political power of ritual, and its ability to ferment political turmoil and revolution (Kertzer 1988: 2, 55; Lukes 1975). Kertzer (1988: 104) argues that “far from simply propping up the status quo, ritual provides an important weapon in political struggle, a weapon used by both contestants for power within stable political systems and by those who seek to protect or to overthrow political systems.” Subsequently, ritual should be included in the array of political strategies elites may employ in their upward, downward, and horizontal faces.

Following Bell (1992: 196), the ritual dimension is approached through the concept of ritualization, a strategic way of acting, which prioritizes and distinguishes itself from more mundane activities and “produces nuanced relationships of power, relationships characterized by acceptance and resistance, negotiated appropriation, and redemptive reinterpretation of the hegemonic order.” The emphasis Bell (1992, 1997) places on ritual action or practice as opposed to overarching religious thought translates well into ancient Mesoamerica, where it seems the onus was on ritual action (see McAnany 2013: xx). Traditionally, ritualization often has been considered a form of “soft power,” however ritualization can be coercive. For instance, Kurtz (1978: 184) describes the ways in which spectacles of mass sacrifice were orchestrated by the Aztec state to coerce intermediate elites into line (see also Conrad and Demarest 1984). Ideology can be defined as “patterned clusters of normatively imbued ideas and concepts, including particular representations of power relations” (Steger and James 2010: 13), or following Friedrich (1989: 301) as “political ideas in action.” Ideology can be conceptualized as a sub-set of cosmology, but where cosmology is inherently politically neutral, ideology relates directly to the creation, legitimation, and naturalization of power relations and inequalities (Bloch 1974: 79; see also Demarest 1992a: 4; DeMarrais, Castillo, and Earle 1996). Bell (1992: 37) argues “ritual is not some basic mechanism for resolving or disguising conflicts fundamental to sociocultural life.” Instead, ritualization can be seen as a situational and strategic response to changing social and political circumstances and crises (Bell 1992: 92; Gluckman 1965: 265; Turner 1974: 39). With this in mind, the question should be not if the intermediate elites responded ritually to the rise of the Lower Dover polity, but how? Did ritualization promote polity-level identities, or did

ritualization allow intermediate elites to subvert and discredit apical elite ideological narratives and promote district-level solidarity and their own narratives (see Brumfiel 2006)?

Strategies of ritualization have long been seen as vital to maintaining political power and authority in the Preclassic and Classic Maya lowlands (Culbert 1991; Demarest 1992a; Freidel 1992; Thompson 1954). One model of the emergence of inequality in Mesoamerica involves emergent ritual specialists employing shamanic powers to accrue political authority (Freidel 1992: 116-117; Freidel and Schele 1988; Freidel, Schele, and Parker 1993; Schele and Freidel 1990; see critique in Zender 2004). In some instances, elite ritualization involves up-scaled versions of commoner ritual (Bloch 1987: 296-297). Lucero (2003) has argued that Classic Maya ritual authority was co-opted from traditional commoner practices (see also McAnany 1995: 9, 127; Robin 2012c: 313). Love (2002: 226) has documented a shift in ritual items like feasting paraphernalia and figurines from commoner to elite households over time, which might corroborate this dynamic. In other instances, very different rituals may be enacted by actors on different levels of the political hierarchy in public and private spaces (MacLellan 2019a, 2019b). Gonlin (2007) argues Classic Maya ritual occurred on three different scales, the polity, corporate group or lineage, and household. This scheme is employed here, although the corporate group/lineage ritual is considered comparable to the intermediate elite/district scale.

Routine district-level gatherings would engender the belief among participants that there were greater degrees of involvement and consensus than may have been the case (Bell 1992: 210). Avoiding participation in local ceremonies might have been difficult for commoners, and attendance would have involved participation, which in turn would have imperceptibly conveyed involvement in the ritualization process (Bloch 1974: 71; Bourdieu 1977). Ritual can provide a risky strategy for the acquisition and accrual of political power and authority because ritual can fail, especially when external socio-political circumstances become embroiled in the process (Geertz 1973; Howe 2000). Furthermore, forms of traditional authority grounded in ritualization are infamously inflexible and can be appropriated by others (Bloch 1974: 62-65; Kertzer 1988: 50). Often rituals can appear not to have any basis in their immediate socio-political context, although often this is due to the age-old repetition of ritual precedent (Rappaport 1979: 207; see discussion in Bell 1992: 101). While ritualization has long been considered to change slowly, being

grounded in traditional orthodoxy, ritual does change and people invent new rituals to accommodate changing socio-political circumstances (Kertzner 1988: 12).

Following Turner (1968) and Tambiah (1979) ritual can be construed as performative in the sense that it involves action, it is staged and includes media, and involves indexical features, which vary in elaborateness. Maya scholars have long recognized the ritual significance and meaning inscribed into the built landscape and the use of ritual caches to animate architecture with life forces (Ashmore and Sabloff 2002; Brady and Ashmore 1999: 140; Jamison 2010; Schele and Mathews 1998: 48; Vogt 2004: 32-33). Inomata (2006; 2014) has stressed the importance of the performative nature of Classic Maya ritual. Plazas and ceremonial architecture served as integrative arenas where ritualization mobilized collective memory to disseminate political ideologies and create community identity among elites and commoners (Carmean 1998; Golden 2010; Hendon 2010; Inomata 2006; Inomata and Tsukamoto 2014; Restall 2001; Walden et al. 2020a). Once created, these ceremonial spaces probably served as the locus for a range of different ceremonial events, which occurred at variable time spans (Brady and Ashmore 1999; Freidel 1981). The scale of architectural facilities at which such ritualization occurred was no doubt crucial to the efficacious conveyance of the messages to an audience (Trigger 1990: 122). In this way, large architecture could serve to increase the power/authority of elites and increase access to labor.

Following Renfrew (1986: 15), an important question is who was meant to be impressed by monumental architecture and the types of ceremonies hosted within it? The position of plazas at hierarchically nested levels within polities and the relative accessibility and size of plazas speak to whether ritualization was inclusive or exclusive. Larger, accessible public plazas in civic-ceremonial centers have long been considered to serve an integrative function at the polity-level, whereas smaller, inaccessible plazas held more restricted, intimate rituals and gatherings involving the ruler and their peers and intermediate elites (Inomata 2014: 26; Richards-Rissetto 2012: 110; Ringle and Bey 2001: 279). Following Inomata (2014), plazas can be considered the forges of community solidarity. Within each polity, multiple different exclusive identities were being constructed simultaneously at different scales (household, neighborhood, district, and polity). The creation of multiple overlapping imagined communities and the fact the identities associated with these were tied to elite lineages and the preservation of the “House” meant that processes of community making could be far from harmonious (Hutson 2016; Smith and Novic 2012).

Classic Maya religion increasingly seems far less holistic than previously thought; many plazas and temples were dedicated to specific local versions of deities, patron deities, and ancestors (Baron 2016a, 2016b). As such ritualization within plaza spaces could serve to ideologically (dis)integrate the polity and foster separate identities (Ashmore et al. 2001; Burham et al. 2020; Carmean 1998; Lohse 2007; Tsukamoto 2014; Walden et al. 2020a). These polity divisions may come to reflect the cleavage planes along which socio-political strife emerges. On the other hand, Baron (2016a: 96-97) argues that only the single largest of the nine temples situated at the capital of the Postclassic Itza polity on Noh Peten island was associated with the patron deity of the ruling elite, the other eight temples were dedicated to the patron deities of different administrative districts of the polity, reflecting an attempt at integration by the rulers (see also Jones 1998: 73; Villagutierre Soto-Mayor 1983: 313-316). This type of arrangement in which centralized temples represented intermediate elite factions within a polity could reflect a desire to integrate the different parts of a polity, but could also represent a vehicle for factionalism (see Lucero 2007). While the creation of numerous identities at multiple nested scales of the political hierarchy need not reflect high degrees of animosity between social groups, distinguishing between these possibilities requires examining the nature of the ritual taking place, the ritual practitioners, the audience, the props, the use of symbols and how these collectively dovetailed or clashed with ritualized narratives in other parts of the polity (Walden et al. 2020a).

Many aspects of Classic Maya ritual symbolism seem akin to elite “high culture” (Baines and Yoffee 1998; R. Joyce 2000a). One has to question the involvement of commoners and the extent to which they were invested in such activities (see for example Abercrombie, Hill, and Turner 1980). Commoner ritual has received much scholarly attention in recent years. Even the smallest households in the Maya lowlands reveal evidence of ritual practices, which can often be tied to ethnographic observations (Vogt 2004). Typical household ritual involved the animation of the structure with life force through the initial caching of specific objects (Wauchope 1934; see also Boteler-Mock 1998).

There is an abundance of evidence of Classic Maya intermediate elites conducting ritual. This is evident archaeologically in the presence of some downscaled ceremonial architecture, including sizeable plazas, ancestor shrines, ballcourts, and causeways for processions, at almost every Maya center irrespective of its position on the political hierarchy (A. F. Chase 1992;

Cheetham 2004; Connell 2010; Foias 2013; Gonlin 2007; Helmke and Awe 2012; Iannone 2003; R. Joyce and Hendon 2000; Robin et al. 2012b; Walling et al. 2007; Walden 2019a; Yaeger 2010: 247). Epigraphic and iconographic evidence of intermediate elite roles in ritualization is also profuse. Classic Maya intermediate elites are often described as fulfilling ceremonial roles like scattering offerings, fire drilling, conjuring, and playing ball in the inscriptions and iconography (Jackson 2013, 2015). What currently remains unclear is the extent to which intermediate elite ritualization celebrated local-level or polity-level identities. The existence of ceremonial facilities at the intermediate elite level shows that apical elites did not monopolize ceremonial forms of power and that intermediate elites had a similar ritual platform to garner support and legitimate their authority.

The very nature of the epigraphic record implicitly suggests that the ritual duties associated with intermediate elite offices probably bolstered apical elite ideologies of divine kingship and polity-level identities because these offices were assigned by apical elites (Jackson 2015). In contrast, archaeological investigations of intermediate elite ritual duties have often been entrenched in authors' assumptions about how (de)centralized Classic Maya polities were. This top-down logic has been applied to the spacing of satellite settlements around political centers such as La Milpa (Tourtellot et al. 2000), Motul de San Jose (Emery and Foias 2012: 402, 417), and Copan (Maca, 2006, 2015). In other instances, ideas about the functions which specific structures served have proved pivotal to whether they are construed as serving ritualized (dis)integration (for ballcourts see Daneels 2008; de Montmollin 1995, 1997; Stark and Stoner 2017). Intermediate elites would also have been performing rituals, which had no overarching ideological or political implications. These might involve rain rituals to ensure a good harvest, divination rituals to solve issues for the community, individuals or households, or ritually mediating disputes between households (Robin, Meierhoff, and Kosakowsky 2012). These rituals would have formed a valuable service to commoner subordinates, which would have made districts more livable (Hutson 2016). The efficacy of such rituals however was no doubt contingent upon the necessary paraphernalia that may be tied to emic beliefs about the efficacy of ritual (Freidel 1992: 116; Howe 2000; Walden 2017). The fact that access to the instruments and facilities necessary to engage in ritual activity was so unequal at different levels of the political hierarchy was no doubt meaningful.

Ritualization served as an important conduit to a sacred landscape replete with non-human entities (Hutson n.d.). Networks of relationships between human and non-human actors would have been fundamental to political and economic success (Latour 2005), as would access to sacred places. Maya scholars have long recognized the existence of sacred landscapes comprising features like rockshelters, caves, shrines, and springs (Brady and Ashmore 1999; Brady and Veni 1992; Moyes 2020a; Vogt and Stuart 2005: 155). Ethnographic, ethnohistoric, epigraphic, and archaeological studies indicate that caves and rockshelters served as ritual locales which represented the entrance to the underworld, housed earth lords, rain gods, and other deities, and served as loci of pilgrimage, bloodletting, rain, and fertility rituals, sacrifice, and mortuary interments (Colas et al. 2000; Kosakowsky et al. 2013; Lucero and Kinkella 2015; Macleod and Stone 1995: 155; Moyes et al. 2009; Vogt and Stuart 2005: 173; Wrobel et al. 2013).

The sacred landscape has rarely been overlaid onto the human landscape to understand the complex relationships between ritual features like rockshelters, caves, shrines and springs, and settlement like major and minor centers and commoner households (but see Moyes and Montgomery 2016). Many of these sacred features were not distant pilgrimage destinations situated far from the settled human realm, but were located near fields, and sometimes literally within commoner residential house lots. This co-occurrence of the sacred and profane speaks to a belief in an animated landscape, and a complicated relationship between the quotidian and cosmological worlds, if such a distinction can even be made (Monaghan 2000). This is problematic for societies like the ancient Maya, which for all intents and purposes can be considered pre-axial, and lacking a clear divide between the sacred and profane (de Montmollin 2012; Trigger 2003; McAnany 2013: xxii; see Eisenstadt 1986: 3; Jaspers 1953 for division between axial and pre-axial worldviews). What is most necessary is an understanding of how caves and rockshelters relate to nearby settlement and the status of the occupants of those sites. When the urban landscape and sacred landscape are overlapped, a far more complex picture emerges. Sacred landscape features are situated in areas with dense demography, no doubt serving important functions at the neighborhood, district, and polity levels (Baron 2016a: 100). Hence these ritual spaces need to be integrated into our understanding of local politics between commoners, intermediate elites, and apical elites (Landau 2016; n.d.). While variability in the size of caves and their potential to accommodate mass gatherings has long been noted (Prufer 2005; Moyes et al. 2012), these spatial

possibilities have yet to be examined in relation to surrounding population numbers. It seems likely that caves associated with dense concentrations of settlement may reflect lineage caves associated with different elite and commoner lineages (Guiteras Holmes 1947: 1).

Caves were emically construed as housing earth lords who dwelled within their depths (Baron 2016a: 104; Moyes 2005; Watanabe 1990). Baron (2016a: 104) sees earth lords as more akin to general deities, but notes these beings could become associated with a particular town through a patron-client relationship. As such the cosmological denizens of such spaces likely acted as patrons to nearby elites and commoners. Given the possible political importance of such ties, caves and sacred landscape features become further intertwined with the political landscape, which accounts for archaeological evidence of caves being attacked, or hidden during times of war (Brady and Colas 2005; Helmke and Brady 2014; Moyes 2006) and epigraphic descriptions of caves “being burned” (see Helmke, Hoggarth, and Awe 2018: 69; Helmke and Brady 2014). Regardless, it seems that an understanding of patronage networks, political dynamics, and the broader landscape are incomplete without an understanding of the ways in which cosmological spaces and entities were incorporated.

2.10 Intermediate Elite Political Strategies

Archaeological reconstruction of the specific strategies which actors employed to create, maintain, and erode political power offers fresh perspectives on political dynamics (Beekman 2016; Feinman 1995; Kurnick 2016a; Moyes and Prufer 2013; Porter 2004; Berdan and Smith 1996; Stark and Chance 2012). Understanding how intermediate elite strategies articulated with underlings, peers, and suzerains is fundamental to understanding how intermediate elites responded to the formation of a higher tier of political decision making, and how the apical elite managed to control their subordinates (M. Doyle 1986: 135; Fleisher and Wynne-Jones 2010: 284; Foias 2013: 32, 43; Lohse 2013; Luttwak 1976; Hassig 1988: 19-25). Different strategies engaged the different faces of the intermediate elite with their suzerains, peers, and subordinates in different ways, although a rough and useful heuristic spectrum involves breaking apart the extent to which strategies were targeted at a positive relationship with suzerains to the detriment of subordinates

or vice versa (see Conlee and Schreiber 2006: 101). Classic Maya minor centers have long been characterized as exhibiting a startling array of variability in terms of their assemblages, architecture, material wealth, activities, and political connections (Iannone 2004: 284-285; Iannone and Connell 2003: 3). This variability is likely reflective of agentive intermediate elites strategizing and reacting to top-down and bottom-up pressures.

This section overviews a range of anthropologically documented intermediate elite strategies, these are contextualized within the literature on Classic Maya political dynamics, and their material correlates are laid out. These strategies are not considered mutually exclusive and involve the articulation of multiple intermediate elite faces. Understanding the ways in which these roles dovetailed or clashed with those of apical elites is important. Sometimes intermediate elites engage in roles similar to their apical elite overlords and simply pursue a downscaled role, for instance, archaeological study of Bronze Age Minoan villas on Crete indicates that their inhabitants pursued comparable ceremonial, economic, political, and administrative roles as the apical elites resident at larger palaces (Watrous 1984). In other contexts, intermediate elites possessed very specific types of power; for instance, in Han dynasty China, intermediate elites formed a “literati” who had control of the written word (Hsu 1988; Hsu and Linduff 1988).

Unfortunately, there is no simple relationship between integration or conflict and intermediate and apical elite roles. For instance, intermediate elite engagement in roles that differ from their apical overlords could be interpreted as indicative of a well-integrated political system exhibiting high degrees of organic solidarity. Yet equifinality arises in this interpretation, as these are also the material correlates of a heterarchical system in which certain dimensions of power existed beyond the control of the apical elite regime. Similar degrees of equifinality occur when the inverse is examined. Intermediate elite replication of apical elite roles might represent duplicitous attempts to commandeer elite sources of power and authority, or emulate respected superiors (Graeber and Sahlins 2017). A multiplicity of different strategies were available to Classic Maya elites, and these do not parse out easily into the centralized or decentralized models (de Montmollin 1995). Distinguishing between these possibilities requires moving to the next rung of abstraction and situating the broader political strategies intermediate elites employed. Conceptually, this research differs from other Maya intermediate elite studies by juxtaposing changes in intermediate elite strategies, activities, and wealth and status with those of commoners

in the surrounding districts. This comparative endeavor allows an understanding of how different intermediate elite political strategies manifested themselves at the commoner level (Blanton et al. 1996; Fargher, Blanton, and Antorcha-Pedemonte 2019; M. Smith 2015).

Political strategies could be experimented with, emulated, learned, or assembled from the bricolage of past strategies (Lillios 2011). For this reason, the historical development of political strategies can be traced over time. In this way, Classic Maya political actors were likely aware of the different policies and strategies of their forebears and counterparts and incorporated them accordingly. Potentially the importance of more collective or corporate governance under councils in the Postclassic was a direct response to issues with Classic Maya divine kingship (Andrews, Andrews V, and Robles Castellanos 2003; Masson, Hare, and Peraza Lope 2006; see also Kurnick 2019). For this reason, this dissertation seeks to understand the historically contingent development of strategies and recognizes that elites can socially learn roles and governmental strategies from contemporary and past political actors located hierarchically above and below them. An important distinction can be drawn between the initial political strategies which transgalitarian elites used to create relationships of inequality, and later strategies which were used to legitimate the status of elites and perpetuate inequality (D'Altroy and Earle 1985).

2.10.1 “Middle-Men” in Tributary Economies

Intermediate elites often extract tax, surplus, and tribute from subordinate elites and commoners on behalf of their apical suzerains (Berdan and Smith 1996; Costin and Earle 1989; D'Altroy 1992; Garraty and Stark 2002: 28; Vaughn 2006; Wernke 2006; Wright 2000; see M. Smith 2014 for taxation versus tribute extraction). Intermediate elite involvement in tributary economies offered substantial scope for strategizing, especially in decentralized political contexts, where taxation might have been construed as obligations. As such these obligations could represent an amount of labor or commodities, which could have been collected in various ways. Intermediate elites could fastidiously extract taxation from their subordinates and pass it all up the line to their patrons. In some circumstances, intermediate elites could over-extract from their subordinates by threatening top-down force if taxation demands were not met. Dutifully passing taxation and surpluses up the political hierarchy would no doubt result in rewards and benefits from their

suzerains. However, if it was felt these benefits were not substantial enough to warrant acquiescence, intermediate elites might pursue some of Scott's (1985) weapons of the weak, such as underreporting commoner household wealth, lackadaisically collecting tribute and tax, or "forgetting" to pass it all on. Apical elites could sometimes grant intermediate elites many benefits in exchange for extracting onerous burdens from their underlings, resulting in heavily unbalanced divisions in society (see Gledhill 2000: 54). Intermediate elites might extract more tribute from commoners under the guise of apical elite taxation and skim off the surplus for themselves (M. Smith 1994: 340; Stark and Chance 2012). This would increase their own fund, which could be reinvested in their commoner subordinates to maintain their downward face or to elevate themselves to outcompete peer intermediate elites. These strategies would be easier to employ if apical bureaucracy, administration, and surveillance were weakly developed. A third strategy outlined below, involves intermediate elites acting as a bulwark to prevent top-down exploitation of commoners by under-extracting tribute, or subsidizing struggling commoner households.

There is substantial evidence of Classic Maya intermediate elites acting as middlemen in apical elite tributary economies (A. F. Chase et al. 2015; Culbert 1991; LeCount and Yaeger 2010d: 358; McAnany 1995: 9; Sharer and Golden 2004). Epigraphic texts describe intermediate elites delivering taxation, gifts, tribute, and prisoners to royal palaces (J. Marcus 2006: 216; Golden and Scherer 2013: 412-14). The terms *patan* (tribute), *ikatz* (cargo), and *yubte'* (tribute cloth) are often associated with scenes showing goods (Baron 2018a, 2018b: 213; Stuart 1995: 352-393). Common tribute items included cacao, cloth, marine shell, feathers, jadeite, and ceramics (Houston 2000; McAnany 1995: 239). T. Neff (2010: 267) shows that intermediate elites in the Xunantunich hinterland were integral to apical elite tributary economies and were rewarded at the expense of their commoner subordinates (see also Robin, Yaeger, and Ashmore 2010).

Epigraphic and iconographic evidence of tribute often involves luxury items, although this is probably due to the overrepresentation of elite scenes depicted in this medium. The average commoner probably passed up foodstuffs, cloth, and labor. The fruits of commoner labor were probably visible for all to see in the pyramids and palaces of polity capitals (Demarest 1992b: 147). Taxation involving the extraction of commoner labor is easily reconstructable archaeologically from the tempo of monumental construction (Demarest 1992b: 141). While some tribute items like jadeite, marine shell, and pottery vessels are non-biodegradable, many other forms of tribute would

not be expected to appear in the archaeological record due to preservation (Baron 2018). Therefore, overt archaeological evidence of an intermediate elite role as middlemen in tributary networks is frustrated by preservation issues. While the lack of storage facilities has prompted the notion that the Classic Maya were not heavily involved in staple finance strategies, there is growing evidence that this might not be the case (T. Neff 2010; Shortman 2010: 371-372). It seems likely that the lion's share of tribute/taxation at lower levels involved the movement of agricultural staples up the political hierarchy from household heads, through lineage heads, to the apical level, as is ethnohistorically documented for the Postclassic period (McAnany 1995: 118).

Labor tax is archaeologically reconstructable (Abrams 1994), and allows an assessment of how much labor intermediate elites could harness relative to apical elites, although it can be difficult to assess where labor originated. It seems likely that intermediate elites were responsible for labor drafts for war parties and the construction of apical elite (and their own) monumental architecture. That said, it would seem that the drafting of men for military purposes was the prerogative of apical elites in the Postclassic period (Roys 1957: 6), although this may have largely been the case during periods of political centralization. Overall, labor organization can provide vital clues about the nature of tributary networks, especially in case studies in which polity capitals are demographically disembedded, because subsequently labor had to flow from commoner households through intermediate elite headed districts.

2.10.2 Controlling Frontiers and Borderlands

Intermediate elites, either through their own volition or historical circumstance, are often found on the peripheries of established polities. Firm control of the frontiers of polities was important to apical elites to regulate who, or what entered and left their territory. Stable clientage relations with frontier elites would politically circumscribe a territory and make it harder for internal intermediate elites to switch patrons to an external apical elite regime. Apical elites often specifically targeted frontier elites for patronage. This involved giving gifts and awarding honorifics in exchange for their role as top-down boundary managers for an apical regime (or more than one; Champion 1989; Chase-Dunn and Hall 1997; Connell and Silverstein 2006: 396-397; Parker 2003; Perdue 2009: 248). The aforementioned medieval Marcher Lords of Wales are a good

example of a borderland/frontier elite who managed to accrue sufficient power in their role as frontier managers to ultimately play a pivotal role in the political dynamics of the core (Holden 2008: 219; Lieberman 2010).

Intermediate elites located in borderland regions are often better situated than their peers within the heartlands of polities when it came to tactically switching patrons. In other instances, the ruggedness of frontier landscapes, or just their liminal position between opposing polities allowed intermediate elites to retain their autonomy, sometimes while acting as economic middlemen between polities (Liebold 2005: 171; Parker 2003; Scott 2009). Following Parker (2006: 79), the term “border” is used to describe physical boundaries (if they even existed as such). “Frontiers” can be characterized as interstitial zones of interaction between socio-political entities. Following, Alvarez (1995: 448), the term “borderlands” is used to refer to the zones between Belize River Valley polities instead of frontiers as these areas show no signs of militarization at any time, and it is quite possible they were entirely fluid. While the term frontier carries military connotations, the term borderlands emphasizes the multiple social, political, economic, and religious qualities of such spaces (Parker 2006: 79; see also Golden and Scherer 2013). Lastly, the term “boundaries” is used generically to refer to the edges of any social unit. For instance, the neighborhoods and districts are treated as having boundaries, but the boundaries of the Lower Dover polity are conceptualized as borderlands.

Less attention had been paid to the intermediate elites on the frontiers of Classic Maya polities until recently (Carter, Gutiérrez Castillo, and Newman 2019; Connell and Silverstein 2006; Driver and Garber 2004; Fry 2003; Golden 2010; Golden et al. 2013; Iannone 2010; Scherer and Golden 2009). Conceptualizing how these Classic Maya frontiers functioned has been complicated by our inability to identify them (Anderson and O’Dowd 1999: 594; de Montmollin 1988: 164; Golden and Scherer 2013; Hammond 1991a). There is a growing consensus among Maya archaeologists that control of territory was relatively weak and instead that political power was derived from control of people and their labor (Davenport and Golden 2016). As Hammond (1991: 275-281) argues, under these circumstances, boundary control would likely be relatively weak. Still, plenty of evidence of Classic Maya boundaries and frontiers exists (Iannone 2010: 353; McAnany 1995: 86-87; Scherer and Golden 2009; see also Halperin, Freiwald, and Iannone 2020). The early colonial Maní Land Treaty specifically mentions that the apical Halach Uinicob placed

guardians on the borders to protect their land and plots from neighboring lineages (Roys 1943: 188). It seems likely that a focus on the intermediate elites situated equidistantly between polities might provide insights into how frontiers operated and the construction of borderlands.

Arguments about the role of minor centers in the borderlands between polities have frequently taken an overt top-down or bottom-up logic. Driver and Garber (2004) argue that some minor centers were located equidistantly between major polities, and functioned as provincial administrative nodes controlled by apical elites located at polity capitals (see also Flannery 1976c: 175). Top-down control of borderland centers is indeed evident at secondary and tertiary centers on the frontier between Yaxchilan and Piedras Negras (Golden et al. 2008: 2). Other scholars have approached borderland elites as quasi-autonomous (G. Braswell et al. 2004; Carter 2016; Iannone 2010). Both these scenarios are plausible, as is a middle ground in which borderland intermediate elites act as clients to multiple hegemonies (Halperin et al. 2020; Iannone 2010). Another alternative scenario may involve borderland zones never becoming incorporated (Scarborough, Valdez, and Dunning 2003). Connell (2010: 306) argues that the Chaa Creek intermediate elites were afforded a more prestigious position in the emergent Xunantunich polity as they controlled a pivotal borderland area. Walden and colleagues' (2019a) analysis of architecture and settlement patterns revealed that most centers located in the borderlands between Belize River Valley polities lacked special features which differentiated them from minor centers located within the territories of polities. While their settlement pattern and architectural analysis skimmed the surface of variability between minor centers, investigation of architectural data and assemblages from excavations offer the potential to provide far more insight into the roles and strategies of frontier elites. Empirical investigation of elites on the borders of polities is necessary to understand their level of incorporation relative to those situated closer to the core.

2.10.3 Benevolent Interactions with Client Commoners

This strategy focuses on the intermediate elite downward face and comprises two elements; the management of local-level infrastructure which improved commoner quality of life and collectively benefitted the district, and altruistic measures to protect clients from top-down pressures (Alston and Ferrie 1999; Bailey 1969: 40; Hsu 1988; Kim 2007; Hsu and Linduff 1988;

Scott 1976; Wallace-Hadrill 1989; Wolf 1977). Intermediate elite management of agricultural systems or economic infrastructure could have represented an important service to commoners (Gilman 1980; Rathje 1983). The elite Rajputs of Khalapur commissioned temples, reservoirs, and bathing tanks for the public benefit (Hitchcock 1959). Greek and Roman *euergetism* involved a local elite moral obligation to commission integrative public architecture such as theaters, amphitheaters, and temples (Cornell and Lomas 2005). Other aspects of an elite managerial role might include divination for the benefit of the community/community members (Robin, Meierhoff, and Kosakowsky 2012: 146), mediating in disputes between households and punishing freeloaders and troublemakers (Kohler et al. 2012), or reallocating resources during times of stress to overcome local scarcities (Friedman and Rowlands 1977; Sanders and Webster 1978: 265-295).

Intermediate elite provision of a corporate shield to buffer top-down exploitation of commoners might involve making up shortfalls in taxation to insulate struggling commoner households or resisting exploitation of commoners and violations of the moral economy (Hsu 1988; Scott 1976; A. Smith 2003). This strategy could be considered group-orientated in a sense (Renfrew 1974; see also Beck 2003; Blanton et al. 1996). Intermediate elite pursuit of this strategy might involve the redistribution of prestige items to commoner clients, but also the redistribution of necessary utilitarian items to struggling households (Barth 1959). While potentially more beneficial for subordinates than aggrandizing elite strategies, such an approach can still be considered an “egalitarian façade” through which elites accrued labor and resources from their subordinates (Stein 1994b: 43; see also R. Chapman 2003; A. F. Chase and D. Z. Chase 2009; symbolic egalitarianism). While the pursuit of this strategy provided important political benefits to intermediate elites, it may not be that useful to judge the relative benevolence of ancient elites through modern concepts of morality (Gledhill 2000: 232; see also Scott 1976).

Classic Maya apical elites have long been characterized as pursuing aggrandizing strategies (Blanton et al. 1996). The political strategies of intermediate elites have received less attention, but it generally seems that lower-level elite actors employed more group-oriented strategies and were probably more engaged in mutually beneficial relationships with underlings, especially earlier in the regional trajectory (Abrams 1995; Blanton 1998; Lohse 2013; T. Neff 2010: 260; Robin, Meierhoff, and Kosakowsky 2012: 149; Robin et al. 2014). At Chan, in the hinterlands of the Late Classic Xunantunich polity, Robin (2012c: 315) describes the intermediate elite as

employing a blend of some network and but more corporate strategies. Corporate or communally beneficial strategies, which potentially underlay long-term community stability included feasting, collective ritual, and the equitable distribution of goods. Similarly, there is an awareness that apical elites also employed some more corporate, or collectively beneficial strategies. Pendergast (1992) has argued that Classic Maya elite political authority may have been derived from “noblesse oblige”, while others have noted the probable importance of moral legitimacy to Classic Maya rulers (Houston et al. 2003). This responsibility might echo contemporary Maya cargo systems in which the accrument of political power is tied to moral obligations such as the hosting of feasts and celebrations and the safeguarding of community interests (Cancian 1965; Hayden and Cannon 1982; Vogt 1969). In these contexts, office is frequently considered to be a “burden” or a “charge” (Barrera Vásquez 1980: 343-344; Redfield and Villa Rojas 1934: 156-157). Postclassic lower-level intermediate elite titles indicate a similar dynamic. For example, *ah cuch cab* translates as “they who bear the burden of the community” (Farriss 1984: 241). Indeed, the *cuch* (burden) rites associated with the accession to political office extend back to the Classic period (Pohl and Pohl 1994: 140). It seems clear that the Classic/Postclassic Maya conceived of power as a burden to both the human and non-human agents who wielded it (McAnany 1995: 155).

Postclassic commoners generally resisted oppression and exploitation by voting with their feet (Farriss 1978; Inomata 2004), or resorting to armed revolt (Bricker 1981; Edmonson 1982, 1986: 39), suggesting that intermediate elite appeasement of subordinates was probably crucial, especially if they were competing with other intermediate elite patrons for clients. While it is less clear how mobile Classic period commoners were (Inomata 2004), their ability to vote with their feet probably depended on a variety of variables such as whether elites cared about losing clients, the relative power of those elites, and the degree to which circumscription prevented commoners moving (see Cohen 1981 for “antifission institutions”; see also Martin 2020b: 460). Factors which might encourage people to stay and tolerate top-down exploitation include the abundance of local resources, or the placement of ancestors within their residences (McAnany 1995; see also Beck 2003). While there is ample evidence of Postclassic and colonial period elites attempting to pull people into a center and commoners attempting to distance themselves, this dynamic cannot be assumed in earlier periods and should be tested (de Montmollin 1995). M. Smith and colleagues (2016: 1581) argue that commoner mobility at Tikal was likely low due to the autocratic rule of

kings and the high population densities (see also Smith et al. 2020). In contrast, the potential for movement in the Belize River Valley was likely high because the political power of apical elites was lower and the relatively depopulated flanks of the valley offered possibilities for relocation. Brumfiel (1983) sees the extent of commoner mobility as fundamental to whether factional or class-based conflict ensued. Larger bloc migrations of entire lineage groups en masse are known ethnohistorically, and these types of migrations may underly dramatic shifts in the demographic landscape such as the formation of Late Classic “boomtowns” in some instances (Roys 1962: 36; see also McAnany 1995: 96; Peuramaki Brown and Morton 2019). Regardless, a political landscape which was not completely circumscribed and offered opportunities for commoner population movement would grant commoners agency and the ability to pick and choose intermediate elite patrons. This type of arrangement would almost certainly require intermediate elites to attract clients. Golden and Scherer (2013) have persuasively argued that the authority of Classic Maya political actors rested in their ability to convince clients/followers that they were trustworthy and could reward loyalty (see also Schortmann and Urban 2004).

The maintenance of a positive downward face through mutually beneficial relationships with underlings might be responsible for the long-term stability of intermediate elites and surrounding commoners in contrast to the short-lived dominance of some polities (Abrams 1995; Connell 2003; Hayden and Cannon 1982; Yaeger 2010b: 247). At some Classic Maya centers, archaeologists have found much greater proportions of higher status households (A.F. Chase and D.Z. Chase 1992; Foias 2013: 152). Rather than reflecting polities made up of elites, what this probably suggests is the average commoner was far more affluent, or simply had access to more wealth items (due to more well-developed market exchange systems potentially combined with top-down policies like symbolic egalitarianism; A.F. Chase and D.Z. Chase 2009). Manzanilla (2012: 59–62) shows that intermediate elite households at Teotihuacan were located within neighborhoods, and the resident elites would manage aspects of neighborhood life such as economic production and ritual (see also Murakami 2016). An intermediate elite management role might be most evident in the facilities they constructed which offered tangible and intangible benefits to commoners. The ceremonial architecture apparent at intermediate elite centers may have served to ritually anchor populations and could actively attract commoners (Hutson 2016: 177). The Aztec believed *calpulli* members would suffer deleterious health if they strayed too far

out of sight of their *calpulli* temple for protracted periods (López Austin 1988: 409). Overall, evidence of intermediate elite sponsorship of reservoir construction, marketplaces, or places of public integration such as plazas and temples might point to a managerial role (Walden et al. 2019). These architectural spaces represent urban services through which apical and intermediate elites might attract clients (M. Smith et al. 2016).

There are several approaches to extrapolating whether intermediate elites pursued altruistic or exploitative relationships with commoner subordinates. These include assessing general disparities in wealth and wellbeing between both intermediate elites and commoners in terms of their health, access to wealth items, and household construction and maintenance (these metrics are best approached separately as they can diverge in insightful ways (see Lesure and Blake 2002; see also Robin, Meierhoff, and Kosakowsky 2012: 135). Rathje (1983) argued that the basis of understanding whether Maya elites were functional (managers) or fungal (exploiters) involved the comparison of multiple metrics of wellbeing from many households. Spatial comparison of wealth and wellbeing metrics between districts provides a comparative perspective on the degree to which intermediate elite policies benefitted or hindered subordinate commoner's quality of life (M. Smith 1987; 2015).

Garrison, Houston, and Alcover Firpi (2019: 135) note that “ascertaining with precision where someone lives, whether these were free-holds or elite estates of a far-flung nature, some free, some enslaved, becomes wholly indeterminate”. In theory, the approach advocated by Rathje (1983) offers one solution to extrapolating between such possibilities. Comparative household archaeology gives a good idea of the relative success of individual households, and the wealth, wellbeing, and quality of life of their occupants during a particular period (Arponen et al. 2016; Munson and Scholnick 2021; M. Smith 1987, 2015; Thompson and Prufer 2021). When this type of approach is employed at multiple hierarchical scales we can arrive at a good understanding of differences between intermediate elites and their respective commoner contingents. Robin and colleagues (2014: 380) argue that the intermediate elites at Chan were less differentiated from their commoner subordinates in terms of architecture and high-value wealth items than their peers at Chaa Creek, who amassed significant quantities of ostentatious wealth items and lived in dwellings with corbelled vault architecture (Connell 2003, 2010). This spatial comparison can be compared diachronically to assess how this dynamic changed over time. For instance, Anderson (1994)

diachronically charts a decline in artifacts indicative of commensal reciprocity and gift redistribution to show a shift from political authority grounded in persuasion to a system of more coercive power in the Mississippian chiefdoms. The two major diachronic thresholds evident at Lower Dover include the transformation of fledgling elites into established local elites during the Middle to Late Preclassic transition and the incorporation of local elites into the Late Classic Lower Dover polity as intermediate elites.

Commoner labor investment in building projects provides a tangential perspective on this dynamic. Labor investment in monumental projects might result from the collective will and generate a sense of pride and community solidarity among the builders, or reflect the onerous labor burdens forced onto commoners by a coercive elite (Abrams 1994; Arnauld et al. 2012; Hutson 2016: 181; McAnany 2010: 149-153; Parker Pearson and Richards 1994; A. Smith 2011: 54). Examination of the architecture and its function allows a rough idea of where a particular district sat on this spectrum. The commoner laborers would likely have conceptualized between public architecture like reservoirs, temples, and plazas and private architecture like palaces and elite residences (Pyburn 1997; Robin et al. 2014; Sanders 1974). Likewise, the quality of construction in terms of the care and attention invested in it might speak to the commitment of the laborers (Abrams 1994; for an alternative view see Adams 1992: 216). Gauging between these two possibilities requires contextualization with metrics of commoner wellbeing because healthy, wealthy commoners might be more inclined to become attached to the fruits of their labor, than exploited and emaciated laborers who lacked access to basic amenities.

Another approach proposed by Lemonnier (2012: 194) involves examining whether or not intermediate elites attracted commoner clients by assessing the extent of residential clustering around elite households (see also Arnauld et al. 2017: 30; Earle 1978; Hutson 2016: 82; Pohl and Pohl 1994; Rice 2006: 252-276; Robin et al. 2010). As described above, Classic Maya commoner populations were able to “vote with their feet”. Arnauld and colleagues (2017: 15) note migration and mobility (local scale population movement) has not received a huge amount of attention in the Maya lowlands (for the distinction between mobility and migration see Anthony 1990: 901). It is becoming increasingly clear that Classic Maya populations moved around the landscape with some regularity (Cucina 2015; Freiwald 2011a, 2011b, 2020; Price et al. 2014; Scherer 2007; Trask, Wright, and Prufer 2012; Wright 2012). It seems quite clear that immigration was necessary for

the perpetuation of large urban cities like Teotihuacan (Storey, Márquez-Morfín, and Núñez 2012; see also Cowgill 1975), however, the extent to which issues of high infant mortality and low life expectancy plagued smaller Maya polities with fairly dispersed populations is unclear. Postclassic Maya elites actively sought to encourage commoners to move to their towns (Roys 1957; Scholes and Roys 1948). In contexts where commoners likely had high degrees of residential mobility, the degree to which they chose to cluster around intermediate elites offers an insightful avenue into the popularity of different elite regimes. Distinguishing between these possibilities is difficult using settlement pattern data alone. There are many reasons why commoners may choose to situate themselves near intermediate elites which are not tied to the benevolence of their patrons, possibilities include dependent households, people working elite landholdings, or some type of household labor service (Adams and Smith 1981; Ashmore 1981; Folan et al. 2009: 68; Freidel 1981; Gonlin 2004: 226). Equally, coercive commoner resettlement was probably possible depending on the power of elites relative to the political power of commoners in question. Although forcibly resettled commoners would probably be of questionable loyalty and more inclined to employ the “weapons of the weak” against their suzerains (Scott 1985, 1992), or seek the patronage of a more benevolent elite (Brumfiel 1994a).

Residential clustering can provide a metric of the degree to which intermediate elites successfully attracted commoner clients when used in conjunction with other approaches, which contextualize the broader relations between elites and commoners (e.g. relative labor tax rates, wealth inequalities, benevolent elite strategies). In this way, commoners may be attracted to benevolent intermediate elites with more collective policies, demanding less labor and tribute while facilitating the accumulation of wealth at the commoner household level. Conversely, more aggrandizing elites pursuing exploitative strategies might cause commoner households to move elsewhere. On the other hand, commoners may have been actively attracted to intermediate elite patrons with larger temples and a greater command of ritual (Hutson 2016: 177). Arnould and colleagues (2017: 18) acknowledge: “differentiating in situ “natural” growth from migration in an urban settlement is probably one of the most difficult challenges for the archaeologist, and assessing the rhythm of desertion is not an easy one either.” However, quantitative diachronic comparison of district populations relative to modeled internal population growth can establish whether commoners migrated in or out of the district (see Chapter 5.2.7). This provides a relative

metric of the success of intermediate elite strategies to expand their client base, especially when contextualized in relation to elite tax rates in terms of labor extraction from commoners and the relative wealth and wellbeing of commoners.

2.10.4 Ritualized Promotion of Polity-Level Identities

Intermediate elite ritualization was often crucial for the successful dissemination of top-down ideologies and polity identities. Scholars have come to increasingly see polities as representing units of unified collective identity, which were materialized in participation in ritualization (Ferguson and Mansbach 1996; Pauketat 2007; see also Fortes and Evans-Pritchard 1940: 21-22). In the Classical world, citizens of a city-state were bound together through participation in ceremonies devoted to their patron deity (Fustel de Coulanges 2010 [1901]: 193-211). The formation of a new polity would involve the replacement and delegitimization of older ritualized identities by essentially reforming older beliefs and ideologies (Comaroff 1985: 228). The projection of a new polity-level identity could destabilize pre-existing local ideologies associated with local elites and could also diminish the formation of class consciousness. New polity identities and a new imagined community had to be generated through ritualization, however, the ritual forms this took would likely be constructed from the bricolage of existing rituals as opposed to being completely new artificial constructs (Anderson 1980; Aronoff 1979: 306; Mosse 1971: 172). Alliance between intermediate and apical elites might involve some degree of ritualization to transform previously perpetuated narratives about the “other” and reconcile disparate identities into a single entity (Edelman 1969: 232). Intermediate elites were particularly important because local-level rituals at disparate locations were fundamental to demonstrating state power, and redefining local identities into a higher-level polity identity (Brumfiel 2006; Issac 1976: 367; Kertzer 1988: 23). Intermediate elite compliance in the ritualized centralization of a polity would no doubt bring top-down benefits and rewards from apical elites but might impair the legitimacy of intermediate elites in the eyes of their subordinates (Connell 2010: 296).

The formation of new polity-wide identities would have been crucial to an emergent Classic Maya polity (Schortman 2010: 374). This would involve the creation of an overarching belief system, which united those living within the territorial limits of the polity to some degree,

and likely involved veneration of patron deities and divine kings. In some instances, a unified identity might be cobbled together using pre-existing beliefs from various sub-groups of that polity. For instance, Baron (2016a: 53, 90) describes how larger hegemon might adopt the patron deities of subordinate polities. While the obvious place to examine the dynamics associated with this emergent polity identity would be the civic-ceremonial core, changes in intermediate elite ritualization can also speak to the role of such actors when integrating commoner populations into that overarching polity-level identity. The plazas constructed by intermediate elite and apical elite actors can be construed as the arenas in which different political ideologies were disseminated (Tsukamoto 2014; see also Gillespie 2010; Hendon 2010; Inomata and Tsukamoto 2014; Restall 2001). Understanding the role of intermediate elites in disseminating broader level ideologies is possible through understanding the types of monumental architecture constructed (Walden et al. 2019), the size and relative accessibility of plaza spaces (A. Joyce and Weller 2007; Inomata 2006; Tsukamoto 2014), and the ritual objects, burials, and caches present in construction contexts (Gonlin 2007; Halperin 2007; Triadan 2007).

Robin and colleagues (2014) use the scale of ceremonial facilities associated with the Chan intermediate elite household to argue that they could incorporate most of the surrounding commoner population in ceremonies and this reflected a group orientated or corporate strategy. While the sizeable middens created from feasting debris speak to a more corporate dynamic, equifinality exists, as individualizing apical elites also organized large public ceremonies in upscaled versions of plazas and pyramids. Yaeger (2000) combines multiple lines of evidence to argue that SL-13, a ceremonial plaza just outside the main San Lorenzo cluster, was not an intermediate elite residence as it lacked an ancestral shrine and had no residential architecture. SL-13 rose and fell synchronously with the Xunantunich polity capital, strongly suggesting that the plaza represented an integrative node constructed in a top-down fashion by the Xunantunich apical elite. Pre-existing intermediate elite residences at SL-22 and SL-23 showed evidence of hosting ceremonies and feasts, possibly suggesting these intermediate elites proved intractable, which necessitated the construction of top-down architecture on the part of the Xunantunich regime (see also Hare and Masson 2012: 241-242). More frequently, apical elite co-option of intermediate elites in patron-client relationships would likely have involved duties associated with promulgating polity-level ritualized identities (Yaeger 2003a: 54). The integration of the previously autonomous

Mountain Cow (Cahal Pichik and Hatzcap Keel) polity into Caracol saw the addition of new special function plazas, which allowed the dissemination of Caracol ideologies and a polity-level identity focused on symbolic egalitarianism (D.Z. Chase and A.F. Chase 2003: 111; J. Morris 2004a: 147; see also J. Morris 2004b; Murtha 2015). Yaeger (2000) sees the rise of Xunantunich involving the construction of a new polity-level identity, which could dovetail or clash with existing ideologies and local identities (see also Ashmore 2004: 312). Haviland (2015: 122) sees heightened evidence of top-down rituals to integrate nobles during periods of dynastic change at Group 7F-1, a large aulic elite household close to the Tikal core. LeCount (2010) has suggested that the prevalence of Mount Maloney bowls and jars across the hinterlands of Xunantunich might have reflected some type of polity-level identity. Another possibility is that these vessels were distributed through the central marketplace documented by Keller (2010) in the Lost Plaza at the Xunantunich polity capital (see Golden et al. 2020). That said these two interpretations are not mutually exclusive.

Archaeologically it seems simple to construe the ceremonial facilities situated at polity cores as being ritually opposed to the facilities present at hinterland elite centers. A. Joyce and Weller (2007) see the enclosing of elite plaza spaces with increasing numbers of structures as a way of restricting the number of commoners present in the civic-ceremonial center. Another important line of evidence into the function of elite plaza spaces involves their capacity in terms of how many people they could accommodate (neighborhood, district, or polity) and how spatially accessible they were (Awe 2008; Inomata 2006; A. Joyce and Weller 2007; Liendo Stuardo et al. 2014; Tsukamoto 2014). Traditionally scholars differentiated between large publicly accessible plazas situated at polity capitals (associated with polity-level integration) and small inaccessible private plazas (associated with royals and high-level elites; see Inomata 2006; Richards-Risetto 2012: 10; Ringle and Bey 2001: 279). In reality, more variability exists in this regard, some intermediate elite centers have large public plazas, which are spatially inaccessible for instance (Walden et al. 2020a: 196). This dynamic suggests that intermediate elites were accommodating large public audiences but they wanted to control who was attending such ceremonies and prevent others from experiencing them. Ceremonies which bolstered polity-level identities may have been carried out in more accessible open plan contexts as the ideologies espoused were in keeping with apical elite narratives. For the purposes of this dissertation, data are drawn from a recent analysis

of accessibility and ritual at the intermediate elite centers at Lower Dover (see Walden et al. 2020a). Walden et al. (2020a) examine spatial accessibility of ritual space at Lower Dover among the intermediate elites and examine whether different rituals and whether they served to promulgate an emergent polity-level identity or local district-level identities focused on the veneration of elite lineages and ancestry. This approach is further developed in this dissertation. If the nature of ritualization changes at the intermediate elite centers and becomes more homogeneous with practices of ritualization staged at the Lower Dover center then this would suggest intermediate elites were complicit in the construction of new forms of identity associated with the rise of Lower Dover.

2.10.5 Ritualized Promotion of Local District and Elite Identities

Intermediate elites might also have employed the opposite political strategy and employed ritualization to solidify local district-level identities and consolidate control over their commoner subordinates. Ferguson and Mansbach (1996: 13) acknowledge that multiple competing and crosscutting identities would exist on many different hierarchical levels of the Westphalian polity: “The state is only one of many collective symbols with which people identify and to which they are loyal. Individuals are subject to crosscutting pressures arising from diverse identities and loyalties. Loyalties to self and extensions of self-family, clan, caste, village, tribe, city, nation, homeland, church, political party, class, and so on-underline the political capacity of officials and compete with loyalty to the Westphalian polity.” As such, the creation of identity at one level was an important tool to intermediate elites to ensure the loyalty of their commoner subordinates.

Understanding the extent to which commoners identified with neighborhood, district, or polity-level entities is fundamental to unpicking where their loyalties lay. Following Butler (1993) identity can be conceived of as operating simultaneously on multiple different fields. Large public ritualization could pose an overt threat to overarching political control as it could unify people around a common cause and instill a particular identity within them by reinforcing juxtapositions and distinctions with other groups and identities (Carneiro 1992: 202; Kertzer 1988: 119, 169; Insoll 2007). Intermediate elite ritualization performed a suite of imagined services for commoners, which incurred ideological indebtedness (Godelier 1986). Mass ceremonies would

have been an important tool for emerging elites to attract clients initially, and a way of maintaining their loyalty over time (Kertzer 1988: 165). Ritualization could also instill solidarity and zeal, and ideologically glue a client base together under elite patronage. This could be beneficial to elite patrons because it could maintain subordinate's loyalty should their coffers become depleted, and could hinder the formation of a collective commoner consciousness (Bailey 1969: 43-45; see also Fortes 1945: 243; Kertzer 1988: 31).

Ritualization offers a vehicle for rivalries and competition, as Kertzer (1988: 112) notes “the fact that ritual can be so important in establishing and maintaining local political influence also means that the struggle by competing groups to improve their positions or to overthrow the powers-that-be will take place in part through ritual.” There are numerous instances where mass ritualization has seeped into overt rioting, and this is even true of ritualization to vent pent-up hostilities (Davis 1973: 69). For this reason, ritualization offers one way in which intermediate elites might react to their political eclipse by a higher-order power. Mass ritualized spectacles not only offered a way of exerting the upward and downward intermediate elite faces, but also the horizontal face. Ritualization could become a vehicle for competition and rivalry with peer intermediate elites (Renfrew 1986; Neiman 1997). In theory, authority grounded in ritualization would lose its legitimacy if displays of largesse ultimately drained the resources of clients in terms of taxation of foodstuffs for feasts, items for redistribution, and labor for the construction of ritual venues (Bailey 1969: 44). This could in theory constitute exploitation and undermine the authority of the leader. Many good archaeological examinations of this dynamic exist. Janusek (2002: 51-52) shows that Tiwanaku was populated by multiple competing corporate groups with internal hierarchies. These corporate entities stood in opposition to one another, which potentially drove the maintenance of very different identities, which were materialized in the veneration of specific ancestors, consumption of particular foodstuffs, and investment in work projects at the corporate group level (see also Janusek and Blom 2006: 234). Brumfiel (2006) shows how Aztec provincial elites employed ritualization to disseminate local-level fertility ideologies, not militaristic state narratives. This creation of local identities through ritualization may involve rituals of egalitarianism, which dovetail with the moral bulwark strategy outlined above (Kertzer 1988: 51).

Examination of the extent to which neighborhood and district-level rituals served to integrate those units internally, and not externally at the polity level, requires understanding the

extent to which separate ritualized identities were being promulgated at multiple levels within a polity. There is some evidence of Postclassic district-based patron deity reveration. Baron (2016: 96) notes the example of the city of Itzamkanac which had four different patron deities associated with its four quarters, and a single overarching city-level patron deity, Kukulkan, who was associated with the apical elite (see also Scholes and Roys 1948: 395). Maya archaeologists have largely focused on the role of ritual to create camaraderie and community to overcome underlying social issues associated with aggregation and inequality (Hutson 2016; Robin, Meierhoff, and Kosakowsky 2012; Yaeger 2000). Some scholars have noted that the construction of social identities invariably involves juxtaposition with other identities (see J. Fox 1994 for an application of moiety structures). Tsukamoto (2014) recognizes that multiple plazas could promote different social identities associated with their resident intermediate elites and that this process could cause socio-political friction. Connell (2003: 40) suggests that these types of district identities could be forged at minor centers. High-status commoner households possess downscaled ceremonial architecture such as larger patios for neighborhood integration and small ancestral shrines meaning they too could create neighborhood-level identities (Lohse 2007). This suggests that lower-level neighborhood and kinship-based identities existed at the sub-district level in Maya polities. Overall, the best approach taken is that advocated by Tsukamoto (2014), which requires understanding the practices of ritualization at the different intermediate elite centers. Comparison of ritual between the civic-ceremonial centers/polity capitals and intermediate elite centers provides one way of understanding the degree to which unified or diverse ritualized identities were created at these scales. This type of endeavor can be incredibly complicated by issues of equifinality (see Chapter 2.9.2). These issues are less severe when considering case studies like Lower Dover, where a clear temporal threshold for comparison allows us to see how much intermediate elite ritual changed during the emergence of the polity.

2.10.6 Legitimation of Authority through Ancestor Veneration

Ancestors form a historical conduit between people and place, which can reassert group origins and legitimacy (Chapman, Kinnes, and Randsborg 1981; Buikstra and Charles 1999; Fortes 1987: 79; Goldstein 1981; Hageman and Hill 2016; Kuijt 2008; Renfrew 1983; Saxe 1970). Ancestral remains and body parts are inherently imbued with significance and can be important

political symbols; hence heads of state can be “notorious grave robbers” (Kertzer 1988: 44). Ancestor veneration represents a political strategy, which can be drawn upon to accentuate and justify historical claims and thereby normalize systems of inequality, underpin strategies of social inclusion and exclusion, and control claims to territory and resources (Kertzer 1988: 25-26; Johnson and Earle 1987: 190; Mantha 2009; McAnany 1995: 8-9). Following McAnany (1995: 11), ancestor veneration is defined as “rituals and practices surrounding the burial and commemoration, by name, of apical ancestors of kin groups”. The construction of highly visible mortuary structures on the landscape to house ancestor remains would act as contextual cues, which reinforce social memory and generate a sense of place (R. Joyce 2003: 107; Pauketat and Alt 2003). Social memory represents a “construction of a collective notion (not an individual belief) about the way things were in the past” (Van Dyke and Alcock 2003: 2).

Ancestor veneration rituals can be incredibly important. Ritualization ties the past to the present, and the present to the future. The timelessness of ritual can alleviate social anxieties and build solidarity, and ideologically naturalize power relations (Abélès 1988; Kertzer 1988: 10). Hence, ritualized attempts to mobilize collective memory represent an important form of action (Vansina 1985: 43; see also Fowler, Borgstede, and Golden 2010; Hastorf 2010). Ritual has often been considered a tool of the oppressed; those who face overwhelming military might lack other options of resistance (Mooney 1965). Indeed, ritualization can provide the basis for irredentism. Although this seems variable, in that some regimes were fastidious in putting down non-conformist religious behaviors (Wipper 1977). Regardless, social memory represents one way in which actors can deploy and renegotiate the past as a political resource (*sensu* Herzfeld 1991).

McAnany (1995: 96) sees ancestor veneration and control of land and resources as tied to the principle of first occupancy. This involved the initial cultivator of a piece of land having a direct claim over it and is well established in the ethnohistory of the Yucatan (Tozzer 1941: 96-97). This dynamic is seen as underlying the vast inequalities often apparent in lineage organization (McAnany 1995: 97). Elites might be more likely to invest heavily in the materialization of ancestor veneration when their access to land, resources or power or authority is jeopardized; calling upon their past to justify their position in the present (Kuijt 2008; Kurnick 2013b, 2019: 51; McAnany 1995: 96). Ancestor veneration could mobilize collective memory in a way which embraced a time prior to political incorporation and invoke a timelessness that potentially

undermined the ideological narratives of apical elite political power. From an emic perspective, ancestors held power, and the ability to affect positive and negative change. By propitiating their ancestors, intermediate elites could draw upon this power, which would be construed as beneficial during times of political uncertainty (for a similar argument about patron deities see Baron 2016a: 111). Ancestor veneration and the veneration of local patron deities could have been tied to notions of community success (Baron 2016a: 170). The ancestors may also have offered important forms of social resolution to intermediate elites. Mediating disputes between commoner clients would have involved making unpopular decisions, which could undermine their standing, leaving such deliberation to patron deities and ancestors would deflect criticism from intermediate elite arbiters (Bailey 1969: 65).

While ancestor veneration has potentially been overapplied in archaeological interpretations in some regions (Whitley 2002). McAnany (1995) has illustrated that ancestor veneration has been a cornerstone of Maya religious practice from the formation of the first farming villages to the current day. Furthermore, Classic period evidence for ancestor veneration is ubiquitous from the lowest commoner households to the royal dynasties. The recording of dynastic history and construction of funerary architecture to house ancestors was clearly of utmost importance to Classic Maya elites (Ashmore and Geller 2005; Freidel and Schele 1988, 1992; McAnany 1995; Vogt 1964: 402). A good example of the legitimacy ancestry brought is evident on Altar Q at Copan, which shows the dynastic founder K'inich Yax K'uk' Mo' handing a ceremonial staff of office to the 16th ruler of the dynasty, Yax Pasaj (Sharer and Traxler 2006: 699). Ethnohistoric documentation suggests curation of important ancestral remains was fairly common (Tozzer 1941). Intermediate elites are epigraphically documented involved in dedications to the ancestors, and ancestor shrines are commonly associated with intermediate elite residences (Jackson 2015; Walden et al. 2019). These types of ancestor veneration and the legitimacy they brought intermediate elite actors (through historical traditions) may have posed a threat to apical elite actors. A good example comes from La Corona, where the hegemony at Calakmul introduced new patron deities to diminish traditional beliefs. Canuto and Barrientos Q. (2020: 193) argue that “by constructing a complex of spaces, buildings, and texts, La Corona’s Kaanul-backed rulers claimed and celebrated a moral connection to ancient (but invented) entities to undermine the (traditional) authority of the community members and their leaders who historically preceded

them.” Examples such as this indicate that Classic Maya elites were overtly aware of the political implications of ancestor veneration and the way it structured relations between elite actors and their commoner followings.

Deathways can be a fundamental way in which intermediate elites construct their own identity and contest top-down power (Tung and Cook 2006). As such, apical elites may seek to constrain the political power/authority of intermediate elites by preventing them from practicing highly elaborate and ostentatious mortuary ceremonies. Following Whitehouse and Hodder (2010) deathways could represent a form of imagistic religion in that they involve elaborate and often experientially traumatic and memorable elements. The importance of deathways to ancestor ritual in the Maya lowlands is perhaps most visibly reflected in the repetitive interment of the dead in pyramids (Coe 1956; McAnany 1995: 99-102). This practice began in small shrines and house platforms, often on the eastern side of a plaza or patio (Becker 2004: 128; D.Z. Chase and A.F. Chase 2004: 139; Ford 1981: 158; Haviland 1981; Welsh 1988: 25-26). This practice began in the Middle Preclassic and evolved over time so much so that older, larger households generally contain more burials (Haviland 1988: 123).

In the Belize River Valley, Classic Maya ancestor veneration shrines take the form of the eastern triadic structure (large eastern temple structures with northern and southern wings) which served as houses of the ancestors and the loci of ancestor veneration (Awe 2013; Awe, Hoggarth, and Aimers 2017; Conlon and Moore 2003; Garber et al. 2004b: 61; Healy et al. 2004; Iannone 1996, 2003; Micheletti 2016; Robin 2012: 11; Robin 2017; Robin et al. 2012b: 122; see also McAnany 1995: 49). E groups became common in the Late Preclassic and have a western viewing platform associated with an eastern range structure with three superstructures, or three separate structures. These arrangements were laid out so that the sunrise could be observed above the eastern structure(s) on the equinoxes and solstices from the western platform (Blom 1924; A.F. Chase, Dowd, and Freidel 2017). Belize River Valley eastern triadic structures are similar to E group complexes, which comprise a tripartite range structure on the eastern side, and a western viewing platform. From the western viewing platform, rough solar alignments existed so that one could watch the sunrise on the solstices and equinoxes above the northern, central, and southern wings of the eastern structure (Aimers 1993; Aimers and Rice 2006; Aveni and Hartnung 1989; A.F. Chase and D.Z. Chase 2017a; Guderjan 2007: 27). The functionality of E groups in the region

seems to vary, some seem not to function, whereas others do (Aimers and Rice 2006; Runggaldier, Brouwer Burg, and Harrison-Buck 2013: 73; Šprajc 2021). There is a general acceptance that functionality as solar observatories becomes less important over time (Aimers and Rice 2006). E groups have long been known to exist at Belize River Valley centers, and it seems likely that Preclassic E groups transitioned to a funerary function in the Classic period (Awe, Hoggarth, and Aimers 2017; Micheletti 2016: 80; Powis et al. 2020: 284). Awe, Hoggarth, and Aimers (2017) show that eastern triadic structures (lone eastern structures), and eastern triadic assemblages (eastern structures with an associated western structure) formed the nexus of ancestor veneration within their respective communities, based on the preponderance of elite and royal burials within (see also A.F Chase and D.Z. Chase 1995). Eastern triadic structures are not to be confused with triadic groups, which are larger triads of structures situated atop a pyramid facing an inner plaza (like Caana at Caracol; see A.F. Chase and D.Z. Chase 2017b; J. Doyle 2020: 50-51).

Eastern triadic structures contained high-status interments in crypts and tombs, sometimes with evidence of veneratory re-visitation and reentry. These structures were likely conceived of as *witz* or sacred mountains, possibly analogous to the ethnographically documented “lineage mountains” in Tzotzil beliefs (Vogt 1964: 402). Re-entry and disinterment of specific body parts are seen as common aspects of ancestor veneration in the Maya lowlands (Brown 2013; Buikstra et al. 2004; Eberl 2005; Fitzsimmons 2009, 2015: 75; McAnany 1995: 60; Welsh 1988: 171). Novotny (2016) shows that re-entry and removal of funerary remains certainly occurred, but was less common in eastern triadic structures. At these locales, ancestor veneration was focused around the continual interment of individuals in a single place over a long temporal period. In theory, then, the eastern triadic structures of the Belize River Valley may be more akin to what Hendon (2010: 121) terms “religiously charged storehouses”. The importance of such contexts involved the stratigraphic sealing of genealogy in place over the *longue durée* to fundamentally change the social and political landscape (McAnany 2013: xxii; see also McAnany and Hodder 2009; see Hodder and Pels 2011 for the concept of “history houses”). Veneration ceremonies at such sites were an important form of social memory, which tied past and present to legitimize continued access to resources and position on the landscape. As such the interment and maintenance of ancestors may be considered “memory work” (Mills and Walker 2008: 4; see also Hendon 2010: 228; Lucero 2008: 204). Furthermore, the removal of burials or destruction of shrines could also

represent “memory work” in that these activities are focused on removing, or expunging such memories (Feuchtwang 1974). The creation of social memory may tie individuals to broader neighborhoods, districts, or polities as bounded social communities (see for instance Golden 2010; Iannone 2010).

Eastern triadic structures were constructed by Belize River Valley apical elites and middle-level intermediate elites, but not by upper-level intermediate elites. Upper-level intermediate elites possessed close ties with apical elites, which potentially allowed them to bury their dead at polity capitals (Iannone 2003; Robin et al. 2012b: 116; Walden et al. 2019). The presence of these structures at Tier 3 tertiary minor centers in the Belize River Valley suggests that middle-level intermediate elite legitimacy relied upon forms of traditional authority grounded in ancestor veneration. In contrast, the more politically powerful secondary intermediate elites residing at Tier 2 minor centers show strong ties to apical elites based at the polity capitals (see Chapter 3; Walden et al. 2019; see also Iannone 2003). Examples of these structures include Bedran (Conlon and Moore 2003; Conlon and Powis 2004), BR-180 (Aimers and Rice 2006), Chan (Robin 2012), Tzuztiy K’in (Ebert and Fox 2015), Tutu Uitz Na (Walden, Biggie, and Ebert 2017) and Zubin (Iannone 1996). The landscape of the Belize River Valley region was marked by a large number of districts of commoners generally focused around intermediate elite households, which had long occupational histories, often dating back to the Middle Preclassic period (Brown 2009; Walden et al. 2019). These elite households often had eastern triadic structures, which contained the local genealogy (LeCount and Yaeger 2010d: 354; Novotny and Kosakowsky 2009). The replication of these large lineage shrines at multiple scales of the settlement hierarchy is very reminiscent of Carmack’s (1981: 161) description of the rural lineages of the K’iche’ sharing the overarching structural organization with the ruling lineages of Q’umarkaj.

2.10.7 Inclusionary Feasting to Foster District Solidarity

Elite-sponsored public feasts acted as a vehicle for commensal reciprocity through which patrons could attract commoner clients (Bray 2003; Chicoine 2011; Costin and Earle 1989; Dietler 1996: 92-97; Goody 1982). Feasting offers opportunities to integrate socially disparate peoples, reinforce alliances, reimburse workers for labor, and create social solidarity, while simultaneously

generating social debt and facilitating the accrual of political power and authority (Bourdieu 1990; Dietler and Herbich 2010; Mauss 1966). As such, feasting is often seen as a vehicle for different types of political relationship which vary along the network-corporate spectrum (Blanton et al. 1996), these can be set up on a continuum from diacritical feasting (exclusionary events which naturalize social inequalities) on one end, to inclusionary feasting (undertaken to promote solidarity) on the other (Dietler 1996: 98). As Dietler (2011: 182) argues, feasting was staged at multiple hierarchical levels of ancient polities and can offer insight into political dynamics and social change. Foodways represent an important way of constructing and maintaining group-level identities (Goldstein and Hageman 2010; Howie, White, and Longstaffe 2010). Furthermore, through repetitive consumption at particular times and in association with specific events, a particular foodstuff can become a powerful mnemonic device that promotes social memory (Eves 1996; Hamilakis 2014). Feasting could therefore, in conjunction with ritualization draw on a collective past, and be used as a powerful political tool.

Evidence of elites hosting feasts in the Maya lowlands is ethnohistorically documented in the Postclassic Yucatan, often as recompense for followers' loyalty (Tozzer 1941: 27-29, 92, 123; see also Pohl and Pohl 1994). Feasting commonly coincided with military victories, calendrical events, marriages, and ancestor veneration ceremonies (Tozzer 1941: 92). Food and drink were often consumed during rituals, and this tradition survives into the modern day (Cancian 1965; Redfield and Villa Rojas 1943; Tozzer 1941: 163; Vogt 1993: 120; Wisdom 1940: 305). Often gifts would be given alongside feasts, which were used as a type of *aide-mémoire* to remember the particular event (Tozzer 1941: 92, 97; see also McAnany 1995: 32). Feasts were also hosted by commoners (Tozzer 1941: 92), and may reflect nested levels of patron-client relationships. Feasts are a major part of patron saint veneration in the region today, and while some aspects of this practice are heavily Catholic, other aspects reflect more ancient beliefs about the feeding of patron deities (Baron 2016a: 104-105).

Epigraphic, iconographic, and archaeological evidence indicates that the hosting of feasts represented an important form of political interaction in the Classic period (Brown 2010; Connell 2010; Tokovinine 2016). Archaeological evidence of ancient Mesoamerican feasting suggests that elites employed feasts to accrue and maintain political power and authority (Ashmore, Yaeger, and Robin 2004; Clark and Blake 1994; Hendon 2003, 2010: 182-187, 197; LeCount 2001; Rosenswig

2007). The climate of the lowlands prohibited long-term storage of staples, meaning that feasting may have been an important political strategy for the generation of social debt (Brumfiel 1994a: 8; Sahlins 1968: 88-90; M.L. Smith 2017). Several archaeologists have considered feasts to be an important tool for Maya elites to build solidarity among the commoner population (Robin et al. 2014; Yaeger 2000). A. F. Chase and D.Z. Chase (2004: 117) argue that feasting might have become less important as elites secured power and authority. Feasting is detectable in the proportions of serving vessels relative to other types of vessel and the proportions of faunal remains of consumed animals in assemblages (Connell 2003: 32; Hoggarth 2012; LeCount 1999, 2001; Robin, Meierhoff, and Kosakowsky 2012: 142). Inclusionary feasting might be apparent in high volumes of more quotidian serving vessels (to cater to larger aggregations of people).

2.10.8 Diacritical Feasting to Promote Elite Solidarity

Diacritical feasting offers opportunities for intermediate elites to build and maintain positive horizontal and upward faces (Dietler 1996: 98). These occasions marked important interactions through which networks of elite actors articulated. Substantial evidence exists of Postclassic Maya elites hosting diacritical feasts. As mentioned above, Landa differentiated between inclusive and exclusive feasting in the 16th century Yucatan and described intermediate elite feasts to maintain a positive relationship with apical elites: “All the lords were careful to respect, visit and to entertain Cocom (the paramount), accompanying him, making feasts in his honor and repairing to him with important business and they lived in peace with each other amusing themselves with their accustomed pastimes of dancing, feasts, and hunting (Tozzer 1941: 27).” Often elite feasts hosted for other elites involved the giving of high-value gifts (Roys 1943: 29). These diacritical events could bring together multiple faction heads in a single context (McAnany 1995: 33). Evidence of diacritical feasting is common in Classic period epigraphy and iconography (Foias 2013). The archaeological hallmarks of diacritical feasting include large elaborate polychrome serving vessels, and vessels with glyphic inscriptions describing consumption (Dietler 2011: 183; see also Hendon 2003; Hoggarth 2012; LeCount 2001; Rice 2009).

2.10.9 Apical Elite Emulation

Intermediate elites emulate more prosperous or powerful superiors to solidify power and maintain their authority in the eyes of their subordinates. A good example of emulation being the “Versailles effect” which saw elites across Renaissance-era Europe emulate the styles and traditions of French royalty (Wiener 1984; see also Alitto 1979; Knaut 2015; Stark and Chance 2012). Leach (1954) explained how the Kachin hill tribe chiefs in Burma effectively allied themselves with Shan princes and adopted their lifestyle, who in turn were emulating Burmese and Chinese kings. Graeber and Sahlins (2017: 13) refer to this process of hierarchical emulation as galactic mimesis. In theory, emulation could range from materialistic emulation involving the procurement and display of stylistically similar items to those owned by their superiors, or constructing architecture in mimicry of prevailing styles, to more abstract types of emulation like the adoption of actual apical elite strategies of governance (Walden et al. 2019). Strategies of emulation may be one overarching reason why structural homologies exist in nested peer-polity networks (Renfrew 1986: 5).

Materialistic emulation might be most visible archaeologically in changing patterns of intermediate elite material culture to conform with styles in vogue among their apical elite overlords (DeMarrais 2005: 87; Jennings and Yepetz Alvarez 2001). Classic Maya intermediate elite emulation of apical elites is apparent in their architecture (Ashmore and Sabloff 2002: 203; Iannone 2005: 31, 2009: 36; Schortman 2010: 374), burial traditions (Scherer 2015), and ceramic styles (LeCount 2010). Intermediate elites at satellites of the Yaxchilan polity like Tecolote and La Pasadita mimicked apical elite burial traditions in terms of the location and the architectural style of their crypts (Garcia Moll 2004; Golden et al. 2008: 264). Novotny and colleagues (2018: 655) use mortuary goods to identify how the rulers of Cahal Pech emulated more senior elites at Caracol. Classic Maya intermediate elite emulation of apical elites is evident in the construction of scaled-down apical elite architecture, and the erection of carved stone monuments like those evident at major centers (Arnauld et al. 2012; A.F. Chase and D.Z. Chase 1996; de Montmollin 1995: 35; Iannone 2003; Marken and González Cruz 2007: 142). Intermediate elites in the Copan hinterland commissioned U-shaped groups in emulation of apical elite architecture at the civic-ceremonial center (Maca 2006). As mentioned above, intermediate elites at Xunantunich adopted

apical elite ceramic and architectural styles and the game of *patolli* (Connell 2010; Walden and Voorhies 2017: 208–213; Yaeger 2010a).

Two important issues emerge in interpretations of emulation. The first being the degree to which intermediate elites were directly emulating an identifiable apical elite, or whether they were just mimicking generic elements of Classic Maya “high culture” (Baines and Yoffee 1998; R. Joyce 2000a). In contexts like Yaxchilan, Copan, and Xunantunich, we can directly trace similarities between apical and intermediate elites. In other contexts though it is less clear whether intermediate elites were directly emulating specific elites or if they were simply constructing generic elite architecture. Much scholarship has examined the cosmological alignments of Classic Maya plaza plans (Ashmore 1991; Ashmore and Sabloff 2002; Houk and Zaro 2011; Schele and Freidel 1990; see also M. Smith 2005). While these different formats conveyed important symbolic messages, like most architecture (Bourdieu 1970), the extent to which these different architectural formats reflect overt decisions and strategies on the part of their commissioners versus whether they resulted from an unconscious series of cultural templates is difficult to ascertain (Abrams 1994: 22; Rapoport 1969: 47).

A second issue involves the types of interpretations we make regarding the intermediate elite emulation. Graeber and Sahlins (2017: 13-14; following Leach 1954) distinguish between “complementary schisomogenesis”, in which intermediate elites emulate suzerains to out-compete rivals, and “antagonistic acculturation” which reflects attempts by local elites to undermine higher political orders by usurping their customs or manners. In some respects, this division follows Renfrew (1986: 8), who essentially sees two types of emulation operating. The first being competitive emulation in which neighboring polities engage in increasingly elaborate displays of a similar type to out-compete one another. The other being symbolic entrainment which involves a more developed symbolic system adopted by a less well-developed one. In the Maya lowlands, these possibilities are rarely teased apart (see for example Robin 2012b: 130). Equifinality is an issue because it is difficult to distinguish whether similarities were due to top-down impositions by apical elites, intermediate elite obedient imitation of respected overlords, or intermediate elite pursuit of duplicitous mimicry in contrivance of apical sumptuary rules (Emery and Foias 2012: 407; Lohse 2007; Sanders and Webster 1988: 534; see also Tung and Cook 2006: 91). Deliberating over these possibilities is done in an ad-hoc manner after establishing similarities, which could

relate to emulation. By attempting to contextualize emulation in such a fashion, we can tease out how emulation articulated with intermediate elite faces. For instance, did intermediate elites emulate apical elites to appear similar to them in the eyes of their subordinates (mobilizing a downward face), to attempt to outcompete peers who were engaged in similar displays of emulation (horizontal face), or to curry the favor of apical elites (upward face)? Another particularly important issue when tracing emulation in the archaeological record involves the temporal trajectory along which a tradition emerged, or more specifically which group of actors possessed certain traits first. The importance of this is reflected in the growing realization that some ritual practices have now been archaeologically determined to have their roots in commoner activities in the Preclassic periods, prior to their co-option of higher-level elites (see for instance Lucero 2004; Robin et al. 2012b: 118).

In many ways, the types of nested hierarchies, which existed in the Classic period Belize River Valley may have led to the emulation of architecture. For instance, apical elites at the polity capitals may have actively sought to emulate the architecture of their apical patrons at Caracol or Naranjo. The construction process would have drawn upon labor from many districts of the polities beginning a process in which the commoner populations would have learned to construct the types of architecture, which were en vogue at the time. When their own intermediate elite district heads needed renovations, their local district labor pool may already be well trained to produce the types of architecture, just on a smaller scale.

2.10.10 Production, Redistribution, and Exchange of Wealth Items

Helms (1993) provides an anthropological perspective on the significance of the creation and procurement of prestige items to create and maintain elite power and authority. Producing and procuring prestige items also represented an important strategy for intermediate elites, as these items represented their fund for engaging in displays of competitive generosity, attracting clients, and paying off patrons (Bailey 1969; Brumfiel and Earle 1987; D'Altroy and Earle 1985). Brumfiel (1987: 676; following Douglas and Isherwood 1979: 62) argues that redistribution of these items represented an important form of political interaction in networks of competing hierarchies of elites. However, production and redistribution of wealth items to commoners may have only

represented an important elite strategy early on during the initial creation of inequalities and may have fallen by the wayside later when elite power was secure (Rathje 2002: 33-34). There is substantial evidence of Classic Maya intermediate elites both crafting, and procuring prestige items through long-distance exchange (Aoyama 1995; Ashmore 2010: 52; Brumfiel 1994a: 6; Foias 2002; Halperin and Foias 2010; Inomata 2001a; Inomata and Triadan 2000). Production involved elite crafting and patronage of attached specialists. Elite residential units may have functioned in a similar way to *oikoi* (see Foias 2013: 225; Hirth 1992). Often it is difficult to discern between whether elites themselves were personally crafting, or if they patronized subordinate crafters (Ball 1993; J. Braswell 2010: 166; Emery and Aoyama 2007; Reents-Budet 1994). In some instances, there are good reasons to suspect that skilled crafters were themselves high-level elites, such as members of the royal family (Inomata 2001a; Reents-Budet 1994: 218; Webster 1989). The high status of particular artisans was likely tied to the fact that the fashioning of sumptuary items had clear ideological implications (Callaghan and Kovacevich 2020). Long-distance procurement and manufacture of prestige goods are treated as a single strategy because often these activities are inter-related, involving raw materials being acquired through long-distance exchange and then crafted in-situ, as is the case with marine shell jewelry in much of the Maya region (Freidel, Reese-Taylor, and Mora-Marín 2002: 42).

Solid evidence of incipient elites crafting marine shell jewelry is apparent in the Belize River Valley early on in the trajectory. Specific production locales have been noted at Chan (Keller 2012), Cas Pek near the Cahal Pech polity capital (Hohmann 2002), Blackman Eddy (Cochran 2010), and Pacbitun (Powis et al. 2020: 274). Other prestige items like jade and greenstone ornaments and jewelry may have been sourced and worked in a single locale and exported once fully finished, or acquired in raw form through long-distance exchange and then worked (Foias 2002; Kovacevich 2015; Robin et al. 2015). High-value pottery was likely associated with “palace schools” associated with royal courts (Coggins 1975; Halperin and Foias 2012). A likely local palace school, producing high-quality Cabrito Cream style polychromes, was based at Buenavista del Cayo (Ball 1993; Ball and Taschek 2004: 160-161; Reents-Budet et al. 2000). Most high-value polychrome ceramics likely would have been fashioned from local clays but potentially decorated with imported pigments (Sánchez del Rio et al. 2005). Production of higher-value textiles was also common in royal and intermediate elite palaces and residential units (Halperin 2008; Emery 2012).

Reconstructions of the chaîne opératoire show that multiple households of varying statuses were involved in the manufacture of a single prestige item. Elites were more often involved in the more specialized final stages of polychrome pottery and jade production (Ball 1993; Halperin and Foias 2010; Kovacevich 2006, 2015; Robin et al. 2015; Schortman and Urban 2004). At Pacbitun, an elite residence and attached slate workshop (Structure 23) is associated with the palace complex (Healy, Hohmann, and Powis 2004: 210-211). The aulic elite households situated at Group D of Xunantunich produced wood, shell, and possibly slate items (J. Braswell 2010; T. Chapman 2013; Chapman, Sword, and Brown 2015). However, in contrast to other large polity capitals in the region like Buenavista del Cayo, there is a general dearth of evidence of the production of sumptuary items at Xunantunich, suggesting power was underpinned by other factors (LeCount and Yaeger 2010d: 353-354). Possible evidence of higher status actors crafting luxury items in the immediate vicinity of Lower Dover is apparent at BR-147, a larger tier 5 high-status commoner household, which acted as a head for the Middle River District at Barton Ramie. Structure D of BR-147 contained high densities of worked bone and marine shell items at various stages of the production sequence, indicating that the residents either personally produced, or patronized the crafting of such prestige items (Weller 2009: 96). Identifying elite procurement of raw materials from distant locales and manufacture into prestige items is possible by comparing proportions of jade, shell, lithic, slate, and stone production debris, and specific tools like drills, polishing stones, awls, and barkbeaters in intermediate elite contexts. Evidence of production of wealth items from locally available materials is more difficult, but is possible by assessing the toolkits present in intermediate elite contexts.

Wealth items produced by intermediate elites, or under their patronage could be sold through market exchange or redistributed to patrons or clients as gifts (Freidel 2020). The economic role of intermediate elites may have also involved redistribution. Traditional patron-client relationships would have involved gift-giving by both parties, this might involve elites passing down prestige items to commoners as rewards, and commoners passing gifts to elites in recognition of their services. Likewise, intermediate elites would gift prestige items to their apical elite patrons, or peer elites. These possibilities are discernable to some degree archaeologically in terms of the proportions of production debris and tools in comparison to the finished product. For instance, the redistribution of marine shell jewelry by intermediate elites to commoner clients

would be visible in high proportions of marine shell production debris in intermediate elite contexts and a lack of finished products, compared to high proportions of finished marine shell jewelry and no production debris in commoner contexts. Traditional forms of exchange such as gift-giving and barter exchange are commonly contrasted with commercial exchange centered on marketplace facilities. As mentioned above multiple different forms of exchange could likely co-exist. Marketplaces could exist independently of or under the patronage of intermediate elites. Equifinality looms large in attempts to differentiate between gift exchange, barter, and commercial exchange. Following the logic of the distributional approach (Hirth 1998, 2009b; Hirth and Pillsbury 2013), if intermediate elites were giving prestige items to commoner clients in exchange for services rendered then higher proportions of these items in high-status commoner neighborhood head households might be expected as these served as intermediaries between intermediate elites and the larger commoner population. If such items are present across all commoner households then some type of commercial exchange may have occurred (Hirth 1998; Demarest et al. 2020; Eppich 2020; Eppich and Freidel 2015; Hutson 2016: 66-68, 2020b). The intermediate elite patronage of marketplaces could be an important part of a managerial role, which saw them at least tangentially responsible for provisioning client commoner households.

2.10.11 Production, Redistribution, and Exchange of Utilitarian Items

There is generally less literature on elite crafting or patronage of quotidian items, and little discussion of the movement of staple goods like agricultural produce. This situation is compounded by the belief that long-distance transportation of staples and utilitarian goods did not make energetic sense (*sensu* Drennan 1984). However, while Drennan's cost distance threshold of 275 km represents an absolute maximum distance (Drennan 1984: 110), this distance remains too great to simply dismiss the movement of agricultural staples in the Maya region (see for instance Culbert 1988; Demarest 1992b: 142). While unlikely, this distance threshold would make the exportation of agricultural staples from the Belize River Valley to such distant centers as Palenque, Calakmul, and Copan energetically logical. It therefore remains plausible that agricultural staples could have been moved from the Belize River Valley to surrounding higher-order centers like Naranjo, Tikal, and Caracol.

The possibility that the intermediate elites were producing or managing the production of staple goods is complicated by the lenses through which the Classic Maya economy has been examined. This issue relates to the multiple nested hierarchical scales evident in Classic Maya society. Many accounts of elite crafting are focused on apical elite agents at larger polities. As such these individuals possessed more power/authority and wealth than the intermediate elites at Lower Dover. While higher-level intermediate elites and apical elites who were more engaged in the production and distribution of overt wealth items. The intermediate elites at Lower Dover, as district heads, are situated at the hierarchical level at which economic decision making is often attributed to faceless “heterarchical forces” or local communities (see for instance Demarest 1992a: 142; Potter and King 1995; Scarborough, Valdez, and Dunning 2003). As such, the production of utilitarian items might be considered more likely among these lower-level elites.

One important form of utilitarian production in which intermediate elites likely had a hand was the chipped stone tool economy. Foias (2013: 93, 224) reports on the production of lithic tools at secondary centers in the Motul de San José polity. The secondary centers of Trinidad, Chak-Maman-Tok’ and Buenavista-Nuevo San José were situated near chert sources along the north shore of Lake Peten Itza. The relative absence of stone tool working debris in the Motul de San José civic-ceremonial center and elsewhere in the hinterlands suggests that these intermediate elites monopolized chert tool production in the polity (Dahlin et al. 2010; Moriarty 2012). Ford (2004: 247) reports on intermediate elite control of an obsidian prismatic blade production workshop at Latón, an outlying peripheral community of the El Pilar polity. In theory, the Latón elites were producing prismatic blades, which were redistributed for utilitarian use among commoner households in a very large area. Another example is the Chan intermediate elite who were crafting obsidian items for redistribution in the broader district (Robin, Meierhoff, and Kosakowsky 2012: 136). A more distant, but comparable example might be Budsilhá, a secondary elite center with a specialized obsidian workshop from which blades were presumably manufactured for exchange in the market at Piedras Negras (Golden et al. 2020: 409-411).

Often arguments about whether or not production sites were controlled by elites rely heavily on the distance between that site and the nearest elite residence or ceremonial center (Shafer and Hester 1991). However, control could extend to outlying nodes and production sites which were not immediately adjacent to elite residences (Garrison, Houston, and Alcover Firpi

2019). This is archaeologically evident in the ways in which the domestic economies of commoner subordinates operated at the district level, and how these district-level economies changed over time. VandenBosch, LeCount, and Yaeger (2010) employ domestic lithic assemblages to reconstruct the lithic economy at Xunantunich, and ultimately understand higher-level processes of economic change and political integration. VandenBosch, LeCount, and Yaeger (2010: 274) state “Although there is no evidence of top-down, centrally controlled lithic economies in the Maya lowlands (Potter and King 1995: 26), little is known about the influence of local hinterland centers on the lithic economies of households located in nearby settlement zones.” At Xunantunich, excavations at commoner households, intermediate elite centers, and the polity capital revealed a complex pattern of lithic tool production and use. It would seem that low-level production locales existed within commoner neighborhoods, with some households far more specialized in utilitarian tool production in each district (VandenBosch, LeCount, and Yaeger 2010c: 276, 282; Yaeger 2000: 162). Some specialized lithic tool production sites focused on the creation of tools for more specific tasks (G. Braswell 2010). Moreover, evidence for commercialized aspects of the stone tool economy were apparent at the centralized marketplace where the finishing touches were being put to various tools at a specific stall (Keller 2010). VandenBosch, LeCount, and Yaeger (2010c: 283, 293) also note substantial variability in tool production between different districts of the Xunantunich polity but do not necessarily see any overt elite role in structuring this variability. A fundamental part of this dissertation involves tying the quotidian chipped-stone economy to the intermediate elites to understand local-level changes in the districts of the Lower Dover polity.

Intermediate elites may rely on economic strategies as they initially establish their status, but these may then fall by the wayside when they are recognized as local leaders (Rathje 2002: 33-34). Alternatively, this strategy could be continually or episodically employed to reward or attract client commoners. It is also possible that such a strategy would set expectations among clients, who would then consistently require transactional pay-offs (Gledhill 2000: 96). The three districts likely varied in redistribution patterns prior to the rise of Lower Dover, as each was overseen by local elites, if such variation continues into the Late Classic, then this would suggest redistribution remained the prerogative of the intermediate elite. Conversely, if the apical elite appropriated some of these economic sources of power, then the redistributive focus may switch from the local elite

compounds to Lower Dover, manifested as a decline in neighborhood-level variability in material culture, and greater stylistic homogeneity across the polity.

2.10.12 Sponsorship of Marketplaces

As outlined above there is a growing realization that commercial exchange formed an important part of the Classic Maya economy (Cap 2015; Dahlin et al. 2007; Freidel 2020; Jones 1996; King 2015, 2020; Masson and Freidel 2012; L. Shaw 2012 see also Chapter 2.9.1). It seems likely that downscaled marketplaces occurred in the plaza spaces associated with intermediate elite centers/district focal nodes (A.F. Chase et al. 2015; Hutson 2016: 61). If so, the intermediate elites who constructed and lived in such spaces almost certainly patronized, regulated, or taxed exchange (Cap 2019: 119; Freidel 1981; Hirth 2009; L. Shaw 2012; Yaeger 2010b: 243). This makes logical sense given the evidence of elite actors attempting to encourage commodity production and exchange through marketplaces elsewhere in Mesoamerica (Brumfiel 1987).

Most polity capitals in the Belize River Valley have at least two plazas. Based on the plaza capacities outlined by Inomata (2006) it would seem that generally, polity-level plazas were larger than necessary for packed ceremonies. It remains possible that one plaza served as a marketplace and another could serve a ceremonial function simultaneously on the same day. The co-occurrence of such activities is hard to ascertain but the possibility they were intertwined may suggest ritual and economic power were interlinked in interesting ways. Detecting marketplace exchange at the intermediate elite centers is more difficult. For various reasons, the high-resolution methods for identifying marketplace stalls developed by Dahlin and colleagues (2007) and Cap (2015; see also Cap 2012) were not possible given the scope of this dissertation (see Chapters 5.6.2., 8.5, and 11.3). Instead, a modified version of the distributional approach was employed to assess the degree to which imported items were distributed within districts over time to attempt to gauge the degree of commercialized exchange (Hirth 1998; Hoggarth 2012; M. Smith 1999). While such patterns are not necessarily indicative of commercialized exchange associated with a marketplace (alternatives may include itinerant merchants moving between houses or some type of low-level barter economy). Sizeable differences between districts spatially, or temporally might reflect the emergence or decline of higher-level commercialized exchange associated with a marketplace. A

stronger case for an increase in commercialized exchange associated with a marketplace could be made after the construction of new plazas, such as those found at Lower Dover in the Late Classic, especially if distributional patterns changed in a homogeneous fashion across the various districts.

2.10.13 Changing and Retaining Roles and Strategies

Intermediate elites may pursue their original strategies and relationships with commoners despite incorporation into a higher political order. Alternatively, intermediate elites may be forced, or take the opportunity, to recast themselves, developing new sources of authority and repositioning themselves with respect to commoners. Bailey (1969: 134) argues that Indian princes who successfully transitioned from being powerful intermediate elites with mandates from the British, to local figureheads, managed to effectively reverse their roles to ensure their legitimacy. Furthermore, intermediates may retain roles, which the apical elites did not desire, or could not appropriate, like minor ritual duties (Jackson 2015). The presence of ceremonial architecture at most minor centers irrespective of whether these centers were incorporated into the political domains of larger polities, probably means ceremonial activity was a hierarchically nested elite role irrespective of broader polity affiliation (G. Braswell 2007: 72-74; A.F. Chase and D.Z. Chase 1996; Lucero 2007). At Chaa Creek, local elites abandoned public ceremonial architecture in favor of more private residences upon incorporation into the Xunantunich polity (Connell 2010). A similar dynamic may also be apparent at Callar Creek, where intermediate elites were not heavily involved with surrounding commoners (Kurnick 2016b). The local elites at Chan switched from producing marine shell items for redistribution to sourcing them externally after the rise of Xunantunich (Keller 2012; Robin et al. 2015). Tracing how strategies changed among the intermediate elites as Lower Dover rose will illuminate their agency and the ways in which they articulated with their overlords and subordinates.

2.11 Factors Structuring Intermediate Elite Incorporation and Agency

Investigation of the causal factors that shaped the patterned variability in intermediate elite agency is important for understanding the rise of Lower Dover as a polity. Moreover, assessing the underlying causal factors which shaped variability allows us to move from reconstructing local politics to creating comparative models which can be employed in other Classic Maya polities. With these goals in mind, a series of plausible factors responsible for structuring changes in the agency and strategies of intermediate elites are now proposed.

2.11.1 Geographic Distance

The Lower Dover polity covers a small area, and the intermediate elite households are close to the capital. Despite this, distances remain relative to the political power/authority of the apical elite in the center. Conventional logic born of world-systems approaches underlies the assumption that geographic distance from the center would structure the degree of integration of the periphery (Chase-Dunn and Hall 1997; for Mesoamerican applications see Blanton and Fargher 2012; Rathje 1972; Schortman and Urban 1999). Michael Doyle (1986: 38) notes the importance of geographic distance in structuring the degree of direct versus indirect control. This dynamic might be apparent at Postclassic Itza kingdom at Noh Peten. Ethnohistorical sources suggest that the Noh Peten polity possessed core areas that consistently fell under the jurisdiction of the centralized regime, whereas more distant areas fell in and out of the sway of centralized control (Jones 1998). Foias (2013: 90) argues that the shorter distances between Naranjo and its client regime at Xunantunich compared to greater distances between Motul de San Jose and Tikal may have been responsible for the greater degree of co-option, and the fluorescence of Xunantunich under the aegis of Naranjo, compared to the stagnation of Motul under Tikal.

Still, other factors remain important, and it is clear that distance from the core alone does not determine incorporation outright. For instance, the expansionist Zapotec state centered at Monte Alban expanded into the distant Cañada de Cuicatlán before it fully consolidated the Valley of Oaxaca (Spencer and Redmond 2004, 2006; see also Sherman et al. 2010), just as the Aztec

state successfully conquered distant city-states but never incorporated Tlaxcallan (Fargher et al. 2011).

Intermediate elites located near the epicenter of the polity may have been more affected (Tutu Uitz Na and BR-180/168) by the policies of the apical elite than more distant peers (Floral Park). This would also be consistent with a decentralized model of polity organization in which political control radiated in concentric fashion from the core. In contrast, direct co-option of elites on the fringe of the polity, like the Floral Park regime, would suggest an apical elite concern with territorial control and would speak to a more centralized model of the polity.

2.11.2 Intermediate Elite Political Power and Authority

The pre-existing political status of an intermediate elite regime might also impact the incorporation process (Bailey 1969: 75). For instance, Wernke (2006) shows that the high-status Colca Valley intermediate elites and their moieties changed very little due to loose incorporation into the Inca Empire. In contrast, lower-status elites changed dramatically to conform to Inca ideals. In the Classic Maya lowlands, there are numerous examples of intermediate elites being allowed to retain pre-existing honorifics and titles following their co-option by higher-order apical regimes. For instance, when the emergent apical regime at Dos Pilas incorporated Arroyo de Piedra, its rulers retained their *ajaw* title following incorporation because their negotiating power and brokerage potential were buttressed by their longstanding claims to authority (Foias 2013: 155; Hammond 1991a: 280; Houston 1993). If the least wealthy or lowest status autonomous Early Classic local elite household sees the most dramatic Late Classic undercutting of wealth and status, or economic or ceremonial roles, but the wealthiest, or highest status local elites, retain their roles and wealth and status in the Late Classic, this will show that pre-existing wealth or status allowed intermediate elites to better negotiate their position in the polity.

2.11.3 Size of Commoner Retinue

The size of an intermediate elite's retinue of commoner followers was crucial to underpinning their power and authority as it translated directly into taxable income in terms of

foodstuffs, labor, and resources (Bailey 1969: 76; Brumfiel 1994a; Kurtz 2001; Roscoe 1993). In many contexts, elites who can successfully extract labor for construction and taxation from subordinates can also draw upon them for military matters (for Mesoamerican examples see Brumfiel 1994b: 91). Intermediate elites who could effectively muster more supporters to put up more resistance to incorporation could likely negotiate a more prestigious position in an emergent polity (Carter 2016: 235). Gauging the size and loyalty of commoner retainers is important for understanding intermediate elite power and authority. A loyal contingent of commoners in the immediate vicinity would have facilitated taxation and made it easier for elites to mobilize war parties (Sanders and Price 1968: 201). Retinue size may or may not overlap with the amount of labor elites had access to (de Montmollin 1995: 8). For instance, some elites might be able to draw upon labor from all households in their district, whereas less politically capable peers might draw on less person power. Still, if the local elite associated with the most populous district prior to incorporation retains the greatest wealth/status or roles into the Late Classic period, then this would suggest that retinue size was important in negotiating political power.

2.11.4 Resource Availability

The amount of resources intermediate elites could draw upon was pivotal to their transactional bases of power and authority (Brumfiel 1994a: 7; Ford 2004: 62). Local soil quality and agricultural productivity could play an important role in structuring apical elite decisions to incorporate specific areas (McAnany 2002). Classic Maya settlement patterns were structured by the distribution of agricultural resources and productive land (Ford 1990, 1991). The fertile flanks of the Belize River, especially around Barton Ramie would have been ideal for growing crops like cacao which was paid in tribute and was drunk at feasts in both the Classic and Postclassic periods (Coe 1994: 50-58; Houston 1997; Jones 1982: 282-285, 1998: 39-40; Willey et al. 1965: 574; see also Baron 2018a; Freidel et al. 2002; McAnany et al. 2002: 123-127; Scholes and Roys 1948: 316). Cacao was very difficult to grow and required specific soil conditions (Bletter and Daly 2006: 35). The potential for the growth of such crops in the region means it may have disproportionately attracted the interest of larger external hegemony (Garrison, Houston, and Alcover Firpi 2019: 234; McAnany et al. 2002; Wright et al. 1959: 249-250). Numerous Postclassic examples exist of elites founding distant estates to grow cacao (Roys 1957: 8; Tozzer

1941: 96-97). It remains possible that the Postclassic occupations evident on the riverine alluvium at Barton Ramie and Baking Pot represent such landholdings controlled by the Itza polity at Noh Peten (Jones 1998: 39-40; see also Muhs, Kautz, and MacKinnon 1985). If the intermediate elites with access to the best agricultural land retained the greatest degree of agency following co-option then this would suggest that control of staple goods or prestige crops influenced the process of incorporation. Likewise, if intermediate elites with access to the best agricultural land saw the greatest decline in their agency then this might suggest an overt desire on the part of the Lower Dover apical elite to target the most bountiful areas of the polity for direct incorporation.

2.11.5 Intermediate Elite Compliance and Resistance to Co-option

The initial hostility of intermediate elites to top-down incorporation by a higher-order could impact the intensity of the co-option process. Craig Morris (1998) contrasts the Inca colonization of the Chincha polity, which was amenable to incorporation, with that of the Chimu empire which actively opposed incorporation. This comparison reveals that indirect strategies were employed to incorporate the acquiescent Chincha, but more direct policies were employed to integrate the recalcitrant Chimu. The compliancy of the Chincha elites meant they ultimately benefitted from operating under the aegis of the Inca empire (Covey 2006). Hypothetically, intermediate elites who actively sought out the patronage of the Lower Dover apical elites might see a negligible curtailment of their agency and autonomy following incorporation. In contrast, intermediate elites who were actively hostile and resisted co-option might see a dramatic reduction in their agency.

3.0 REGIONAL BACKGROUND

This chapter provides an overview of the developmental trajectory of the Belize River Valley and the Lower Dover polity and contextualizes these changes within the broader Mesoamerican culture region (Kirchoff 1943). Lower Dover is located in the central Belize River Valley, in the eastern Maya lowlands of what is now western Belize (formerly British Honduras). The central Belize River Valley extends from the confluence of the Macal and Mopan Rivers in the west, near the polity of Cahal Pech (modern San Ignacio), to the polity of Saturday Creek and the Cocos Bank/Three Sisters minor center in the east (near modern Belmopan; see Chase and Garber 2004; Lucero et al. 2004: 94; see Figures 1.1 and 1.2). The Macal and Mopan Rivers flow into the Belize River, several kilometers north of the modern town of San Ignacio, and the Classic political center of Cahal Pech. From there the Belize River meanders eastward to the coast, through the modern village of Unitedville and the area which was once the Lower Dover polity, before finally emptying into the Caribbean Sea (Guerra and Awe 2017). The Belize River was canoe navigable and probably acted as an important artery of communication and trade between the central Peten and the Caribbean coast (Jackson and McKillop 1989). Unlike the upland terrain surrounding the Upper Belize and Mopan and Macal Valleys, the central Belize River Valley is flanked by broad alluvial plains (Fedick 1995: 18). The central Belize River Valley forms the eastern part of the Upper Belize River Valley. West of the Macal/Mopan confluence lies numerous Preclassic and Classic Maya polities including Actuncan, Buenavista del Cayo, Guacamayo, Las Ruinas de Arenal, Early Xunantunich, and Xunantunich.

The regional trajectory in the Upper Macal/Mopan/Upper Belize River Valley region follows the dynamic model (Leventhal and Ashmore 2004; see also J. Marcus 1993). Early Xunantunich and possibly Las Ruinas de Arenal were dominant in the Middle to Late Preclassic (Horowitz et al. 2020; Taschek and Ball 1999), then power shifted from Early Xunantunich to Actuncan in the Late Preclassic through to Early Classic periods (LeCount 2004), before shifting to Buenavista del Cayo in the Early to early Late Classic (Ball and Taschek 2001; Yaeger, Cap, and Peuramaki Brown 2009; Yaeger et al. 2015). Xunantunich rose in the Late Classic and likely incorporated many of the surrounding polities (Leventhal and Ashmore 2004). Following the

Terminal Classic collapse of Xunantunich, Actuncan and Buenavista once again show signs of autonomy, and more collective forms of political organization (Helmke et al. 2008; Mixter 2017; Yaeger and Brown 2019: 24-25). It currently remains unclear how the major center of Guacamayo to the southeast fitted into this trajectory (Ashmore 2010; T. Neff et al. 1995).

The Belize River Valley was dominated by a series of smaller Maya polities sandwiched between much larger Classic period political capitals like Caracol (~45 km to the south), Naranjo (~20 km to the west), and Lamanai (~80 km to the northeast; D.Z. Chase 2004; Connell and Silverstein 2006; Helmke and Awe 2012; see Chapter 2.6.5). In contrast to the largest polities, like Caracol, Calakmul, and Tikal, which were not associated with major waterways (Willey 1981), the riverine valleys of the Maya lowlands often contain multiple competing peer-polity arrangements. The scale of such peer-polities varies from the relatively small centers of the Belize River Valley to the large competing capitals of the Usumacinta (Golden et al. 2008).

The largest polity in the central Belize River Valley was Baking Pot in the west. Generally, polity capitals decrease in size and regularity from west to east along the valley (Harrison-Buck et al. 2015; Runggaldier et al. 2013). The major civic-ceremonial centers and much of the commoner settlement lies on the south bank of the Belize River. While the higher proportions of settlement situated on the south bank were once considered to reflect biases in survey coverage (Chase and Garber 2004: 3), we now know this to be an accurate pattern. The likely reason for this is the abundance of limestone for construction in the foothills running along the southern flank of the valley compared to the paucity of such resources on the low-lying terraces on its northern flank (see Flannery 1976c: 173 for discussion of riverine settlement patterns).

The western portion of the central Belize River Valley (80 km²) encompassed the polities of Baking Pot, Ek Tzul, Lower Dover, and Blackman Eddy. Collectively these polities encompassed around 2000 Late Classic commoner residential settlement groups, each containing between ~5-20 individuals. Most of this population was associated with the polities, but some households were situated in districts focused around what appear to have been quasi-autonomous intermediate elites situated in the borderlands between these polities (e.g. Esperanza, Spanish Lookout). Regional population densities ranged between 100-300 people per km² across the region and peaked with densities of ~800 people per km² in the immediate epicenter of Baking Pot. While

generally lower than the urban cores of Caracol (~940 people per km²), Palenque (2727 people per km²), Chunchucmil (3525 people per km²), and Copan (12,000 people per km²), this stretch of the central Belize River Valley should for all intents and purposes be considered “urban” (for densities see A.F. Chase and D.Z. Chase 2016: 9; Hutson 2016: 41-60). While population was separated into different polities, which from an urban standpoint likely reflect units comparable to towns, the general swath of population along the valley may better be considered a “conurbation”, a term which recognizes the integrated nature of the settled landscape (see Garrison, Houston, and Alcover Firpi 2019: 135; Lucero, Fletcher, and Coningham 2015: 1140). The argument that the Belize River Valley forms a dispersed conurbation is consistent with the findings of most household, neighborhood, and district studies. For example, Yaeger (2003: 56) argues that comparison of San Lorenzo and Barton Ramie reveals high levels of internal heterogeneity and interdependence and little conformity with the idea of the little community (Redfield 1989), or the closed corporate community (Wolf 1957; see also T. Neff 2010; Robin 2012b: 5).

Recently A.F. Chase and D. Z. Chase (2016) and Hutson (2016) have noted two patterns of Maya urbanism, 1) densely nucleated centers with moderate populations predominantly practicing outfield agriculture (such as Chunchucmil, Copan, Dzibilchaltun, Sayil, Mayapan, and Palenque), and 2) more dispersed but larger urban centers with infield agriculture interwoven with settlement like Caracol, Coba, and Tikal. Settlement patterns in the Belize River Valley have long been the focus of archaeological research (Awe 1992; Awe, Ebert, and Hoggarth 2015; Ebert, Hoggarth, and Awe 2016a; Ford 1990; Hoggarth 2012; Hoggarth et al. 2010; T. Neff et al. 1995; Peuramaki-Brown 2012; Yaeger 2000, Yaeger et al. 2011). While relatively dense, the settlement pattern is consistent with the dispersed urbanism apparent in most of the Maya region (Awe, Hoggarth, and Helmke 2014). Most households in the Belize River Valley seem to have had sufficient surrounding space for infield agriculture (Drennan 1988: 284-291), although it remains possible that the surrounding valley flanks were subjected to sustainable swidden cultivation (Ford and Nigh 2015).

3.1 The Geographical Backdrop

The southern and central Maya lowlands encompass rolling hills covered in dense sub-tropical forest interspersed with sizeable lakes and river valleys. The networks of rivers likely provided through-fares for canoe trade and population movement (McKillop 2010). The immediate vicinities of these rivers are covered in Riverine or Riparian Broadleaf Forests and see an average annual rainfall of 1300 to 2000 millimeters (Di Fiore 2002; Jolly and McRae 2008: 68). The area sees a rainy season from roughly June to January and a dry season from February to May. Topographically, the region has flat alluvial bottomlands running along the Belize River and its tributaries. To the north of the river lies a gradual escarpment, which runs up to the contemporary Mennonite community of Spanish Lookout. A range of steeper forested limestone hills run along the southern flank of the valley.

3.2 The Developmental Trajectory of the Belize River Valley Polities

This section charts the regional trajectory of the Belize River Valley from the Archaic to the Late Postclassic periods (see Chapter 5.4.1 for a more substantial overview of ceramics associated with this dissertation research).

3.2.1 The Archaic Period

Belize possesses evidence of Paleoindian (11,500-8000 BC) occupations (Lohse et al. 2006). However, the Belize River Valley first shows signs of human habitation in the Archaic Period (8000-2000 BC). Occupation at this time is indicated by the presence of Sawmill and Lowe points (Stemp and Awe 2013: 19; Stemp et al. 2016; see also Lohse 2020). Archaic period activity within a 2 km radius of Lower Dover is apparent in the presence of a diagnostic Sawmill point near Iguana Creek at Barton Ramie (Solmo 2017: 80; Stemp and Awe 2013). It is likely that populations at this time were mobile and practiced hunting, gathering, and incipient agriculture from around 3000 BC (Lohse et al. 2006). The shifts to agriculture and sedentary life in the Belize

River Valley roughly correspond with changes in other regions of Mesoamerica (Lohse 2020; see also Flannery 1986).

3.2.2 The Early Preclassic Period

The first sedentary populations in the region occur during Early Preclassic period (1200-900BC). Examples include formative villages at Cahal Pech (Awe 1992; Awe and Healy 1994; Ebert 2017; Ebert et al. 2017; Healy et al. 2004; L. Sullivan, Awe and Aimers 2013), Blackman Eddy (Garber et al. 2004b), Early Xunantunich (Brown et al. 2011), and Actuncan (LeCount, Mixter, and Simova 2017; Mixter 2016; Mixter 2017). These populations are associated with the predominantly red-slipped Cunil ceramic complex first identified at Cahal Pech (Awe 1992; Garber and Awe 2009; L. Sullivan, Brown, and Awe 2009; see Garber 2004b for the similar Kanocha ceramics complex).

It would seem that the Belize River Valley was tied into developments across Mesoamerica during this period, as indicated by the presence of pan-Mesoamerican iconography on Cunil vessels (Garber and Awe 2009). These vessels were likely employed in both quotidian consumption and socially integrative feasting, as argued for similar vessels elsewhere in Mesoamerica at this time (Clark and Blake 1994; Rosenswig 2007). Participation in regional interaction networks is also visible in the presence of jade, obsidian, and marine shell in Cunil contexts (Awe 1992; Awe 1995; Ebert 2017: 147; Peniche May 2016). The distribution of these imported items seems to reflect a degree of equality between households (Awe 1992; Ebert 2017). In terms of emergent political hierarchy and wealth inequality, the Belize Valley seems somewhat ahead of some parts of the Maya lowlands but lags slightly behind earlier developments in other regions of Mesoamerica such as Soconusco, the Valley of Oaxaca, and the Gulf Coast (Clark and Blake 1994; Drennan 1976; Lesure and Blake 2002; Pool 2007). In terms of the climate during the Early Preclassic period, it would generally seem that dry conditions and possible droughts prevailed during this time within the Belize River Valley (Ebert, Hoggarth, and Awe 2019: 80-81).

It is during the Early Preclassic period that the Lower Dover area first shows signs of habitation in the form of Cunil/Kanocha ceramics in the early levels at the Floral Park center (Garber et al. 2004a: 28). These materials were not associated with architectural stratigraphy and possibly could have been redeposited at a later period. It seems likely that Cunil occupations existed at Barton Ramie, however, no obvious Cunil material was encountered during the re-analysis of the Barton Ramie assemblage for this dissertation (Walden et al. 2020c; see Chapter 5.4.1). Further reanalysis of the Barton Ramie ceramics will likely reveal Cunil phase materials.

3.2.3 The Middle Preclassic Period

The Middle Preclassic period (900-300BC) saw the emergence of clear social inequality in the Belize River Valley, and across the Maya lowlands (Brown and Stanton 2020). This phase is marked by the presence of Jenney Creek phase ceramics (Gifford 1976). The fertile soils and easy riverine communication likely made the region preferable to early sedentary farmers (Fedick 1994, 1995), potentially giving rise to the peer-polity networks of small, independent political centers which dominated the political landscape during the following centuries. Chiefdoms arose at villages with pre-existing Early Preclassic occupations such as Cahal Pech (Awe 1992; Ebert 2017; Peniche May 2016), Blackman Eddy (Garber et al. 2004b), and Early Xunantunich (Brown et al. 2018; LeCount and Yaeger 2010c: 70). It is also during this period that initial occupation begins at other emergent major centers such as Baking Pot (Audet 2006; Hoggarth 2012), El Pilar to the north (Ford 1995), and Pacbitun to the south (Healy, Hohmann, and Powis 2004; Micheletti, Crow, and Powis 2017; Powis et al. 2009, 2017). Inequality becomes more overt in terms of the distribution of wealth (exotic items) at the household level at Cahal Pech (Horn 2015, 2020). The emergence of a chiefly political elite is apparent at Blackman Eddy, Cahal Pech, and Pacbitun at this time, based on the construction of sizeable monumental structures and large residential platforms. The appearance of these structures seems to reflect the origins of ideological institutions which later became associated with Classic Maya divine kingship (Awe 1992; Freidel and Schele 1988; Garber et al. 2004b; Powis et al. 2009, 2017).

The wide dispersal of stylistically Olmec material culture across Mesoamerica during this period has been the subject of intense debate (Blomster 2010; Flannery and Marcus 2000; Flannery

et al. 2005; H. Neff 2011). It seems fairly clear that the broad dispersal of Olmec style material culture was likely tied to a broader interaction sphere than overarching political control (*sensu* Caldwell 1964; see also Willey 1962). Elements of this material culture were likely important for emergent elites wishing to elevate themselves above the rank and file (Clark and Blake 1994; R. Joyce and Henderson 2010). Without wishing to enter into this debate extensively, some purportedly Olmec themes do appear on Belize River Valley ceramics, but it remains highly unlikely that the developing polities of the Belize River Valley were politically or culturally dominated by Olmec centers like San Lorenzo at this time. Instead, following Garber and Awe (2009), it seems most likely that aspiring local elites drew upon symbols of power and prestige to aid in the pursuit of political power (see also R. Joyce and Henderson 2010; Wilk 2004). The emerging polities of the Belize River Valley seem to have been dominant in the redistribution of some trade items, for instance, Savana Orange ceramics were likely produced in the Belize River Valley and redistributed to the Peten, in direct juxtaposition to later core-periphery relationships between the two regions (Callaghan et al. 2018; Ebert and Awe 2018: 74; Ebert, Pierce, and Awe 2019). This suggests that the valley may have formed an important trade thoroughfare even at this early time. Climactic conditions changed throughout the Early to Middle Preclassic transition and the Belize River Valley became wetter and more humid (Ebert, Hoggarth, and Awe 2019: 81).

At Ceibal at this time, the first ceremonial E group structure was constructed alongside adjacent elite residential platforms (Inomata et al. 2017a; Inomata et al. 2017b; Triadan et al. 2017). Elsewhere in the Maya lowlands, notable developments occurred during this time at the lowland polity of Nakbe in the Mirador Basin of the northern Peten. Nakbe exhibits many of the architectural attributes later associated with major centers such as stelae, *sacbeob* (causeways, or “white roads”), ballcourts, and temples (R. Hansen et al. 2020). Nakbe represents the epicenter of a larger Middle Preclassic polity probably comparable in scale to a complex chiefdom or even a state. A similar pattern may hold for the recently discovered Middle Preclassic center of Aguada Fenix, and surrounding smaller centers in the Usumacinta region (Inomata et al. 2020). Across Mesoamerica, this period saw the formation of increasingly larger social formations. For instance, in the Valley of Oaxaca, San Jose Mogote represents the center of a territorial chiefly polity (Marcus and Flannery 1996). In the Gulf Coast region, the Olmec polity of San Lorenzo was at the head of at least a three-tier settlement hierarchy (Pool 2007).

By the Middle Preclassic period there is evidence of occupation in the Lower Dover area. At this time, the Tutu Uitz Na, Floral Park, and BR-180/168 local elite households established themselves in the region, alongside several smaller commoner households. Initial construction phases at Tutu Uitz Na suggest that the resident local elites could command substantial commoner labor. The first construction phases at the Tutu Uitz Na center involved the construction of a large plaza and surrounding structures. In contrast, the Floral Park local elite may have settled the area earlier (in the Early Preclassic) and gradually accrued more political power and access to labor. The initial development of the BR-180/168 local elite center is less clear, but Jenney Creek materials are present in the plaza fill. At least 18 commoner mounds at Barton Ramie show evidence of Jenney Creek phase occupations, including BR-174 in the Texas District. A more in-depth discussion of the emergence of these groups is offered in Chapters 5 and 6.

3.2.4 The Late Preclassic Period

The Late Preclassic period (300 BC-AD 150) in the Belize River Valley saw continued regional population increase and the growth of pre-existing villages into larger political entities centered at Cahal Pech (Awe, Grube, and Cheetham 2009; Awe 2013; Awe and Zender 2016; Ebert et al. 2017), Baking Pot (Audet, 2006; Hoggarth, 2012; Hoggarth et al. 2014), and Blackman Eddy (Garber et al., 2004a, 2004b). Early Xunantunich in the western portion of the valley went into decline and was superseded by the emergent political center of Actuncan as the sub-regional hegemon in the Macal drainage (Mixer et al. 2013). Cahal Pech was of similar political importance as Actuncan at this time based on the scale of monumental architecture (Awe 2013). These developments reflect the clearest evidence for the development of a multi-tiered settlement hierarchy as seen in the scale of monumental architecture and the first elaborate burials indicating that centers had become the seats of an elite ruling class. Variability in wealth and status at the household level becomes more accentuated during this period, continuing the trend evident in the Middle Preclassic. Around this time the political center of Baking Pot, located equidistantly between Blackman Eddy and Cahal Pech grew in size. Baking Pot probably represented the capital of a similar territorial entity by the end of the Preclassic (Hoggarth 2012). To date there is no evidence of sizeable palace structures in the valley at this time, suggesting a prolonged period of competition between chiefs who could control labor for the construction of elaborate civic-

ceremonial architecture but not for private residences (Cheetham 2004: 138; see also Blanton et al. 1993: 172). The Late Preclassic saw the development of many traits once commonly attributed to the later Classic period. For instance, hieroglyphic writing, mathematics, stelae, calendrics, corbelled vault architecture, and polychrome ceramics all emerged during the Late-Terminal Preclassic periods (R. Hansen 1998). While evidence for the timing of these developments in the Belize River Valley is largely unclear, the carved Stela 9 at Cahal Pech dates to this period (Awe, Grube, and Cheetham 2009). The Late Preclassic climate in the Belize River Valley became drier as droughts prevailed. The fertile alluvial soils of the valley likely allowed people to buffer the risks associated with these conditions, as populations grew during this time. Moreover, unlike some other areas of the Maya lowlands monumental construction also increased at this time (Ebert, Hoggarth, and Awe 2019: 82).

Similar developments across the Maya region and Mesoamerica occurred during this period (J. Doyle 2020). The colossal center of El Mirador, superseded Nakbe as the primate center in the Mirador Basin (see Figure 1.1). El Mirador was likely at the apex of a four-tier settlement hierarchy, and possessed a civic-ceremonial center dominated by sizeable triadic groups including La Danta at 72m high, and was at the center of a network of *sacbeob* (R. Hansen et al. 2020). Similar developments occurred in the Guatemalan Highlands with the apogee of Kaminaljuyu (Kidder et al. 1978). In the Peten, the initial rise of Tikal occurred at this time, as did the growth of Uaxactun which probably became a regional seat of power. Mesoamerica as a whole saw increased centralization and the appearance of larger polities at the Zapotec capital of Monte Alban in the Valley of Oaxaca, Cuicuilco, and Teotihuacan in the Basin of Mexico, and the Olmec center of La Venta, which overtook San Lorenzo as the dominant regional center on the Gulf Coast (Blanton et al. 1993; Pool 2007).

There is substantial evidence for Late Preclassic development within the Lower Dover area during this period. The elite architecture at Tutu Uitz Na was expanded and several commoner households established themselves during this period. A similar process took place at Floral Park. In the Barton Ramie settlement, at least 15 households were occupied at this time, although out of the house groups sampled at the Texas cluster, only the local elite center, and the commoner BR-260 mound revealed Late Preclassic material (Willey et al. 1965).

3.2.5 The Terminal Preclassic/Proto-Classic Period

The Terminal Preclassic period (AD 150-300) saw the “Preclassic collapse” of El Mirador and several other dominant polities. Other smaller settlements were abandoned and there was a cessation of monumental stela erection at sites in Highland Guatemala (Sharer and Traxler 2006). There has been a growing realization that the Classic period collapse of the Maya reflects one of several periods of decline which punctuated the developmental trajectory of the region (Ebert 2017; J. Marcus 1993; Cioffi-Revilla and Landman 1999). The collapse of El Mirador, formerly the predominant center, probably led to a power vacuum that stimulated the elevation of several other Maya centers to primate status, such as Tikal (Sharer and Traxler 2006: 294). The existence of smaller political collapses punctuating Maya prehistory, and preceding the grand Classic period collapse has been the subject of some attention (Iannone 2002; J. Marcus 1993; Webster 2002a: 178). It remains unclear whether a significant demographic collapse was associated with these earlier instances of political collapse, but this appears unlikely in the Belize River Valley (Awe and Helmke 2005). The Lower Dover area saw dramatic population growth during this phase (Willey et al. 1965), with the establishment of more households at Floral Park and at Tutu Uitz Na. At Barton Ramie, some 50 households were occupied during this time period, including the local elite center of BR-180/168 and surrounding commoner mounds BR-169, 174, 184, 189, 194, and 260 in the Texas District.

3.2.6 The Early Classic Period

The Early Classic period (AD 300-600) saw increasing political centralization at the large polities of Caracol, Calakmul, Uaxactun, and Tikal (Figure 1.1). The fall of El Mirador triggered a wave of balkanization resulting in a series of quasi-autonomous polities, which each came to lead its own multi-polity network (Grube and Martin 2008). In contrast, the Belize River Valley trajectory never saw any real centralization of power at the regional level and therefore never really balkanized. Many of the polities surrounding Tikal were likely subsumed into its political sphere relatively early in the Classic period. More distant competitors like Calakmul and Caracol remained a thorn in its side for many years. This period also saw the spread of homogeneous ceramic traditions across the central lowlands, possibly reflecting higher degrees of political

centralization at this time or the development of larger production and market distribution systems (King 2015). The Early Classic period witnessed the ascendance of Teotihuacan in the Basin of Mexico and the influence of this urban metropolis on Kaminaljuyu, Tikal, and other Maya centers (G. Braswell 2003). Association with Teotihuacan is most visible in ceramics and architecture but is also described epigraphically at Tikal and Uaxactun. The so-called *entrada* occurred at AD 378 and involved the possibly violent arrival of Siyaj K'ak', likely from Teotihuacan (Stuart 2000). It seems likely that this intrusive event led to long-term changes in political leadership and power at Tikal and Uaxactun. Tikal or Caracol nobility were probably responsible for the founding of Copan and possibly Quirigua around this time. The establishment of these vassal centers may have been motivated by a desire to control the flow of jade from the Motagua Valley and obsidian from Ixtepeque (Sharer and Traxler 2006: 333). By the end of the Early Classic period the formation of an alliance between Calakmul and Caracol (a once loyal vassal of Tikal) resulted in the downfall of Tikal around AD 562.

During the Early Classic period, the civic-ceremonial architecture at the heart of the Belize River Valley polities continued to grow, alongside regional populations. Early Long Count dates are apparent at several centers in Belize including Caracol, Pacbitun, and Blackman Eddy (Sharer and Traxler 2006: 317). Sharer and Traxler (2006: 376) argue that Tikal's incorporation of Nakum, Yaxha, and Naranjo may primarily have been driven by a desire to control a trade route to the Caribbean. The Belize River Valley being one trade conduit to the Caribbean at this time. Some Belize River Valley political centers do show evidence of Teotihuacan influence, for instance, Baking Pot has both *talud-tablero* architecture and Teotihuacan style tripod vessels (Colas et al. 2002; Hoggarth et al. 2016; Ricketson 1931). Generally, this period saw the earlier dry conditions associated with the Late Preclassic recede and warmer, wetter conditions prevail (Ebert, Hoggarth, and Awe 2019: 83). Traditionally, the Early Classic period in the Lower Dover area was considered a period of population decline (Willey et al. 1965). However, this was in part due to issues with ceramic dating and the persistence of Late Preclassic ceramic types (outlined in Chapter 5.4.1). Part of this dissertation involves a reanalysis of ceramics and radiocarbon dating to better understand the Early Classic in the Lower Dover area.

3.2.7 The Late Classic Period

During the Late Classic period (AD 600-900) political decentralization took place across the Maya lowlands as once-powerful polities waned and smaller centers proliferated. Many of the larger polities jockeyed for control of emergent centers although ultimately it seems that the drive for autonomy on the part of these smaller centers led to the breakdown of the largest multi-polity networks centered at Calakmul and Tikal. This process saw a substantial demographic increase across the landscape; at this time population was much higher than it is today (Sharer and Traxler 2006). Rivalries between the main centers led to widespread warfare in some regions; the Petexbatun region in particular became embroiled in competitive warfare by around AD 600 and underwent political collapse shortly after (Demarest 2004).

The political landscape of the Belize River Valley during the Classic period was dominated by several major centers including Cahal Pech, Baking Pot, Lower Dover, Buenavista del Cayo, and Xunantunich. These centers were surrounded by minor centers, a term which includes large multi-component monumental sites, large residential plazuelas with monumental architecture, and high-status commoner households (Awe, Ebert, and Hoggarth 2015; Ebert, Hoggarth, and Awe 2016a: 291; Willey et al. 1965). By the Late Classic period, most of these polities contained populations of 2000-5000 people (Ebert et al. 2016a; Walden et al. 2017). Despite the political decentralization apparent at the valley level, the region was one of the more densely settled areas of the Maya lowlands (Ford and Fedick 1992: 39). Generally, the collapse process in the Belize River Valley seems to follow general trends evident across the lowlands (Hoggarth et al. 2014). The Late Classic period saw a drying trend across the region, which culminated in a number of severe droughts in the following Terminal Classic period (Ebert, Hoggarth, and Awe 2019: 83). The early Late Classic period saw the rise of the Lower Dover polity, and the population of Barton Ramie reached its apogee (Guerra and Awe 2017; Willey et al. 1965). Substantial architectural remodeling and construction is likewise apparent at Floral Park at this time (Brown et al. 1996; Glassman, Conlon, and Garber 1995).

3.2.8 The Terminal Classic Period

The Terminal Classic period is generally considered a time of profound change in the Maya lowlands (Demarest 2004; Kennett et al. 2012; Webster 2002a). A series of changes start to occur which are commonly associated with the collapse of southern lowland polities. This involves the collapse of the political system of divine kingship, some type of economic collapse/reorganization (Kepecs, Feinman, and Boucher 1994), and what appears to be a massive demographic collapse (Yaeger 2020: 778; see also Culbert 1973; Lowe 1985; for a critique see Aimers 2007a). We now know that different polities in diverse regions of the southern and central lowlands collapsed at different times and through a variety of causes (Webster 2002a; Yaeger 2020). The major causes being environmental degradation (Beach et al. 2015), drought and climate change (Kennett et al. 2012), and political turmoil and warfare (Folan et al. 2000: 23; Inomata 1997; O'Mansky and Dunning 2004). However, it seems that the close interconnections between polities interwoven into regional networks was likely a factor in the series of political collapses, in a manner resembling the concept of hypercoherence (Flannery 1972: 407-419; see also Cherry and Renfrew 1986: 155). Often intermediate elites are implicated as important actors in structuring the process of political collapse. J. Marcus (1993: 164) has argued: "the lords of secondary centers, who controlled the manpower of a whole province, were the weak link in the whole hierarchy". It would seem that almost all of the Classic period polities of the southern and central lowlands had collapsed by around AD 1050. While abandonment was the norm, continued occupation is apparent in riverine, coastal, and lacustrine environments (Graham 2004; see also Sharer and Traxler 2006).

The extent of the demographic decline during the Terminal Classic remains unclear. Abandonment processes vary between polities. In many instances, it would appear the epicentral elites abandon the center first (Inomata 1997; Valdés and Fahsen 2004: 15). In some instances, the departure of apical elites was followed by higher-status intermediate elites and high-status commoners, leaving only low-status commoners (Palka 1997: 303-304). In other instances, low-status commoners abandoned a polity first, even before the collapse of apical elites (Yaeger 2010b: 245), or following the collapse of apical elite authority but prior to the abandonment of high-status commoners and intermediate elites (Lamoureux-St-Hilaire et al. 2015). This variability is

important for understanding the collapse process and the nature of demographic abandonment within a region but is also eye-opening in terms of understanding the formation of such political units. Understanding abandonment processes is compounded by issues examining Terminal Classic residential occupations. Much of the domestic architecture associated with this phase is close to the surface and is now destroyed by bioturbation from vegetation. Radiocarbon dating charcoal from these contexts is risky due to the likelihood that such samples are associated with recently burned vegetation.

Several other major changes occurred in the Terminal Classic period. In tandem with the collapse of divine kingship, increased power-sharing emerged. Power sharing is evident in the construction of *popol nah* or council houses at Copan (Fash et al. 1992 see also Bey and May Ciau 2014), Nim Li Punit (Fauvelle, Fisher, and Braswell 2013: 247-248) Actuncan (LeCount, Keller, and Blitz 2011: 26; Mixter 2017). This seems to occur alongside a general decentralization of power, which saw intermediate elites appearing with greater frequency on monuments in some regions (Sharer and Traxler 2006: 500-502). The Terminal Classic sees the shift in power towards the northern Yucatan with the rise of Chichen Itza and the creation/intensification of a circum-peninsular trade network (Masson 2002; Sharer and Traxler 2006: 555-568). This saw the proliferation of pan-Mesoamerican symbol horizons and what are traditionally considered northern lowlands architectural traits at centers in the southern lowlands (Ringle, Negrón, and Bey 1998).

The civic-ceremonial centers of most Belize River Valley polity capitals show signs of abandonment by around AD 900. Some, such as Actuncan seem to have been occupied slightly longer (Mixter 2017), while others, like Cahal Pech were abandoned slightly earlier. This political collapse seems to have coincided with a substantial demographic collapse (Ebert et al. 2014; Hoggarth et al. 2014; n.d.). The existence of Postclassic ceramics at Baking Pot and Barton Ramie was originally assumed to reflect continued occupation at the commoner level through the collapse process (Willey et al. 1965: 291), however, radiocarbon dating of burials suggests a demographic collapse around AD 900, followed by a hiatus and reoccupation between AD 1280-1420 (Hoggarth et al. 2014; Hoggarth, Freiwald, and Awe 2021; Hoggarth et al. n.d.).

Peri-abandonment deposits comprising sheets of ritual middens are common at the Belize River Valley major centers. These likely represent trash/offerings from large ceremonies (Awe et

al. 2020a; Hoggarth et al. 2020). There is some evidence of Terminal Classic architectural trends in the Belize River Valley, such as round Yucatecan style columns at Structure A-20 at Xunantunich (Zanotto, Galvan, and Awe 2016), and a Terminal Classic elliptical “ticket-booth” structure situated at the end of the Group A/B *sacbe* at Baking Pot (Structure 209; Audet and Awe 2003: 1-24; see also D.Z. Chase and A.F. Chase 1982; Helmke 2006; Harrison-Buck and McAnany 2013; see Chapter 6.4.1.1.3).

The Terminal Classic period in the Belize River Valley saw two, or three severe droughts in relatively quick succession continuing into the Early Postclassic period (Ebert, Hoggarth, and Awe 2019: 83). It would seem the polity capital of Lower Dover was not abandoned until late into the Terminal Classic period. One of the major construction phases at the civic-ceremonial center seems to date to the early phase of the Terminal Classic (Guerra and Awe 2017: 247). Less can be said about the Terminal Classic occupation of Barton Ramie as most of the Terminal Classic ceramics were combined into the Late Classic II (Spanish Lookout Phase; Gifford 1976). At Floral Park, a Terminal Classic round platform was constructed atop the eastern residential shrine which was emulating other Terminal Classic round platforms (Brown et al. 1996; see Chapter 6.4.1.1.3.).

3.2.9 The Early and Late Postclassic Period

The Early Postclassic is marked by the collapse of Chichen Itza around AD 1050 and the subsequent rise of the Mayapan confederacy. Following the fall of Mayapan, the northern lowlands became dominated by a number of smaller states, which persisted until colonial contact (see Sharer and Traxler 2006: 598-603). Generally, this period saw a revival in the southern and central lowlands at Lamanai, and in the Peten Lakes at the emergent Itza polity on the island of Noh Peten (modern day Flores; see Jones 1998). This period also saw the rise of the K’iche’ polity centered at Q’umarkaj (Utatlán) in the southern highlands of Guatemala (Carmack 1981).

Evidence for Postclassic occupation is comparatively more abundant in the Belize River Valley than surrounding areas. Evidence of Postclassic occupation is readily apparent at Tipu, in the Upper Macal River Valley (Aimers 2004; Graham, Pendergast, and Jones 1989). Elsewhere occupations are especially common on the productive alluvial soils around Barton Ramie and

Baking Pot (Hoggarth 2012: Table 3.1; Hoggarth, Freiwald, and Awe 2021; see also Aimers 2004; Audet and Awe 2005; Gifford 1976). While Willey and colleagues (1965: 291) noted the presence of Postclassic ceramics on 95% of mounds at Barton Ramie, comparison of the overall amount of ceramics left by the Postclassic occupants are but a tiny proportion of their Late Classic predecessors. This evidence is likely suggestive of some type of ephemeral occupation at Baking Pot and Barton Ramie. In contrast, while Postclassic artifacts are present in other areas of the Belize Valley, like the Lower Dover civic-ceremonial center, their presence is likely more suggestive of episodic revisitation than reoccupation (Guerra and Awe 2017: 241).

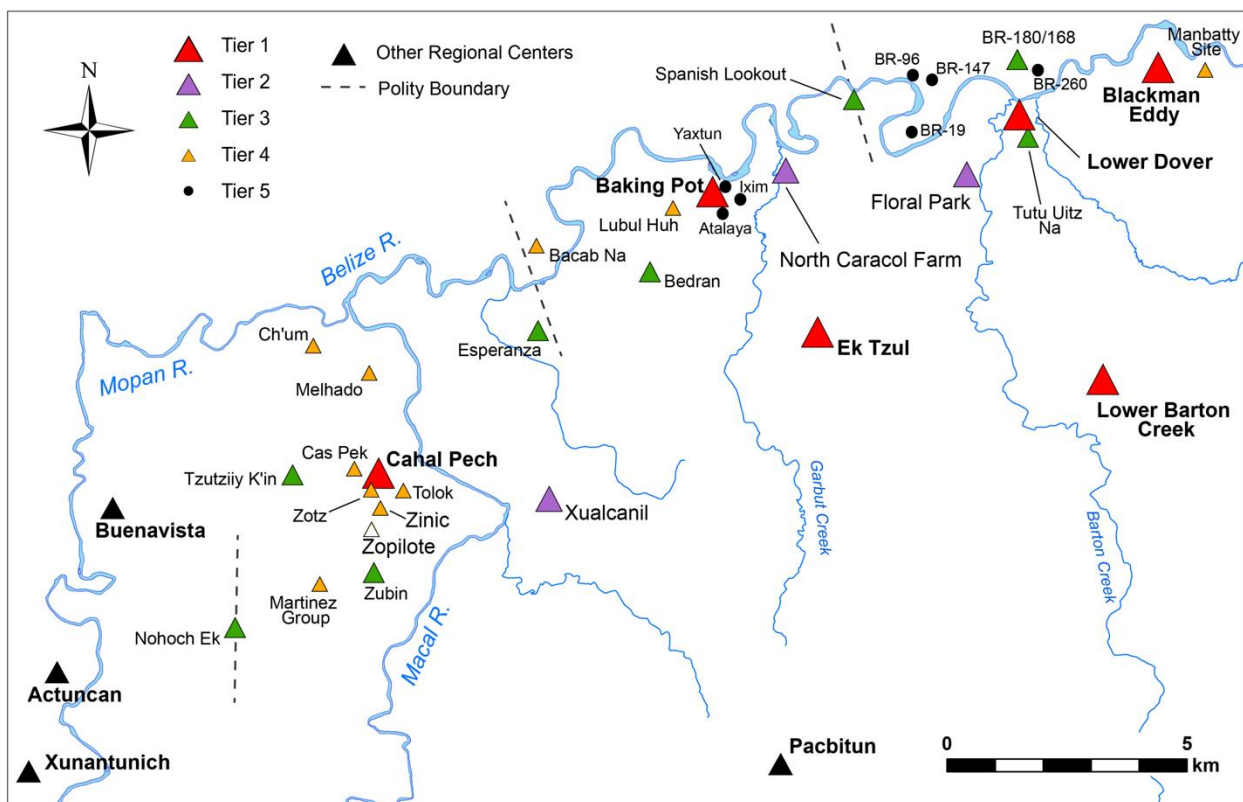


Figure 3.1 Map showing the BVAR study region

(Polity capitals and intermediate elites are shown; modified from Walden et al. 2019: Fig.2)

3.3 The Classic Maya Elites of the Belize River Valley

Walden and colleagues (2019a) present a multi-variate statistical analysis of 35 sites within the BVAR study region to examine 28 variables; i.e. architectural area, volume, plaza size, presence of ballcourts, ancestral shrines, causeways, distance to major center, surrounding population density. This study revealed the presence of six polities (Baking Pot, Blackman Eddy, Cahal Pech, Ek Tzul, Lower Barton Creek, and Lower Dover), each with six hierarchical tiers of internal actors: (1) apical elite polity rulers, (2-4) secondary, tertiary and quaternary intermediate elites, (5) high-status commoner neighborhood heads, and (6) low-status commoners (see Figures 3.1, 3.2, and 3.3).

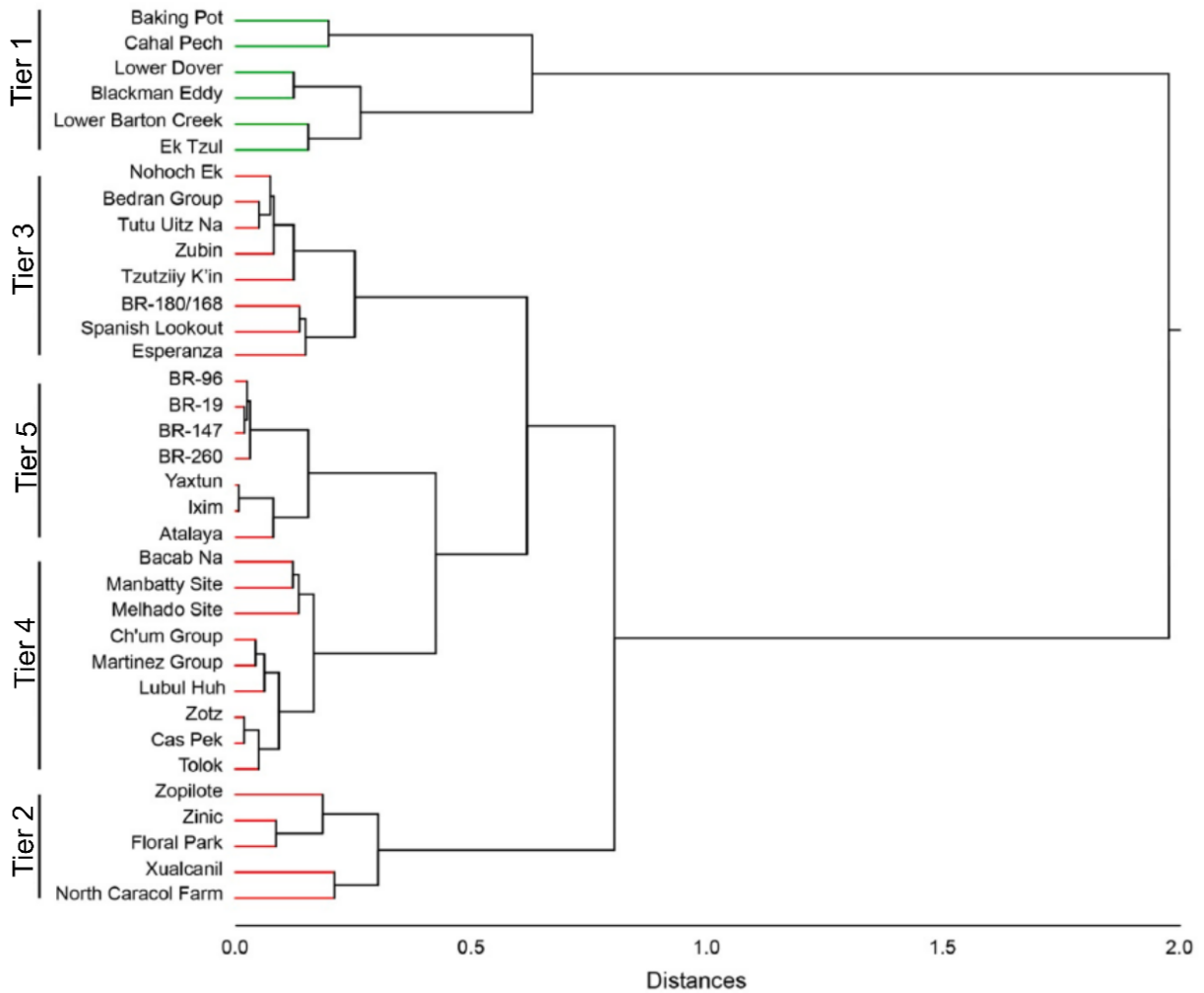


Figure 3.2 Hierarchical cluster analysis dendrogram of Belize River Valley sites
(modified from Walden et al. 2019: Fig.4)

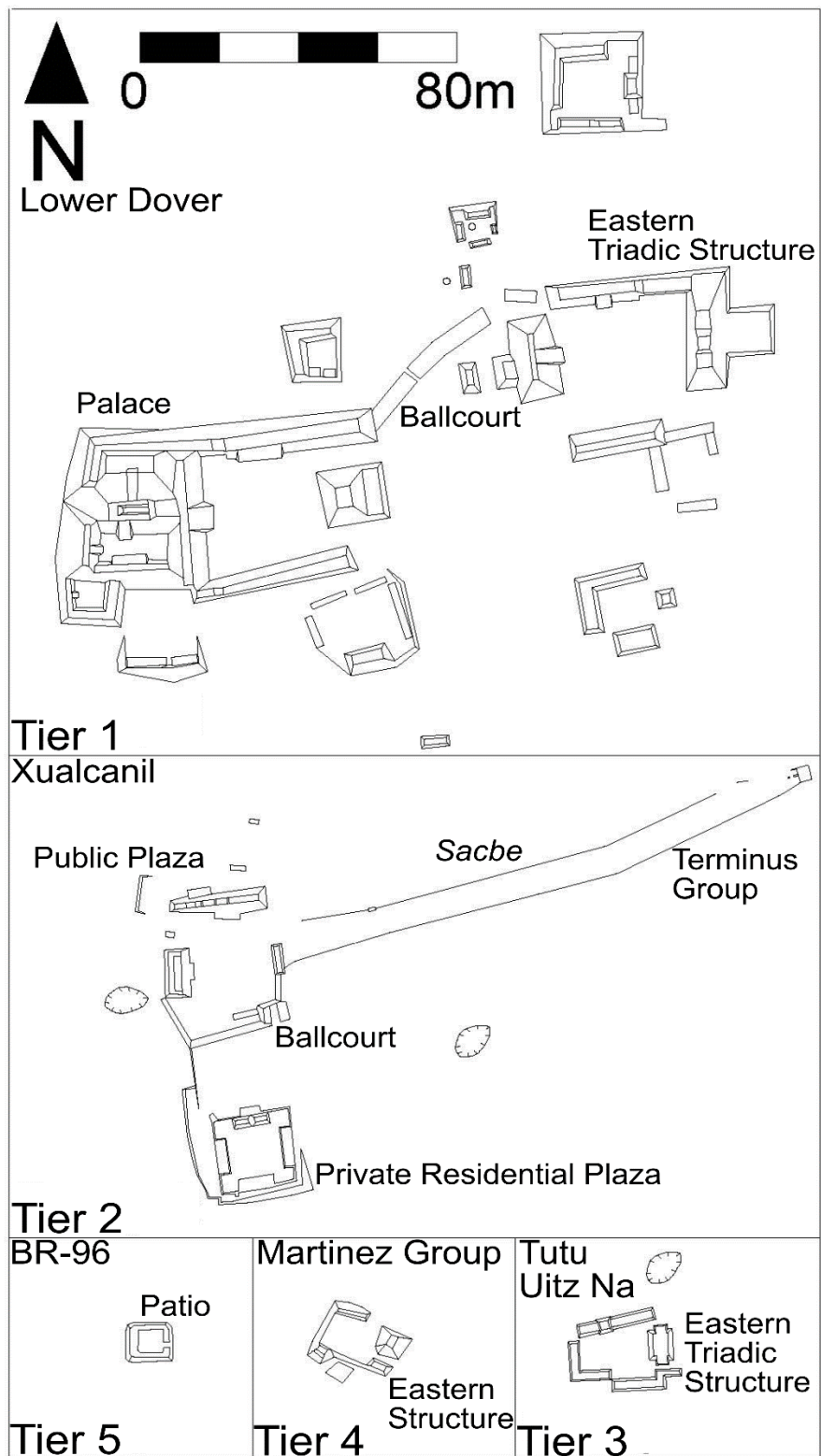


Figure 3.3 Plans of Belize River Valley site layouts
(modified from Walden et al. 2019: Fig.3)

Tier 1 apical elites in the Belize River Valley are situated at polity capitals; these possess multiple plazas with the full suite of monumental architecture including ancestral eastern triadic structures, ballcourts, *sacbeob*, terminus groups (an architectural group joined to a center via a causeway), and corbelled vault palaces (see also Helmke and Awe 2012). In contrast, each polity contains a single Tier 2 secondary intermediate elite center with multiple plazas, large ceremonial pyramids, ballcourts, *sacbeob*, terminus groups, secondary elite residential plazas, low densities of surrounding commoners, but no eastern triadic structures (Cheetham, 2004; Iannone 2003, 2004: 281-282; Figures 3.2, 3.3, and 3.4a-d). Multiple Tier 3 tertiary intermediate elite centers exist in each polity. These possess a single plaza with an elite residence and an eastern triadic structure (Awe, Hoggarth, and Aimers 2017; Conlon and Powis 2004). Tier 3 centers are usually located at the epicenters of districts. Tier 4 intermediate elite centers are slightly smaller and rarer than Tier 3 centers. Collectively, Tiers 2-4 can be considered “elite” because they show evidence of residential occupation by higher-status households, are ten times larger than commoner residential groups, possess high-status burials, epigraphic inscriptions on ceramics, and large monumental structures up to 12m high (Awe 1992; Ebert, Hoggarth, and Awe al. 2016a; Helmke and Awe 2012; Hoggarth 2012; Hoggarth et al. 2010; Iannone and Connell 2003; Walden et al., 2019a; Walden et al. 2020c). Tier 5 sites represent the residences of high-status commoner households who acted as neighborhood head families. These households possess downscaled square eastern mortuary shrines and patios for commoner aggregations at the neighborhood level. Tier 6 comprises low-status commoner residences.

The structures commissioned by intermediate elites are generally comparable to the “improved form” outlined by Abrams (1994: 26), in that they have large masonry basal platforms with aprons, but consistently lack the corbelled vault and beam and mortar superstructures apparent on similarly sized substructures elsewhere in the lowlands (see also Loten and Pendergast 1984). All of the structures at Lower Dover (except the palace) had pole and thatch construction with wattle and daub walls. These structures less labor-intensive than corbelled vault architecture but still had substantial masonry platforms. Generally, intermediate elite architecture in the central Belize River Valley did not require lots of specialized masons (unlike other regions of the Maya lowlands). Instead, it would seem that most intermediate and apical elites had access to a lot of fairly unskilled unspecialized labor (see Costin 1991; Kamp 1993: 305–306). The rarity of

corbelled vault architecture suggests that masons were attached specialists associated with polity capitals and apical regimes, and were possibly only made available through the patronage of external suzerains (see Abrams 1994: 114; Sabloff 1986: 110; Ringle, Negrón, and Bey 2020). For whatever reasons, masons were never “loaned” to intermediate elites.

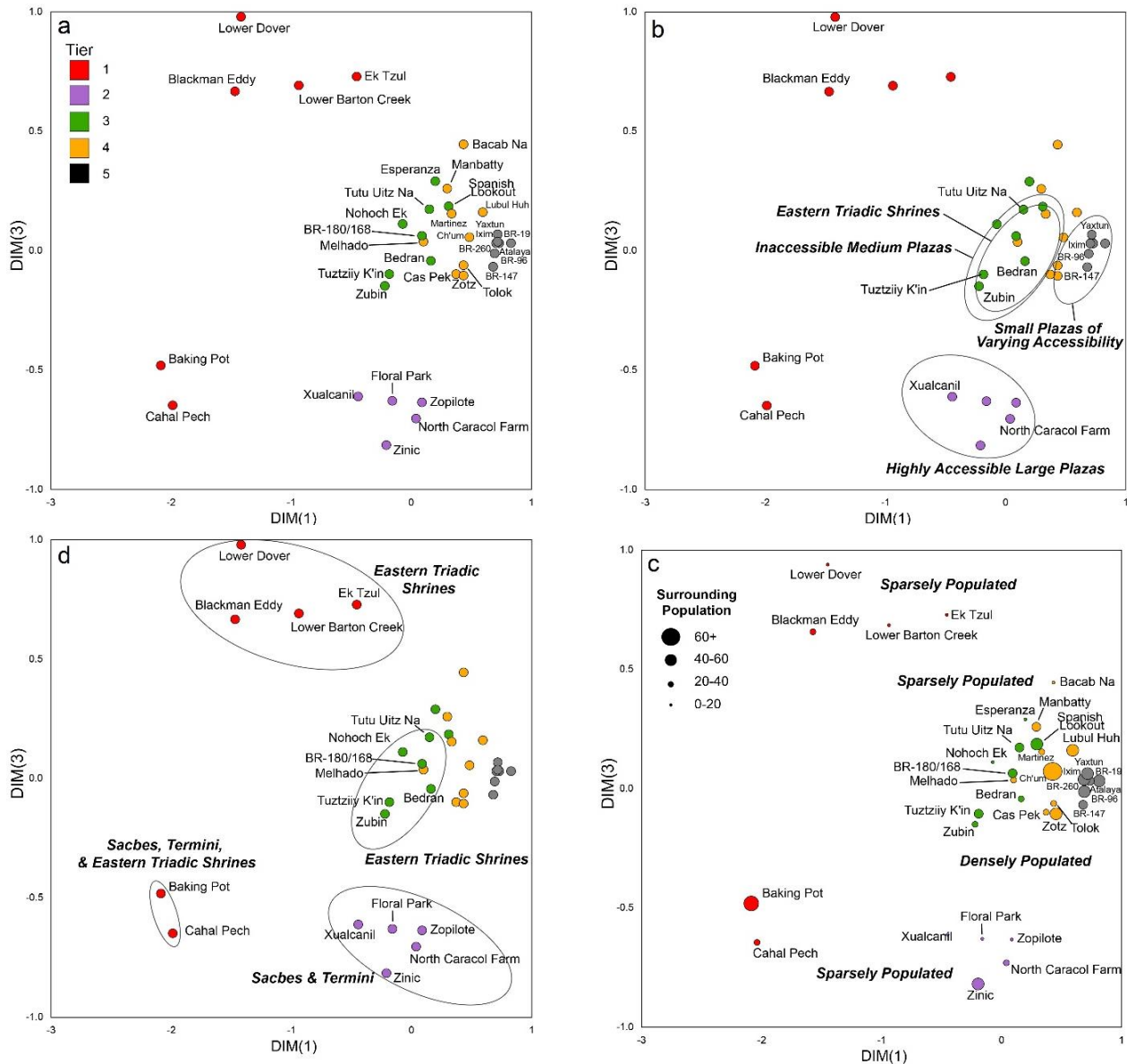


Figure 3.4 Multidimensional scaling plots of Belize River Valley sites

Clockwise from top left: (a) shows sites of various hierarchical tiers together. (b) shows plaza accessibility, (c) shows population densities (d) shows eastern triadic structures, sacbeob and termini

The presence of special function ceremonial architecture at Tier 2 secondary centers, and lack of commoner aggregations in their vicinities to provide construction labor suggests that labor resources were allocated in a top-down fashion by apical elites, or were secured by tier 2 intermediate elites through alliances with apical elites. This special relationship is further substantiated by the presence of a single Tier 2 center within the hinterlands of each polity. Further corroboration is provided by the lack of ancestral eastern triadic structures at tier 2 centers, which suggests that the resident intermediate elites interred their dead at the polity capitals (Iannone 2003). In contrast, multiple competing Tier 3 centers exist within each polity. Tier 3 intermediate elites at these locations hosted large ceremonies and gatherings for surrounding commoners, and performed elaborate ancestor veneration ceremonies at their lineage shrines. Based on these patterns Walden and colleagues (2019) argue for a close relationship between apical elites and Tier 2 intermediate elites, which strengthened polity-level identities. In contrast, Tier 3 intermediate elites represent a more decentralized stratum of the hierarchy comprising district heads in direct competition with one another.

3.4 The Lower Dover Polity

The Late/Terminal Classic (AD 600-1000) polity of Lower Dover is located on the southern bank of the Belize River, 1 km west of the modern village of Unitedville, Cayo District, roughly equidistant between the modern town of San Ignacio and the Belizean capital of Belmopan. The Lower Dover polity is one of many similarly-sized Classic Maya peer polities in the Belize Valley, and is located 3 km west of the major center of Blackman Eddy, and 7 km east of the major center of Baking Pot (Guerra and Awe 2017; Helmke and Awe 2012; Figures 1.2 and 1.3). Archaeological investigations in the Lower Dover hinterlands have been sporadic over the past 80 years. Barton Ramie, which constitutes the northern settlement of the Lower Dover polity was intensively examined by Gordon Willey and colleagues (Willey et al. 1965). The minor center of Floral Park, located to the southwest of the Lower Dover center, was also initially surveyed by Willey and colleagues (1965), and later underwent excavation by the Belize Valley Archaeological Project (BVAP; Brown et al. 1996; Driver et al. 1997; Driver and Garber 2004; Glassman, Conlon, and Garber 1995). Driver and Garber (2004) pointed out a general spatial pattern in which major

centers in the Belize Valley are typically located ~10 km apart, with minor centers sometimes located between the larger political centers. Floral Park was seen as a “Type 3” or buffer zone minor center located on the fringes of the Blackman Eddy polity. Barton Ramie was long seen as its own standalone rural “community” (Gerry 1993: 48), an outlying fringe of the Baking Pot polity (Weller 2009: 3), or part of the Blackman Eddy polity (Garber et al. 2004b: 67; Yaeger 2003a: 52). The recent discovery of the Lower Dover center just 500 m to the south calls for reconsidering the relationships between purportedly independent centers and settlements like Barton Ramie and Floral Park, and Lower Dover (Wölfel et al. 2009). It is now clear that Late Classic Barton Ramie and Floral Park were part of the Lower Dover polity (Hoggarth et al. 2010: 178; Wölfel et al. 2009: 33; see Chapter 6.2).

Despite considerable survey and excavation, we are only beginning to arrive at a comprehensive understanding of the settlement pattern and developmental trajectory of the Lower Dover polity (Driver and Garber 2004; Glassman, Conlon, and Garber 1995; Guerra 2011; Petrozza 2015; Willey et al. 1965). Following the discovery of Lower Dover several surveys were conducted in the southern and western settlement (Guerra 2011; Petrozza 2014, 2015; Petrozza and Biggie 2015). Survey by Petrozza (2015: 74) in the area immediately south of Lower Dover revealed settlement which pre-dated the Late Classic construction of Lower Dover (corroborating earlier dates from Floral Park and Barton Ramie; see Driver and Garber 2004: 294; Willey et al. 1965). My 2016 investigations in the Lower Dover hinterland encompassed two elements: survey and excavation. Systematic, full coverage micro-regional settlement survey was conducted over a 12 km² area south of the Belize River. Collectively, survey and excavation across the polity indicate settlement patterns in this area of the Belize River Valley to be a complex palimpsest. The civic-ceremonial center rose and fell in the Late/Terminal Classic but its immediate hinterland had already been settled over a thousand years earlier in the Middle Preclassic period (900-300 BC), roughly contemporaneous with the rise of the nearby Blackman Eddy polity (Garber et al. 2004b; Guerra 2011; Petrozza 2015).

3.4.1 Geography and Geology of the Lower Dover Area

The landscape around Lower Dover comprises flat alluvial plains to the north and west and limestone hills with shallow soils to the south and east. Today, the area surrounding the Lower Dover center consists of arable riverine farmland on the northern and southern banks, and dense *wamil* (secondary shrub growth), and cattle pasture on the foothills of the Maya Mountains to the south. It is likely that the region was more biologically diverse in the Classic period than today in terms of the species present, although this is far from clear as human population densities were higher in the past. The region was home to a range of animals including deer, felines, monkeys, turkeys, peccaries, crocodiles, and turtles (Jolly and McRae 2008: 68; Willey et al. 1965). These animals represented important resources to the ancient Maya and were used for subsistence, ritual, and crafting purposes. The riverine resources of the Belize River Valley, included fish, turtles, crayfish, and a range of edible freshwater snails and mollusks including *jute* snails (*Pachychilus glaphyrus*, *Pachychilus indiorum*, *Pachychilus largillierti* spp), apple snails (*Pomacea flagellate* spp), and river clams (*Nephronaias ortmanni* spp; Healy, Emery, and Wright 1990; Moholy-Nagy 1978; Solis 2010; Yaeger 2010b: 234).

The alluvial soils at the river bottoms were highly productive and could support a wide range of plant species. The Belize River Valley represents one of a handful of locales in the Maya lowlands in which tree crops like cacao could be grown (Muhs, Kautz, and MacKinnon 1985; Willey et al. 1965). While less productive, the karstic hilly slopes surrounding the Belize River were far more agriculturally productive when subjected to the types of hand cultivation employed by the ancient Maya, than modern agriculture (Fedick 1988; Ford 2008: 228). The agricultural potential of these upland soils is evident in the fact these locales were almost as popular to Middle Preclassic farmers as the lower-lying alluvial soils (Yaeger 2010b: 236). These upland zones to the south provided access to chert deposits, which were usually associated with specialist biface production workshops (L. Sullivan, Awe, and Montgomery 2016; Hearth 2012; Horowitz 2018, 2019; VandenBosch, LeCount, and Yaeger 2010). The closest known chert workshop to Lower Dover is at Iguana Creek, located 5 km to the southeast, within the Blackman Eddy polity (K. Sullivan, Awe, and Montgomery 2016: Fig. 1). While it remains possible that similar sites will be identified at Lower Dover, chert was readily available in streams, riverbeds, and the alluvial beach

and bar deposits associated with these waterways (Horowitz, Canuto, and Andrieu 2020: 123; Willey et al. 1965: 411; Yaeger 2003a: 44). These local sources of low-quality chert were also a good source of river cobbles which were an important construction material for both commoner and elite architecture (Abrams 1994: 16). A small proportion of chert tools in the Belize River Valley are fashioned from the high-quality honey-colored chert imported from the Northern Belize Chert Bearing Zone (NBCBZ) around Colha (Hester and Shafer 1983). The Belize River itself represented an important corridor of canoe transportation. Upper Barton Creek, situated west of the Lower Dover civic-ceremonial center, and immediately east of Floral Park provided a canoe navigable artery to the small polity of Lower Barton Creek to the south (Kollias 2016). It seems likely that granite, slate, and pyrite from the Maya Mountains and pine from the Mountain Pine Ridge were moved along this route (Dunham 1996), possibly via intermediaries at Lower Barton Creek and the larger center of Pacbitun (Healy et al. 1995).

3.4.2 The Lower Dover Civic-Ceremonial Center

This section serves as a summary of previous excavations at the Lower Dover civic-ceremonial center over the last decade. An upcoming doctoral dissertation by Rafael Guerra (n.d) will present these data in much greater detail. Survey of the civic-ceremonial center began in 2009 (Guerra 2011; Guerra and Awe 2017; Guerra and Morton 2012; Wölfel et al. 2009). The civic-ceremonial center covers 3 hectares and contains 52 structures arranged around two monumental plazas (A and B) and several elite residential plazuela groups (Figure 3.5 and 3.6). Plaza A is the easternmost and largest plaza and is surrounded by 12 structures, including an eastern triadic structure (Structures A1, A2, and A3) and a large range structure on the western side (Structure A6). To the north of Plaza A is an *aguada* (Guerra and Awe 2017; Guerra and Collins 2016: 223). Behind Structure A6 is the ballcourt (Structures A9 and A10). Plaza B is the western plaza and is surrounded by 16 structures including an eastern temple pyramid (Structure B1) and the western palace acropolis (Structure B3, Structures B5-15; Guerra and Awe 2017: 242). The large *audiencia* (Str. B3) at the entrance to the palace is strikingly similar to Cahal Pech (Guerra and Awe 2017: 243). The palace represents the tallest structure at Lower Dover. While ceremonial pyramids are usually the largest structures at centers in the region, it is not uncommon for palaces to be raised

up atop a large pyramidal structure (A.F. Chase and D.Z. Chase 2017b; Leventhal 2010; Yaeger 2010a). Guerra (2018) compiled a ceramic report of the civic-ceremonial core excavations.

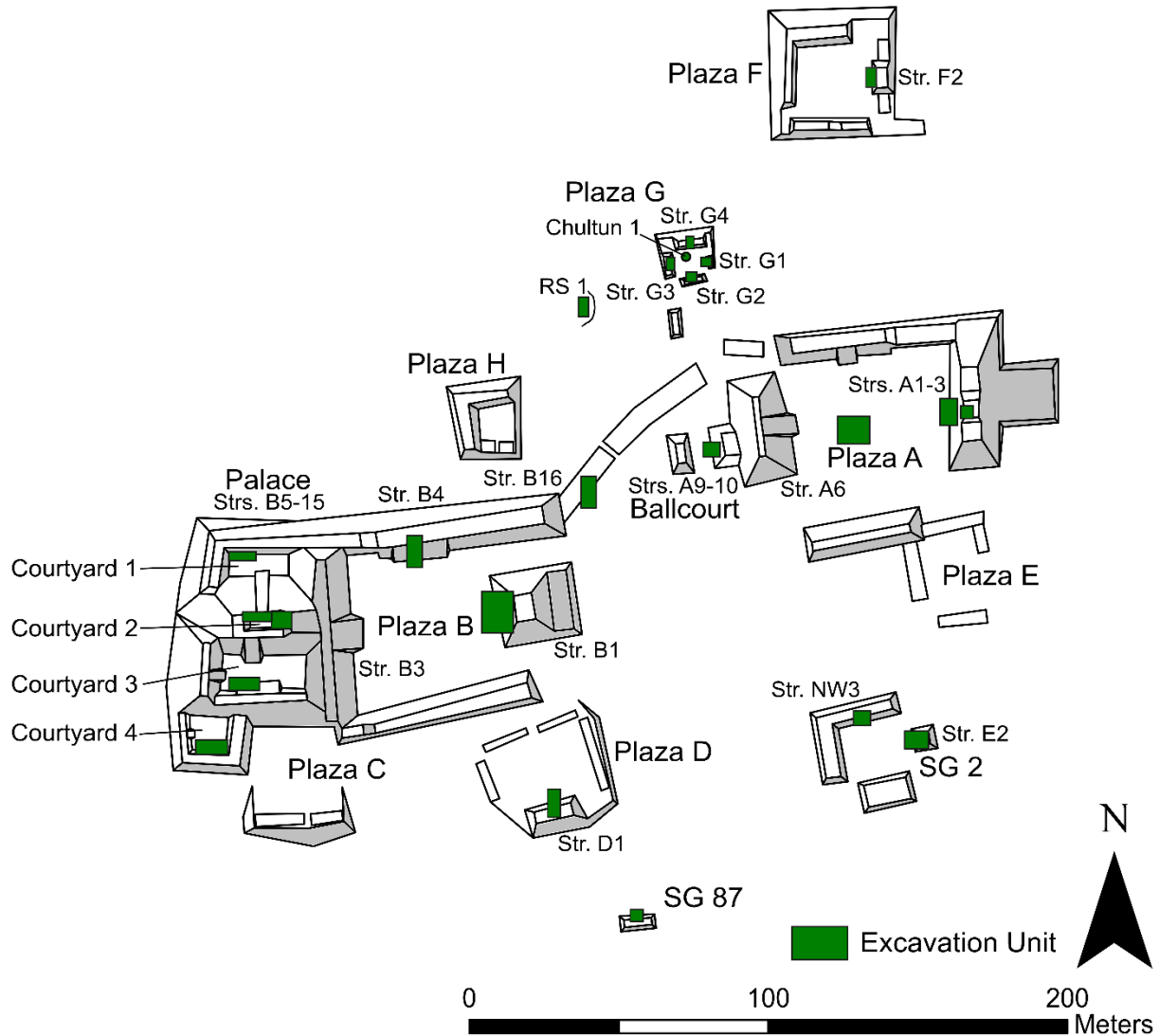


Figure 3.5 Map of the Lower Dover civic-ceremonial center
(adapted from Guerra 2017: Fig.2)

The civic-ceremonial core is ringed by several smaller plazas. Several of these are aulic elite residences (SG 2, and Plazas G, H, and F). Plaza F is the largest and comprises a sizeable elite plaza with an eastern triadic structure. Interestingly, this arrangement fits into the regional settlement typology as a Tier 3 center, although these are normally found further from the cores of polity capitals. Plaza G is a sizeable residence with an eastern mortuary shrine and a rockshelter (RS 1) to the west. Plaza H has seen less investigation but appears to be an elite residential plaza

(tier 4). SG 2 (formerly Plaza M) to the south of the constructed plateau upon which Lower Dover is built, likewise served as an elite residential unit with an eastern mortuary structure. Plazas C, D, and E are smaller informal units situated to the south of the civic-ceremonial plazas. These have seen some investigation but it remains unclear whether they served an elite residential or an administrative function.

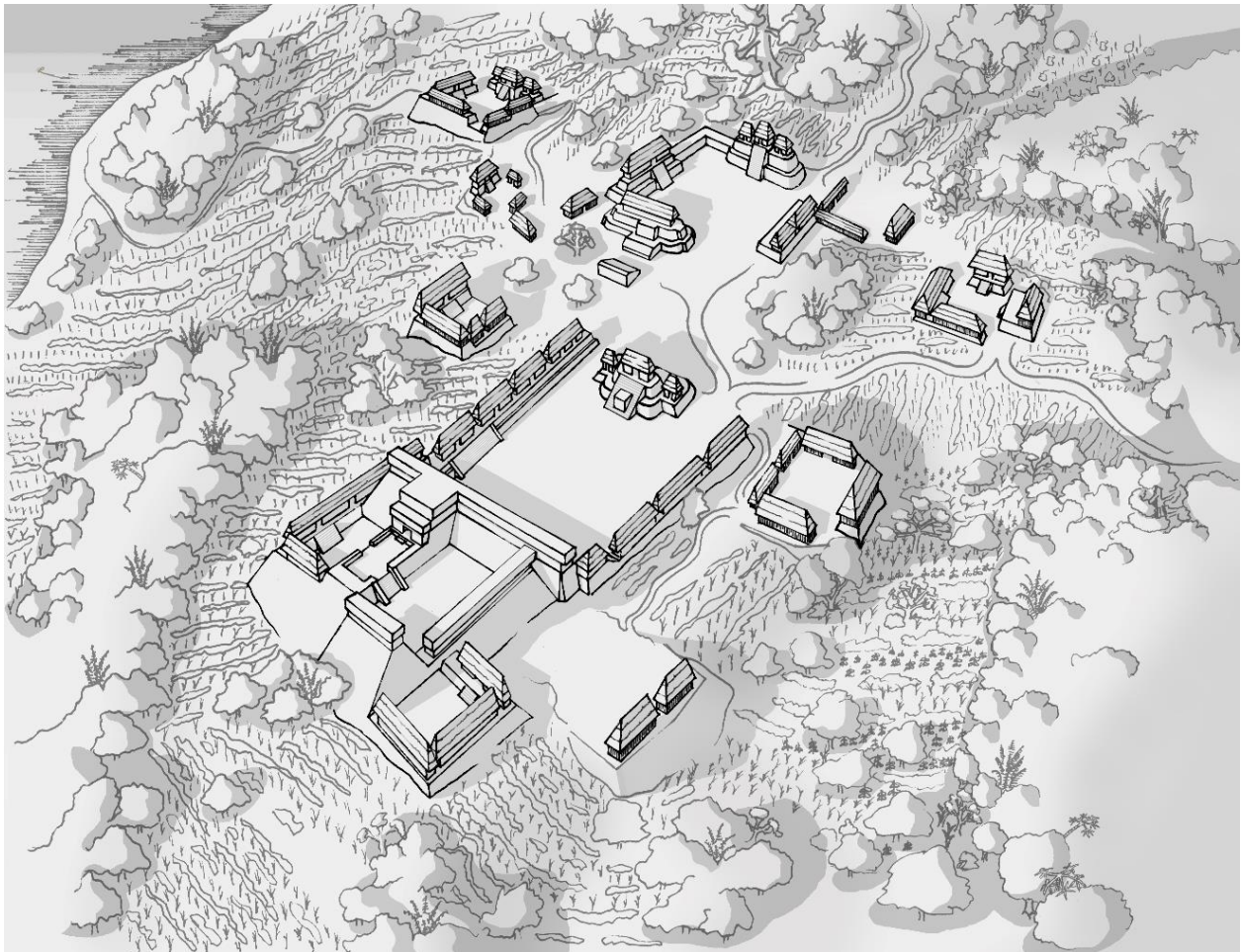


Figure 3.6 Illustration of the Lower Dover civic-ceremonial center
Drawing by Kyle Shaw-Müller (adapted from Walden et al. 2020a: Fig. 3a)

3.4.2.1 Plaza A

The epicenter has been subjected to intensive excavations across the civic-ceremonial center. Plaza A has seen substantial investigation. Wilkinson and Hude (2011: 10, 13) revealed a series of three Late Classic construction episodes and a secondary burial within Structure A2, the

central component of the eastern triadic structure. Further excavation at the base of this structure exposed a series of three plaza floors. The first two of these plaza construction phases dated to the Late Classic period, while the last was built in the Terminal Classic. There was also some evidence of Postclassic revisitation (Guerra and Collins 2016: 225). Investigation also focused on a peculiar rock feature in the center of Plaza A (Guerra and Collins 2016: 229). Guerra (2018) investigated the possibility that this plaza functioned as a marketplace by excavating a grid of test units across the plaza. While the final results of these excavations are pending, preliminary results suggest multiple stone tool production loci in this plaza (Guerra 2018: 144). Stone tool production, especially the latter stages of production is often associated with marketplace activities in the Belize River Valley (Cap 2015; Keller 2010).

Excavation of the ballcourt on the back of Structure A6, revealed it was constructed in one major phase in the Late to Terminal Classic period, with some minor remodeling events following completion (Guerra and Arksey 2012; Guerra and Collins 2016; Wilkinson and Hude 2011). This ballcourt is the only structure of its type in the Lower Dover polity. Guderjan (2007: 21) points out that despite having a public function ascribed to them, Classic Maya ballcourts often could not accommodate vast numbers of people. Stark and Stoner (2017) corroborate this finding in their analysis of ballcourts in Veracruz. The Lower Dover ballcourt was entirely covered on the east side by Structure A6. The eastern and western platforms had surface areas of 20 m² and 30 m² respectively, the open area to the north which was eventually closed off with a Terminal Classic wall covered 120 m² while the area to the south of ballcourt only covered 150 m² (for a combined total of ~320 m²). Using Inomata's (2006) figure of 0.46 people per m² (for dense aggregations) the Lower Dover ballcourt could likely only accommodate ~600 viewers. This number is far below the polity population but likely equal to the number of high-status commoners and elites within the Lower Dover polity, or the number of apical and intermediate elites living in the broader central Belize River Valley (at Baking Pot, Blackman Eddy, and Lower Dover). Inomata's (2006) figure of 3.6 people per m² for more spacious gatherings yields an estimate of ~90 people, which is roughly comparable to the number of apical and intermediate elites in the Lower Dover polity (if lower-level district heads at BR-19, BR-96, BR-147 are included). Regardless of the details, spatial analysis indicates that a selective crowd could watch the ballgame. As such the ballgame was probably not associated with polity-level gatherings because spectatorship was likely tied to status.

3.4.2.2 Plaza B

A series of excavations focused on Plaza B. These included a salvage operation in a looter's trench in Structure B1 (the eastern temple) which revealed a small corbelled vaulted room flanked by two staircases (Guerra and Romih 2017: 125-126). Inside this room was a bench with two caches. The first cache contained two thin-stemmed bifaces fashioned from chert from the Northern Belize Chert Bearing Zone/Colha area (Guerra and Awe 2017: 246). The second cache contained two lip-to-lip bowls (one with spikes similar to a Miseria Appliquéd incensario) with a human distal phalanx inside. Construction dated to the Late Classic period (Guerra and Romih 2017: 126), although the similarity of the upper vessel of the cache with Miseria, may suggest a Terminal Classic date for the interment of the caches. Similar lip-to-lip finger bowl caches are common at Caracol (D.Z. Chase and A.F. Chase 2017), and have been found at Baking Pot, Cahal Pech, and Chan (Blackmore 2008; Cheetham 2004: 137; see also Dillon, Bruner, and Pope 1985). These caches may represent phalanges cut off living individuals as offerings (A.F. Chase and D.Z. Chase 1998a), phalanges removed from burials (McAnany 1995; Weiss-Krejci 2011), evidence of autosacrificial rituals (Berryman 2007; Piehl and Awe 2010; Scherer 2015), or a way of punishing scribes captured following battle (Johnston 2001). In the past, the presence of these caches has been identified as possible evidence of overarching hegemonic control of the region by Caracol, where finger bowl caches appear early on in the Late Preclassic and are very common (A.F. Chase and D.Z. Chase 1998a). Finger bowl caches were typically thought to only exist in the region surrounding Caracol (Freiwald 2011a; Scherer 2015), but this seems increasingly unlikely as examples are found further afield beyond the Caracol zone of influence (McCauley 2019: 83).

The second phase of Structure B1 involved the dismantling of the western wall, and infilling of this room in what appears to be a deliberate act of destruction. Intermixed with the fill were several human molars and drilled incisor and human tibia and fibula fragments (Guerra and Romih 2017: 129). This event is dated to the Terminal Classic based on the ceramic assemblage, which interestingly also contained a complete heirloom Late Preclassic Laguna Verde Incised: Laguna Verde Variety bowl (Sierra Group). Following the infilling of the room, a small wall was constructed to block access, however, this was never completed. This intentional infilling of architecture is reminiscent of similar acts apparent at Structure A11 at Xunantunich (LeCount et al. 2002: 44; MacKie 1961, 1985; Yaeger 2010a: 156-157), La Milpa (Hammond and Thomas

1998), Lamanai (Graham 2004), and Minanha (Iannone 2005, 2006, 2010). Such behavior may seem desecratory (Yaeger 2010a: 156-157), but may represent some type of veneratory ritual practice in which a context is preserved within the architecture (Iannone 2005: 39; for veneratory/desecratory ritual distinction see Pagliaro, Garber, and Stanton 2003). This is complicated by examples like Minanha, where the palace was infilled and buried coevally with the destruction of stelae and stucco facades suggestive of practices of iconoclasm (Iannone 2005: 40).

Excavation of the northern range structure (Structure B4) revealed three construction phases dating to the Late to Terminal Classic periods (Barillas 2015: 24). A small excavation on Structure B16, a northern range structure running northwest of Plaza B exposed a single construction phase, probably dating to the Late Classic period (Guerra and Collins 2016: 229).

3.4.2.3 The Apical Elite Palace

Excavations focused specifically on the apical elite palatial acropolis (Structure B3 and Structures B5-B15) on the western flank of Plaza B. This structure functioned as more than just the residence of the apical elite household, serving as the locus of the royal court at Lower Dover (Harrison 2001; Inomata and Houston 2001). This large palace complex comprises four internal courtyards, and unlike other Late Classic palaces in the Belize River Valley, seems to possess the full range of functional architecture for governing a small Classic Maya polity (see Martin 2001; Yaeger 2010a). Excavation has focused on all four courtyards within the palace. Excavations at the northern courtyard (Courtyard 1) revealed four construction phases on the plaza floor all dating to the Late to Terminal Classic periods (Guerra and Collins 2016: 230-231; see also Guerra and Collins 2015; Hoggarth et al. n.d.).

Several apical elite palaces are situated on the western side of civic-ceremonial centers in the Belize River Valley, other known examples include Buenavista del Cayo, Cahal Pech, Las Ruinas de Arenal, and Pacbitun (Awe 1992; Yaeger 2010a: 149). While the placement of the royal residence on the largest structure in a civic-ceremonial center is relatively rare, this does occur at Late-Terminal Classic Xunantunich, following the fall of Naranjo (Leventhal 2010; Yaeger 2010a), and at Terminal Classic Caracol (D.Z. Chase and A.F. Chase 2017). The Baking Pot palace in Group B also comprises a large pyramidal structure.

Excavation of the central courtyard (Courtyard 2) at the apex of the pyramidal palatial structure sought to determine whether the courtyard functioned as a throne room (Guerra and Collins 2016: 231; Watkins et al. 2017). These excavations revealed a sizeable peri-abandonment deposit. Generally, these deposits are common and thought to signify, potentially a single or a series of ritual events occurring roughly around the time of abandonment (Awe et al. 2020a). The assemblages often contain items associated with feasting and ceremonial items like musical instruments and burials (Hoggarth et al. 2020). It remains unclear whether these ceremonies were conducted by the elites previously living within these contexts, commoners living around them, or some combination of the two.

The deposit in Courtyard 2 included the burial of an older female individual with dental modification (CT 2 Burial 1). This individual was interred within the deposit prone, with the head to the south, semi-flexed in the ‘VPLF’ (ventrally placed, legs flexed) position (Wrobel and Graham 2015, see also Donis 2013; Izzo 2018). VPLF burials are common at Terminal Classic Marco Gonzalez on Ambergris Caye (Graham and Pendergast 1989), Early Postclassic Lamanai and Chau Hiix (Andres and Pyburn 2004: 419), and Late Postclassic San Pedro (Wrobel and Graham 2015). These burials are also fairly common ($n=9$) at Terminal Classic Lower Dover (Biggie et al. 2019; Walden et al. 2018; Willey et al. 1965: 101-121, 114-118, 202, 242; see Chapter 6). Graham, Simmons, and White (2013: 174) suggest that the placement of the lower legs flexed over the body necessitated some type of binding (see also Tiesler 2007: 18-22; Watkins 2017: 155). Indeed, it remains unclear how the legs would have been held in this position without binding and this seems tentatively corroborated by the placement of the hands at the sides also.

The ceramic assemblage of this peri-abandonment deposit contained predominantly Spanish Lookout I and II types indicative of a Terminal Classic date. Ceramics from other time periods were surprisingly well represented; especially Middle Preclassic types (Jenney Creek phase; see Watkins et al. 2017: 148-150; Fig. 12). The placement of Middle Preclassic ceramics in Terminal Classic deposits at Courtyard 2 shows these items were accessible during Lower Dover’s apogee, probably retrieved from architectural fill or residential middens (Watkins et al. 2017). Aside from this, the peri-abandonment deposit assemblage was surprisingly quotidian for a palace. This may suggest that the deposit was laid after the apical elite household had abandoned the premises (with their valuables), or this paucity of imported wealth items may be more reflective

of a broader lack of ostentatious wealth items in multiple contexts across the Lower Dover civic-ceremonial center (Watkins et al. 2017: 157).

Excavation in the southern courtyard (Courtyard 3) revealed three construction phases beneath a peri-abandonment deposit (with Spanish Lookout II ceramics; Guerra and Collins 2015). Similarly, excavation in the southwestern courtyard (CT 4) revealed a substantial peri-abandonment deposit with predominantly Terminal Classic ceramics and a small number of Early Postclassic types, high proportions of serving vessels, ocarina, flute and drum fragments, figurine fragments, broken and whole bifaces, incensario fragments, jade beads, spindle whorls, faunal remains, and needles and awls (Guerra, Petrozza, and Pollett 2013; Guerra et al. 2014: 186-189; Kulig 2015: 40-42, 47; Romih 2019a: 46; Romih et al. 2018). Radiocarbon dating of stratigraphy within the Courtyard 4 deposit revealed that it was probably laid at some point between cal AD 735-805 (Romih 2019a: 63). Investigation of the adjacent eastern structure (Structure B14) revealed a single construction phase dating to the Late Classic (Guerra, Petrozza and Pollett 2013; Guerra et al. 2014: 186-189). The broad range of items found in the peri-abandonment deposits tentatively suggests that the Lower Dover palace hosted a range of varied activities including production and ritual (based on the assumption such items were not brought from elsewhere; see (Ball and Taschek 2004: 160-161; Inomata 2001a; Reents-Budet et al. 2000).

3.4.2.4 The Aulic Elite Plazas

Excavation has focused on four of the seven plaza groups surrounding the Lower Dover core. These excavations include Plaza D (Guerra and Collins 2016: 233), Plaza G (Collins and Guerra 2017; Guerra et al. 2013; Guerra and Arksey 2012), Plaza F (Guerra et al. 2013; Guerra et al. 2014; Perkins 2013), and SG 2 (formerly Plaza M; Guerra and Collins 2016: 233-234; Rawski 2015). Excavation of the southern structure (Str. D1) at Plaza D revealed two construction phases both dating to the Late Classic period (Guerra and Collins 2016: 233). It remains unclear whether this plaza fulfilled a residential or administrative function.

Comparison of architecture and excavation suggest Plaza G was a high-status commoner household (tier 5; Walden et al. 2019, 2020a; see also Collins 2018: 42). Plaza G has five structures, four of which, including the small eastern mortuary shrine (Str. G1) are situated around

a small patio space containing a *chultun* (storage pit). In addition to this patio group, there is a separate structure to the south (Str. G5), and a small rockshelter (RS 1) to the west (Collins 2018). Excavation of the eastern mortuary shrine (Structure G1) revealed two interments (Guerra and Arksey 2012: 110-112). Burial 2 was a crypt interment of an adult male individual with jade inlaid incisors interred in terminal phase construction fill. This individual was accompanied with 25 marine shell beads, a cylinder vase, and a small *olla*. Bone collagen from the individual in Burial 2 produced the earliest radiocarbon date at Lower Dover, cal AD 470-640, with a high probability of AD 535-640 (Guerra and Awe 2017: 245; Guerra et al. 2015). Interestingly, the lack of later construction episodes tentatively suggests that this mortuary structure went out of use contemporaneously with the rise of the civic-ceremonial center.

The southern structure (Structure G2), which was likely the residence of the lineage head, had one early Late Classic construction phase and two later phases dating to the Late Classic period (Collins et al. 2019: 141-145). Excavation of the western structure (Structure G3) revealed two construction episodes dating to the Late and Terminal Classic periods (Guerra and Arksey 2012: 120). The northern structure (Structure G4) had three major construction phases dating to the Late Classic period (Collins and Guerra 2017: 176-183; Collins et al. 2019: 137). Investigation of the *chultun* in the central patio revealed a predominantly Late Classic ceramic assemblage and several ocarina fragments (Perkins 2013: 255). Investigation of the rockshelter (RS 1) revealed a crude use surface associated with an uncut stone alignment (Guerra, Petrozza and Pollett 2012; Romih, Izzo, and Burns 2017). A tightly flexed burial (RS 1 Burial 1) of a male individual with the head to the east, facing south was placed in a cut in this use surface which had been the rockshelter floor (Romih, Izzo, and Burns 2017: 172-173; see also Hoggarth et al. n.d.). The domestic assemblage associated with Plaza G and the architectural scale of the group is consistent with a relatively wealthy high-status commoner household (molded carved ceramics, polychromes, and jade beads). The assemblage suggests that a variety of quotidian activities including subsistence (agricultural bifaces, *manos* and *metates*, and net sinkers), craft production (barkbeaters, a ceramic roller stamp, spindle whorls), and domestic ritual (ceramic ocarina fragments; shell tinklers, speleothems) occurred in the vicinity of Plaza G (Guerra and Arksey 2012: 120; Collins 2018: 35-40; Collins et al. 2019: 137, 144). Ceramic and radiocarbon dating suggest that Plaza G was probably occupied prior to the start of the construction of Lower Dover (Collins 2018).

Excavation at Plaza F focused on the central component of a 3 m high eastern triadic structure (Structure F2). As mentioned above, the presence of the eastern triadic structure, the relatively inaccessible, medium-sized plaza, and the overall architectural volume of Plaza F represent the hallmark traits of a tier 3 intermediate elite center (see Walden et al. 2019), like Bedran (Conlon and Moore 2003, Conlon and Powis 2004), Tutu Uitz Na (Biggie et al. 2019; Walden et al. 2018), Tzutziiy K'in (Ebert 2017, Ebert and Fox 2016), and Zubin (Iannone 1996, 2003). Despite these similarities and quite unlike other tier 3 intermediate elite centers in the region, Plaza F is entirely devoid of a surrounding district of commoner subordinates. The eastern triadic structure appears to have been constructed in two episodes both dating to the Late Classic period (Guerra and Romih 2017: 129-130). The first construction phase was likely associated with a substantial crypt burial (Plaza F Burial 2) which contained an individual interred prone, head to the south with a Sotero Red-brown vase at its side and a Mountain Pine Red dish over the burial. This individual was also interred with an elaborate shell necklace of over 300 marine shell beads (Guerra and Romih 2017: 132). The Tiger Run phase assemblage indicates an early Late Classic date for the interment of the burial and suggests a similar date for the initial construction of the eastern triadic structure. A later construction phase, probably dating to the Spanish Lookout phase was also apparent. This was associated with a second, potentially intrusive burial (Plaza F Burial 2), which lacked any non-perishable grave goods. These excavations suggest that Plaza F was home to a relatively wealthy aulic elite household who interred their dead in the eastern triadic structure. Furthermore, despite lacking a clear commoner client base in the vicinity, these elites could still draw upon substantial labor (likely mandated through the Lower Dover apical elite) to construct an elaborate eastern triadic structure. The discrepancy in wealth between the two interments might hypothetically speak to a decline in elite wealth at the Plaza F throughout the Late Classic period although this remains speculative.

Excavations at SG 2 have focused on two of the structures, the eastern mortuary shrine (Structure E2) and the northwestern L-shaped structure (Structure NW3). Guerra and Collins (2016: 233-234) document excavation of the eastern structure. This seemingly revealed a single Late Classic construction phase and a large secondary Late-Terminal Classic funerary deposit of four co-mingled individuals with 14 olive shell (*Oliva* spp.) tinklers placed directly on either the terminal or penultimate plaster floor at the apex of the structure (Guerra and Collins 2016: 234;

see Hoggarth et al. n.d.). Excavations on the L-Shaped structure (Structure NW3) on the northwestern side of plaza at SG 2 revealed a single construction phase likely dating to the Late to Terminal Classic period (Rawski 2015: 20-21).

To briefly summarize, it would seem that the aulic elite plazas immediately surrounding the civic-ceremonial core served as elite residences and ceremonial contexts. Some of these plazas possibly fulfilled an administrative function. It seems fairly clear that these aulic elites had no immediate commoner subordinates with whom to articulate a downward face, unlike their peers in the hinterland. This indicates that their power/authority was likely tied to the Lower Dover apical elite (see Guderjan 2007: 67, 72 for a similar argument). Despite this it remains fascinating however that Plaza F conforms to a Tier 3 minor center template (following Walden et al. 2019), and possessed all the necessary architecture to employ a downward ceremonial face like peer elites at Tutu Uitz Na, Bedran, Tzutziiy K'in, or Zubin. Ceramic and radiocarbon dates from some of these aulic elite contexts indicate they may have predated some of the monumental construction associated with the core. For instance, the eastern mortuary shrine on Plaza G apparently went out of use as the core rose. Issues establishing the contemporaneity and minutiae of the developmental trajectories of such parts of site cores are not uncommon (Keller 2010: 190), although, at Lower Dover, a rough *terminus post quem* is provided by the fact that all of the aulic elite groups (except SG 2) sat upon the monumental raised escarpment which was likely the first stage of the civic-ceremonial core construction.

3.4.2.5 Summary of the Civic-Ceremonial Center

Excavations have indicated a paucity of Early Classic (AD 300-600) material in the immediate vicinity of the Lower Dover civic-ceremonial core, with most of the monumental architecture constructed in two or three phases dating to the early Late Classic, Late Classic, and Terminal Classic (Guerra 2019; Guerra and Awe 2017; Guerra and Collins 2015: 12, 2016: 224). The monumental architecture in the Lower Dover core is comparable in scale to other nearby major centers like Cahal Pech and Baking Pot, suggesting that Lower Dover functioned as a primate political center in the Late Classic (Helmke and Awe 2012: 61-65). The composition of the internal settlement hierarchy of the Lower Dover polity is likewise similar enough to that of Baking Pot and Cahal Pech (Walden et al. 2019). Consequently, Lower Dover likely controlled the peripheral

settlements at Floral Park and Barton Ramie during this period, relying on labor from those areas for monumental construction projects (Hoggarth et al. 2010: 178; Wölfel et al. 2009: 33).

The Late Classic construction of a sizeable eastern triadic structure (Structures A1, A2, and A3) in Plaza A at the Lower Dover civic-ceremonial center shows that the apical elite commissioned similar elite funerary architecture as their peers at other polities in the Belize River Valley (see Chapter 2.6.5 and 2.7.1). While these ancestral structures commonly contain the burials of royal lineages, excavation of this structure to date has only yielded loose scatters of human remains and a secondary burial were recovered in fill (Wilkinson and Hude 2010: 8-10). In addition, a secondary, nine-meter-tall mortuary temple (Structure B1) was created on the eastern side of Plaza B (Guerra and Romih 2016: 124). However, excavation of the front of this structure did not reveal any formal burials, just loose scatters of human remains in construction fill (Guerra and Romih 2016: 129). The size of these structures alludes to similar practices of royal ancestor veneration common at Baking Pot (Aimers 1997), Blackman Eddy (Garber et al. 2004b), and Cahal Pech (Awe 2013). The lack of similar interments in these eastern structures at Lower Dover is almost certainly due to the fact the polity existed for a shorter duration than its peers and thus had fewer apical elite rulers and lineage members to be interred in such shrines. Despite this, the Lower Dover rulers had similar levels of access to labor for monumental construction. It seems likely therefore that the absence of evidence of royal burials to date is likely a sampling issue, not indicative of a different type of political organization. The scale of looting on Structure B1 hints at the lucrateness of this endeavor and the possibility that royal burials were once present here. The existence of these structures strongly suggests that despite their new position on the local landscape, the Lower Dover apical elite were attempting to employ similar political ideologies and strategies of ancestor veneration as their peers at other polity capitals in the Belize River Valley.

3.4.2.6 The Lower Dover District

The Lower Dover residential district consists of the civic-ceremonial center of Lower Dover described above, the adjacent intermediate elite plaza groups, and some small commoner dwellings slightly further away. The Late Classic Lower Dover core district had a population of ~180 people, resulting in a rough population density of ~360 people per km², the majority of these people lived in the aulic elite residences surrounding the civic-ceremonial center. The Lower

Dover residential district is the smallest in the polity and is surrounded by a clear uninhabited buffer zone of 500m. The dearth of settlement in the area immediately east of the civic-ceremonial center may be due to extensive bulldozing in the 1960s (Petrozza 2015: 5). Still, very low settlement densities are likewise apparent to the south and west of the civic-ceremonial center and on the northern flanks leading to the Belize River.

The lack of residential clustering around the core is surprising as even in dispersed Maya settlement there is generally some greater degree of nucleation around the political center. Traditionally, such a pattern might suggest the Lower Dover political structure was politically decentralized (de Montmollin 1987). In this context, the unoccupied buffer zone might be a product of outlying settlement developing before the civic-ceremonial epicenter, or the arrangement might represent the civic-ceremonial center exerting a centrifugal force on demography. The clustering of some intermediate elites around the political center of Lower Dover and dispersal of others across its hinterland aligns with some traditional notions of the diffusion of power across Maya polities (Arnold and Ford 1980; Folan et al. 2009: 63). The lack of aggregation around Lower Dover suggests that the intermediate elite plazas in the civic-ceremonial center represent aulic elites who were involved in the royal court (Houston and Inomata 2009). The difference between the aulic elites situated around the Lower Dover civic-ceremonial core and the intermediate elites of the hinterland was largely due to the central elites deriving their wealth and status from serving the apical elite regime, not control of population and agriculture (for a similar dynamic see Conlon and Moore 2003: 67; Guderjan, Lichtenstein, and Hanratty 2003; Tourtellot, Everson, and Hammond 2003: 104). In contrast, the demographic clustering around the Tutu Uitz Na, Floral Park, and BR-180/168 centers suggest they functioned as focal nodes in the settlement pattern (Hutson 2016: 80), and the residents had a clear “inter-hierarchical” role (Gluckman 1968).

3.4.3 Tutu Uitz Na

First discovered and mapped by Wölfel et al. (2009), this large elite residential and ceremonial group was first recorded as Lower Dover Plaza F, and was later rediscovered and renamed Group 1 by Petrozza (2015; Figure 3.7). The group was renamed SG 1 to fall in line with current settlement classification. The Tutu Uitz Na moniker, or “jute sacred mountain house” came

from the hilltop locale of the center, and the vast deposit of the freshwater shell jute, or tutu in Mayan beneath the plaza. The large plaza and eastern triadic shrine suggest an overt ceremonial function. The northern and eastern structures are both ~3 m high. The northern structure (N1) has two later offsets on its east and west ends. Christian Brückner (Wölfel et al. 2009: Fig. 13) profiled a sizeable looters' trench running through this structure.

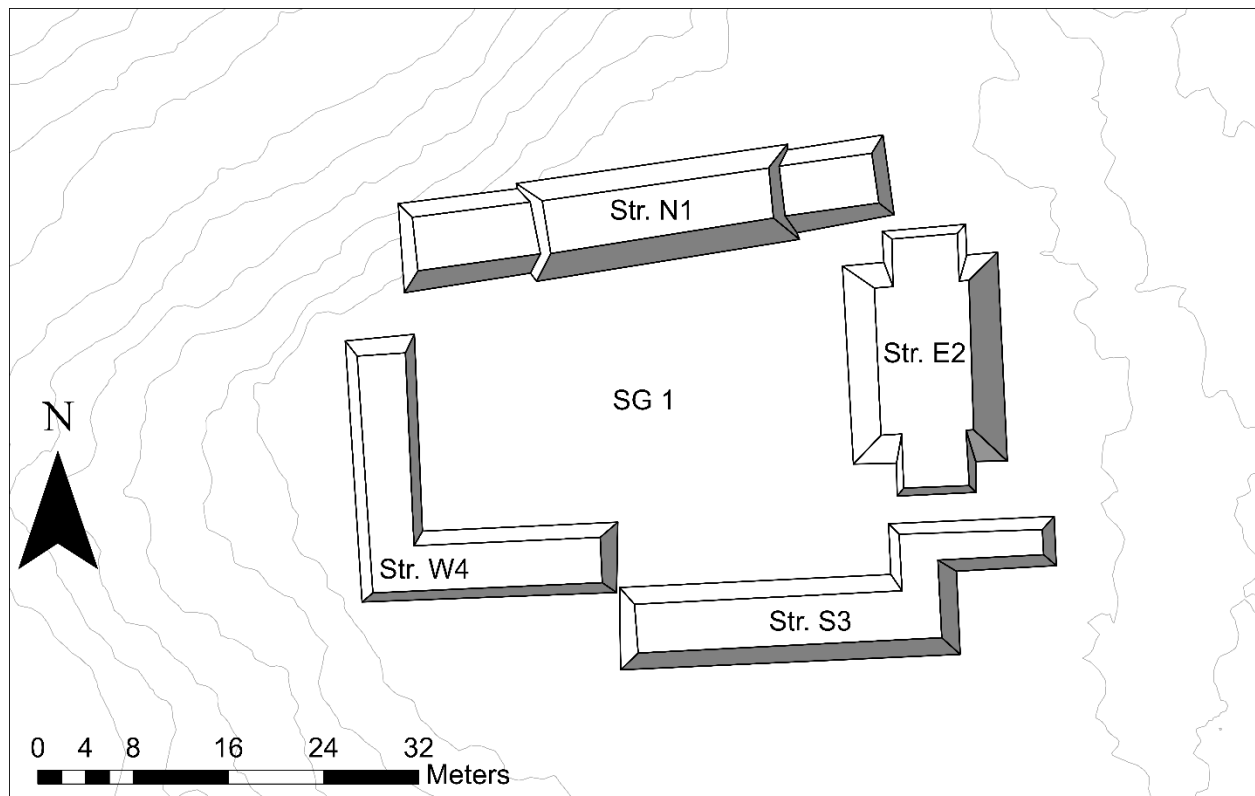


Figure 3.7 Map of the Tutu Uitz Na center

Back dirt from two more looters' trenches is piled against the front of Structure E2 making it appear apsidal in form. In reality, this structure is an eastern triadic structure, with a raised central component, and northern and southern wings (Awe, Hoggarth, and Aimers 2017). This interpretation was initially bolstered by the dog-leg evident in the interface of the western and southern structures, which indicates that the plaza was extended to accommodate the eastern triadic structure. Before the onset of this dissertation research, a salvage unit was placed in the southern wing of this eastern triadic structure to remove a burial, which was collapsing out of the baulk of the looters' trench (Petrozza and Biggie 2015: 33-34; see Chapter 6). An initial test pit placed in the plaza in 2014 identified a thick layer of freshwater *jute* snail shells associated with Jenney

Creek ceramics (Middle Preclassic). Located to the north of Tutu Uitz Na is a small rockshelter (Uchenchoc RS 2) and a reservoir (15 m in diameter) which probably began life as a borrow pit. Tutu Uitz Na is comparable in size to large plazuelas (Ashmore 1981: 49; Thompson 1931), Plaza Plan 2 groups at Tikal (Becker 1983), East Structure-Focus Groups at Caracol (D.Z. Chase and A.F. Chase 1987: 55), or tier 3 minor centers like the Bedran Group (Conlon and Moore 2003; Conlon and Powis 2004; Willey et al. 1965: 572). Architecturally, Tutu Uitz Na is about 10 times larger than any of the surrounding high-status commoner groups.

3.4.4 Floral Park

The minor center of Floral Park is located on a limestone outcrop 25m above the surrounding alluvial plain south of the Belize River and southwest of Lower Dover. The minor center is situated on the least cost path between Lower Dover and Baking Pot (Helmke et al. 2020: 36). The site was first surveyed by Willey and colleagues (1965), and consists of three groups. The civic-ceremonial plaza covers 1400 m² (Plaza A) and has two pyramidal structures, the easternmost being 7 m high, and the southern one being 5.6 m (Figure 3.8). Immediately to the northwest of Plaza A are three *aguadas* (Glassman, Conlon, and Garber 1995: 58). A short *sacbe* joins Plaza A to a small double mound terminus group (Group 1). Group 2 is the elite residential component of the minor center, located 50m to the northeast (Driver and Garber 2004: 292-4). Kirke (1980: 282-285) noted the presence of a possible ditched field system on the banks of Upper Barton Creek near Floral Park, similar to that documented at the Bedran Group outside Baking Pot (Ebert, Hoggarth and Awe, 2016b: 112).

Floral Park saw renewed attention in the 1990s when BVAP excavated at Plaza A and Group 2 (Brown et al. 1996; Glassman, Brown and Garber 1995). Excavations were also conducted at Structure 3A, a commoner house mound located to the northeast of the minor center (SG 143 in our survey). Excavations revealed that the large civic-ceremonial architecture was predominantly Late Classic but the presence of Kanocha (Cunil) ceramics indicate that the area was occupied by the Early Middle Preclassic (1200-900 BC; Driver and Garber 2004: 294; Garber et al. 2004a: 28). Petrographic analysis of ceramics from domestic contexts at Floral Park suggested that the center had limited economic interaction with other centers in the Belize Valley (Sunahara 2003: 137).

Before my research, no settlement survey had been conducted in the area surrounding Floral Park.

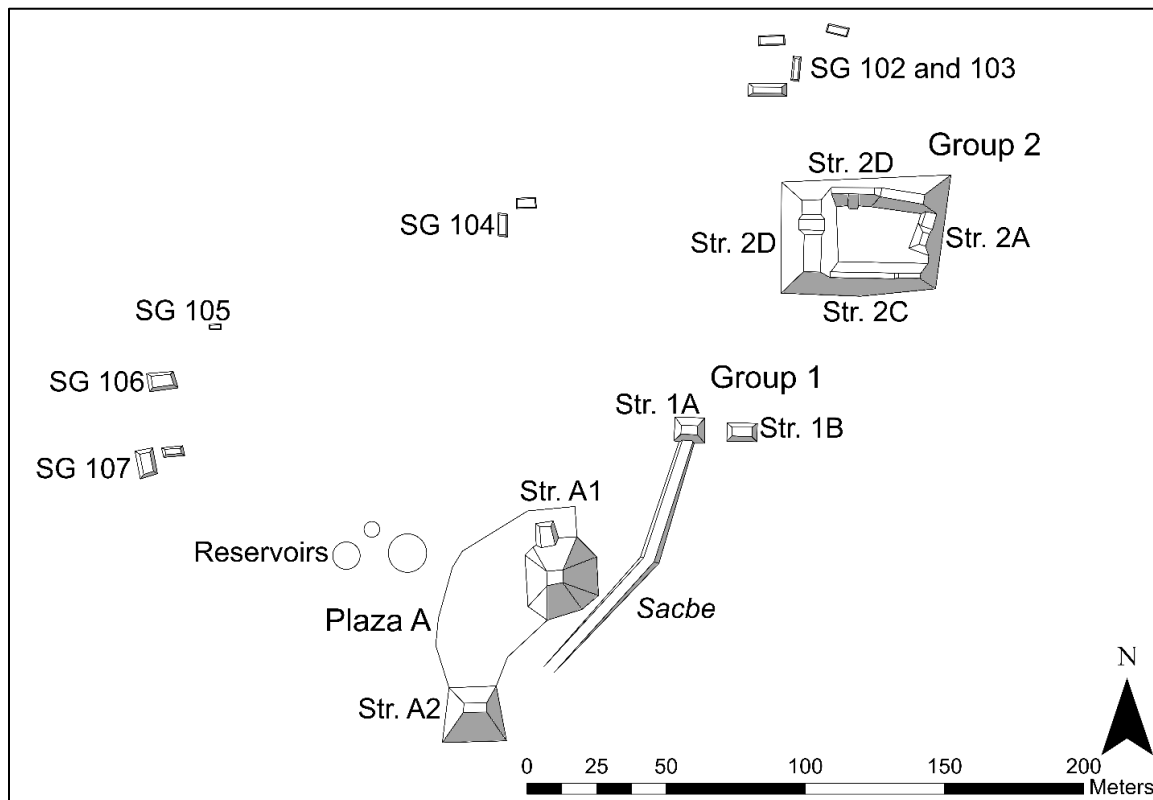


Figure 3.8 Map of the Floral Park center

(adapted from Glassman, Conlon, and Garber 1995: Fig.4.1 and Walden, Biggie, and Ebert 2017: Fig: 6)

3.4.5 Barton Ramie

Gordon Willey and his colleagues intensively investigated Barton Ramie between 1954 and 1956 (Willey et al. 1965). The area Willey investigated was on a ramie (*Boehmeria nivea*) plantation, which covered 2 km² immediately north of the Belize River Valley (Figure 3.9). The site is composed of a settlement area with a minor center on its western flank (Willey 2004: 22). The survey boundary at Barton Ramie was arbitrarily set at the edge of this plantation and Barton Ramie cannot be considered a spatially delimited ancient settlement as such (Willey et al. 1965: 30, 34). Nevertheless, airborne LiDAR (light detection and ranging) analysis shows a reduction in settlement density to the north of Barton Ramie (Weller 2009: Fig.5.34). Numerous scholars have questioned how Barton Ramie articulated with the broader political landscape, especially given

the surprisingly high settlement densities and the affluence of some households (Chase and Garber 2004: 9-10; A.F. Chase and D.Z. Chase 2019: 6; Coe 1966: 309; Drennan 1988: 283-286; Hutson 2016: 33; Weller 2009; Yaeger 2003a).

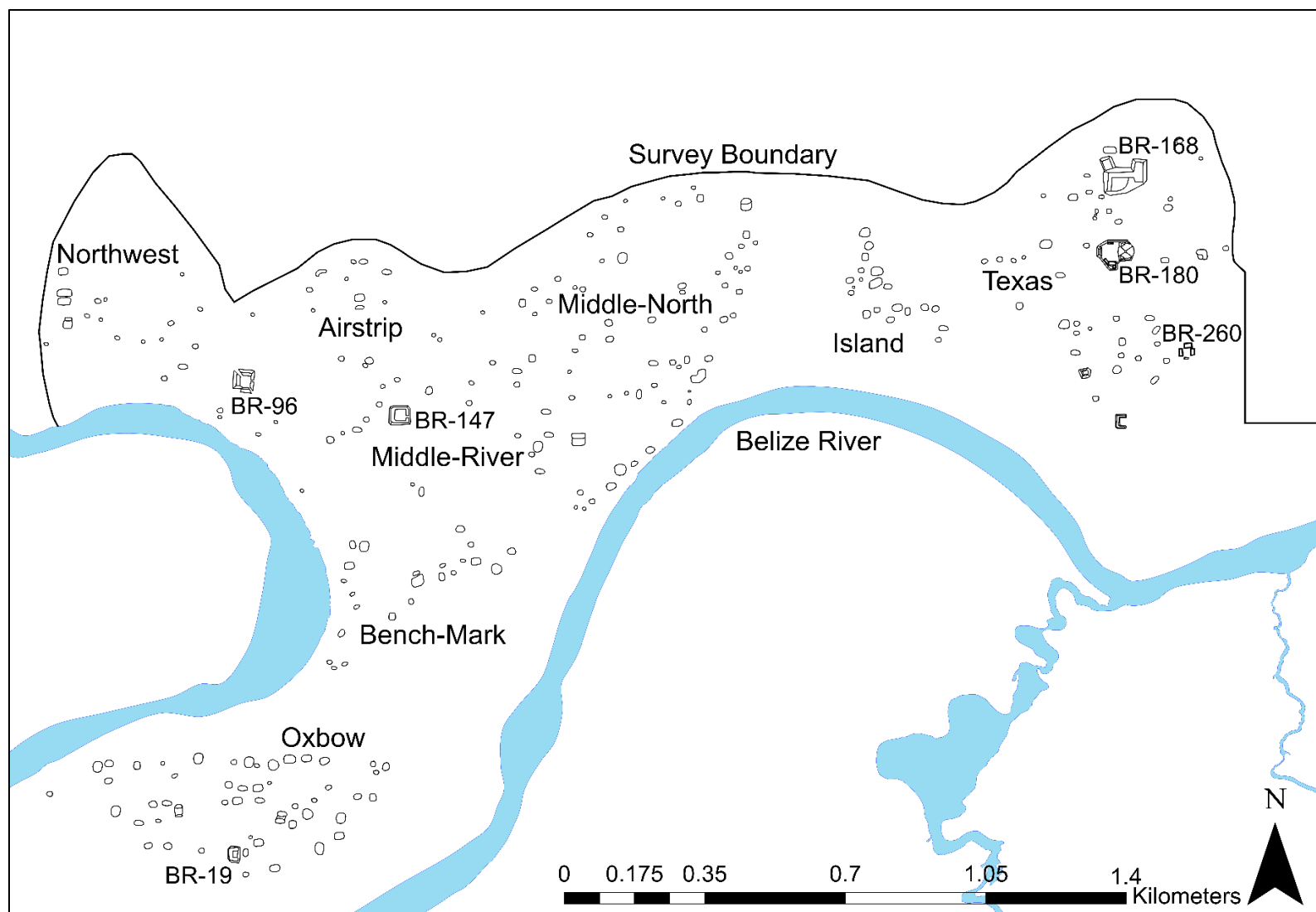


Figure 3.9 Map of Barton Ramie
(adapted from Willey et al. 1965)

This uncertainty led Chase and Garber (2004: 10) to ask “Was Barton Ramie independent? Was it a cluster of nonrelated households? Was it a tightly organized group of people? Did it have different societal levels and an elite stratum? How were these people organized socially, politically, and economically?” This uncertainty led to speculation that Barton Ramie was an outlying fringe of the Baking Pot polity (Weller 2009: 3), part of the Blackman Eddy polity (Garber et al. 2004b: 67; Yaeger 2003a: 52), or just a rural site (Gerry 1993: 48).

The civic-ceremonial center of Lower Dover remained shrouded in the dense vegetation just south of the Belize River for another 60 years; hence the mystery was only recently solved (Petrozza 2015: 19). We now know that Barton Ramie was not the isolated settlement Willey and colleagues envisaged (1965), but was, at its closest point, located just 500 m from the major center of Lower Dover. Still, the situation remains complicated as Lower Dover did not rise until the early Late Classic, meaning that Barton Ramie, like Tutu Uitz Na and Floral Park, remains an example of a relatively isolated Preclassic villages (Drennan 1988). That said, Preclassic Barton Ramie, Tutu Uitz Na and Floral Park were situated between the established polity of Blackman Eddy and the emergent polity at Baking Pot (see Chapter 6.2.11.; Yaeger 2003a: 52). Another enigma at Barton Ramie was the high levels of relative wealth in some relatively small households (A.F. Chase and Garber 2004: 10; Weller 2009: 409; Willey et al. 1965).

Barton Ramie was occupied as early as the Middle Preclassic, grew substantially in the Late Preclassic, was abandoned during the end of the Terminal Classic period and then was likely reoccupied in the Early-Late Postclassic period (Gifford 1976: 23; Hoggarth et al. n.d.; see also Hoggarth et al. 2014). A total of 262 ‘mounds’ were documented, some of which are individual house platforms while others form patio groups of two or more houses which modern plowing reduced to single amorphous mounds (Weller 2009: 17; Willey 2004: 22; Willey et al. 1965: 34; Yaeger 2003a: 49). Mounds were divided into three categories: 1) ordinary house mounds 2) ‘plazuela’ mounds; and 3) temple mounds (Willey et al. 1965: 34). Generally, the ordinary house mounds fall into tiers 5 and 6 of the regional settlement typology proposed by Walden et al. (2019a). The larger ‘plazuela’ mounds form tier 5 high-status commoner neighborhood and district head households. The only “temple mounds” are BR-180, 181, and 182 situated in the eastern Texas district. The BR-180 group forms a civic-ceremonial compound possessing a 12m high

pyramid and plaza of 1700m² (Figure 3.9). Adjacent to BR-180 lies the elite residence of BR-168. These structures collectively served as the administrative and ceremonial focus of the settlement (Willey et al. 1965: 34). Willey and colleagues (1965: 576) argued for a population of around 2000 people at Late Classic Barton Ramie. While this has been critiqued as an overestimate (Weller 2009: 17), it was probably roughly accurate as many mounds contained multiple residential platforms, and it seems increasingly likely given new regional settlement data that all the mounds were occupied during the Late Classic period. House mounds were organized into nine clusters, which were not meant to reflect ancient communities as such (Willey et al. 1965: 31), although these form three districts and one neighborhood based on the spatial analysis in the next chapter (Chapter 6.2.4; see also Hammond 1981: 171; Weller 2009: 309-310). Willey and colleagues (1965) conducted five horizontal excavations at BR-1, BR-123, BR-144, BR-194, and BR-147, and smaller test excavations (2x3 m) on another 60 mounds (25% sample).

3.5 Summary of Regional Background

This regional background has purposefully focused on developments in the Maya lowlands and Mesoamerica which are evident in the Lower Dover area. The Middle Preclassic period saw the emergence of local elite households of a smaller scale, but not dissimilar to their counterparts at Cahal Pech or Blackman Eddy. General trends in other parts of the lowlands are apparent in the Lower Dover area, with the exception of a formation of a clear regional polity until the Late Classic period. The presence of nearby Blackman Eddy (3 km) from the Lower Dover region does suggest some type of political authority apparent in the region, but as I argue in Chapter 6, there is no clear evidence that the districts of the Lower Dover area ever fell under the aegis of Blackman Eddy. Instead, what is more likely at this time is that the different districts operated as small autonomous villages under the leadership of their local elite leaders. This type of arrangement is certainly not without precedent in the Classic Maya world (Lemonnier and Vanni re 2013: 397). It remains plausible that some overarching suzerain such as Tikal may have exerted hegemony over the area during the Early Classic, but this has left no tangible material signature. Late Classic Lower Dover shares similarities with other “boomtowns” in the region (Peuramaki-Brown and Morton 2019). Monumental construction at Lower Dover appears to have been quick but impressive, in a manner

comparable to Xunantunich (LeCount and Yaeger 2010a). Lastly, the Terminal period collapse appears to have largely impacted the Lower Dover region in a similar way to the rest of the Belize Valley, with political and demographic collapse occurring in relatively quick succession between AD 900-1100. Unlike much of the Classic period lowlands, some parts of Lower Dover, especially Barton Ramie show substantial evidence of Late Postclassic reoccupation (Hoggarth, Freiwald, and Awe 2021; Hoggarth et al. 2014, n.d.).

4.0 RESEARCH QUESTIONS, HYPOTHESES, AND METHODS

This dissertation research seeks to answer three overarching questions:

- 1) How and why did the political strategies and agency of Classic Maya intermediate elites change after incorporation into a larger polity?
- 2) How did intermediate elite relationships with apical elites and commoners change following the rise of a Late Classic Maya polity?
- 3) Why did the political agency and strategies of intermediate elites change in the way they did?

4.1 Reconstructing Intermediate Elite Roles and Political Strategies

Answering the proposed research questions requires examining intermediate elite ritual, economic and social roles. To do this, I focus on diachronic reconstruction of three realms of the human lived experience: inequalities in wealth and wellbeing, economic production and exchange, and ritual and religion in the Tutu Uitz Na, Floral Park, and Texas districts.

4.1.1 Reconstructing Intermediate Elite Wealth and Power and Authority

The first dimension, which requires reconstruction is inequalities in material wealth, wellbeing, and political power/authority among intermediate elites. Charting how these various dimensions of variability in prosperity changed in relation to one another following the rise of Lower Dover will provide a holistic picture of how the rise of the center affected intermediate elites. The various metrics used to investigate different activities are shown in Table 4.1 (note some artifact classes are indicative of multiple different types of activities).

Table 4.1 Artifactual Indicators of Specific Activities.

| <i>Activity</i> | <i>Artifactual Correlates</i> |
|------------------------|--|
| Wealth and Status | High-value ceramics, jade ornaments serpentine ornaments, shell ornaments, bone ornaments, greenstone ornaments, pyrite ornaments, monolithic axes, maceheads, glyph bearing objects, and non-local chert ceremonial items. |
| Feasting | Serving Vessels, faunal remains, and freshwater shell. |
| Ritual | Objects included in caches and burials, incensarios, figurines, musical instruments, speleothems and cave pearls, bloodletting paraphernalia, chert eccentrics, and fossils. |
| Imported Items | Obsidian, foreign ceramics, non-local chert, jade, greenstone, serpentine, granite, basalt, sandstone, pyrite, marine shell and slate. |
| Stone Tool Production | Chert cores and chert and obsidian debitage. |
| Wealth Item Production | Scrapers, borers, drills, chisels, thin bifaces, edge dulled flakes, pins, polishing stones, awls, hematite, miniature pestles, barkbeaters, and debris (jade, greenstone, serpentine, marine shell, slate, obsidian, quartz). |

Metrics of intermediate elite wealth employed in this dissertation include the proportion of items from distant locales (jade and marine shell), or those which require time and skill to produce (polychrome, decorated or well-finished ceramics, chert eccentrics, carved bone and stone, jade and shell jewelry; see Becker 1986, A.F. Chase and D.Z. Chase 1992; Drennan 1976; Haviland and Moholy-Nagy 1992; Hutson 2016, 2020; Inomata and Triadan 2003; Munson and Scholnick 2021; Reed and Zeleznik 2015; M. Smith 1987, 2015). Calculating wealth from portable objects is a complicated enterprise because it involves assigning a value to objects, whose distribution may be related to different forms of commercialized exchange or redistribution through the political economy (M. Smith 1987: 301-317; see also A.S.Z. Chase 2017: 32). This method of calculating wealth is prone to issues (M. Smith 1987), but less so than calculating construction energetics estimates for monumental elite palaces (Abrams 1994; Abrams and Bolland 1999; A. Chase and D. Chase 2014; Erasmus 1965; McCurdy 2016a). Conceptually, issues associated with calculating wealth using items like jades and polychrome ceramics are somewhat problematized by the idea these objects may have represented inalienable wealth which was of primary value to its owner

alone (Callaghan 2013; Kovacevich 2013). Callaghan (2013: 124) argues that some polychrome vessels could be personally tied to individuals, especially those which were received as gifts. Munson and Scholnick (2021) examine social well-being through interregional connections (the presence of non-local items like jades). Such an approach to examining the distribution of polychrome ceramics (along patron-client lines) could indeed be insightful. At the crudest level, the presence of these “wealth items” do reflect disparities in wealth and status and are usable as a metric of wealth here. The bigger issue, which is not really addressed is whether items were inalienable (*sensu* Kovacevich and Callaghan 2013), or commercially exchanged through marketplaces (*sensu* King 2015; Eppich and Freidel 2015), or both (Eppich 2020).

Using multiple metrics of inequalities is ideal because this approach allows an understanding of how these different lines of evidence overlap or deviate (Peterson and Drennan 2018). Numerous examples exist of surprisingly elaborate tombs interred within small unimpressive structures, or conversely, lackluster mortuary interments in large monumental structures (Clayton 2013; Douglas, Brown, and Awe 2015; Houk and Valdez 2011). Similarly, high proportions of wealth items are frequently associated with commoner residences (Douglass 2002: 103; Freidel 1986: 414, 417; Haviland and Moholy-Nagy 1992: 54) while sometimes, elite architectural contexts yield surprisingly utilitarian assemblages (Powis 2004; Reents-Budet et al. 2000). In some instances, there is a temporal element to this variability. Lesure and Blake (2002) argue that inequalities in access to construction labor emerged prior to inequalities in access to wealth items at Paso de la Amada. This variability between access to construction labor and access to elaborate wealth items is no doubt socio-politically meaningful and thus charting variability along multiple independent lines is important. As primary contexts, valuable objects placed in burials and caches are a direct metric of wealth. Furthermore, osteological analysis of human remains illuminates quality of life and wellbeing including rates of trauma, disease, and malnutrition (Rathje and McGuire 1982; Robb et al. 2001; Tung and Cook 2006), these metrics are corroborated with evidence of dietary practices based on carbon and nitrogen isotope analysis.

At the most abstract social scale, architectural volume provides a solid metric of wealth inequalities (see A.S.Z. Chase 2017; Thompson and Prufer 2021). However, at smaller scales, architectural volume and especially construction energetics provide a direct metric of the ability to command labor, and as such, they can be insightful metrics of elite political power and authority

(Abrams 1994; Arnold and Ford 1980; Ashmore 1988). Volume serves as a better indicator of architectural difference than area in Mesoamerica due to variability in terms of whether a specific context is “built-up” or “built-out” (M. Smith et al. 2014: 312; see also Hutson 2020a: 411). Webster and Gonlin (1988: 186) found at Copan that structure height and quality of construction materials were more reliable metrics of wealth and status than the area of the interior living space. Labor is investigated through calculation of the proportional increase in architecture, cumulative volumetric increase in architecture (m^3), volumetric architectural increase (m^3) per year, cumulative volumetric architectural increase (m^3), and an energetics analysis based on Abrams (1994) and McCurdy (2016a; see Chapters 5.6.1, 5.6.2 and 7.1.2). The use of energetics over volume is preferable in contexts in which the various sources of construction materials are known (Abrams 1994; see also A.S.Z. Chase 2017: 32). In the case of the Belize River Valley, there seems to be politically insightful differences between settlement situated in upland zones with abundant locally available construction materials and those situated on highly productive alluvial floodplains far from construction materials. The heterogeneous resource availability across the region makes the application of architectural energetics very useful. Subsequent comparison of energetics estimates with district and polity populations allows the calculations of tax rates which can be compared diachronically within a district, or spatially between districts in the polity.

Collectively, these three dimensions of intermediate elite life provide a basis for making comparisons between intermediate elite households and assessing how each regime was faring relative to one another and through time. The political status of intermediate elites is also reflected in how active they were in terms of securing external alliances and relationships. The proportions of luxury and utilitarian ceramics showing stylistic similarities with those common at surrounding polities are a rough metric of affiliation with external powers. For example, these include Mount Maloney from Xunantunich (Connell 2010; Kurnick 2016b; LeCount 2010), or Belize Red from Baking Pot (Audet 2006: 319-320; A.F. Chase and D.Z. Chase 2012: 8; Reents-Budet et al. 2005: 374, 378). Belize Red may have primarily been made at Baking Pot, whereas Mount Maloney was likely made in multiple locales throughout the valley suggestive of different processes underlying their distribution (Douglas et al. 2021).

4.1.2 Altruism and Avarice

Identifying variability in whether elites pursued strategies which were collectively beneficial for commoners or more aggrandizing and exploitative requires reconstruction of wealth and wellbeing among commoner households in each district (Blanton et al. 1996; Lohse 2013; Rathje 1983; Robin et al. 2014). To monitor changes in commoner wealth and wellbeing, I rely on similar metrics to those proposed above for intermediate elites. Commoner wealth is reconstructed through the proportions of long-distance items (jade and marine shell) or that which necessitates above-average time and ability to make (polychrome, decorated or well-finished ceramics, chert eccentrics, carved bone and stone, jade, and shell jewelry). Commoners facing greater tribute burdens should have less household wealth (McAnany et al. 2002). Commoner wealth is also quantifiable using the valuable objects placed in primary contexts, such as burials and caches. Commoners were relying on their own labor to expand their homes, meaning that architectural increases are a better metric of commoner wealth than political power/authority (as it does for intermediate elites; see Arnold and Ford 1980; Wilk 1983; see also Kohler et al. 2017).

Commoner wellbeing is reconstructed through osteological analysis and dietary isotopes. Architecture provides a second, more qualitative measure of commoner wellbeing. Unlike intermediate elites who by their very nature lived in more substantial structures, lower status commoners frequently resided in smaller structures which had implications for their quality of life and physical wellbeing (Abrams 1994: 31-36). Identifying changes in commoner wealth and quality of life allows an assessment of whether elites pursued strategies that were collectively beneficial for commoners or more aggrandizing and exploitative (Blanton et al. 1996; Blanton and Fargher 2007; Rathje 1983; M. Smith 2015). A range of factors other than the policies of intermediate elites could impact the relative wealth and quality of life of commoners. Possible candidates include the apical elite at Lower Dover, broader changes at the regional level, such as the inclusion of the valley under the hegemony of external suzerains at Caracol or Naranjo, environmental issues, disease, and famine, among others. Comparison of multiple districts in the Lower Dover polity serves to identify whether changes in commoner wealth and quality of life were determined by apical or intermediate elite policies. Comparison of the three districts with a

similarly sized district at Baking Pot (Settlement Cluster C) provides an indication of whether trends were associated with broader regional level processes (Hoggarth 2012).

4.1.3 Production and Consumption

The second dimension which requires reconstruction is the economic realm, which can be divided into two separate components, (1) productive differentiation, and (2) exchange and redistribution patterns. Following (Peterson and Drennan 2012), the concept of productive differentiation is examined at the household level to examine the degree to which production patterns changed at both the intermediate elite and commoner scales with the rise of Lower Dover. Investigation of productive differentiation among intermediate elites and their subordinates provides an important avenue into understanding broader political organization (Stanish 2004).

The term productive differentiation, or economic differentiation (following VandenBosch, LeCount, and Yaeger 2010: 273), effectively allows us to examine the types of low-level unspecialized variability in production strategies between households, which is the norm in many parts of the ancient world without (Costin 1991). Several scholars have shown that the crafting of wealth items was an important economic strategy for Classic Maya elites (J. Braswell 2010; Kovacevich 2015; Inomata 2001a; Keller 2012). Intermediate elites were also involved in the production of more quotidian items (Foias 2013; Robin et al. 2012a).

The proportions of production items and debitage are employed to identify intermediate elite production. Tools such as chert drills, along with marine shell debitage reflect shell jewelry production (Keller 2012). High proportions of jade debitage or jade working tools would reflect the production of jade objects (Kovacevich 2015: 51). Chert is categorized into tools (borers, scrapers, edge dulled flakes, cores, drills, bifaces, rough bifaces, fine bifaces) and debitage to differentiate between specific activities (Aoyama 1996). Items indicative of craft production include polishing stones, awls, and barkbeaters (Gonlin 2007). Lithic analysis can therefore also distinguish between the production of quotidian (agriculture tools) and high-status items (ornaments). High densities of chert debitage and cores are used to identify approximate locales in which chert tools were produced. Generally, one would expect that debitage dumped in/near an

intermediate elite, or commoner residence is more likely to reflect activities at that household rather than a commoner household further away (see Chapter 5.3.3 for a discussion of depositional processes and taphonomy). Understanding the degree to which the intermediate elite patronized production on the part of commoners is difficult. Any evidence of production at an intermediate elite center could have been conducted by the intermediate elite or commoner clients who worked there. The proportions of items associated with the production of high-status items or quotidian tools are also assessed at the commoner level. Homogeneous patterns of change among commoners within a single district might be reflective of intermediate elite policies impacting commoner households in similar ways across the district.

A strong argument has been made for intermediate elite redistribution of quotidian and luxury items either through marketplace exchange or other means (G. Braswell 2010; Dahlin et al. 2007; Ford 2004; King 2015; Masson and Freidel 2012; Potter and King 1995). Reconstructing exchange patterns is also fundamental to understanding the role of intermediate elites in redistributive economies. Identification of marketplace facilities in the plazas of Maya centers highlights the possibility that smaller local and intermediate elite plazas may also have functioned as nodes in a commercialized exchange system (Cap 2015; King 2015; L. Shaw 2012). Test excavations of intermediate elite plazas, to assess a marketplace function, are a fruitful line of future research, but were beyond the scope of this dissertation. Instead, the distributional approach was employed to chart the exchange patterns of trade items like obsidian, marine shell, and fine polychromes at a neighborhood level (Hirth 1998; see also Eppich and Freidel 2015). The distributional approach offers one way of assessing how dramatically household assemblages changed with the rise of Lower Dover. Following the logic of the approach, if imported items were relatively accessible to all households then this would suggest a degree of commercialization. In contrast, if their flow was tightly restricted then this might equate to the movement of items through patron-client relationships or other modes of exchange (Hirth 1998).

Homogeneous Late Classic distributions of imported items at the district level, but heterogeneity between the different districts prior to the emergence of Lower Dover would suggest that the local elites played a role in redistribution or exchange. On the other hand, heterogeneity in access to imported items within districts at either the neighborhood or the household level would suggest redistribution was occurring at lower social scales and households were provisioning

themselves (Ebert et al. 2015). The homogeneous distribution of imported items across the villages prior to the rise of Lower Dover would show centralized marketing facilities predated the political center. The rise of Lower Dover in the Late Classic saw the possible construction of a centralized marketplace in Plaza A (Guerra 2018). If people were sourcing their goods from a single place, this should result in a homogeneous distribution pattern at the pan district level (at least in terms of the artifact classes redistributed at the central market). Conversely, persistent district-level differences, and/or little change in the distribution of these materials, would suggest intermediate elites retained an exchange and or redistributive role. The relative wealth of households also determined how much of a commodity they could purchase. This needs to be taken into account when employing the distributional approach (Hoggarth 2012: 26; M. Smith 1999). The distributional approach, as applied here will buttress Guerra's (2018) marketplace excavation and geo-chemical analyses at the Lower Dover center, to provide a holistic understanding of the polity-level economy (see L. Shaw 2012: 118). Following Hoggarth and Awe (2014) a modified version of the distributional approach was employed here using the proportions of imported items (Hoggarth 2012; see also Hirth 1998). Sourcing analysis of obsidian (pXRF) will reveal how variable local connections to sources were, and how this changed diachronically (Ebert 2015b; G. Braswell 2002). In this regard, obsidian provides an independent window into redistribution patterns, which can be used to compare to the distributional approach.

4.1.4 Ritualization and Ceremony

The last dimension is ritual and religion. Intermediate elite involvement in ritual is assessed using the proportions of ritual items like *incensarios* (Kosakowsky et al. 2012: 304), musical instruments (including whistles, tinklers, and drums; Cheong 2020; Foias 2013: 178-9), fossils (Alvarado-Ortega et al. 2018; Riquelme et al. 2012), speleothems and cave pearls (Brady et al. 1997; Brady and Rissolo 2006: 477-480), bloodletting tools (Haines, Willink, and Maxwell 2008; Munson et al. 2014), and figurines (DeLance 2016; Halperin 2012, 2014; Plunket 2002; for a similar approach see de Montmollin 2012). M. Smith (2002) used similar metrics to show that little change occurred in ritual objects in domestic assemblages at sites in Postclassic Morelos despite incorporation into the Aztec empire.

Architecture provides a qualitative window into the extent and nature of the rituals which intermediate elites hosted (Freidel 1992: 125). For example, the construction of specific structure types, like eastern triadic structures, speaks to ancestor veneration, whereas the expansion of plazas indicates a desire to include larger audiences (Awe, Hoggarth, and Aimers 2017; Becker 2004; Inomata 2006; Ossa, Smith, and Lobo 2017). The Classic Maya interred their dead within their residential platforms providing a window into lineage dynamics and ancestor ritual (McAnany 1995; Plunket 2002: 9). Burials within structures also provide a window into changing ritual practices (Barnhart 2002; Blackmore 2011; Welsh 1988). These different approaches to understanding ritual practices may overlap or diverge, revealing interesting patterns. For instance, if intermediate elite ceremonial architecture and feasting indicators decrease, but the proportion of ritual items like bloodletters increase, this might reflect a shift from public to private ceremonies (Deal 1987: 177; Lohse 2007).

Feasts could co-occur alongside public ceremonies or represent separate events. Feasts are identifiable archaeologically through the proportions of feasting-related items such as distinct serving and drinking vessels, and characteristic patterns in faunal remains (Connell 2010; Hayden 2001: 37-40; LeCount 2001; Hoggarth 2012: 30, 143; Robin, Yaeger, and Ashmore 2010: 328). Distinguishing between inclusive or diacritical feasting is possible through examination of whether of the feasting locale was public or private, and the proportions of lavish fine feasting wares (see Chapter 2.10.7 and 2.10.8).

Charting shifts in the proportions of ritual and feasting-related items (proportions of serving vessels to other types of vessel and faunal remains) at commoner households will provide a broader overview of how these activities were patterned across the neighborhood and social spectrum. This approach is useful as it also provides a metric of the degree of centralization of ritual and feasting at the neighborhood level. For instance, a neighborhood could be ceremonially integrated at the intermediate elite level, as reflected in much higher proportions of ritual and feasting items at the center. A somewhat centralized pattern would involve ritual and feasting items at the intermediate elite center and among high-status neighborhood head households. A decentralized pattern would involve ritual and feasting paraphernalia in similar proportions across all the intermediate elite and commoner households.

4.2 Hypotheses: Examining Variability in Intermediate Elite Political Strategies

The dissertation employs three hypotheses to structure research around the questions outlined above. Hypothesis 1 elucidates how events unfolded after the rise of the Lower Dover center and situates the polity on a spectrum of centralization. At one end of the spectrum would be a highly decentralized, loosely politically integrated polity with politically active intermediate elites, with independence to pursue their own strategies and roles, At the other end of the spectrum would be a highly centralized polity with apical elite policies constraining intermediate elite agency and political strategies. Research questions 1 and 2 are directly related to hypothesis 1.

4.2.1 Hypothesis 1a

Each intermediate elite household retained political agency and pursued its own strategies despite the establishment of an apical elite court at Lower Dover:

Test Implications for Hypothesis 1a:

1) Upon incorporation into Lower Dover, the intermediate elites would remain politically powerful, as wealthy as before if not more so, and experience high degrees of wellbeing.

2) No change between Early and Late Classic intermediate elite strategies, or if there are changes, the changes would not be uniform for all intermediate elites. These strategies may reflect the continued pursuit of earlier strategies. Variability in strategies between intermediate elites would reflect the idiosyncratic choices of those households to integrate themselves fully into a subsuming Lower Dover politico-economic structure, or by positioning themselves as politico-economic intermediaries between commoners and the apical elite.

3) Patterns of wealth and wellbeing, or economic production or ritual among commoner households would not change in a homogeneous manner across the entire polity. Instead, change might not be noted at all, or changes at the household level might vary based on district membership due to intermediate elite practices.

4) The apical elites at Lower Dover seem to be involved in exchange networks of sumptuary items, and cosmologically related practices like those conducted by rulers at other Maya centers (Guerra and Awe 2017). Following this hypothesis, intermediate elites might be expected to carry out large-scale ritual and ceremonial activities or were involved in the redistribution of prestige items. Intermediate elite rituals and ceremonies venerating their lineages and creating district identities would flourish despite the rise of Lower Dover.

5) Lastly, a high degree of political autonomy would manifest itself in intermediate elite pursuit of relationships with apical elites at surrounding political centers (Tsukamoto et al. 2015).

4.2.2 Hypothesis 1b

At the other end of the spectrum, if the Lower Dover apical elite were a centralized regime whose policies dramatically changed the surrounding political landscape then we might expect intermediate elite power to decline and their surrounding districts to change in similar ways following the rise of Lower Dover.

Test Implications for Hypothesis 1b

1) If Lower Dover were completely centralized we would expect to see pre-existing intermediate elite wealth, political power, and wellbeing decline in the Late Classic period, as local elites became highly subordinate intermediate elites.

2) The curtailment of intermediate elite agency might be seen in the reduction of ceremonial or economic activities, the “leveling” of elite and commoner statuses, or all three intermediate elites adopting similar strategies. This would either reflect the potential options for intermediate elite roles becoming more limited under the emergent Lower Dover regime or a centralized political economy on the part of the Lower Dover apical elite subsuming intermediate elite activities.

3) Commoner households would see uniform changes across the polity irrespective of district membership. This shift would reflect intermediate elites losing some of their direct effects

on commoner lifeways as commoner districts became uniformly integrated into the urban economic and religious order centered at Lower Dover.

4) Intermediate elite roles and strategies may shift so that they are not in direct competition with those at Lower Dover. This might be evident in reduced investment in ceremonial architecture at the intermediate elite contexts, reflecting a decline in the ceremonial creation of district-level identities. Intermediate elite lineage-based ritual would decline, as the Lower Dover elite would become the sole recipients of public veneration.

5) Intermediate elites would not show evidence of external relationships with other political centers in the Belize Valley as they were tightly controlled by the Lower Dover elite.

4.3 Factors Determining Intermediate Elite Political Strategies

Research question 3 asks why did the political agency and strategies of intermediate elites change in the way they did? Investigation of hypotheses 2 and 3 clarifies the causal factors that influenced the patterns outlined by hypothesis 1. Hypothesis 2 explores the relationship between autonomous local elite wealth and status and their ability to negotiate their position in the ascendant polity. Hypothesis 3 scrutinizes the relationship between intermediate elite agency and geographic distance from the Lower Dover center.

4.3.1 Hypothesis 2

Variability in the political agency and roles of intermediate elites is structured by geographic distance.

Variability in intermediate elite agency might be impacted by geographical distance from the Lower Dover center. While only minor distances separate the core and the hinterland intermediate elites at Lower Dover, distance is relative to political power. Elites closer to the Lower Dover center may have been impacted in more overt ways than elites located on the fringes

of the polity (A.F. Chase and D.Z. Chase 1998a; J. Marcus 2006: 238; Schortman and Urban 1994; see also Berdan 2006: 159). Geographic distance might have played a role in variable ways, for instance, closer intermediate elites may have lost political power but gained wealth through being co-opted as “middle men” in the Lower Dover polity. More distant intermediate elites might have retained higher degrees of political autonomy and power, but lost out on some of the wealth-based benefits of being allied with the Lower Dover regime. Investigation of this hypothesis sheds light on two important dynamics; the degree to which different parts of the Lower Dover settlement were part of the overall polity, and how territorial the polity was. Investigation of the role physical geography played in this dynamic should show the affiliation of these intermediate elite centers. If evidence of change, or overt control by Lower Dover seems to decrease with physical distance from the center then this would suggest that Lower Dover was probably a weakly developed territorial unit. Conversely, if borderland intermediate elite centers show high degrees of integration, then this would suggest Lower Dover was a territorial unit that potentially purposefully co-opted borderland elites to secure these areas.

Test Implications for Hypothesis 2:

If the rise of Lower Dover undercut the political agency, wealth, and status of the Tutu Uitz Na center (located 700 m from Lower Dover) the most, but the Floral Park center (located 3 km away) saw the least change, then this would suggest distance was a factor in determining intermediate elite agency.

4.3.2 Hypothesis 3

Variability present in the political agency and roles of Late Classic intermediate elites was structured by intermediate elite wealth, resources, access to labor, or retinue size.

The degree of agency Late Classic intermediate elites possessed might have been directly related to their relative wealth or political power during the Early Classic period (Ashmore 2010; Canuto and Fash 2004). More politically powerful local elites with the status necessary to command contingents of commoners may have had greater traction to negotiate their position in the emerging Lower Dover polity, thus retaining greater autonomy. Likewise, intermediate elites

with better access to foreign luxury items might have possessed greater external connections to rely on if their position or power be questioned. Wealthier local elites may have also been better situated to “buy off” the Lower Dover elite or even commoner subordinates. Investigation of this hypothesis delves into the historically contingent nature of power relations at Lower Dover.

Test Implications for Hypothesis 3

Hypothesis 3 will be proven correct if the most impoverished intermediate elite, with the least access to person power or resources sees the most dramatic undercutting of wealth, status and roles. Conversely, if the wealthiest intermediate elite with the most access to person power and resources retains the most agency, then this would be seen as that household having more resources to negotiate their position in the emergent polity.

4.3.3 Understanding Structural Factors Promoting Elite Agency

Ultimately, the patterns of variability between different intermediate elite centers and their respective districts might be too complex to be fully explained by either hypothesis 2 or 3 individually, however investigation of both hypotheses in unison should provide a rough idea of the factors which may have structured the degree of intermediate elite agency in the Late Classic period. These hypotheses serve as more of a handrail for informing interpretation than hard and fast rules. For instance, it remains unlikely that a single intermediate elite regime would be the wealthiest, and control the most person power, and resources. It seems likely that geographic distance and pre-existing levels of intermediate elite political power/authority and wealth no doubt contributed to the nature of their co-option process. Collectively, investigation of the above research questions and hypotheses will allow the reconstruction of intermediate elite strategies and how changes in activities manifested in how the different intermediate elite regimes constructed their upward, downward, and horizontal faces. The hypotheses represent possible scenarios or configurations of the activities/roles of intermediate elites. Investigation of these strategies along multiple axes (political, economic, religious) allows us to move beyond an understanding of whether Lower Dover was centralized or not. Instead, this endeavor allows a comparison of the ways in which districts were centralized in relation to the overarching polity.

4.4 Investigating Diachronic Changes in the Lower Dover Polity

Understanding the broad research goals associated with this dissertation requires examination of three intermediate elite centers and their respective districts of commoner subordinates over four time periods. The temporal scheme developed by Annales historian Fernand Braudel (1972) is useful for conceptualizing change over time (see also Bintliff 1991; Iannone 2002; Knapp 1992). The concept of the *longue durée* is taken out of its original geographic/geological context but is useful for thinking about the broader time frame from the establishment of the intermediate elite centers and the commoner households in the Middle Preclassic period, through to their abandonment during the Terminal Classic period.

This long temporal trajectory is divided into four analytical phases for the purposes of this dissertation; the Middle Preclassic, Late Preclassic, Early Classic (including Terminal Preclassic), and Late/Terminal Classic periods. Most of the analysis is geared around changes occurring between these periods. These periods can be thought of as representing the *moyenne durée* in Braudel's scheme, or the middle duration. There are two underlying reasons why chronology has been lumped into four sizeable periods as opposed to dividing it into more periods which would no doubt reveal more interesting trends. The first is related largely due to issues separating contexts based on the ceramic assemblages (see Chapter 5.4.1). A second issue relates to sample sizes, lumping periods has allowed the investigation of broad spatial trends over a sizeable area with a decent degree of statistical confidence. If the household inventories were divided into five or six periods, this would have necessitated larger samples, which could only be obtained through excavating units 2-3 times larger. While this would no doubt be a highly fruitful pursuit, it was simply not logistically possible given the scale of a dissertation project. Ultimately, these intermediate temporal units can be strung together in a continuous fashion to investigate diachronic change (Ashmore 2003: 11; see also Barrett 1999).

Lastly, the *événement* or events form a smaller time scale within the broader periods outlined above. These might involve the interment of individuals or the deposition of artifacts in a specific primary context. This last temporal category reflects fortunate archaeological discoveries, which speak to broader temporal changes. While these concepts are useful for methodologically situating temporal units, they are also fundamental to thinking about ancient behavior.

Application of these multiple time scales forms diachronic sub-units, which can be easily compared. This provides a fluid approach to reconstructing the developmental sequences of each intermediate elite center (see Iannone and Connell 2003: 3-4). Furthermore, the extrapolation of temporal patterns at the scale of the *longue durée* provides a picture, which does not pigeonhole the developmental trajectory into smaller time periods (Runggaldier and Hammond 2016: 38). This approach allows an understanding of the relative success of intermediate elite strategies pursued in previous phases, and the ways in which they came to shape the agency of elites later on (see Baron 2016a: 15).

One issue with diachronic comparison over such long periods involves the degree to which the intermediate elite households in question reflect a single-family or multiple different kinship groups. The long settlement history at Lower Dover means that the assumption that a single biologically related lineage resided within a minor center or commoner household seems unlikely (see McAnany 1995: 97). For all intents and purposes, this issue is not dramatically important for the purposes of this dissertation, as the term intermediate elite is not referring to a specific lineage but the residents of a physical place on the landscape. These issues are also reduced by the fact that whoever the residents of a particular minor center were, their agency was prescribed in a historically contingent fashion by the strategies of their predecessors. Moreover, employment of “House” society style fictive kinship and the molding of a single identity (veneration of ancestors at the same shrine) suggest that even if the occupants of elite centers changed, they still presented themselves as somehow related to the preceding family (see Chapter 11).

4.5 Summary of Research Questions and Hypotheses

This chapter has outlined the three research questions under investigation in this dissertation. These include: **1)** How and why did the political strategies and agency of Classic Maya intermediate elites change after incorporation into a larger polity? **2)** How did intermediate elite relationships with apical elites and commoners change following the rise of a Late Classic Maya polity? **3)** Why did the political agency and strategies of intermediate elites change in the way they did? Answering research questions 1 and 2 involves testing hypothesis 1. Answering

question 3 requires testing hypotheses 2 and 3. Collectively, examining these questions will provide insights into how intermediate elite agency and strategies changed following the rise of Lower Dover, and how these changes impacted commoner subordinates at the district level. Investigation of question 3 will shed light on why these changes occurred.

5.0 RESEARCH METHODS

A sizeable settlement dataset for the Lower Dover polity can be brought to bear on the research questions outlined in Chapter Four. Unpacking the relative agency and political strategies of intermediate elites and their relationships with their subordinates, peers, and suzerains required marshaling substantial archaeological data and combining multiple lines of quantitative and qualitative data in a comparative fashion. This chapter outlines the research methods employed to create this dataset. Section 5.1 reviews the full coverage pedestrian survey of the southern portion of the Lower Dover polity. Section 5.2 outlines the settlement pattern analyses. Section 5.3 describes excavation sampling strategies, procedures, and taphonomic issues. Section 5.4 describes lab analysis of the materials from excavations. Section 5.5 outlines the incorporation of pre-existing data from Barton Ramie (Willey et al. 1965), and Floral Park (Brown et al. 1996; Glassman, Conlon and Garber 1995). Finally, Section 5.6 describes the statistical methods used to assess changes at Lower Dover.

5.1 The Lower Dover Settlement Survey

Several small surveys in the broader Lower Dover area suggested to me that the locale could be an ideal case study to investigate how the rise of a political regime impacted pre-existing intermediate elites and commoners. Tutu Uitz Na, Floral Park, and BR-180/168 represented good candidates for investigation because prior fieldwork had shown all three minor centers possessed substantial Preclassic components (Brown et al. 1996; Glassman, Conlon, and Garber 1995; Petrozza 2014; Petrozza 2015; Petrozza and Biggie 2015; Wölfel et al. 2009; Willey et al. 1965; see also Chapter 3.4.3, 3.4.4, and 3.4.5). In stark contrast, work at the Lower Dover civic-ceremonial center revealed no evidence of construction predating the Late Classic period (Guerra and Awe 2017; see also Chapter 3.4.2).

Therefore, I conducted systematic, full coverage pedestrian survey of a 12 km² area south of the Belize River, and several smaller areas to the north of the river (for a full survey report see

Walden, Biggie, and Ebert 2017). This survey extended pre-existing BVAR survey to the east to connect with Willey and colleagues' (1965) Barton Ramie survey (Hoggarth et al. 2010). High-resolution LiDAR data gathered through the West-Central Belize Lidar Survey (co-PI, J. Awe) was provided by BVAR. Most settlement groups (69%) were either visible on the LiDAR bare earth model or were evident through a Topographic Position Index (TPI) LiDAR analysis conducted by Claire Ebert (Walden, Biggie, and Ebert 2017; see also Awe, Ebert, and Hoggarth 2015). TPI analysis creates a raster layer of equal-sized cells which reflect the difference between the height of one cell and the average height of the surrounding cells. The TPI analysis revealed a substantial drop-off in settlement density north of Barton Ramie, west of Floral Park, east of Tutu Uitz Na, and in the foothills to the south. Subsequent analysis revealed that this drop-off probably marked the boundaries of the demographic unit which represented the Lower Dover polity (see Chapter 6.2.1 and 6.2.3). The Lower Dover settlement survey integrated new and pre-existing survey data into a single high-resolution settlement dataset comparable to those created for the nearby polities of Baking Pot and Cahal Pech (Ebert 2015a; Conlon and Ehret 2000; Hoggarth et al. 2010). Survey involved revisiting and mapping settlement groups identified in earlier surveys conducted by Guerra (2011), Petrozza (2014, 2015), and Petrozza and Biggie (2015). This resulting dataset included each residential group, the orientations of house structures, monumental architecture, *chultunob* (storage pits), caves/rockshelters, *sacbeob* (causeways), *aguadas* (modified/natural ponds), and reservoirs (man-made ponds; see A.S.Z Chase 2016b: 885).

5.1.1 Survey Units of Analysis

The settlement group (SG) was the primary survey unit, this residential unit typically consisted of one to six low stone platforms situated around a central patio space. These units, which are also commonly referred to as patio groups or *plazuelas* are considered to represent kin-based household units (Ashmore 1981: 49; Eaton 1975; Haviland 1988; Tourtellot 1988). Following Thompson and Prufer (2016: 222), the term settlement group was chosen not *plazuela* or *patio group* because unlike surrounding regions, informal single or double mound dwellings are the norm in the Belize River Valley, and thus the more flexible term “settlement group” was considered favorable. The SG designation was used instead of a Lower Dover prefix because it was unclear which settlement groups were part of the polity prior to settlement pattern analysis,

and because much of the settlement was not associated with Lower Dover until its rise in the Late Classic period. Most settlement groups did have some discernable patio space which alongside the surrounding house lot would have served as the locus for gatherings, ceremonies, craft production, and other domestic activities (Killion 1992). Each identifiable architectural unit was given an SG number which ran sequentially as survey progressed. Structural designations within an SG started with the tallest structure and ran in a clockwise fashion according to the cardinal directions (N1, E2, S3, W4). This approach maximized information about mound height and cardinal directionality within the structural prefix. Recording of rockshelters (RS), *chultunob* (CH), aguadas (AG), and reservoirs (RV) followed a similar format. Rockshelters, *chultunob*, and reservoirs retained their original designations, while newly discovered sites of these types ran sequentially in the order they were found (Perkins 2013, 2014; Petrozza 2015). Patios are defined as smaller flat, open areas associated with one or more structural platforms (of 50-350 m²). In contrast, plazas are defined as larger built spaces (>350 m²). At Lower Dover, all the patios are associated with commoner households, whereas plazas are only found in intermediate or apical elite contexts (see also Ashmore 1981: 51). The architectural volume of the settlement groups was extracted from the LiDAR using a method developed by Claire Ebert (reported in Walden et al. 2019, 2020c; for an alternative approach see A.S.Z. Chase 2017: 34).

5.1.2 Survey Instruments, Procedures, and Temporal Control

All archaeological features were recorded on a Garmin Map 64S handheld GPS. Transects were walked with surveyors placed roughly 5-15 m apart (depending on visibility) to ensure coverage in forested areas. All the house platforms around a patio were mapped using tape and compass and assigned an SG number. Information was collected about the number of structures, the orientations of the structures, the height of structures, the geographical location of the group, and any diagnostic ceramics on the ground surface.

Past attempts to test-pit for chronology in the region did not provide sufficient material to reliably date residential contexts (Petrozza 2015: 36; see the method by Fry 1972). Analysis of ceramic sherds on the ground surface provided a relatively quick and easy way of establishing a very rough settlement chronology (Ebert, Hoggarth, and Awe 2016a: 294-295; Hoggarth 2012:

60-61; Robin et al. 2012a: 29-30). Temporal comparison of household occupations using survey data is prone to palimpsest issues in the Classic Maya lowlands due to the ancient propensity for overbuilding, which seals earlier sherds redeposited in construction fill from middens between thick plaster floors. This can lead to an unsurprising preponderance of Late Classic sherds on the ground surface (T. Neff 2010: 257). That said, bioturbation is more extensive in the Maya lowlands than most parts of the world, and earlier ceramics were certainly apparent on the ground surface at Lower Dover, allowing the application of survey methods employed in other corners of the globe (Billman 1996; Downum and Brown 1998; Drennan, Berrey, Peterson and 2015; Kowalewski 1989; Sanders, Parsons and Santley 1979; Wilson 1988). Moreover, the layout, scale, and form of settlement provided some clues about its temporal longevity on the landscape (Garrison, Houston, and Alcover Firpi 2019: 138; Yaeger, Brown, and Cap 2016: 348-349).

These original survey temporal designations based on analysis of surface ceramics, were corroborated by subsequent excavation as part of this dissertation. Further substantiation of this method was provided through test pitting of a subset of 10 Late Classic households by Rafael Guerra (see Walden, Guerra, and Qiu 2019). The broad temporal sequence of the polity was reconstructed using information from a total of 96 excavated settlement groups (~20% of the total Late Classic settlement groups) within the Lower Dover polity (Biggie et al. 2019; Brown et al. 1996; Ellis, Walden, and Rick 2020; Garcia, Walden, and Martinez 2020; Glassman, Conlon, and Garber 1995; Guerra and Awe 2017; Levin et al. 2020; Nachamie and Walden 2020; Shaw-Müller et al. 2019; Shaw-Müller, Walden, and Nachamie 2020; Walden and Biggie 2017; Walden, Biggie, and Ebert 2017; Walden, Guerra, and Qiu 2019; Walden et al. 2018, 2020b, 2020c; Willey et al. 1965).

The main comparative temporal threshold in this study is the Early to Late Classic transition. The general paucity of Early Classic ceramics in the Belize River Valley was once taken to assume political decentralization and population stagnation. It is now becoming clear that Late and Terminal Preclassic types like Sierra Red continue through the transition (Lincoln 1985; see Chapter 5.4.1). The ubiquity of Sierra Red among other Late and Terminal Preclassic types in addition to those traditionally considered Early Classic reduced the risks of palimpsest issues when comparing between Early and Late Classic settlement. Like other parts of the Belize River Valley,

survey and excavation at Lower Dover revealed that all settlement was occupied in the Late Classic period (see Hoggarth 2012: 40; Willey et al. 1965: 289; Yaeger 2010b: 238).

5.1.3 Incorporation of Pre-existing Survey Data

The pedestrian survey drew upon several earlier surveys conducted by Guerra (2011), and Petrozza (2014; 2015; see also Petrozza and Biggie 2015). Survey data was also incorporated from BVAP work at Floral Park (Brown et al. 1996; Glassman, Conlon, and Garber 1995), and the Harvard Peabody project at Barton Ramie (Willey et al. 1965). Data from all these various projects was standardized into a single polity dataset. Past surveys recorded individual mounds, not settlement groups. All previously-recorded mounds which were part of a group were renumbered. The SG designation was applied to all ‘groups’ found in the hinterland whether were are single dwelling commoner houses or elite ceremonial/residential compounds. The Barton Ramie households were given SG numbers but retained their BR designations in this dissertation because they are established in the existing literature. The Barton Ramie settlement data was modified for integration into the Lower Dover settlement dataset.

Weller (2009: 17) argues that Willey’s usage of 7.5 people per mound at Barton Ramie is too high, although this possibility is less worrisome because many of the plowed mounds contained multiple structures (Willey et al. 1965: 72, 572, 576; see also Weller 2009: 17; Yaeger 2003a: 49). Regardless, the re-estimation of the population of Barton Ramie was necessary for comparability with the rest of the Lower Dover settlement, where individual platforms around each patio were mapped (Ashmore 1981b: 63; Drennan 1988: 278; Willey et al. 1965: 34). Revised population estimates for Barton Ramie were calculated using mound volume and the rough shapes of the mounds. BR-201 was never plotted on the site map published by Willey and colleagues (1965), but was allocated to a large un-numbered mound north of BR-200. Newly identified settlement groups at Barton Ramie, outside the original survey boundary were given SG numbers. The aulic elite residential plaza groups located around the civic-ceremonial epicenter of Lower Dover are situated on a constructed plateau. Group M, which is located 15m southeast of the Lower Dover epicenter is not on this constructed plateau and was subsequently renamed SG 2 (see Guerra 2017).

5.1.4 Taphonomic Issues and Depositional Processes

Taphonomic processes, depositional processes, and modern land use can damage structures or render them invisible, posing issues that need to be taken into account (Ashmore 1981b: 61; Johnston 2004: 167; Kurjack 1974: 80-81). Roughly 30% of settlement was shrouded in dense *wamil* (see Figure 5.1). This posed several problems. The first being general visibility was suboptimal and the ground surface was sometimes covered in ~30 cm of decaying leaf matter. This problematized the identification of non-mounded platforms and made the analysis of surface materials more labor-intensive. Potentially, more alarming is the fact that this type of dense vegetation impacts the visibility of settlement on the LiDAR (Cap, Yaeger, and Brown 2018: 40; Ebert, Hoggarth, and Awe 2016a: 286; Ford and Horn 2019; Horn, Ford, and Morales 2019: 144; Thompson and Prufer 2015; see also Hutson 2015; Prufer, Thompson, and Kennett 2015). Subsequently, a transect survey was used to map these areas. TPI analysis revealed 20 possible features in the 400 square meter block of *wamil* around Tutu Uitz Na, of which 17 proved to be mounds. A further seven small low mounds were identified through pedestrian survey. These success rates corroborate patterns outlined by Ebert, Hoggarth, and Awe (2016a).

A substantial portion of what was the Lower Dover polity, including all of Barton Ramie, and the Western Cluster has been intensely plowed over the past fifty years. Concerns about whether plowed mounds would be visible on the LiDAR fortunately proved to be unfounded (Ebert, Hoggarth and Awe 2016a: 296). Roughly 10% of the original mounds at Barton Ramie are still visible today (Weller 2009: 18). This intense plowing saw settlement groups reduced to large amorphous tells (Yaeger 2003a: 49), with their structural fill and artifact assemblages generally smeared in linear scatters. These scatters generally conformed to the cardinal directions at which the houses were oriented, however, and their areal extent was mapped to produce settlement group plans comprising multiple structures around a central patio, comparable to those identified in unplowed areas (Golden and Conlon 1996; see also Hawkins 1998). This approach was attempted at Barton Ramie, but the platforms were plowed to the point where they could not be accurately mapped (many of the smaller platforms are now destroyed). Plowing generates a random jumble of artifacts from all periods of occupation, allowing a more comprehensive temporal understanding of the occupational sequence of these mounds (Conlon and Ehret 2000; Hoggarth 2012: 60-61).

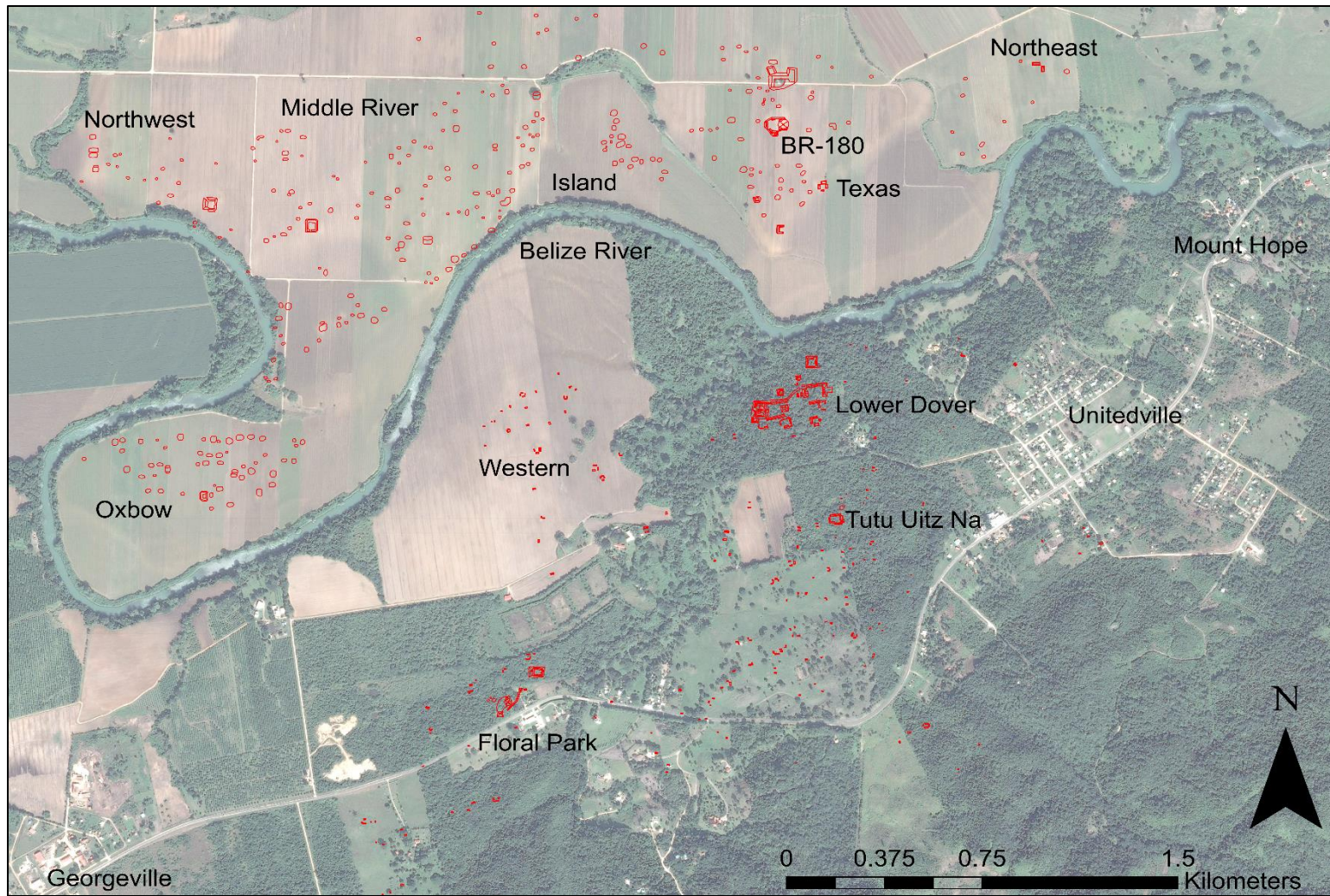


Figure 5.1 Map of Lower Dover area showing terrain and modern villages

Google Earth Pro 7.3.3.7786 (January 2016). Cayo District, Belize. NOAA, DigitalGlobe 2013. <http://www.google.com/earth/index.html> (Accessed February 1, 2021)

Another taphonomic concern involved the presence of modern habitation, most notably the village of Unitedville. Pedestrian survey was conducted door to door to identify and map any mounds in the gardens of modern residences. Generally, the TPI analysis of the LiDAR revealed few possible settlement features in Unitedville. However, concern existed as to whether this was the result of modern land-use practices (Ebert, Hoggarth, and Awe 2016a: 296). However, very few settlement groups were identified through survey, even in more open areas. This absence of settlement seems less likely to relate to modern disturbances but instead is reflective of the fact the area was probably not a good settlement choice in the past due to poor soil quality. Interestingly, two small pockets of soils amenable to hand cultivation were identified in the village, both of which had small clusters of Maya settlement associated with them.

In general, the movement of the Belize River and Upper and Lower Barton Creeks over the last 1000 years probably eroded some settlement. Destruction of settlement due to river movement generally seems fairly minimal because settlement was far less common on lower river terraces due to flood risk (Willey et al. 1965: 31). That said, it is notable that a handful of settlement groups (BR-164, and BR-223) at Barton Ramie have subsequently eroded dramatically since the original survey (Willey et al. 1965: 31), although this pales in comparison to the destruction wrought by agriculture. Another issue that exists in the Upper Belize Valley, around the confluence of the Macal and Mopan rivers involves intense bouts of flooding which buried Preclassic Maya residences (Holley et al. 2000; Yaeger 2010b: 234). This certainly seems to be far less of an issue in the Lower Dover area because non-alluvial zones away from rivers have shallow soil depths (Tutu Uitz Na district and the southern uplands zone of Floral Park). In contrast, almost all of the alluvial zones with deep soils and riverine deposits (the Barton Ramie districts and the Western District) are intensely farmed today meaning that the settlement patterns recorded involved identifying surface scatters of artifacts. In theory, small residences may have been so deeply buried that they remained un-surveyed, but this is unlikely considering plowing over the last eight decades has stripped at least the upper meter of topsoil from most contexts (exposing Middle to the Late Preclassic construction phases). Further solace can be taken from Willey and colleagues' (1965: 274-276) failure to detect archaeological materials or construction in their flat test units.

Non-mounded structures are difficult to detect using traditional settlement survey methods in the Maya lowlands. While test-pitting offers one method of identifying non-mounded structures this was beyond the scope of this dissertation (Ashmore 2003: 8; Goldsmith 2007; Johnston 2004: 167). Consequently, the residences of the least affluent commoners may be underrepresented in the Lower Dover settlement dataset (Pyburn et al. 1998; Wilk and Wilhite 1991). These concerns can be somewhat assuaged by the fact that about 15% of what was the Lower Dover hinterland is currently cleared and used as a cow pasture, however, only a small number of dense scatters of fill and artifacts reflective of smaller non-mounded structures were identified in these areas. Furthermore, these scatters probably represent auxiliary structures as opposed to actual residences (Ford and Nigh 2015: 101). This lack of non-mounded architecture were further corroborated by geophysical survey by Bryan Hanks and Marc Bermann which found no obvious non-mounded architecture in the vicinity of SG 35. These patterns were likewise corroborated by the aforementioned flat test units at Barton Ramie (Willey et al. 1965: 156, 274-276). The low proportions of non-mounded structures might indicate a situation comparable to Copan, where it seems non-mounded structures were rare (Abrams 1994: 20-21). This would make logical sense considering the practicalities of living on a raised platform in a riverine valley relative to the fairly minimal labor cost of constructing the platform.

Still, the fact that proportionally fewer settlement groups were discovered in heavily foliated areas and that some non-mounded platforms were only discernible due to their association with larger platforms nearby means concern is somewhat warranted (D. Chase 1981: 30; Johnston 2004: 167). The number of non-mounded structures evident on the surface of cleared areas was calculated and the polity population estimates were adjusted to take this into account. These numbers could not be included in settlement pattern analyses because there was no way to specifically place these extra households on the landscape. Lastly, it is important to note that the sample of *chultunob* (storage pits) was haphazard as they are difficult to identify (Puleston 1971). These features would be a reliable metric of the storage capacity of households had we some way to rigorously detect such features through survey.

5.2 Settlement Pattern Analysis

The Lower Dover settlement dataset was analyzed using a series of methods to investigate the broader research questions posed in Chapter 4. The first series of analyses explained in this section deal with delineating the polity as a spatial demographic unit. The second set of analyses distinguish internal focal nodes (intermediate elite district heads and high-status commoner neighborhood heads), and the social aggregations associated with these (the results of which are included in Chapter 6). The latter part of this section is devoted to more complex analyses which allowed greater insight into the roles and strategies of intermediate elites and their relationships with commoners (the results of which are reported in Chapters 6, 7, 8, and 9). Methods used to understand these dynamics include the ideal free distribution, watershed analysis, modeling birth rates and migration, and archaeoastronomical analysis of eastern triadic structures.

5.2.1 Delineating the Lower Dover Polity

On a theoretical level, it remains unclear whether the concept of a ‘boundary’ is emically meaningful or even heuristically useful when discussing less centralized or segmentary ancient political systems like the Classic Maya (Giddens 1981; Inomata and Aoyama 1996: 307; McAnany 2013: 86; Scherer and Golden 2009; see Chapter Two). Defining frontiers and boundaries in low density or dispersed settlement patterns is a complicated task (Awe et al. 2014; Feinman and Nicholas 2012; Flannery 1972; Fletcher 2012; Freidel 1981; Hammond 1974). Full coverage survey allows the delineation of clusters, which likely represent different social and political units on multiple scales (Drennan, Berrey, and Peterson 2015). Residential clustering in the Belize River Valley can be discerned at three scalar levels: **(1)** small clusters of between five to sixteen settlement groups, (neighborhoods), **(2)** larger clusters of 20-50 settlement groups often focused around minor centers (districts), and **(3)** the largest clusters which usually focus around major centers (polities; Ebert, Hoggarth, and Awe 2016b; Helmke et al. 2020; Smith and Novic 2012; Walden et al. 2019; see also Chapter 2.6). To delineate the frontiers of the Lower Dover polity in a timely and cost-effective manner, a fluid survey boundary based on TPI analysis of LiDAR data was implemented to identify a settlement density ‘drop off’.

5.2.2 Population Estimates

Estimating population numbers using archaeological materials is a fraught but worthwhile endeavor (Drennan, Berrey, and Peterson 2015). Maya archaeologists have relied on counts of structural platforms or patio groups to deduce population estimates (Ashmore 1990; Carr and Hazard 1961; Culbert et al. 1990; Ford 1990; Fry 1990; Rice and Culbert 1990; Ricketson and Ricketson 1937). The current nature of the settlement dataset allows a fairly watertight population estimate for the Late Classic period and more tentative estimates for the Early Classic, Late Preclassic, and Middle Preclassic periods. Commonly used population estimates per residential structure in the Maya region range from 4 to 7.5 people (Bullard 1960; Haviland 1965, 1972; Puleston 1973: 173-75; Ricketson and Ricketson 1937; Sanders and Price 1968: 163; Villa Rojas 1969; Wauchope 1938; Willey et al. 1965: 576). For the purposes of this dissertation, Ricketson and Ricketson's (1937) used figure of five people per platform was employed (Conlon and Moore 2003: 60; T. Neff 2010: 256; Robin, Yaeger, and Ashmore 2010: 321).

The amount of foliage and general visibility (Ashmore 1981: 61; Johnston 2004: 167; Kurjack 1974: 80-81), the presence of non-residential structures like kitchens, storage structures, shrines, and field houses (A.F. Chase and D.Z. Chase 2014; Haviland 1970: 193; Rice and Culbert 1990: 14), cycles of platform disuse (Rice and Culbert 1990: 17; Ringle and Andrews 1988; Thompson 1971: 214), were all accounted for when arriving at a population estimate. Ricketson and Ricketson's (1937) method of estimation involved an excessive correction formula of 75% because it worked on the false assumption that the Classic Maya routinely moved residence due to a reliance on shifting swidden agriculture. Following Rice and Culbert (1990: 19), a lower correction of 20% was employed to account for non-residential platforms. This 20% could have been higher but was lowered to take into account undetectable structures also. The priority given to platform disuse was reduced for the Late Classic population estimate reduction as it is unlikely that usable platforms would have lain unoccupied during a period of demographic growth (Ford and Fedick 1992). Population estimation involved a re-analysis of the Barton Ramie settlement data, which involved some guesswork as the vast majority of the settlement groups are plowed to oblivion. Estimates of 10-20 people were used for larger mounds at Barton Ramie as these contained multiple houses around a central patio.

5.2.3 Reconstructing Districts at Lower Dover

While Maya settlement is dispersed, clusters exist within the dispersion. This is unlike other regions of the world where settlement is truly dispersed (Drennan, Berrey, and Peterson 2015: 58-63), as such drop-offs in settlement density can be employed to distinguish communities on multiple nested hierarchical scales (Levi 1993: 33). Maya archaeologists visually ‘eyeball’ residential clusters based on the distance between patio groups, often utilizing topography, vacant spaces, distance measures, walls and boundaries, and transportation routes (Bullard 1960: 367; Hutson 2016: 73; Kintz 1983b: 181; Kurjack 1974: 80-81; Lemonnier 2012). While clustering is observable in the settlement pattern at Lower Dover, a variety of spatial tools allowed the more concrete delineation of neighborhoods and districts and spatial relationships (see Clarke 1977: 5). The range of different methods employed as part of this dissertation was ultimately fairly redundant but allowed an understanding of the relative merits and issues associated with different spatial analyses. This understanding of the different analytical tools to delineate clustering in the settlement pattern was fundamental to ongoing larger-scale settlement pattern studies in the Maya region (Thompson, Walden, and Chase 2021).

Despite the ease with which cost-distance analyses can be included in spatial models, these pose issues in terms of local scale analysis in a small riverine context like the Belize River Valley because the major impediments to movement were rivers and settlement (house lots, infield agriculture, gardens, etc.). Incorporating these features into an analysis is difficult when the locations of bridges and other landscape features which would expedite movement remain unknown. Euclidean distance was partly justified because both Upper and Lower Barton Creeks are easily fordable on foot, as is the Belize River in certain places during the dry season, such as between the Lower Dover civic-ceremonial center and the Texas District (Willey et al. 1965: 31). While the rivers were easily navigable by canoe, it also seems possible that wooden bridges spanned both the Belize River and the creeks in prehistory. Obvious locations for such bridges would include the narrow spans of the Belize River between the Lower Dover civic-ceremonial center and the Texas District, and the Western and Oxbow Districts, and the narrow stretch of Upper Barton Creek near Floral Park (where the modern George Price Highway bridge is). Few Classic period bridges are known archaeologically, a rare stone-built example exists at Pusilhá in

southern Belize (G. Braswell, Prager and Bill 2005: 66), and piles of boulders in the Usumacinta at Yaxchilan possibly mark the site of a collapsed suspension bridge (O’Kon 2005; Tate 1994: 134). Modern bridges and crossing places are found close to many major and minor centers; examples include Floral Park (and the George Price highway bridge), the Iguana Creek Bridge center (east of the modern Iguana Creek bridge), Esperanza (to the east of the Red Creek bridge), the Spanish Lookout minor center (near a disused ferry crossing), BR-19 (north of an old ferry crossing), and Baking Pot (adjacent to the modern Spanish Lookout ferry crossing). These associations suggest that centers were located near good crossing points.

5.2.3.1 Focal Nodes

One way of delineating Classic Maya neighborhoods and districts involves first identifying focal nodes around which people would have aggregated (Hutson 2016; see also Arnauld et al. 2012; see Chapter 2.6). These might include reservoirs, fields, shrines, or intermediate elite households with ceremonial or economic integrative facilities. By far the most visible focal nodes at Lower Dover were the high-status commoner neighborhood head households and the intermediate elite district centers. Application of the focal node label to these is justified because these higher status residences are commonly situated at the epicenter of larger commoner aggregations, and because they possess clear integrative infrastructure, whether it be the larger patios and eastern shrines apparent at many commoner neighborhood head households, or the larger eastern triadic mortuary structures, large plazas, and reservoirs apparent at intermediate elite district head households (see Smith and Novic 2012). From these focal nodes, rough territorial catchments can be modeled which reflect the supporting population associated with that focal node (see Haines et al. 2016; Killion, Sabloff, and Tourtellot 1989). In theory, the people living around the focal node would have likely been responsible for the construction of that focal node and would have attended ceremonies within the plaza at its epicenter.

5.2.3.2 K-Means Clusters

K-means statistics were applied to the Lower Dover settlement data to delineate clusters in the settlement pattern (Kintigh and Ammerman 1982). K-means solely assesses patterns between

points based on their spatial distribution. This method was employed to delineate three, four, five, six, seven, and eight clusters. The method which created three clusters produced the most legible results, but this did not effectively separate the settlement associated with the civic-ceremonial center and Tutu Uitz Na. Other analyses were necessary to understand the relationship between space and the number of people living at each settlement group. K-Means clusters were generated in Microsoft Excel and moved into ArcGIS 10.7.1.

5.2.3.3 Inverse Distance Demographic Contours

This method was developed by Drennan and Peterson (2006) to look at the spatial distribution of demography. The creation of demographic contours involves inputting the population of different areas as elevations to create a topographic surface that reflects the density of settlement in an area. Different degrees of mathematical smoothing were then applied to create multiple surfaces which depicted the spatial distribution of population in different ways. To discern districts, a specific degree of mathematical smoothing was applied, and a cut-off was defined at a uniform contour across the surface. This method involved moving from the Lower Dover settlement map in Autocad Map 3D 2018 to Idrisi Selva. The population contours were created using Golden Software Surfer 8.

5.2.3.4 The Interaction Model

Alden's (1979) interaction model offers another approach that takes into account the spatial distribution of points and the value of those points to define clusters. Theoretically, the Interaction model relies on two assumptions:

“ASSUMPTION 1. There is a “cost” involved in the transfer of information that is a function of the distance over which the information is transferred, and political hierarchies try to minimize these costs.

ASSUMPTION 2. The number of administrators at each level of a political hierarchy is directly proportional to the amount of information being processed, and the amount of information generated at a place is proportional to that place's population (Alden 1979: 170)”

$$I = \frac{C(P_i.P_j)}{f(d_{ij})}$$

The basic formula used by Alden (1979) to calculate interaction is displayed above. Where I is political interaction, C is a constant, P_i is the population of location i , and d_{ij} is the distance between i and j (Alden 1979: 171). To assess distance, Alden used a gravitational model (1979: 172):

$$I = \frac{C(M_i.M_j)}{(d_{ij})^n}$$

The interaction model was modified for use in ArcGIS 10.7.1 by Ran and Walden (see also Ran and Walden 2017). Alden's (1979) use of an exponent of 1.9 was theoretically justifiable because it allowed the most realistic reconstruction of the Late Postclassic Aztec political networks of the Basin of Mexico as confirmed through ethnohistorical evidence. Such an approach was not possible for Lower Dover and an experimental exponent of 2 was employed because it produced the most intelligible districts. Following Alden (1979), the strength of the links between households were used to delineate clusters. The nearest neighbor links were used to define district membership while the second nearest neighbor links could essentially be cut by district boundaries. This allowed the rough approximation of the limits of districts in the Lower Dover hinterland during the Late Classic period. This method generally produced comparable results to other methods.

5.2.3.5 The Xtent Model

The Xtent model was developed by Renfrew and Level (1979) to delineate polity boundaries using the population or size of a center to project out a territory. The Xtent model has been adopted fairly widely for outlining the frontiers of polities (Hare 2004; Scarry and Payne 1986; Stoner 2012). In essence, this approach to territory allocation is not too dissimilar from the principle of a Voronoi diagram (Ducke and Kroefges 2008: 247). An Xtent calculator spreadsheet was built in Microsoft Excel by Walden and Ran for distribution as part of the Spatial Analyses of Maya Settlements (SAMS) workshop series (Thompson, Walden, and Chase 2021). This calculator allows the user to input settlement groups and focal nodes with populations, or in this

case architectural volume from ArcGIS into the calculator and then move the Xtent output back into ArcGIS. The Xtent model was operationalized using architectural volume in cubic meters extracted from LiDAR data.

$$I_{xy} = (A_y)^a - (k \times D)$$

Following Stoner (2012: 388) I reflects the measure of influence of center y at location x , based in this instance on its architectural volume (reflecting how much labor it commanded). A is the architectural volume of center y , which is measured in m^3 , a is an experimental constant that exponentially changes the relative importance of A . D is the Euclidean distance between center y and commoner household x . k is an experimental constant that modifies the importance of D . One might question the validity of applying the Xtent model to full coverage settlement data because this tool was designed to project territories when only a center point was known. The advantage of such an approach is that it not only allows the reconstruction of clusters but an understanding of the political dynamics existing within those clusters relative to one another. By inputting the architectural volume of elite centers into the Xtent model and then altering the constants on distance and architectural volume one can project out territorial units at different scales based on where labor was invested. By pursuing this approach, the Xtent model can be used to hypothetically model where labor was being drawn from for each of the elite centers in the polity. This approach illuminates neighborhood, district, and polity-level political dynamics and the nested levels of political power of different intermediate elites within polities. Ultimately, the Xtent model provided fairly different results to the other methods employed to delineate clustering. This was because the Xtent was effectively projecting out labor catchments based on the scale of elite architecture at the focal node, whereas the other models were delineating patterns in residential clustering. The Xtent model projected larger areas for districts with larger civic-ceremonial architecture at their focal nodes, and smaller areas for districts with smaller civic-ceremonial architecture at their focal nodes.

5.2.3.6 Kernel Density Analysis

Kernel density analysis was also employed to examine the relationship between households on the landscape. This involved the method employed by Thompson, Meredith, and Pruffer (2018),

but with minor modifications so that each point had its associated population assigned to it (see also Horn, Ford, and Morales 2020). This analysis was carried out in ArcGIS 10.7.1. Rather than use the mean distance between groups to inform cluster size, arbitrary distance values of 100 m and 200 m were input into the kernel density clusters to examine clustering at the district and neighborhoods scales. Largely, this method corroborated the inverse distance population contour model and the interaction model. The decision to employ all these models was largely based on a desire to compare results to understand which model(s) could be easily incorporated into pan-regional settlement pattern analysis (Thompson, Walden, and Chase 2021).

5.2.3.7 Delineating Districts and Neighborhoods

Stoner (2012: 387) argues that a network approach conceptualizing the landscape as a series of nodes might be a more productive line of inquiry than thinking of polities as a contiguous territory (see also M.L. Smith 2006). Theoretically, this makes sense given that much of ancient political dynamics was probably interpersonal (Davenport and Golden 2016). All the different approaches were overlain upon a single map and they were all used to inform the delineation of neighborhoods. The combination of the analyses allowed a clearer definition of the boundaries of different neighborhoods at Lower Dover. The combination of the different models revealed larger spatial aggregations which conformed to districts, and many of these models also allowed the delineation of smaller internal neighborhoods within each district. These will all be described in greater detail in Chapter 6.

5.2.3.8 Intervisibility

Viewshed analysis of the Lower Dover polity was conducted by E. Messinger and C. Besaw (Messinger, Walden, and Besaw, and 2020; see also J. Doyle 2017: 60-63; Golden and Davenport 2013). This involved the viewshed tool in ArcGIS 10.7.1. A major impediment to viewshed was tree cover. It remains unclear whether shifting swidden agriculture was practiced in the more fertile areas of the Lower Dover polity, such as Barton Ramie. The southern foothills show no signs of terracing and the soils are shallow meaning sustainable swidden was likely employed. To overcome this issue, the heights of tree cover at various stages of the sustainable

swidden cycle were simulated and taken into account when examining viewshed (Ford and Nigh 2015). The viewshed analysis was fundamental to understanding the location of the Lower Dover polity capital and its surveillance capacity over the subordinate intermediate elite regimes. The results of the analysis are discussed in Chapter 6.

5.2.4 Soil Quality and Agricultural Productivity

High-resolution local soils data compiled by Fedick (1988) was provided by Anabel Ford. This high-resolution 1: 50,000 scale soils data is based on the Land Resources Development Centre (LRDC) survey by Jenkin and colleagues (1976) and Birchall and Jenkin (1979), with revisions based on Baillie and colleagues (1992). These soils data include information about the types of soils present and how productive soils were based on hand (not mechanical) cultivation (Fedick 1996: 108, 121-122). This distinction is very important because the types of environment preferable for hand cultivation differ from those considered arable (plowable) for modern agriculture (Ford, Clarke and Raines 2009: 499). Previous analysis examining the relationship between the locations of major and minor centers and soil zone by Walden et al. (2019) employed the original Birchall and Jenkin (1979) maps and not the revised hand cultivation maps produced by Fedick (1995, 1996). The central Belize River Valley primarily contains slow-drained lowlands. Well-drained alluvial soils are particularly prevalent around Baking Pot, Spanish Lookout, and Barton Ramie (Fedick and Ford 1990: 24). The thin soils located on limestone bedrock posed far fewer issues for traditional hand cultivation than they do for contemporary agriculture (Fedick 1989; Fedick and Ford 1990: 20). These well-drained upland soils are abundant in the Lower Dover area, especially on the south bank of the Belize River, and would likely be highly productive under swidden cultivation (Fedick and Ford 1990: 20). Unlike surrounding regions, riverine seasonal swamps are non-existent in the central Belize River Valley, and closed-depression seasonal swamps are incredibly rare (Fedick and Ford 1990: 24).

The hand cultivation ranking ranges in capability in five classes. Class 1 soils have the least limitations in terms of hand cultivation. These soils are characterized as highly fertile, deep, well-drained, level, and easily worked (Fedick 1995: 22). Class 2 soils generally have few limitations but will support a narrower array of plans. Moreover, these soils might have issues related to depth,

drainage, erosion, or less optimal fertility. Class 3 soils have greater limitations and may support specific plants. These limitations are imposed by numerous issues and may require improvement in terms of drainage or terracing. Class 4 soils have severe limitations which mean only very specific plants will grow, and often require management. These soils suffer from the issues outlined for class 2 and 3 soils but in a greatly intensified fashion. Moreover, these soils are susceptible to flooding. Lastly, class 5 soils are generally unfit for cultivation unless severely modified (Fedick 1995: 22). This ranking system took into account five variables; effective root zone, susceptibility to erosion, workability, drainage, and fertility (Fedick 1995: 22). While the scale of the soils data is not sensitive enough to examine the cultivability of soils surrounding different households, the scale is fine for district-level analysis (see Fedick 1995: 17; see also Lucero et al. 2004: 88). This does not downplay the role of the household as the basal subsistence and economic unit in Classic Maya society (Fedick and Ford 1990: 20; Wilk and Rathje 1982). These data were used to compare the overall agricultural potential of land adjacent to each of the districts under investigation. Arriving at a comparative understanding of how productive the local land was and the types of crops which could be grown is fundamental to understanding the resource base of the different intermediate elites.

5.2.5 Understanding Settlement Choice

The nucleation of people on the landscape can result from a desire for social propinquity, economic or political factors (Drennan 1988; Dunning 2004; Green 1973; Roberts 1996). Residential clustering might result from wanting degrees of social interaction, as well as reflecting a desire to live near good agricultural soils, access to water, or a preference for elevated positions in the landscape (Sanders 1981). Logistic regression analysis was performed on the real settlement data and a set of randomly generated points to investigate the effect that ecological variables had on the settlement location (Systat 13.2). Several different ecological variables which Classic Maya farmers may have prioritized were taken into account. The first variable was distance to river, this was measured from the Belize River, which was the main artery running through the landscape to the coast, and Upper and Lower Barton Creeks. The Belize River and Upper Barton Creek were both canoe navigable and would have provided benefits in communication and trade and exchange, all were obvious sources of drinking water, fish, and consumable riverine snails (Healy, Emery,

and Wright 1990). Slope was considered as this is important for siting a residence, sometimes the Maya would invest effort into leveling off a hillside for occupation, although more often than not it made more sense to live on flat ground. Elevation was considered also, it is generally beneficial to live higher up in this area as the viewshed is improved which has obvious benefits in terms of control of crops, land, and defense. Higher elevations also have less flood risk (which is pretty high along the river valley, especially during hurricanes) and the hilltops afford a good breeze. The last variable taken into account was soil productivity based on Birchall and Jenkin (1979).

To further investigate these initial patterns, the ideal free distribution was employed. The ideal free distribution is a model originally developed to investigate territorial behavior in birds (Fretwell and Lucas 1969: 16), but has been applied in a range of archaeological contexts (Coddington and Jones 2013; Giovas and Fitzpatrick 2014; Kennett, Anderson, and Winterhalder 2006; Kennett et al. 2009; Prufer et al. 2017). The model is used to explore habitat selections and assumes that habitats that have the highest suitability (provide the highest fitness or utility) will be occupied first and then increasingly lower-ranked habitats will be occupied subsequently (Fretwell and Lucas 1969: 19). As these higher-ranked habitats fill up their general suitability should decrease as the habitat is full.

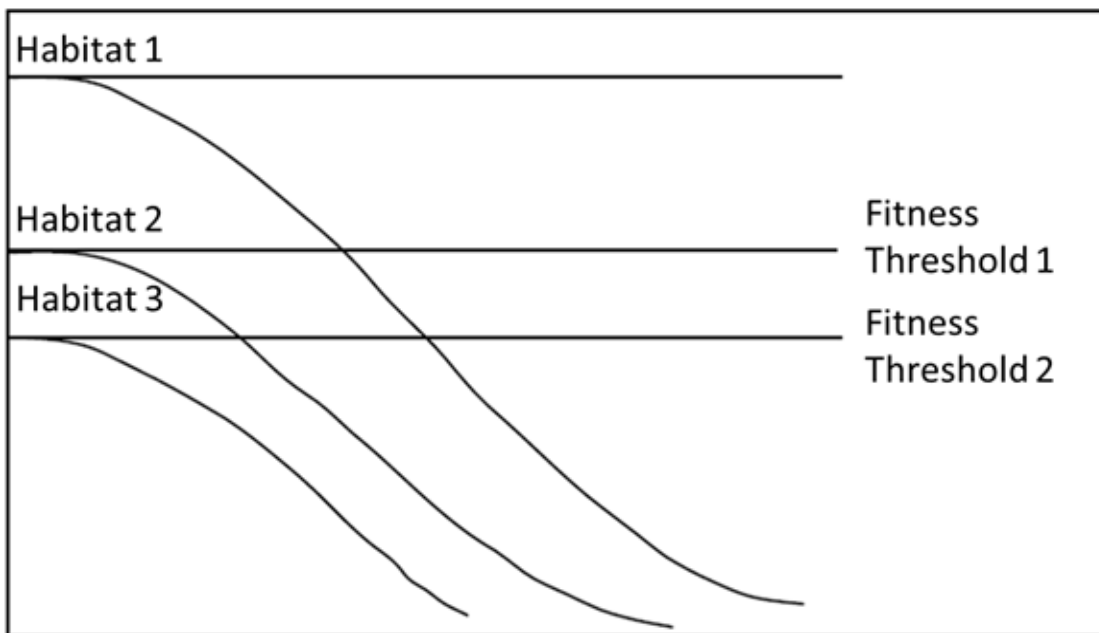


Figure 5.2 Ideal free distribution plot

Figure 5.2 shows how the IFD works, habitat 1 is the most highly ranked habitat, however, as it fills up, the quantity/quality of the resources present deteriorates until it is as suitable as the second most highly ranked habitat (habitat 2). The same thing occurs here, however, and over time habitat 2 deteriorates until its suitability is similar to habitat 3. In theory, the highest-ranked habitats will remain occupied the longest as people living in these spots will not wish to lose the benefits of a highly suitable locale. Important in this respect is the Allee effect (Allee et al. 1949), which postulates that survival and reproductive rates increase with population size although there is a maximum threshold at which it then decreases. Therefore, a second type of ideal free distribution is possible which follows Allee's (et al. 1949) principles. This works on the assumption that the presence of people living in a particular habitat will increase the suitability of it, and then over time it will begin to deteriorate in a manner similar to the normal IFD. This model is applied to the Lower Dover settlement data in a conceptual fashion. The key assumptions of the IFD model are (1) that individuals settle in the best habitat for them in terms of suitability and (2) that all of the individuals within one habitat have the same success rates (Fretwell and Lucas 1969: 21). In theory, if a particular habitat is full then-incoming individuals will have to settle elsewhere. In terms of the application to the Classic Maya, this model works particularly well as the vast majority of households practiced agriculture and can therefore be considered sufficiently similar for analytical purposes (Dunning 2004). Traditionally, the habitats are ranked in terms of food supply and predators (Fretwell and Lucas 1969: 19). That said, a multitude of different variables can be included in applications of the IFD (see Winterhalder et al. 2010). With this in mind, the previous four variables; distance to river, slope, elevation, and soil zone, were included.

5.2.6 Archeoastronomy and Solar Alignment Analysis

The Lower Dover polity contains four eastern triadic structures, Tutu Uitz Na, BR-180, Lower Dover Structure A1, and the aulic elite residence of Group F (Awe, Hoggarth, and Aimers 2017; see Chapters 2.10.6 and 3.4). These structures are similar to the earlier E Group complexes which had northern and southern wings and a west viewing platform. The sun would rise over the northern wing on the summer solstice, the central component of the structure on the equinox, and over the southern wing on the winter solstice (Aimers and Rice 2006; Blom 1924: 218). To investigate whether eastern triadic structures functioned as solar observatories in the same way as

E groups, a basic analysis was conducted in ArcGIS 10.7.1 of the alignments of the western structures and the central plazas to see how the sun would rise in relation to the northern, central, and southern wings of the E groups (Šprajc 2021).

5.2.7 Modeling Birth Rates, Mobility, and Migration

Birth rates in each district and the polity are modeled diachronically to provide a rough understanding of the degree to which commoners were migrating in and out of districts and the polity. This is quite a complex task using traditional archaeological data such as house counts and ceramic assemblages (Arnauld et al. 2017: 18). Diachronic comparison of population estimates derived from house counts provides an idea of how the Lower Dover polity and its districts grew over time. To gauge the extent to which population grew due to migration into the region or between districts, the estimated maximum population was calculated for each period based on the previous period's population estimate and a growth rate of 0.1% per year. This growth rate was derived from Middle Preclassic to Middle Classic settlement data at Kaminaljuyu (Sanders 1974). This estimate is in keeping with many different growth estimates for Late Neolithic communities in Mesoamerica and around the world (Cowgill 1975: 511-512; Hassan 1978: 68-69; see also Cowgill 1997; 2015). While this provides only a very blunt tool for calculating whether people were migrating in or out of districts or the polity, it does provide a quantitative comparative baseline to gauge when and where migration in or out occurred. Other lines of inquiry such as strontium isotope analysis provide greater clarity about the nature of this process. District-level variability in elite labor demands, benevolent vs. exploitative elite policies, commoner household wealth, and skeletal wellbeing serve to contextualize these patterns.

5.2.8 Modeling Plaza Capacities

Following Inomata (2006) the various capacities of different plazas were calculated using the areas of these spaces. This involved the use of three different capacities of .46 m²/person, 1 m²/person, and 3.6 m²/person. These values have been widely adopted by Maya archaeologists interested in plaza function and integrative potential (see Cap, Yaeger, and Brown 2017). These values were particularly useful when comparing the known population within the rough

catchments (districts) of the different elite political centers. In addition, a value of 3.4 m²/person was included. While not originally used by Inomata, this number seems to consistently appear across most contexts analyzed in the Lower Dover settlement. By combining plaza capacities with spatial analyses to model labor catchment areas at multiple hierarchical levels (see Chapter 5.2.10), and energetics and labor estimates (see Chapter 5.6.1 and 5.6.2), we can begin to understand how many people were likely involved in the construction of a ceremonial space relative to the number of people the space could accommodate.

5.2.9 Architectural Accessibility Analysis

The relative accessibility of ancient Maya plazas offers important clues about the types of ceremonies and other activities which occurred within them and the concerns of the elites who commissioned them. Open and easily accessible elite architectural contexts are referred to as precincts, whereas more inaccessible and restricted plaza spaces are referred to as compounds (see Walden et al. 2020a: 198). A range of approaches are available for quantifying the relative accessibility of the Classic Maya constructed landscape (Liendo-Stuardo 2003; Ossa 2014; Richards-Risetto 2012; Stoll 2014; Watkins 2019; see also Chicoine and Whitten 2019). For the purposes of this dissertation, the important element of accessibility was how easy it was for commoners to file into a plaza space from outside its external structures. The approach used in this dissertation is the same approach presented by Walden and colleagues (2020a: 204). This involved the calculation of an accessibility index based on the sum of the width of the different entryways (m) divided by the area of the site (m²). The higher the index the greater the accessibility.

5.3 Excavation Methods

This section outlines the excavations methods employed in the Lower Dover hinterland. This includes a summary of the sampling strategy, excavation protocols, and how various taphonomic concerns related to excavated materials.

5.3.1 Sampling Strategy

A sampling strategy was developed to understand the developmental trajectory at three intermediate elite centers and their respective commoner districts. To answer the research questions, analysis focused on architecture and assemblages from three intermediate elite centers (Floral Park, BR-180, and Tutu Uitz Na) and 20 commoner households. Materials from some of these contexts existed from earlier excavations and were re-analyzed for the purposes of this dissertation. A sample of six to eight commoner households from each district was needed to understand how intermediate and apical elite strategies impacted the broader populace of Lower Dover. A three-year excavation program targeted the Tutu Uitz Na center and an elite rockshelter shrine beneath it, and six households in this neighborhood, SGs 3, 9, 11, 28, 42, and 51. Initial plans to excavate the Floral Park center were derailed by land access issues. Fortunately, Garber and Brown provided their materials from their 1995 and 1996 excavations (Brown et al. 1996; Glassman, Conlon, and Garber 1995). These materials provided sufficient data to make statements about the Floral Park elite household through the trajectory. Furthermore, materials were also provided from a single commoner household, Floral Park Group 3, or SG 143 (in our survey; see Brown et al. 1996). Therefore, excavation at Floral Park consisted of the excavation of five commoner households SG 34, 35, 129, 132, and 142. The original plan was to draw entirely upon Willey and colleagues' (1965) materials from Barton Ramie to characterize the BR-180/168 intermediate elite and the commoner households of the Texas district. Materials from the BR-180/168 center and eight commoner households; BR-169, BR-170, BR-174, BR-179, BR-184, BR-189, BR-194, and BR-260 are curated by the Harvard Peabody Museum, and they graciously permitted re-analysis of these materials for the purposes of this dissertation. However a much larger sample was required from BR-180/168 to effectively compare it with Tutu Uitz Na and Floral Park. Willey and colleagues (1965: 243, 249-251) only excavated a small test unit in the plaza of BR-180 and collected ceramics from a bulldozer cut on BR-168. This necessitated excavation of the BR-180 civic-ceremonial precinct and analysis of surface ceramics from BR-168.

The six to eight households sampled from each district generally included several multi-component commoner households which pre-dated the Lower Dover civic-ceremonial center

(Preclassic-Late Classic) and several single component (Late Classic) households. While this strategy yielded less data from households that straddle the Early/Late Classic transition, it removed sampling biases inherent in drawing the entire sample from older households where greater wealth may have been linked to their longevity (McAnany 1995: 96). Analysis of survey data revealed a strong correlation (Pearson's $r=0.609$ $p < .001$ $Y = 1.186 X + 0.714$) between mound height and the number of structures, corroborating the idea that the physical structures increased in size as the household grew through the developmental cycle (Haviland 1988; Tourtellot 1988). Generally, the number of platforms situated around a central patio is seen as reflective of the stage in the developmental cycle that a household progressed to prior to abandonment (Haviland 1988; LeCount, Keller, and Blitz 2011; Tourtellot 1988; see also Fortes 1958; Goody 1958; Vogt 2004: 35). Analysis of surface ceramics strongly suggested that most of these larger settlement groups with larger structures had Preclassic components. Based on patterns elsewhere in the Belize River Valley (Blackmore 2012; Hoggarth 2012; Yaeger 2003a), it seemed likely that some of the larger/older commoner households served as neighborhood heads. It was deemed important to include these in the sample also. In order to standardize comparisons, the largest mound on each group was excavated/sampled to ensure consistency between groups, increase prospects of finding ritual offerings or burials, while simultaneously avoiding ancillary structures.

5.3.2 Excavation Protocols

Excavation of commoner residential platforms involved the placement of centerline axial trenches, running perpendicular to the structure to expose stratified occupational phases and temporally diagnostic materials. Excavation units in intermediate elite structures were placed more strategically to capture important architectural features and avoid looter's pits and back dirt. Excavation units were dug in cultural levels to bedrock (usually <1-2 m below ground surface). All sediments were screened through 1/4 inch mesh (see protocols in Hoggarth 2012: 65). A 2-liter matrix sample was collected from each context for flotation to identify micro-artifacts, seeds, and botanicals. Behavioral inferences were drawn from datable stratigraphic contexts composed of architectural fill redeposited from middens. The materials recovered from each construction phase typically included domestic debris, representing household refuse from the preceding occupation phase (See Chapter 5.3.3).

Special attention was given to possible evidence of platform disuse and reoccupation such as the establishment of humic layers as this is suggestive of abandonment and reoccupation by a different household. Evidence of occupational hiatuses (abandonment and reoccupation) was very rare at Tutu Uitz Na and Floral Park, corroborating patterns at Barton Ramie (Willey et al. 1965: 158). Lot numbers were assigned to contexts in the order they were exposed archaeologically. The first lot number was consistently designated for the ground surface regardless of whether artifacts were present as this practice can provide valuable data for survey archaeologists who primarily deal with surface deposits. Excavation units were recorded using a two-digit number, the first designating the settlement group number, the second number designating the numerical order of excavations; for instance, E.U. 1-4 is located on SG 1 and is the fourth excavation unit placed in this group. Past excavations followed similar procedures (e.g., similar gauges of screen were used for sifting), and materials were excavated and curated based on their context making comparisons between datasets viable.

5.3.3 Depositional Factors and Taphonomic Concerns

The majority of behavioral inferences are drawn from datable stratigraphic contexts composed of architectural fill redeposited in construction from surrounding middens (see Hoggarth 2012). Typically, the fill of ancient Maya residential platforms contains refuse redeposited from middens which the occupants, or people living nearby generated over preceding time periods (Moholy-Nagy 1997: 300; Willey et al. 1965: 58). While most Maya archaeologists prefer artifacts from primary contexts when making specific statements about behavior and political affiliations (see LeCount and Yaeger 2010d: 340), the analysis of materials from fill can provide substantial information about household and neighborhood-scale behavior. The proportions of items included in fill can speak to wealth and status inequalities (proportions of polychrome and high-quality ceramics, marine shell, jade, and polished bone jewelry; Rathje 1983; M. Smith 1987) productive differentiation between households (proportions of chert tools versus debitage, awls, chisels, needles, spindle whorls, etc.; see Drennan and Peterson 2012), patterns of exchange (distributional approach, compositional analysis of obsidian and ceramics), ritual differentiation (proportions of figurines, *incensarios*, musical instruments, speleothems, chert/obsidian eccentrics, stingray

spines; see de Montmollin 2012), consumption of foodstuffs (proportions of faunal remains), feasting (proportions of faunal remains and serving vessels to storage vessels; Hoggarth 2012).

It seems paradoxical to favor mixed items from middens and redeposited midden contexts to in-situ deposits, but the former represents a random sample of trash from a particular temporal period. In contrast, on-floor deposits can be insightful into the particular function of a structure, but following the Pompeii premise, this may simply reflect how the structure was being used at the time of abandonment (Binford 1981; D.Z. Chase and A.F. Chase 2000: 67; for Maya examples see Inomata 1997; Sheets 2000). For this reason, midden materials are more representative of household-level behaviors over a long duration than artifacts deposited in a single, or a relatively short-lived intentional depositional event, like on-floor deposits, caches, and burials (Bayman 1996; Hayden and Cannon 1983; LaMotta and Schiffer 1999; Peterson and Drennan 2018: 46, 48; Peterson, Drennan, and Bartel 2016). Another advantage of using redeposited midden items in architectural fill is that it reflects general trash produced by a household (Drennan, Peterson, and Fox 2010: 57). Artifacts deposited in midden fill are less likely to offer an avenue of aggrandizement for members of that household than artifacts intentionally deposited in caches or burials. Extrapolating wealth from burials and caches alone can introduce a series of biases because the creation of these contexts represented intentional symbolic events. These events offered clear opportunities for the expression of wealth inequalities and may also have involved wealth items passed down from higher-level patrons, and therefore may be more indicative of social networking (Peterson and Drennan 2018: 44; see Munson and Scholnick 2021).

Furthermore, there are distinct advantages to using midden materials redeposited in structural fill over the middens themselves. In comparison to residential platforms, middens in the Maya lowlands are difficult to detect and often require test-pitting or even large horizontal excavations to identify (Connell 2003: 36). This might be due to a tendency for trash to be deposited in limited numbers across a larger household lot in dispersed settlement contexts (Deal 1983: 195; Robin, Meierhoff, and Kosakowsky 2012: 137). Another reason why this might be is due to the tendency to redeposit midden refuse in residential platforms. Furthermore, even stratified middens may reflect a single feasting event meaning they too can represent similar issues to on-floor deposits and caches as mentioned above. Middens can be stratigraphically complex to excavate, often the soil lenses between deposition events are particularly difficult to define and

isolate from one another. In contrast, by redepositing materials in construction fill, building walls around it, and laying plaster floors atop it, the Classic Maya were creating sealed architectural layer cakes perfect for diachronic analysis (Abrams 1994: 70). Preservation of these layers with limited temporal mixing seems contingent upon an array of factors such as bioturbation and modern disturbance. The most problematic issue it seems was later modification on the part of the Maya. This seems especially bad in contexts like Barton Ramie and Baking Pot where residential platforms are filled with heavy clay and earth (see Hoggarth 2012; Walden 2016; Willey et al. 1965: 90-100), as opposed to contexts in which limestone and cobble fill prevailed (Tutu Uitz Na and Floral Park; see Chapters 7.4.6. and 10.1.3).

Depositional concerns need to be considered when using redeposited midden materials from structural fill (D.Z. Chase and A.F. Chase 2000; Schiffer 1987; M. Smith 1987; Wilk and Kosakowsky 1991). One issue is the process by which midden materials are redeposited in fill. Comparisons between households should take into account the size of the materials present in the fill to understand the extent to which smaller items may have been lost in transit. While redeposition techniques always lead to the disappearance of some debitage and smaller items (see Behm 1983), it seems unlikely that this exerted a sufficiently unequal bias on the assemblages to impede comparison between different redeposition events. Analysis of such materials from households at Baking Pot and Lower Dover consistently revealed relatively high proportions of chert debitage, obsidian, and small faunal remains in redeposited midden contexts (Chapters 7-9; see also Hoggarth 2012).

Another taphonomic issue involves the extent to which midden materials were transported over longer distances before redeposition (D.Z. Chase and A.F. Chase 2000: 68; Willey et al. 1965: 17). A.F. Chase and D.Z. Chase (1998b: 71) reports household refuse being used in the fill of agricultural terraces at Caracol, and it seems likely that the construction fill of most large monumental structures likely contained material redeposited from surrounding middens. This relocation of some trash materials should not however render the substantial amounts of artifacts encountered in residential fill completely unusable for reconstructing behavior. Several solutions to this issue were employed.

Firstly, careful excavation of architectural fill with particular attention not just to the matrix qualities but also to the general ceramic assemblage provided information about different fill events. This effectively allowed the quarantine of materials from different depositional events during the excavation process. More in-depth ceramic analysis and radiocarbon dating of charcoal from these contexts then served to tighten chronological control and assess whether or not materials should be omitted from the analysis. Following this, materials could effectively be lumped back together for diachronic analysis, or omitted from the analysis if their provenience seemed problematic. To avoid problems with temporally mixed stratified deposits in architecture, any lots with excesses of 20% mixed assemblages were omitted from the analysis. This threshold was employed because it was considered that bioturbation could introduce a small number of sherds from contexts above. This did not drastically reduce sample sizes, except in contexts where units had unintentionally been dug into otherwise complicated contexts (e.g. looter's back dirt). While a construction phase may contain items from middens of differing dates, residential platforms included in this study contain ceramics dating to a single, or at worst, two ceramic complexes; 90% of these mixed contexts are pre-Lower Dover phases and posed less of a problem considering the dissertation goals.

The second solution involved statistical comparison of materials from midden fill to evaluate whether they pattern in a way that makes coherent sense. If refuse were being moved between households, then a high degree of homogeneity in terms of the proportions of artifacts would be expected, not the usual variability which is noted between commoner households in the Maya lowlands (Blackmore 2008; Hoggarth 2012; Robin 2012c; Yaeger 2003a; see Chapters 7-9). In theory, a substantial proportion of residential trash could be moved elsewhere, but this would remain representative of broader activities at that household unless there was cause to believe that specific types of trash (such as broken ritual items were purposefully removed). The proportions of items found within household fill at Lower Dover reflected logical interhousehold differences. For instance, the commoners living at SG 28 were involved in chert tool production and carpentry, while their peers at SG 34 were engaged in crafting shell and slate items (Levin 2019; Levin, et al. 2020; Walden et al. 2018). Nearby commoners at SG 35 were engaged in higher amounts of ritual practice but lacked evidence of domestic production (Garcia, Walden, and Martinez 2019).

Contextualization of these patterns suggests that the approach is likewise a coherent indicator of behavior.

A third solution involves corroborating patterns with independent data, such as the size of household platforms, and behavioral assessments based on primary contexts like burials and caches (Powis 2004). If residential fill was being moved around between households then we may expect no patterning between household size and quality of architecture and access to wealth items, or for example, the presence of ceremonial architecture and ritual items. Generally, higher-status commoner neighborhood heads and intermediate elite district heads (as outlined above with larger public patios, plazas, and monumental architecture) had higher proportions of ritual items such as *incensarios*, and much higher proportions of serving vessels corroborating architectural evidence of ceremonial activity. Generally, larger commoner residences with wealthier burials yielded higher proportions of wealth items from fill than smaller mounds with poorer grave assemblages.

A fourth approach to further mitigate these bias issues involves contextual analysis of materials from architectural fill (Wilk and Kosakowsky 1991). This involves careful analysis of ceramics to establish how long they had been sat in middens prior to redeposition (see Schiffer 1987). This approach served to highlight overtly mixed contexts, or contexts in which, for instance, a Late Preclassic midden had been redeposited in a Late Classic context.

Lastly, a fifth, previously unforeseen opportunity to assess the degree to which assemblages may have been mixed presented itself after the analysis. This involved the relative proportions of debitage types within residential assemblages. Generally, most households contained a similar ratio of primary, secondary, and pressure flake debitage suggestive of domestic chert tool production (see Chapter 8). In theory, the introduction of a substantial amount of midden materials from elsewhere would skew this ratio and result in a divergent pattern. The only architectural contexts which deviated from this ratio are those where such inconsistencies might be expected, such as the chert tool/carpentry workshop at SG 28, and Late Classic intermediate elite contexts. This approach to detecting compromised assemblages generally requires further testing and analysis to establish if it works effectively.

Issues regarding the general redistribution of midden fill diminish when the spatial scale of analysis is taken into account. While it seems unlikely that each residential structure contained trash associated with its inhabitants, this reduces somewhat at the broader household scale (settlement group/kin group level). This issue diminishes even more so as the spatial analytical lens extends out from the household to the neighborhood, and onto the district (J. Marcus 2004: 261). While this dissertation uses the household, or settlement group as its basal unit, the important analytical units for comparison are the districts, and it seems highly unlikely that trash was being moved around over distances of 2 km just for redeposition. Although some types of ritualistic redeposition might have involved the transit of materials over longer distances (Newman 2019).

Monumental intermediate elite architecture is more likely to contain middens redeposited from surrounding commoner households than those commoner households themselves (Moholy-Nagy 1997: 300). This filling of architecture with trash from a broader area poses issues for making statements about levels of wealth from structural fill. This seems to be a serious issue with the fill of construction phases on large elite architecture as the elite households situated around the civic-ceremonial centers could not have generated sufficient trash to fill entire pyramids. On the one hand, the possibility that commoner middens were being redeposited in larger elite architecture or agricultural features (Moholy-Nagy 1997; A.F. Chase and D.Z. Chase 1998b), should not impact our ability to use the remaining items associated with that household to make inferences about the wealth and activities associated with that residential context unless we have reason to believe that the materials which were removed for redeposition reduced the representativeness of the sample (e.g. the Maya were actively selecting dish and bowl rims over jar rims for redeposition in midden fill elsewhere over a protracted period). On the other hand, this longer distance redeposition elsewhere causes issues when making inferences about activities at the destination at which items were redeposited. For instance, the redeposition of items from commoner middens might downwardly skew any metrics of intermediate elite wealth based on the presence of high-value items in architecture fill. Dealing with this issue involves combining other metrics of wealth, especially comparison of burial assemblages between commoner and intermediate elite contexts to establish the extent to which these may diverge. Burial/cache wealth represents an independent metric to compare to wealth patterns reconstructed from architectural fill. Burials and caches represent intentional symbolic events that offer clear opportunities for the expression of wealth

inequalities and may also have involved wealth items passed down from higher-level patrons (Peterson and Drennan 2018: 44). Subsequently, comparing wealth items from architectural fill and those from burials and caches provides two sources of information about wealth, effectively providing insights into the statements Classic Maya intermediate elites may have been intentionally making about wealth in burials and caches, as juxtaposed with the consumption of wealth items in their day-to-day activities.

5.4 Lab Analysis and Methods

The majority of lab analysis was conducted in the field at the Lower Dover Field Station lab, managed by Y. Qiu, A. Levin, and O. Ellis. Lab work involved the sorting, cataloging, washing, and basic analysis of all artifacts recovered (see protocols in Banning 2020). Items classified as small finds included anything deemed significant or worthy of photography. Often the arbitrary decision was made to “small find” a particular artifact in the field because a photograph was needed. Examples of small finds include jade beads, pendants, chert bifaces, figurines, musical instruments, marine shell pendants, fossils, carved bone tools, complete vessels, sherds with glyphs, and so on. The entire assemblage of small finds and other selected artifacts (faunal remains, chert tools) were photographed by A. Abdool using a Nikon D90 with a Nikos 18-200 mm (f/3.6-5.0), AF lens. A Foldio 18” foldable studio was used. Photographs were edited using Lightroom Classic L6. Artifacts were placed in the lightbox along with the information card and a measuring ruler. Camera was set at 100 ISO, aperture was set at F16, focus was set at automatic. Exposure was set as long as the camera calculated. All images were shot as raw. Images were numbered by the camera and were recorded in notebooks in the format as indicated on the info card, by date, site, object name, and material. Artifacts were positioned to show important features.

5.4.1 Ceramic Analysis

Ceramic analysis was primarily conducted by Walden, K. Shaw-Müller, Y. Qiu, O. Ellis, A. Nachamie, X. Li, and E. Messinger. Jaime Awe and Laura Kosakowsky provided valuable assistance with tricky sherds. Analysis involved all materials from stratigraphic excavations. Ceramic analysis involved all materials excavated from the Tutu Uitz Na and Floral Park Districts, previously unanalyzed materials from the Floral Park center materials from the Texas District, currently curated by the Harvard Peabody Museum of Archaeology and Ethnology. Analysis focused on 10535 diagnostic rim and body sherds (of a total of 47085 sherds). 42% of these sherds were decorated body sherds which could not be analyzed to type or variety level. The other 58% were categorized according to the local ceramic typology developed by Gifford (1976) and amended by numerous scholars (Aimers 2002, 2007b, 2013; A.F. Chase and D.Z. Chase 2008; Kosakowsky 2012; Kosakowsky and Robin 2010; LeCount 1999; Pring 2000). While other regional ceramic typologies were useful (i.e. Culbert and Kosakowsky 2019; Hammond 1975; Sabloff 1975; R. Smith 1955), the vast majority of the assemblage could unsurprisingly be analyzed according to Gifford (1976), without falling afoul of the “Barton Ramie paradigm” (Ball and Taschek 2003: 179). Modal analysis of ceramics involved their classification into plates, bowls, dishes, vases, and jars based on the rim diameter and the open/closed nature of the orifice (Sabloff 1975: 22-27). Rim diameters were also taken for each vessel. The degree of energy investment was also recorded, based on whether a vessel was decorated (incised, punctated, striated, etc.), painted (bichrome, polychrome), or bore glyphic inscriptions. The ceramic data provided a window into temporal change over time, portable wealth (M. Smith 1987), storage, feasting, and consumption (Horn and Ford 2018; Powis 2004). Outlined below is a summary of preliminary temporal patterns evident from the ceramic analysis (see Chapter 6 for a more detailed overview of the respective contexts).

5.4.1.1 Early Preclassic Cunil/Kanocha Phase (1200/1100–900 BC)

Early Preclassic Cunil (Kanocha) phase ceramics are widely encountered in the region at Blackman Eddy (Garber et al. 2002), Cahal Pech (Awe 1992; Ebert 2017; Garber and Awe 2009; Healy et al. 2004: 113), Early Xunantunich (Brown et al. 2011), and are reported at Floral Park

(Garber et al. 2004a: 28). None were encountered during the ceramic analysis associated with this dissertation, or the reanalysis of materials from Barton Ramie. The presence of Cunil materials in the region is expected though given further excavation and reanalysis. Table 5.1 shows the ceramic complexes in the Lower Dover polity.

Table 5.1 Ceramic Complexes in the Lower Dover Polity.

| <i>Time Period</i> | <i>Date Range</i> | <i>Barton Ramie Ceramic Complex</i> |
|---------------------|-------------------|-------------------------------------|
| Postclassic | AD 900/1000–1521 | New Town |
| Terminal Classic | AD 800–900/1000 | Spanish Lookout II |
| Late Classic II | AD 700–800 | Spanish Lookout I |
| Late Classic I | AD 600–700 | Tiger Run |
| Early Classic | AD 300–600 | Hermitage |
| Terminal Preclassic | AD 150-300 | Mount Hope/Floral Park |
| Late Preclassic | 300 BC-AD 150 | Barton Creek |
| Middle Preclassic | 900–300 BC | Jenney Creek |
| Early Preclassic | 1200/1100–900 BC | Cunil/Kanocha |

5.4.1.2 Middle Preclassic Jenney Creek Phase (900–300 BC)

Middle Preclassic Jenney Creek phase materials were particularly abundant in the lowest stratigraphic contexts at six settlement groups. A total of 375 diagnostic sherds from the Jenney Creek complex were identified (6% of the total diagnostic assemblage). Three of these are the intermediate elites, while the other three are high-status commoner residences (SG 3, SG 34, BR-194). While certainly possible, the decision was taken not to use the arrival of Mamom ceramics to subdivide the Middle Preclassic into early and late facet Jenney Creek (see Garber et al. 2004a: 44). This decision was made because it would reduce sample sizes to the point where not much could be said with any real certainty about these periods (see Chapter 4.4). Although it remains true that summarizing behavior over a ceramic phase of 600 years is likewise problematic (Demarest et al. 2020). Ultimately, the Middle Preclassic period did not have a huge bearing on the dissertation topic, which focuses on diachronic comparison between Early and Late Classic Lower Dover. The most abundant evidence of Middle Preclassic remains comes from a large *jute* deposit evident at Tutu Uitz Na elite center and a structure situated immediately upon this deposit, and similar but smaller *jute* deposits in the lower levels of residences at SG 3 and SG 34 (see

Chapter 6). These materials are associated with Middle Preclassic radiocarbon dates and structures at Tutu Uitz Na and SG 3. Although this remains less clear at SG 34. Excavations by Glassman, Conlon, and Garber (1995) on the northern appendage of Structure A1 at the Floral Park center revealed a complete stratigraphic construction profile. The lowest levels of this yielded a substantial amount of Middle Preclassic ceramics and a radiocarbon date of cal 770-540 BC (PSUAMS#8097). A fair amount of Jenney Creek material was evident in Willey and colleague's collection lots from BR-194, and the plaza at BR-180. Single component Middle Preclassic materials were also excavated in the lowest levels at BR-180, however, these were accompanied by a radiocarbon date of cal AD 10-130 (PSUAMS#8088). Unlike other contexts, these materials in construction fill were not mixed with Barton Creek ceramics and are interpreted as earlier materials that were redeposited in later construction fill on the eastern structure of BR-180. Generally, the Jenney Creek assemblage across the area primarily is comprised of the Savana and Jocote Ceramic Groups, but also included the Chunhinta, Joventud, and Pital Groups.

5.4.1.3 Late Preclassic Barton Creek Phase (300 BC-AD 150)

Late Preclassic Barton Creek phase ceramic materials were apparent in all the contexts in which Jenney Creek materials were found. A total of 1062 diagnostic sherds from the Barton Creek complex were identified (16% of the total diagnostic assemblage). Securely dated construction phases dating to the Barton Creek phase were apparent at the Tutu Uitz Na center (SG 1), SG 3, SG 34, BR-180, and BR-194. Fill from a construction phase on the Northern Appendage of Structure A1 at Floral Park likely dated to the Barton Creek phase. A Late Preclassic round platform (SG 132) was constructed during this phase and saw two extensive remodeling events which occurred at various points prior to a third construction phase dated to cal AD 130-245 (PSUAMS#8101). Two burials were interred in Barton Creek phase construction at SG 3, the first of which dated to cal 25 BC-AD 85 (PSUAMS#3366 Modeled). A major Barton Creek construction phase at BR-180 dated to cal AD 10-130 (PSUAMS#8088), and included a sizeable platform dating to cal AD 125-230 (PSUAMS#8087) containing an interment (BR-180 Burial 3) dating to cal AD 15-130 (PSUAMS#8574), and a pit excavated into this phase dating to cal AD 25-205 (PSUAMS#8086). A general preference was given to charcoal samples that dated to the earliest contexts (Jenney Creek) and later Hermitage/Tiger Run contexts to better understand

construction sequences and answer the research questions. Clear Barton Creek construction phases are also apparent at the Tutu Uitz Na center (SG 1), which are bracketed by Middle Preclassic and Terminal Preclassic/Hermitage dates. As expected, most of the ceramics associated with the Barton Creek phase at Barton Ramie were apparent in the Tutu Uitz Na and Floral Park Districts (Gifford 1976). The typical Barton Creek ceramic assemblage contained predominantly Sierra, Polvero, Hillbank, Sapote, and Paila Ceramic Groups. Lower proportions of other groups encountered include Flor Cream and Matamore Dichrome. Generally, the waxy lustrous slips associated with Paso Caballo Waxy Wares in the Petén were relatively common (see R. Smith 1955). Fundamental to this dissertation was an awareness that many Late Preclassic types persist into the Terminal Preclassic and Early Classic periods (Lincoln 1985; Kosakowsky 2012; Kosakowsky and Sagebiel 1999; L. Sullivan and Sagebiel 2003; see Chapters 5.4.1.5 and 5.4.1.6 below).

5.4.1.4 Terminal Preclassic Mount Hope/Floral Park Phase

The Mount Hope and Floral Park complexes are apparent at a greater number of settlement groups than the earlier Barton Creek complex. A total of 1018 diagnostic sherds from the Mount Hope and Floral Park complexes were identified (16% of the total diagnostic assemblage). This was expected given the findings at Barton Ramie (Willey et al. 1965). Originally considered to reflect the arrival of an external group, with different ceramic culture, the Terminal Preclassic sees the introduction of an array of vessel types and forms, including polychromes (Willey and Gifford 1961; Willey, Culbert and Adams 1965: 297; see also Vaillant 1927, 1935). Regardless of whether the phase reflects some type of far-flung in-migration (Demarest and Sharer 1986), the dramatic increase in population does likely reflect an influx of people in the region (Willey 1973: 95-96). Materials dating roughly to the Terminal Preclassic period were uncovered at the Tutu Uitz Na (SG 1), Floral Park, and BR-180/BR-168 elite centers, SG 3, SG 11, SG 28, SG 34, SG 35, SG 129, SG 132, BR-169, BR-174, BR-184, BR-184, BR-189, BR-194, and BR-260. Of these contexts, clear Terminal Preclassic construction phases were apparent at the Tutu Uitz Na (SG 1), and BR-180 elite centers, and the commoner households of SG 3, SG 34, SG 132, BR-184, BR-189, and BR-260. Terminal Preclassic materials were associated with an extensive occupation phase at BR-180, including two elite burials dating to cal AD 70-150 (PSUAMS#8868 Modeled).

A possible transitional Terminal Preclassic/Early Classic construction phase was identified at SG 35 dating to cal AD 265-425 (PSUAMS#8102). The Mount Hope/Floral Park assemblage saw the introduction of the Aguacate, San Felipe, Monkey Falls, and Chan Pond ceramic Groups, and in lower proportions, the San Antonio and Cabro ceramic Groups. Terminal Preclassic types are found in abundance in architectural fill at Lower Dover. Earlier Barton Creek groups such as the Sierra, Polvero, Flor, Matamore Dichrome, Hillbank, and Paila continued to proliferate in all Terminal Preclassic contexts. Generally, more elaborate bichrome and polychrome types associated with the Aguacate group (Ixcanrio, Gavilan Black-on-Orange) appear later in the Terminal Preclassic (see Brady et al. 1998; Kosakowsky 2012: 51).

5.4.1.5 Early Classic Hermitage Phase (AD 300–600)

The relative paucity of Hermitage complex sherds at some Belize River Valley sites, including Barton Ramie, was long assumed to reflect an Early Classic demographic decline (Sabloff 1975: 233). Traditionally, many of the diagnostic ceramics of the Hermitage phase as outlined by Gifford (1976) are high-status ceramics from the Peten (LeCount 2004: 28; Morris and Ford 2005: 79-81). Lincoln (1985: 57-63) first suggested that many Terminal Preclassic (Floral Park) ceramics prevailed into the Early Classic period (see also Brady et al. 1998; Demarest 1992b: 139; Kosakowsky and Sagebiel 1999; L. Sullivan and Sagebiel 2003; Valdez 1987: 246). It is now known that both Barton Creek types like Sierra Red and Floral Park types like Aguacate Orange continued well into the Early Classic at Baking Pot, Cahal Pech, Barton Ramie, and Lower Dover (Awe and Helmke 2005: 48). Moreover, a combination of ceramics, architecture, and radiocarbon data has effectively proven that the Early Classic period saw increases in the scale of civic-ceremonial architecture at many Belize River Valley polity capitals (Awe 1992; Awe and Helmke 2005; Ball and Taschek 2004; 2017; Ebert et al. 2016, 2017; Healy et al. 2004; see also A.F. Chase and D.Z. Chase 2005: 17), and demographic increases in their respective hinterlands (Ebert et al. 2016: 13; Hoggarth 2012; Robin et al. 2012a: 32; for an alternative perspective see Brown, Awe and Garber 2009: 64).

There is a general paucity of many diagnostic types associated with the Early Classic in residential contexts across the Lower Dover area. However, the small proportions of Early Classic sherds were used to establish a terminus post quem to separate Late Preclassic and Early Classic

assemblages. This continuation of types like Sierra Red was resoundingly clear within the contexts included in this dissertation. A total of 392 diagnostic sherds from the Hermitage complex were identified (6% of the total diagnostic assemblage). Despite this, the vast majority of settlement was occupied at this time. Clear Hermitage phase residential structures and occupations are apparent at the Tutu Uitz Na and Floral Park centers. Str. E2 at Tutu Uitz Na had a Hermitage phase pit excavated through the floor of the Terminal Preclassic phase structure around cal AD 440-600 (PSUAMS#8090), and a substantial Hermitage phase construction episode above this. Structure E2 saw a sizeable mortuary structure built during this period with two elite interments. Three radiocarbon dates suggested this construction occurred around cal AD 425-560 (PSUAMS#8092, PSUAMS#8095, PSUAMS#8096). While contexts dating to this period at BR-180/168 were destroyed by bulldozing, a fair amount of Hermitage phase sherds were apparent on the ground surface. A clear Hermitage phase construction was apparent at Floral Park although no dateable charcoal existed for analysis. Commoner households occupied during the Hermitage phase included SG 3, SG 11, SG 28, SG 34, SG 35, SG 42, SG 129, SG 132, BR-170, BR-174, BR-184, BR-189, BR-194, BR-260. Four of these yielded radiocarbon dates; SG 11 (cal AD 250-405, PSUAMS#098), SG 42 (AD 415-540, PSUAMS#8100), SG35 (AD 265-425 PSUAMS#8102), and SG 129 (AD 590-650, PSUAMS#8103). These samples were specifically ran to separate the construction sequences of these households, and are not representative of broader demographic occupation (multiple undated samples exist from Hermitage contexts within the households listed above; see Chapter 5.4.2). Commonly encountered Hermitage ceramics include Aguila, Balanza, Minanha, and Pucte Ceramic Groups. Other polychrome types such as Dos Arroyos Orange Polychrome and Actuncan Orange Polychromes were also fairly common. Aguacate Orange: Dos Hermanos Variety vessels were incorporated as Aguila Orange: Dos Hermanos Variety following Kosakowsky (2012: 53; see also Culbert 1993; Forsyth 1989, 1993; Sagebiel 2005).

5.4.1.6 Early Late Classic Tiger Run Phase (AD 600–700)

The early Late Classic Tiger Run phase is poorly defined at many sites and many diagnostic types associated with this complex overlap significantly with the later Spanish Lookout I phase (R. Smith 1955; Gifford 1976; Kosakowsky 2012: 54). A total of 137 diagnostic sherds from the Tiger Run complex were identified (2% of the total diagnostic assemblage). A further 1049 sherds,

which were attributable to the Tiger Run and Spanish Lookout phases were also identified (9.5% of the total diagnostic assemblage). These percentages illustrate some of the issues with making clear statements about the Tiger Run phase. Still, this early Late Classic period represents the flashpoint at which the polity of Lower Dover rose and thus is crucial to answering the questions posed in this dissertation. The only event which clearly dates to this transitional phase is the remodeling of the eastern mortuary structure at Tutu Uitz Na into an eastern triadic structure (see Chapter 6.3.1.3). This involved the interment of SG 1 Burial 4 which dated to cal AD 480-595 (PSUAMS#8573 Modeled). Ballast from the floor which capped this interment cal AD 600-660 (PSUAMS#8093). It seems highly likely that this burial was interred well towards the end of this date range due to the subsequent floor above, and because the funerary assemblage contained two Belize Red vessels, two Dolphin Head Red bowls and a Vaca Falls bowl. As Willey and colleagues (1965: 289) acknowledge, the lack of Tiger Run phase construction in the BR-180 plaza must not be overinterpreted given the nature of the sample and the short length of this ceramic phase (<100 years). While no radiocarbon was analyzed from Late Classic contexts at Floral Park, it is abundantly clear that the center grew dramatically during this time. The general Hermitage assemblage included ceramics from the Mountain Pine, Dolphin Head, and Belize ceramic Groups. While Gifford (1976) placed many of these types in the Spanish Lookout phase, it is becoming increasingly clear that they appear earlier at many sites in the Belize River Valley (Ball and Taschek 2004; Kosakowsky 2012; LeCount et al. 2002).

5.4.1.7 Late/Terminal Classic Spanish Lookout Phases I and II (AD 700–900/1000)

Spanish Lookout I and II ceramics were the most commonly encountered across the settlement. A total of 3489 diagnostic sherds from the Spanish Lookout I and II complexes were identified (53% of the total diagnostic assemblage). Substantial construction is apparent at both Tutu Uitz Na during the Spanish Lookout I phase, although the center appears to be abandoned by the early Spanish Lookout II phase. There was a general paucity of Spanish Lookout II types and a series of radiocarbon dates suggest Structures N1 and E2 saw their last construction episodes prior to cal AD 780-880 (see samples PSUAMS#8089, PSUAMS#3367, PSUAMS#3464, and PSUAMS#3365). The ceramic assemblage of terminal construction and intrusive burials suggests a date towards the latter end of this range due to the presence of Spanish Lookout II types. While

no radiocarbon samples were analyzed from Late Classic contexts at Floral Park, it is clear that the center saw a sizeable architectural remodeling during the Spanish Lookout I period, following by an even larger Terminal Classic remodeling during Spanish Lookout II (see Chapter 6). No securely dated Late Classic contexts exist at BR-180 due to the extensive devastation wrought by the bulldozer, but it is clear from excavations that the eastern triadic structure increased dramatically in size during this time (see Chapter 6). Lastly, all the commoner households excavated revealed Spanish Lookout I phase construction.

Most excavated households contained contexts which may represent Spanish Lookout II phase construction, although most of these materials and the associated construction were bioturbated to the point where it was unclear whether they reflected construction or just occupation. Commonly found Spanish Lookout I ceramics predominantly belonged to the Belize, Cayo, Vaca Falls, Garbutt Creek, and Dolphin Head Ceramic Groups. Following Kosakowsky (2012: 54), Late Classic jars were sorted into the Cayo Unslipped and Tutu Camp Ceramic Groups. Analytically, we could not differentiate between these groups and others identified at Barton Ramie by Gifford (1976) like White Cliff or Jones Camp. The lack of discrete Terminal Classic phase ceramic deposits at Barton Ramie prohibited Gifford (1976: 226) from originally separating Spanish Lookout phase ceramics into the two phases. Discerning between Spanish Lookout I and II is more difficult in the central Belize River Valley due to the comparative paucity of Mount Maloney Black, which exhibits diagnostic changes in rim form as the Late Classic period progressed (see LeCount 1996; LeCount et al. 2002; Taschek and Ball 2003; Willey et al. 1965: 373). Still, in unison, types like Cayo Unslipped: Alexanders Variety (with the piecrust rim), highly incurving diagnostic Mount Maloney bowl rims (LeCount 1996), Miseria Appliquéd *incensarios* (Sabloff 1975), outcurving Roaring Creek Red bowl rims (Aimers, Awe, and LeCount 2019: 138), Daylight Orange (which might be earlier; see also Awe and Helmke 2007: 36), and Molded-Carved body sherds (Helmke and Reents-Budet 2008; Ting, Graham, and Martín-Torres 2014), served as a rough handrail to distinguish these later construction phases.

5.4.1.8 Early to Late Postclassic New Town Phase (AD 1000/1521)

Generally, much has been made of the Postclassic occupation at Barton Ramie, however, in reality despite being widespread across the settlement, and potentially more substantial than

assemblages at surrounding sites (Willey, Culbert, and Adams 1965: 311), the New Town ceramics form a small sample in comparison to the Spanish Lookout ceramic assemblage (see Weller 2009). A total of nine New Town sherds were identified at the Tutu Uitz Na and Floral Park districts (0.1% of the total diagnostic assemblage). These included More Force jar rims and a Paxcaman Red scroll foot. The New Town ceramics from the Texas District were not incorporated into the analysis though. The sheer paucity of remains strongly refutes the idea of continued occupation at each settlement group (Willey et al. 1965: 291), and seems to suggest sporadic resettlement and/or ritual re-visitation (Willey 1973: 100). This is corroborated by the differences between the Spanish Lookout and New Town assemblages, which are suggestive of different ceramic traditions (Willey et al. 1965: 384-90). This corroborates Hoggarth and colleagues (2014) who suggests the possibility of an Early Postclassic hiatus and Late Postclassic reoccupation based on summed probability distributions of radiocarbon dates from human remains at Baking Pot, which was originally thought to follow a similar trajectory of continuation as Barton Ramie (Hoggarth, Freiwald, and Awe 2021; see also Aimers 2007). Willey and colleagues (1965: 79, 291) remained skeptical that even the more substantial New Town occupations at Barton Ramie reflected construction phases. Postclassic occupations at Barton Ramie are generally badly bioturbated but seem to reflect low platforms and stone alignments constructed over Late Classic platforms (Willey 1973: 103). Some Postclassic contexts at Baking Pot seem to be situated upon a lens of humic matrix reflective of an occupational hiatus before resettlement (Walden 2016: 274-276). Willey (1973: 103) argues: “by comparison with the massive amount of platform building that occurred at Barton Ramie in the Spanish Lookout Phase, New Town dwelling mound construction must be considered very minor. The New Town occupation was extensive, the construction minimal.” The southern districts of Tutu Uitz Na and Floral Park show even less evidence of a New Town occupation than Barton Ramie.

5.4.2 Radiocarbon Dating

High-resolution AMS ^{14}C dating was conducted on 19 radiocarbon samples from organic remains, and eight samples from human remains by Brendan Culleton at the Penn State Radiocarbon Laboratory (see also Hoggarth et al. n.d.). All charcoal encountered during excavation was collected in the field for possible future analysis. Each sample had its x and y

coordinates and its depth below unit datum recorded alongside the particular event the sample would date. Samples were then recorded on the specific plans and profiles of the excavation units. The vast majority of samples were extracted from construction fill, plaster floors, floor ballast, burial contexts, features, and deposits. Sample selection was largely driven by two overt goals: **1)** to reconstruct the temporal sequence at the intermediate elite centers, **2)** to accurately discern Early and Late Classic architectural contexts and fill events within commoner households. For these reasons, the subsequent radiocarbon dataset is not really fit for summed probability distribution to understand population dynamics as sample selection was biased by the two aforementioned research questions. Generally, smaller carbonized twigs were prioritized when selecting samples for AMS ^{14}C dating to reduce inaccurate dates derived from “the old wood effect” (Schiffer 1986; Kennett et al. 2002). Following Stuiver and Polach (1977) all radiocarbon ages are reported with the conventional ages, corrected for fractionation with measured $\delta^{13}\text{C}$, alongside the calibrated and modeled date ranges, which are reported at the 2σ level (see Chapter 6 and Table 5.2).

Radiocarbon ^{14}C dates from eight individuals were also produced. Samples were prepared at the Penn State Radiocarbon Laboratory. Approximately 100-1000 mg of cortical bone was sampled to maximize collagen yield. Bone collagen was extracted and purified using the modified Longin (1971) method with ultrafiltration (Brown et al. 1988) or XAD-purification for poorly preserved samples (Stafford et al. 1988). Sample quality was evaluated by % crude gelatin yield, and %C and %N were used to calculate stable isotope carbon/nitrogen (C:N) ratios to assess collagen preservation (DeNiro 1985; DeNiro and Epstein 1978, 1981; van Klinken 1999). Samples that met quality control standards were sent for AMS radiocarbon measurements.

Table 5.2 AMS Radiocarbon Dates and Ceramic Phases.

| <i>Lab ID#</i> | <i>Location</i> | <i>Context</i> | <i>Material</i> | <i>Conventional ¹⁴C yr (BP)</i> | <i>2σ Calibrated Range</i> | <i>Modeled 2σ cal range</i> | <i>Ceramic Complex(es)</i> |
|-------------------|-----------------|------------------------------------|-----------------|--|--------------------------------|---------------------------------|--------------------------------|
| PSU-8091 | SG 1 Str. N1 | Floor 1 ballast | Carbonized wood | 2395 ± 20 | 540-400 BC | N/A | Jenney Creek |
| PSU-8090 | SG 1 Str. N1 | Feature 1 | Carbonized wood | 1530 ± 20 | AD 440-600 | N/A | Hermitage |
| PSU-8089 | SG 1 Str. N1 | On Plaza Floor 2 | Carbonized wood | 1215 ± 15 | AD 770-885 | N/A | Spanish Lookout II |
| PSU-8094 | SG 1 Str. E2 | Feature 1 | Carbonized wood | 2485 ± 15 | 765-540 BC | 765-535 BC | Jenney Creek |
| PSU-8092 | SG 1 Str. E2 | Wet laid fill | Carbonized wood | 1575 ± 20 | AD 425-550 | AD 430-550 | Hermitage |
| PSU-8096 | SG 1 Str. E2 | SG 1 Burial 7, Minanha Red | Carbonized wood | 1570 ± 15 | AD 430-555 | AD 430-550 | Hermitage |
| PSU-8095 | SG 1 Str. E2 | Fill around SG 1 Burial 5 crypt | Carbonized wood | 1545 ± 15 | AD 435-585 | AD 435-560 | Hermitage |
| PSU-8573 | SG 1 Str. E2 | SG 1 Burial 4 | Bone collagen | 1550 ± 20 | AD 430-580 | AD 480-595 | Tiger Run/Spanish Lookout I |
| PSU-8093 | SG 1 Str. E2 | Floor 1 ballast | Carbonized wood | 1405 ± 20 | AD 600-660 | AD 600-660 | Tiger Run/Spanish Lookout I |
| UCIAMS- 172401 | SG 1 Str. E2 | SG 1 Burial 1 | Bone collagen | 1245 ± 20 | AD 675-880 | AD 675-825 | Spanish Lookout I/II |
| PSU-3367 | SG 1 Str. E2 | SG 1 Burial 2, Individual 1 | Bone collagen | 1210 ± 15 | AD 780-880 | AD 780-880 | Spanish Lookout II |
| PSU-3464 | SG 1 Str. E2 | SG 1 Burial 2, Individual 2 | Bone collagen | 1185 ± 15 | AD 770-890 | AD 770-890 | Spanish Lookout II |
| PSU-3365 | SG 1 Str. E2 | SG 1 Burial 3 | Bone collagen | 1190 ± 20 | AD 770-890 | AD 770-890 | Spanish Lookout II |
| PSU-8099 | SG 3 Str. N1 | Fill on bedrock | Carbonized wood | 2360 ± 15 | 465-385 BC | N/A | Jenney Creek |

| <i>Lab ID#</i> | <i>Location</i> | <i>Context</i> | <i>Material</i> | <i>Conventional ¹⁴C yr (BP)</i> | <i>2σ Calibrated Range</i> | <i>Modeled 2σ cal range</i> | <i>Ceramic Complex(es)</i> |
|----------------|-----------------|--------------------------|-----------------|--|--------------------------------|---------------------------------|-------------------------------------|
| PSU-3366 | SG 3 Str. N1 | SG 3-Burial 1 | Bone collagen | 1960 ± 20 | AD 5-125 | 25 BC-AD 85 | Barton Creek |
| PSU-8098 | SG 11 Str. N1 | Floor 3 ballast | Carbonized wood | 1725 ± 15 | AD 250-405 | N/A | Hermitage |
| PSU-8100 | SG 42 Str. S1 | Fill on bedrock | Carbonized wood | 1615 ± 15 | AD 415-540 | N/A | Hermitage |
| PSU-8097 | FPK, Str. A1 | Fill on bedrock | Carbonized wood | 2485 ± 20 | 770-540 BC | N/A | Jenney Creek/Cunil? |
| PSU-8104 | SG 34 Str.N1 | Ballast behind Wall 2 | Carbonized wood | 1875 ± 15 | AD 120-220 | N/A | Barton Creek |
| PSU-8102 | SG 35 Str.W1 | Fill under Floor 1 | Carbonized wood | 1665 ± 15 | AD 265-425 | N/A | Mount Hope/Floral Park/Hermitage |
| PSU-8103 | SG 129 Str.SW1 | Fill behind Wall 1 | Carbonized wood | 1450 ± 15 | AD 590-650 | N/A | Hermitage |
| PSU-8101 | SG 132 Str. W1 | Behind Wall 2 | Carbonized wood | 1835 ± 15 | AD 130-245 | N/A | Barton Creek |
| PSU-8088 | BR-180 | Clay fill on bedrock | Carbonized wood | 1945 ± 20 | AD 10-130 | AD 20-115 | Jenney Creek/Barton Creek |
| PSU-8574 | BR-180 | BR-180 Burial 3 | Bone collagen | 1950 ± 20 | AD 15-130 | AD 50-125 | Barton Creek |
| PSU-8086 | BR-180 | Feature 4 | Carbonized wood | 1925 ± 20 | AD 25-205 | AD 80-165 | Barton Creek |
| PSU-8868 | BR-180 | BR-180 Burial 2 | Bone collagen | 1930 ± 15 | AD 25-250 | AD 70-150 | Mount Hope/Floral Park |
| PSU-8087 | BR-180 | Boulder Fill | Carbonized wood | 1860 ± 15 | AD 125-230 | AD 115-215 | Mount Hope/Floral Park |

Samples were cleaned, packed, combusted, and graphitized for AMS ^{14}C dating at the Penn State Radiocarbon Laboratory. Samples were calibrated using OxCal 4.4 with the IntCal 20 Northern Hemisphere atmospheric curve (see Reimer et al. 2020). The dates from structures with complex construction histories such as BR-180 and Tutu Uitz Na Structure E2 were modeled using Bayesian statistics. This approach employed a priori contextual information derived from architectural stratigraphy and ceramic dating to constrain the associated date ranges and more precisely and accurately reconstruct the temporal construction sequence (following methods employed by Ebert et al. 2016; see also Bronk Ramsey 2015; Bronk Ramsey et al. 2010; Culleton, Prufer, and Kennett 2012; Hoggarth et al. 2014; Prufer, Kennett, and Culleton 2011). Oxcal provides an agreement index for distributions of modeled ^{14}C dates which reflect how well those dates fit with the contextual data included (Bronk Ramsey 2009). These indices are combined to provide an idea of the overall agreement of the model (Amodel). Both of the modeled contexts had satisfactorily high agreement indices. The model for BR-180 had an agreement index of 104.2%, while the model for Tutu Uitz Na Structure E2 had an agreement index of 93.7% (see Table 5.2).

5.4.3 Lithic Analysis and Obsidian Sourcing (pXRF)

All culturally modified lithic artifacts and possible ecofacts were collected in the field. Lithics were separated into chipped stone artifacts commonly made of obsidian and chert, a term which encompasses various cryptocrystalline silicates, such as cherts, chalcedony, jasper, and biosparite/fossiliferous limestone (Stemp, Helmke, and Awe 2010), and ground stone (granite, basalt, quartz). All chert artifacts encountered were visually inspected to determine whether they were local or non-local. All lithic analysis was conducted in the field with the exception of portable x-ray fluorescence of obsidian. Ground stone artifacts such as *manos* and *metates* were categorized based on their material and their probable function. Chipped stone artifacts underwent more thorough analysis depending on the type of artifact (Levin 2019; see also Andrefsky 2005). Lithic analysis was conducted by Walden, A. Levin, G. Saldaña, and N. Mendez. The general classificatory scheme and protocols were developed by Levin, Walden, and John Whittaker as part of Levin's undergraduate honors thesis (Levin 2019). The analysis was designed to identify patterned variability in chert tool production and consumption, and different activities at the household level. This involved the recording of all waste flakes (debitage) and an analysis of a

20% debitage sub-sample to establish whether tools were produced in the contexts in which they were found (VandenBosch, LeCount, and Yaeger 2010: 282).

5.4.3.1 Bifaces

Bifaces represent any tool that has been worked on both sides. The vast majority of bifaces encountered in the residential assemblages at Lower Dover were of the general utility type used for agricultural and quotidian tasks such as felling trees and tilling the soil. General utility bifaces are easily identified by their crude appearance, thick cross-sections, and rounded bits. These were likely hafted and used as general-purpose agricultural tools (Moholy-Nagy 1991: 196). Half-finished bifaces, at various stages of the production sequence, were classified as rough bifaces. Chisels were also present, these are long, narrow, thin pointed bifaces used for woodworking. Any bifaces with a thickness of less than half their length were categorized as thin bifaces. Thin and small bifaces could have fulfilled many different functions, but most were bi-pointed and probably represented knives (Moholy-Nagy 1991: 197). These thin bifaces are often assigned a “ceremonial” function in the Maya lowlands, and this was corroborated at Lower Dover by their presence in burials. Bifaces were analyzed according to ten categories: stage of production, edge treatment, bit treatment, bit form, part of biface, modification, burning, presence of cortex, material, and provenance.

5.4.3.2 Flake Tools

Any tools made of debitage were classified as flake tools. Most flake tools are unifacially worked and represent expedient tools (Moholy-Nagy 1991: 196). These were separated into a series of sub-categories including blades, borers, drills, edge dulled flakes (edf), choppers, and scrapers. Borers are narrow unifacially worked tools with the two worked edges leading to a point, which was likely employed for woodworking. In contrast to borers, drills fulfill a similar function but are bifacially worked. Edge dulled flakes are smaller rounded implements with intentionally dulled edges. Scrapers are unifacially worked tools with a single sheer edge. These were likely used for an array of domestic cutting activities. Choppers are similar to scrapers but are bifacially worked and probably required slightly more skill to produce. The different types of flake tools

were analyzed according to the level of work each took to produce (little/medium/extensive), the presence of cortex, quality of material, and provenance.

5.4.3.3 Cores

Cores were separated into three main types: amorphous cores, flake cores, and blade cores (Moholy-Nagy 1991: 195). Amorphous cores are formed when flakes were removed at random leaving them with no specific shape. Flake cores are flakes which have been reused as cores. Blade cores result from flakes being removed from a single platform, in a unidirectional fashion. Cores were classified according to seven criteria; size, presence of cortex, platform (unidirectional versus multidirectional), evidence of blade scars, modifications, and provenance.

5.4.3.4 Eccentrics

Eccentrics are non-utilitarian chipped stone implements generally associated with ritual. Ancient Maya eccentrics vary in their complexity and quality from incredibly elaborate to simple unifacially modified flakes (K. Sullivan 2017). Eccentrics were classified according to their shape, size, material, modification, and the presence of cortex.

5.4.3.5 Debitage

The vast majority of lithic artifacts comprised chert debitage. A 20% random sample of debitage from each lot was analyzed. Debitage was measured and analyzed based on its type (hard-hammer, soft-hammer, and pressure flakes). Debitage of a non-local variety was recorded.

5.4.3.6 Obsidian Metric Analysis and Sourcing (pXRF)

Metric analysis of obsidian involved classifying its color and its type (blade, serrated blade, flake, core, biface). The vast majority of the obsidian assemblage were blades, although a small number of flakes were apparent, especially in Preclassic contexts.

Table 5.3 Elemental Concentrations of Obsidian in Parts Per Million.

| <i>Source</i> | | <i>Mn</i> | <i>Fe</i> | <i>Zn</i> | <i>Rb</i> | <i>Sr</i> | <i>Zr</i> | <i>Nb</i> |
|----------------------------|-------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| El Chayal <i>n</i> =175 | mean | 260 | 6204 | 23 | 127 | 119 | 84 | 13 |
| | std | 42 | 550 | 3 | 8 | 7 | 4 | 2 |
| | % rsd | 0.16 | 0.09 | 0.14 | 0.07 | 0.06 | 0.05 | 0.15 |
| Ixtepeque <i>n</i> =27 | mean | 93 | 9129 | 16 | 83 | 120 | 131 | 11 |
| | std | 40 | 679 | 5 | 5 | 6 | 5 | 2 |
| | % rsd | 0.43 | 0.07 | 0.29 | 0.06 | 0.05 | 0.04 | 0.17 |
| San Martin <i>n</i> =27 | mean | 139 | 6641 | 21 | 97 | 152 | 85 | 11 |
| | std | 34 | 448 | 3 | 5 | 6 | 3 | 1 |
| | % rsd | 0.24 | 0.07 | 0.12 | 0.05 | 0.04 | 0.03 | 0.14 |

Obsidian provenance analysis involved portable x-ray fluorescence analysis conducted by J.V. Gonzalez Avendaño, C. Ebert, and B. Hanks using a Thermo Fisher Niton XL3 Gold+ portable X-ray fluorescence analyzer (pXRF) following methods described by Brown and Pitman (2019). Calibration samples were kindly provided by Ellery Frahm. Each measurement was recorded for a total of 240 seconds using the instrument’s in-built Fundamental Parameters calibration, in this case, mining mode (Cu/Zn). Four filters were selected to optimize the detection of the analyzers’ sensitivity for various elements, including “Main” (60 seconds), “Light” (60 seconds), “Low” (60 seconds), and “High” (60 seconds). Four standards were run periodically to ensure consistent results, though only two detect the elements consider for obsidian analyses in sufficient quantities. Standards (each run 5 times during analyses): *USGS SdAR-M2, *NIST 2709a, Blank SiO₂ (99.995%), RCRA1. The flattest surface on the artifact was targeted to ensure that analysis of each sample included the bulk of the X-ray produced. Irregularly shaped samples were placed with the smoothest side positioned for analysis. Artifacts at least >2 mm thick are optimal for pXRF analyses, with reduced levels of accuracy noted with decreasing size (Lundblad et al. 2008; Davis et al. 2011; Shackley 2012). A total of 17 artifacts that were less than 2mm thick and relatively small in size could not be analyzed. The elemental concentrations of the obsidian analyzed using the pXRF is reported in Table 5.3 (note these values are rounded to the first whole number, and the relative standard deviation (% rsd) is reported as a percentage).

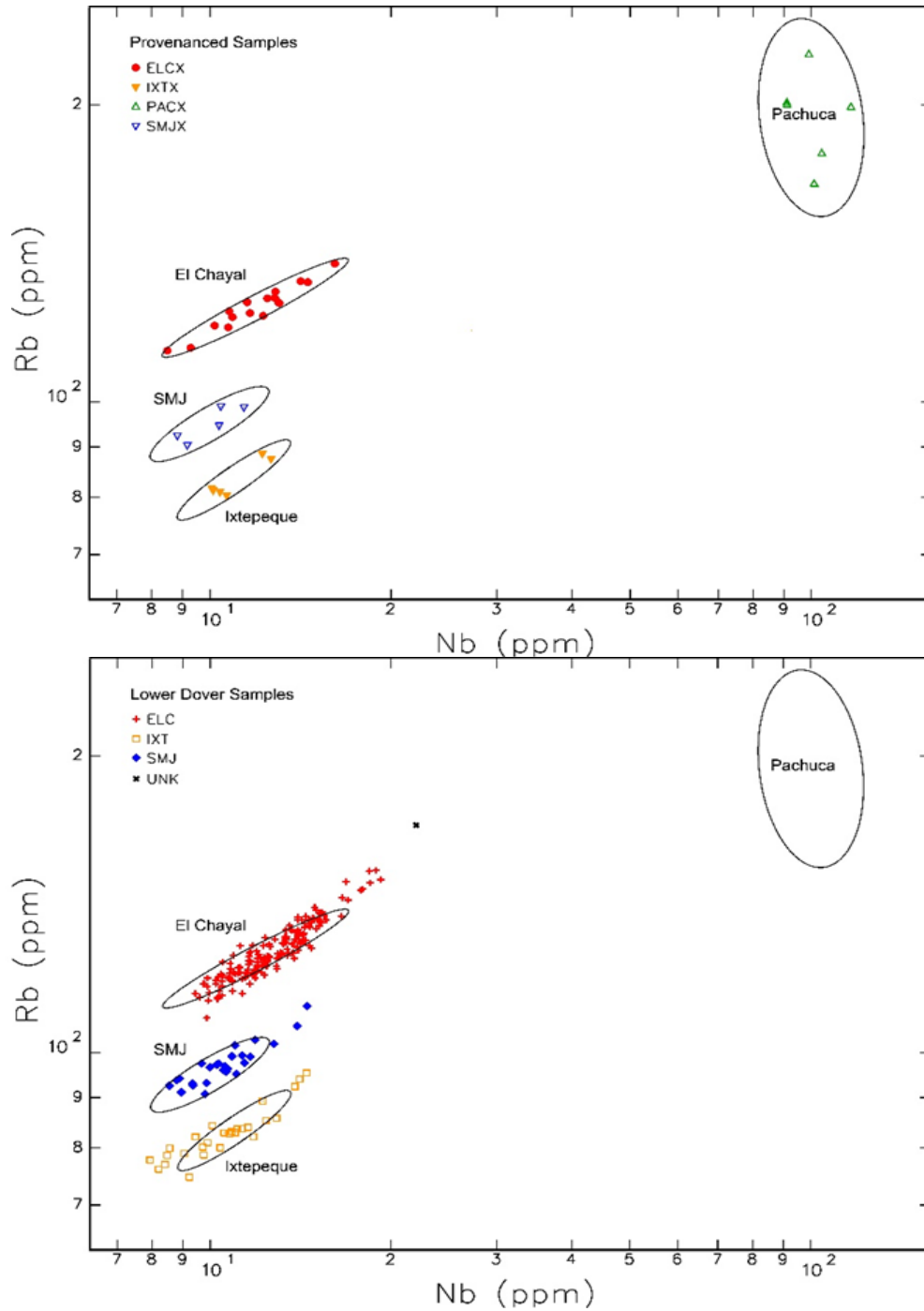


Figure 5.3 Bivariate Nb/Rb plot of calibrated elemental concentrations

The top plot is for samples with known proveniences from Cahal Pech and Lower Dover (SG-1). The bottom plot shows source assignments for unprovenanced Lower Dover settlement artifacts. Ellipses represent 90% confidence intervals for group membership based on previously provenanced samples

The resulting ppm data were empirically calibrated using linear regressions of 20 mounted geological standards – Peabody-Yale Reference Obsidians (PYRO) reference set described in Frahm (2019). Calibrated results were compared to calibrated ppm data of samples with previous source determinations (Cahal Pech, n=20, Ebert 2017; Tutu Uitz Na SG 1, n=12, Petrozza 2015) from the El Chayal, San Martin Jilotepeque, Ixtepeque, and Pachuca sources, the most common found in the Belize River Valley. Because we do not have our own geological data, trace element values and ratios of data from previously provenanced samples were used to assign sources for unprovenanced Lower Dover samples (see Figure 5.3).

Cluster analysis was performed in the GAUSS program and identified three primary sources that compose the Lower Dover Settlement obsidian assemblage: El Chayal, SMJ, and Ixtepeque. One sample could not be assigned to an archaeologically known source based on the present analyses but is possibly porphyritic (i.e., glassy) basalt. Previous pXRF analyses of obsidian from Cahal Pech and Lower Dover found a sample of third series blades that were created out of basalt (Ebert 2015b, 2017: 135). Geochemically, these artifacts have high Fe and Zn, which match the sample here. While porphyritic basalt is most common in the Tuxtla region of the Gulf Coast (Pool 2007: 67), the geochemical composition of basalts across Mesoamerica is not well characterized, however, so this sample remains unassigned.

5.4.3.7 Ground Stone

Ground stone artifacts include any item which has been reduced through grinding. Common ground stone implements include *manos* and *metates*. A basic metric analysis of ground stone items was conducted. Ground stone was not washed so that residue analysis could be conducted at a later date.

5.4.3.8 Polished Stone

Polished stone was split into two categories, jade, and greenstone. Materials classed as jade include a range of minerals including jadeite, nephrite, diopside, apatite, amazonite, among others. All of these can be considered “social jade” following Hammond (1991b). Jade was likely coming from the Motagua Valley in Guatemala and Honduras. In contrast, greenstone encompasses a range

of schists, shales, and serpentines. There is a debate as to whether jade was a fungible commodity, or a restricted sumptuary item in the Classic period (Guderjan 2007: 117; Kovacevich 2013; see Chapter 7.4.6).

5.4.4 Faunal Analysis

Faunal remains including animal bones (birds, fish and terrestrial animals), marine shell, and freshwater shell were collected and analyzed in the field by I. Roa, using methods reported by Burke and colleagues (2020; see Roa et al. 2020). Any shell recovered was cleaned on-site and the other remains were dry-brushed or intensively cleaned by Roa. Faunal remains were assigned bag numbers which included all items recovered from a single lot but separated into freshwater, marine, and faunal subcategories. Each specimen was given a catalog number corresponding to the BVAR Project faunal database (modified after Burke et al. 2020).

All specimens were identified to record basic zooarchaeological data: skeletal element, portion of said element (complete, proximal, distal), body portion (exoskeleton, cranial, appendicular, axial), side, age (generally subadult or adult), sex, and modifications (either natural or cultural) and taxonomic classifications. This analysis involved the use of several osteological guides (Andrews 1969; Gilbert 1990; Gilbert, Martin, and Savage 1996, 1990; Hamblin 1984; McKusick 2001; Olsen 1964, 1968, 1979, and 1982; Sobolik and Steele 1996). Comparative collections from the Stanley J. Olsen Laboratory of Zooarchaeology at the Arizona State Museum in Tucson, and the Herpetology Collection at the Carnegie Museum of Natural History in Pittsburgh were also used. Specimens were recorded as “closely following” when minor features or measurements were identifiable which seemed indicative of belonging to a certain taxon (see Burke et al. 2020).

5.4.5 Epigraphic Analysis

The limited epigraphic corpus from the Lower Dover hinterland was analyzed by Christophe Helmke. The glyphs present were entirely limited to ceramics (no inscription bearing

stone monuments were uncovered). A total of three glyphs were recovered, and only one of these was decipherable.

5.4.6 Burial Data and the Analysis of Human Remains

All burials encountered during this dissertation were cataloged according to BVAR burial dataset protocols developed by Walden, Izzo, and Ellis. Burials were recorded as primary or secondary based on whether the remains were articulated (Duday 2004: 33). In contrast, secondary burials varied from relatively complete to highly incomplete (Duday 2004: 45-46). Grave types recorded include simple, cist, crypt, and tomb (based on a simplified version of Welsh 1988). The size of the grave and the quality of construction were recorded. The body placement, the orientation of the individual, the direction the head was facing, and the body position (prone/supine) were recorded along with spatial relationships with any grave goods. All burials were plan mapped. Human remains were excavated in the field by Walden, K. Green Mink, R. Bongiovanni, V. Izzo, M. Biggie, A. Thompson, A. Levin, M. Swearinger, K. Dudash, J. Puc, C. Mendez, and A. Morales. Skeletal analysis was subsequently carried out by K. Green Mink, R. Bongiovanni, V. Izzo, and A. McKeown. Skeletal data were collected in accordance with Buikstra and Ubelaker (1994). This produced information on age, sex, trauma, pathology, use, and cranial and dental modification.

5.4.7 Geographic Origins (Strontium and Oxygen Isotope Analysis)

Strontium and oxygen isotope analysis was performed on dental enamel extracted from the molars of four individuals interred at Tutu Uitz Na and BR-180 as part of this dissertation by Carolyn Freiwald. Pre-existing strontium isotope data existed for three intermediate elite individuals at Floral Park, and several commoner burials from Barton Ramie, but none from the Texas District (Freiwald 2011a, 2021). Isotopic variation that serves as a proxy for human mobility in the Maya region includes $^{87}\text{Sr}/^{86}\text{Sr}$, based on geologic differences, and to a lesser extent, the $\delta^{18}\text{O}$ values of water sources (see Bentley 2006; Hodell et al. 2004; Lachniet and Patterson 2009; Price et al. 2010). The proximity of the Belize River Valley to the coast and the Maya Mountains

results in a mosaic of values that allow population movement to be observable over relatively short distances (Freiwald 2018, 2020). However, there is a significant overlap in both $^{87}\text{Sr}/^{86}\text{Sr}$ and $\delta^{18}\text{O}$ among sites located in the Yucatan Peninsula (Figure 5.4).

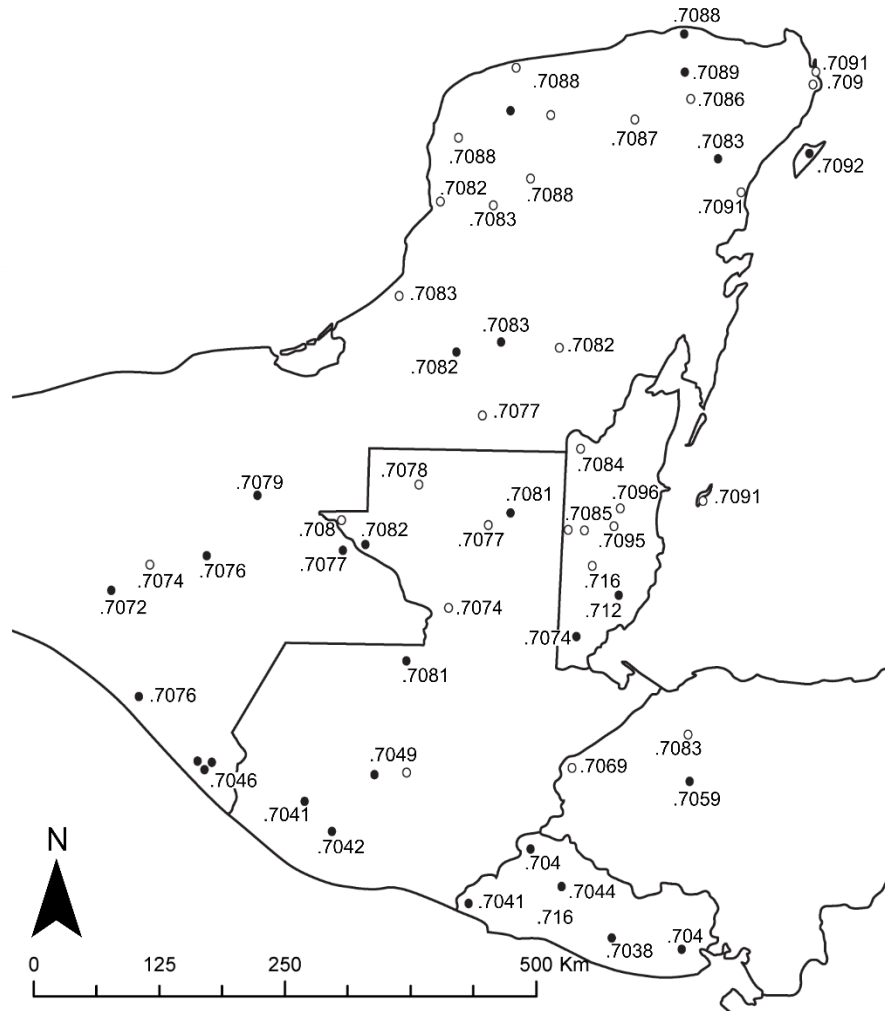


Figure 5.4 Strontium isotope map of the Maya region

Average strontium isotope values of humans (open circles) and fauna (closed circles) in the Maya region (Freiwald 2011a, 2020; Freiwald, Woodfill, and Mills 2019; Miller Wolf and Freiwald 2018; Ortega-Muñoz et al. 2019; Price et al. 2010; R.L. Smith 2020; Suzuki et al. 2015; Wright 2005). Map by Carolyn Freiwald.

The sampled teeth were documented using a digital microscope camera and tooth measurements. Polysiloxane dental impressions were made to produce casts of the tooth crowns, and then each tooth was mechanically cleaned using a variable speed dental drill equipped with a

diamond bur to remove surface contamination (Freiwald 2011a: 106-108). Five milligrams of clean tooth enamel were processed at the University of North Carolina at Chapel Hill Geochronology and Geochemistry Laboratory using a VG Sector 54 thermal ionization mass spectrometer (TIMS), supervised by Drew Coleman and Ryan Mills. $^{87}\text{Sr}/^{86}\text{Sr}$ values were obtained by isotope dilution thermal ionization mass spectrometry (TIMS) using a VG Sector 54 instrument. Each sample was dissolved in 3.5M HNO_3 and the strontium was purified using Eichrom Sr-Spec resin. Samples were loaded on single rhenium filaments in phosphoric acid and tantalum chloride solution and analyzed on a VG Sector 54 as a metal in dynamic multi-collector mode with $^{88}\text{Sr}=3\text{V}$. Strontium isotopic ratios were corrected for mass fractionation using an exponential law correction and normalized to $^{86}\text{Sr}/^{88}\text{Sr}=0.1194$. Replicate analyses of the NBS 987 Sr standard yielded $^{87}\text{Sr}/^{86}\text{Sr}=0.710250 \pm 0.000015$ (2σ , $n=20$).

The oxygen isotope 1-2 milligram-enamel samples were processed at the University of Arizona under the supervision of David Dettman. Each sample was washed in a 0.2 M acetic acid for 1-2 hours and rinsed three times with distilled water. Samples were measured against $\delta^{18}\text{O}$ using reference values from Craig (1957) with an automated Finnegan Delta S VG602C mass spectrometer with analytical precision of 0.11‰ and $2\sigma=0.08\%$. $\delta^{18}\text{O}$ is measured relative to Standard Mean Ocean Water (SMOW), determined as follows: $\delta^{18}\text{O}=1000 \times [((^{18}\text{O}/^{16}\text{O})_{\text{sample}})/(^{18}\text{O}/^{16}\text{O})_{\text{SMOW}}] - 1$. Standards include SMOW and VSMOW.

5.4.8 Dietary Reconstruction (Carbon and Nitrogen Isotope Analysis)

Stable carbon ($\delta^{13}\text{C}$) and nitrogen ($\delta^{15}\text{N}$) isotope measurements from human bone collagen from a sample of seven individuals (SG 1 Burial 1, SG 1 Burial 2 Individuals 1 and 2, SG 1 Burial 3, SG 1 Burial 4, SG 3 Burial 1, and BR-180 Burial 3) was used to reconstruct diet (Ambrose and Krigbaum 2003; DeNiro and Epstein 1978, 1981). Carbon isotope values $\delta^{13}\text{C}$ are used to differentiate food acquired in the fields or the forests, as well as from the land or sea- C3 (trees, shrubs) and C4 (grasses) plants. Carbon isotope values in the Maya lowlands generally reflect the amount of maize consumed (White 1999). There is significant variation among Maya diets regionally, but no broad patterns have yet been identified to show consistent differences across populations by time, gender, or status (Gerry 1993; but see Somerville et al. 2013). Nitrogen

isotope values ($\delta^{15}\text{N}$) in human bone increase by 3‰–5‰ between trophic levels although this is subject to multiple problematic confounding factors (Hedges and Reynard 2007; see also Ebert et al. 2019). Isotope analysis of bone collagen was conducted as part of the ^{14}C radiocarbon process at the Human Paleoecology and Isotope Geochemistry Laboratory at Penn State University using standard procedures for bone collagen extraction and purification.

Stable carbon ($\delta^{13}\text{C}$) measurements were analyzed from four tooth enamel samples (SG 1 Burial 1, SG 1 Burial 4, SG 3 Burial 2, and BR-180 Burial 3). These samples were prepared at the University of Mississippi by Carolyn Freiwald from tooth enamel that forms during infancy and early childhood. The enamel of the first molars begins to form in utero, and these are completely formed during infancy, generally by the age of two. They likely were not yet weaned, so trophic level fractionation in oxygen and carbon isotope values will be present if these values are compared to those from teeth that form later (Wright et al. 2010). The isotope values serve as proxies for the place of origin as they should match those found where the food and water were obtained.

5.4.9 Architectural Data

Architectural data was recorded for each excavation context. This information included the nature (river cobble, river clay, limestone boulder), color (Munsell) and consistency of architectural fill, the thickness of plaster floors, and the quality of ballast. Munsell numbers are not reported in this dissertation but are available in the site reports. An interpretation of the overall level of workmanship invested in laying plaster and cutting limestone boulders for construction was also noted. Information was also collected about what the structures would have been like to live in, in terms of locale, quality of construction, and other factors such as susceptibility to flooding, the quality of the breeze, ease of access, and the availability of general necessities like running water. A more thorough description of how architectural data was employed is provided below (see Chapter 5.6.1. and 5.6.2).

5.4.10 Archaeobotany and Flotation

L. Garcia conducted flotation on matrix samples removed from burials and caches from architectural contexts across the Lower Dover hinterland, under the guidance of J. Hoggarth and R. Guerra (using methods outlined by Guerra 2018). All light fraction was analyzed according to standard BVAR protocols for flotation. The manual process utilized a large bin filled with water, which held a 5-gallon bucket with drilled holes for drainage at its base and two layers of differently sized mesh that covered the perforations. Flotation processed 75% of each collected matrix sample, leaving a small sample for future analysis. The matrix sample was placed into the bucket with perforations and mesh, and agitated by hand with a circular motion, separating the valuable materials from the soil. The light fraction materials were collected with a tea strainer and muslin, while the heavy fraction materials were transferred into the same cloth material and then set to dry for later analyses. The microartifacts and flora were sorted and recorded.

5.5 Pre-existing Collections and Older Excavation Data

Significant re-analysis of previously excavated materials from museum collections was conducted. A series of issues related to comparability and biases had to be thought through in compiling disparate sources of data into a single settlement dataset. These challenges and the solutions to them are presented below. The incorporation of this data in some cases posed issues for which there was simply no solution, hence some of the contexts had to be excluded from certain analyses in Chapters 7-9. For instance, if no reliable information existed about the counts of certain artifacts in a context, then these data were omitted. In some instances, I chose to work with biased or incomplete samples although this involved thinking through the ways in which the bias operated and how it affected the resulting patterns in the analyses (see Drennan 2009). Overall, the Barton Ramie collections housed at the Peabody Museum are a wonderful resource. It is my hope that more scholars take advantage of the opportunities these residential assemblages offer. Likewise, the materials from the BVAP Floral Park excavations were fundamental to this dissertation project, without them the scope would have been drastically reduced. Attempting comparison of data drawn from different archaeological projects always will present issues in terms of comparability.

Biases and issues will be introduced through both the different collection methods and overarching project goals. The issues raised below are not a critique but form a discussion of how to overcome sampling issues that are inherent in the collection of any archaeological data. This discussion is necessary to highlight the ways in which data was compiled for this dissertation and also serves as a reference for others who are contemplating how to incorporate similar data into a larger dataset.

5.5.1 Previous Settlement Excavations at Tutu Uitz Na

Previous excavation at the Tutu Uitz Na center had been undertaken from 2009 onwards. Formal excavation units were renumbered as E.U. SG 1-1 (E.U. PL1-1) and E.U. SG 1-2 (E.U. PL1-2; see Petrozza and Biggie 2015), this scheme was not extended to informal units, such as the cleaned looter's trenches (Petrozza 2015: Fig. 12; Wölfel et al. 2009: Fig. 7). Artifacts from these contexts were not re-analyzed and included in this dissertation dataset due to the fact the Tutu Uitz Na center sample was already sufficient to show patterns in a statistically significant fashion. That said, SG 1 Burial 1 which was removed by Petrozza and Biggie (2015) was included in the analysis. The obsidian from all previous collection lots was also included in the p-XRF analysis conducted (see Chapter 5.4.3).

5.5.2 The Barton Ramie Collections

Issues of comparability existed with the assemblages from the Barton Ramie households. The fact that many of the excavations into commoner residential contexts at the Texas District comprised 3x2 m test units was less of an issue as they generally contained adequate proportions of materials to make statements about the relative wealth and activities of the inhabitants (Wiley et al. 1965: 155). More of the excavation contexts at Barton Ramie were temporally mixed, however. This mixing of contexts was partly due to bioturbation, partly due to extensive architectural remodeling (possibly associated with greater use of clay fills than the stone fills with the southern settlement), and also due to the fact that arbitrary excavation levels were used on sloping mounds (see M. Smith 1979: 823; Yaeger 2003a: 50).

One major issue involved the significant amount of material, which had been discarded in the field; this included much of the chert and a substantial amount of freshwater and marine shell, and non-diagnostic ceramics (see Weller 2009: 134; 251-252). The small collection of lithic tools curated at the Peabody are generally “nicer pieces”, and do not reflect the quotidian residential assemblage (see Weller 2009: 181-200; for a good overview; see also Willey et al. 1965: 411). Obsidian is included in the analyses as it would appear a greater proportion of it was collected (44), or at least reported, although numbers still seem suspiciously low in comparison to the 322 blades reported by Willey and colleagues (1965: 447; see also Weller 2009: 204). The average number of total artifacts collected from households at Floral Park and Tutu Uitz Na was ~1600 per temporal phase. In contrast at Barton Ramie, the average total artifacts per household was ~260 per phase, which was partly due to chert and freshwater shell not being collected. To correct for the discarding of these artifacts and non-diagnostic sherds, a conservative average of 400 items was added to the total artifacts from the Barton Ramie commoner households. This represented a relatively crude way of dealing with quite a substantial problem. For this reason, the rough trends between commoner households at Barton Ramie can be compared to households in other districts, but a direct comparison of the proportions of a particular artifact class is more problematic. This issue does not affect the early phases at the BR-180/168 center to the same extent, as collections data was bolstered through excavations as part of this dissertation.

The nature of the assemblages from Barton Ramie meant that the household data had to be omitted from certain comparisons. For instance, the vast majority of chert debitage, chert tools, and ground stone were discarded in the field meaning that the entirety of commoner sample from the Texas District was omitted from analysis of productive differentiation in stone tools and wealth item production, and imported items from outside the polity (see Chapter 8; Willey et al. 1965: 440). A fairly detailed report on various stone tools is provided by Willey and colleagues (1965: 410-449), yet there was no clear way of associating these tools with their respective contexts within the mounds, and only a fraction of these items were available for re-analysis. The small proportions of chert relative to diagnostic sherds at Barton Ramie, ~1: 400, compared to ratios of roughly ~1: 1 at Tutu Uitz Na and Floral Park, suggested that this endeavor was not worth pursuing.

In contrast to productive differentiation, comparison of wealth among the Texas District households was possible because the full ceramic assemblages were available, as were other

wealth items recovered by Willey and colleagues (1965). While we did not have access to some of these materials, it seems likely that Willey and colleagues (1965) noted the existence of most artifactual indicators of wealth such as jade and marine shell jewelry in their report. It seems likely that the analyses included here probably slightly underestimated the wealth of each of the Texas commoner households in comparison to those at the Tutu Uitz Na and Floral Park Districts.

The decision was made to include the Texas District contexts in comparisons of feasting-related paraphernalia. This was because faunal remains were relatively rare at Tutu Uitz Na and Floral Park, so serving vessels (the ceramic assemblage) comprised the vast proportion of feasting-related assemblages. A similar decision was made to include the Texas District households in comparisons of ritual items. This was less problematic because the backbone of the ritual assemblages were ceramic, and hence included in the Barton Ramie collections (i.e. *incensarios*, figurines, musical instruments), or were noted in the report (i.e. bloodletting paraphernalia and cached items). Furthermore, Willey and colleagues (1965: 490) report on instances of fossils. Ritual assemblages of Texas District commoners might be expected to be lower than their peers in the southern settlement. These data were included because an inspection of the results suggested that the bias was operating in spite of this underestimate (see Chapter 9).

The civic-ceremonial group of BR-180 posed many issues for comparative analysis with the other minor centers at Lower Dover. Willey and colleagues' (1965) plaza unit provided an accurate idea of how the plaza increased in size over time but provided no information about diachronic increases in structure size. For this reason, excavation at BR-180 was deemed necessary to generate data to compare with that from Tutu Uitz Na and Floral Park (Walden et al. 2020c). Unfortunately, the Early and Late Classic construction episodes on the eastern triadic structure had been bulldozed and destroyed. Excavation at the BR-180 eastern triadic structure revealed a sizeable Late-Terminal Preclassic elite mortuary shrine, which was located 30 cm below the plowed field surface. Willey et al. (1965) claim the Late Classic eastern triadic pyramid was 12 m high, although this appears to be measured from the valley floor to the top of the mound, not from the plaza. The excavation of the BR-180 eastern triadic pyramid shows that its initial phase in the Middle Preclassic was situated on a natural rise in bedrock, suggesting that the structure was smaller, maybe around 9 m in height.

5.5.3 The BVAP Floral Park Materials

Several issues arose when combining the collections from the Floral Park center into the comparative database. Generally, the collections posed fewer issues than those from Barton Ramie. For instance, ceramics, chert, and other artifact categories were available. For this reason, the Floral Park elites were included in most statistical comparisons in Chapters 7-9. The freshwater shell could not be located although this was a minor issue.

The biggest issue of comparability resulted from the fact that the only pre-Lower Dover architectural phases and assemblages apparent at Floral Park came from the central plaza unit in Group 2 (Operation 5C) and the northern appendage of Structure A1 on Plaza A (Operation 3). The 2x2 m operation on the northern appendage of Structure A1 reached Early Classic, Late Preclassic, and Middle Preclassic contexts (see Chapter 6.4.1.1 and 6.4.13). The architectural sequence was reconstructed from the original excavation report and radiocarbon dating and ceramic analysis conducted as part of this dissertation (Glassman, Conlon, and Garber 1995). The top 25 cm of the excavation was humus, under which was a burned layer of material. This context contained predominantly Late Classic types. At the base of the burned layer was an almost complete Chunuitz Orange bowl. Beneath this context was 70 cm of large uncut stones (terminating at 130 cm below ground surface). It would seem this context was associated with Early Classic and Late Preclassic types such as Balanza Black, Society Hall Red, and Chan Pond Unslipped. Beneath 130 cm below ground surface, the fill changed to a dense layer of cobbles, this context was associated with Late Preclassic and Middle Preclassic types. At the base of this fill layer, at 210 cm below ground surface, was a second cached vessel, this one likely being a smashed Jocote Orange Brown. This was accompanied by marine shell debris and other Middle Preclassic types such as Savana Orange. Radiocarbon dating of a charcoal sample retrieved from this context as part of this dissertation revealed a date of cal 770-540 BC (PSUAMS#8097). This context continued to a depth of 240cm when bedrock was reached.

The reconstructed sequence outlined above suggests that the northern appendage on Structure A1 was roughly 30 cm high in the Middle Preclassic, 110 cm high at the end of the Early Classic, and saw some minimal construction in the Late Classic, increasing in size by about 35 cm. The upper levels of this reconstructed stratigraphic sequence are corroborated by ceramic analysis

of materials protruding from the looter's pit at the summit of Structure A1, which indicates Early Classic construction at a depth of ~150 cm. Investigation of looter's pits on Structure A2 suggests a similar construction sequence. While this reconstructed sequence is tentative it provides the best information available.

To cautiously extrapolate these observations to the structure as a whole is problematic considering the construction of the northern appendage could have followed a different trajectory from the rest of the pyramid. That said, it seems unlikely that the appendage was constructed before the structure it was appended to. Operation 1 comprised two units situated along an axial line running east-west from the top of the pyramid to the plaza. Operation 2 on Structure A1 was situated midway up its northern flank equidistant between Operation 1 and 3. This exposed a nicely preserved apron. All of this architecture was however Late Classic. The Late Classic pyramid was roughly 7 m high. If the construction of the pyramid occurred at a roughly comparable rate to the rest of the structure, then it would have been 102 cm high in the Middle Preclassic, increased in size by 478 cm during the Late Preclassic to Early Classic, resulting in a 580 cm high structure by the end of the Early Classic, this would then have increased in size by 120 cm in the Late Classic, resulting in the pyramid visible today at 7 m high. This reconstruction is used extensively to model architectural energetics for Floral Park (see Chapter 5.6.1 and 5.6.2). More data on the construction sequence of multiple structures and the plaza would be ideal but this was not possible given the lack of physical access to the site.

A small commoner household named Floral Park Group 3 was excavated by Brown and colleagues (1996). This group is likely SG 143 based on our survey and is situated north of the Floral Park center. SG 143 seems by all accounts to have been a relatively standard commoner household but exact volumetric figures could not be established due to subsequent plowing. For this reason, analysis of architectural volume was not possible for this settlement group. The complete assemblage was however available for comparative analysis along the various dimensions investigated in Chapters 7-9.

5.5.4 Baking Pot, Settlement Cluster C Materials

Comparison between the Lower Dover districts and Settlement Cluster C at Baking Pot is employed to delineate whether the trends apparent among intermediate elites and commoners at the district level were related to the rise of Lower Dover, or were the result of regional trends across the Belize River Valley. These data were collected by Julie Hoggarth as part of her dissertation research. This dissertation uses the same sampling strategy and artifactual criteria for assessing household activities as Hoggarth (2012). This greatly facilitated comparative analysis of the two datasets. Few issues were encountered when structuring comparisons between the two polities.

5.6 Statistical Analysis

Two primary statistical measures were used to assess differences between households in this dissertation. The changing pace and tempo of construction in commoner and intermediate elite contexts is presenting using line graphs. Bullet graphs are employed to show the changing proportions of artifacts in architectural assemblages (Drennan 2009). This was complemented by an array of other approaches which are explained throughout the dissertation.

5.6.1 Basic Architectural Analysis and Volumetrics

Line graphs were used to visually display variability in architectural construction in all contexts investigated (intermediate elites and commoners). This involved calculation of the proportional increase in architecture, cumulative volumetric increase in architecture (m^3), volumetric architectural increase (m^3) per year, cumulative volumetric architectural increase (m^3), and an energetics analysis based on the work of Abrams (1994) and McCurdy (2016a; see Chapters 5.6.2., 7.1.2 and 7.4). The architectural volume (m^3) of each settlement group was extracted from the LiDAR data using the method outlined above (see Chapter 5.1.1.).

Architectural increase was calculated based on the profile drawings from excavated groups. This approach provided a rough idea of the cubic volume of any one settlement group at any particular period. Sampling issues problematize this approach as only a single structure was excavated on each group. A more solid understanding of the architectural developmental sequence at any one settlement group could be gleaned by excavating multiple structures, but this was beyond the scope of this dissertation. Basic statistical analysis of changes in architectural volume was approached in four ways (although these varied between intermediate elites and commoners). (1) The proportion of total labor invested in a structure during each period was calculated for elites and commoners but was not calculated for single component commoner settlement groups. (2) The volumetric increase in cubic volume of architecture (m^3) was calculated. In contrast to the proportional investment in architecture, using the actual volume invested during each phase allows a quantifiable comparison of how much architectural volume was constructed. (3) These volumetric increases per phase are normalized by the construction length of the construction time periods to show the cubic volumetric (m^3) increase per century. (4) Cumulative volumetric architectural increase over time, including investment in previous periods was calculated for intermediate elites. Abrams (1994: 78) notes, the Maya did not deconstruct households when their political power/and or authority waned. The cumulative volumetric architectural increase over time provides a good idea of the impressiveness of architecture through time but misrepresents the amount of commoner labor invested in a specific period. This also accounts for the fact that elites may be living in incredibly grandiose monumental contexts which denoted status but were constructed earlier and simply maintained. While the apparent lack of ability to command labor to expand architecture may have been obvious to locals, outsiders might be unaware of this inability.

5.6.2 Architectural Energetics and Labor Costs

A modified version of the architectural energetics model proposed by Abrams (1994) and expanded for the Belize River Valley by McCurdy (2016a) was employed to calculate rough energetics estimates for the apical and intermediate elites (but not commoners). These analyses were conducted by Walden and Y. Qiu. The results of these calculations are given in Chapter 7. The method employed is broadly outlined here along with a brief overview of some of the issues encountered for each of the sites and the steps taken to overcome these. While some excavations

allowed a very fine-grained understanding of the construction sequence, others were more problematic due to partial excavation or modern destruction.

Calculations of the energetics/labor involved in the construction of architecture at Lower Dover were based on previous calculations of architectural energetics in the Maya lowlands (Abrams 1994; Erasmus 1965; McCurdy 2016a). A series of reasons prohibited the type of thorough analysis Abrams recommends however. First and foremost was the nature of sampling in the Lower Dover hinterland. Frequently the single largest platform was sampled in each settlement group and then the architectural sequence was extrapolated onto the rest of the group. This provided only a relatively rough idea of the overall construction sequence because we know that each platform surrounding a plaza/patio had its own construction history and developmental tempo (Haviland 1988; Tourtellot 1988). That said, this is the nature of archaeological sampling, and excavation of entire patio/plaza groups was clearly beyond the scope of this dissertation.

Secondly, the pursuit of the approach advocated by Abrams would have made more sense if we had a better idea of the full construction sequence of the intermediate elites. Unfortunately, these data were not available for BR-180/168 and Floral Park Plaza A. Reliable energetics figures were produced for Tutu Uitz Na and Floral Park Group 2. Excavations at Floral Park allowed reliable calculations for Structure A1 and Structures A and D at Group 2. A very rough figure was calculated for the Lower Dover civic-ceremonial center. It would seem most of the structures in the core had two or three construction phases (Guerra and Awe 2017). Labor estimates were calculated based on our knowledge of the construction sequence to date (see Collins 2018; Guerra and Arksey 2012; Guerra and Collins 2016: 231; Guerra and Romih 2017; Romih 2019b; Watkins et al. 2017; Wilkinson and Hude 2011). These figures are consistent with figures calculated for various types of residential architecture at Copan (Abrams 1994), El Castillo at Xunantunich (McCurdy 2016a), and energetics values calculated for structures with recorded construction histories in the Lower Dover settlement (see Chapter 7.1 and 7.2). These conservative figures seem roughly consistent with McCurdy's labor estimates for the construction of El Castillo at Xunantunich. For instance, McCurdy argues that El Castillo Phase 1a, a large masonry platform with a pole and thatch superstructure, took 4329 person-days to construct. This seems consistent with the early Late Classic remodeling of the eastern mortuary shrine into an eastern triadic structure and the expansion of the northern elite residence at Tutu Uitz Na. The methods were

tested on a handful of commoner households at Lower Dover. These residential structure calculations were consistent with energetics values reported for commoner households ethnographically and at Copan (Abrams 1994: 62).

Following Abrams (1994) and McCurdy (2016), construction costs were calculated based on four main stages (1) sourcing materials, (2) transporting materials, (3) manufacture and preparation of materials, and (4) assembly (Abrams 1994: 43). Following Abrams (1994: 43) and McCurdy (2016), the length of workdays varied based on task (5 hours for intensive, 8 hours for less intensive).

Estimates of architectural fill types were derived from profile drawings of structures and the excavation notes. The rough ratio of limestone, to cobble, to earth/midden fill was recorded for the structural contexts excavated as part of this dissertation. Transport distances were based on the nearest known sources of materials (following Abrams 1994: 48). While this introduces some degree of inaccuracy, most of the minor centers included in this analysis had obvious borrow-pits and were close enough to the creeks from which cobbles were hauled. Following McCurdy (2016a), a limestone quarrying value of 1200kg per person per day from Erasmus (1965) was used in place of Abrams' value as this was calculated for quarrying tuff at Copan. A cost of 43.9 person-days was allocated to produce 1 m³ of plaster. Abrams (1994: 50) reports this value, which is based on open-air lime burning but does not use it at Copan due to the presence of lime kilns, there are however no lime kilns apparent in the Belize River Valley (McCurdy 2016a).

The methods employed were designed for residential architecture with negligible building at height costs (Abrams 1994: 51). However, when dealing with sizeable pyramids substantial effort is involved in hauling masonry blocks and constructing scaffolding. McCurdy (2016a) however used Abrams values for El Castillo. Attempting to determine energetics values for this aspect of construction was beyond the scope of this dissertation and would impair comparability and consistency with these previous approaches. The lack of such calculations is one prime reason why these energetic approximations can be considered an underestimate especially for architecture higher than 3-4 m, such as the Lower Dover civic-ceremonial center, Floral Park, and BR-180. Another important reason to think that the energetics calculations might underestimate labor costs of construction at larger centers is the fact that following the established method, maintenance

costs were not included (see Abrams 1994: 74). These costs are fairly standard when dealing with residential units like those at Copan, however greater variability is no doubt apparent when dealing with the maintenance of large public plazas and *sacbeob* which would no doubt require fairly regular replastering given the climactic conditions.

5.6.2.1 Floral Park

Several issues existed when it came to calculating construction costs for Floral Park. Fortunately, solid excavation data exist for several of the structures, which provided a good idea of the construction sequence. Plaza A posed some thorny issues for reconstructing labor calculations. The full diachronic sequence from the Middle Preclassic (cal 770-540 BC) through to Late Classic was apparent in Operation 3 on the northern appendage associated with Structure A1 (the eastern pyramid). Associated construction was difficult to discern however. The sequence suggests a small Middle Preclassic phase, a substantial series of construction phases from the Late Preclassic through to the Early Classic periods, followed by a less substantial Late Classic construction phase. The proportions of constructed volume were employed to diachronically model labor invested in Structure A1 and A2 based on the architectural volume extracted from the LiDAR, and information gleaned from Glassman, Conlon, and Garber's (1995) excavations. Although the only reliable data this provided was for the well-documented Late Classic construction phases.

Furthermore, no excavation data was available for the *sacbe* and the terminus group (Group 1). As expanded upon in Chapter 6, these features were clearly in existence/under construction in the Late Classic period due to the presence of Late Classic sherds on the ground surface. Earlier construction phases remain possible but unlikely given the complete dearth of any earlier ceramics in the vicinity of the *sacbe* and terminus group. This would suggest both the *sacbe* and Group 1 followed a similar construction sequence to Group 2.

The elite residence at Floral Park (Group 2) was excavated by Glassman, Conlon, and Garber (1995) and Brown and colleagues (1996). Excavations revealed three construction phases on the northern residential structure (Structure 2D), the eastern mortuary shrine (Structure 2A), and the plaza. Ceramic analysis conducted by Walden, Qiu, Ellis, and Messinger between 2018-

2019 revealed that the first construction phase dated to the early Late Classic period (Tiger Run phase), while the second dated to the Late Classic proper (Spanish Lookout I), and the third dated to the Terminal Classic (Spanish Lookout II). Only the lowest depths of the plaza revealed earlier material dating to the Late-Terminal Preclassic period, all of which had been repurposed in the early Late Classic construction of the plaza. Labor was calculated for the unexcavated Structures 2B and 2C based on the sampled structures. The lack of Preclassic and Early Classic materials encountered during survey of these structures, and the fact that all the architectural contexts on the plaza shared a similar construction trajectory (three Late Classic phases) alleviates some of the concerns associated with this extrapolation.

5.6.2.2 BR-180/168

The early construction history of BR-180 is well documented (Walden et al. 2020c; Willey et al. 1965: 249-251). The later construction history is more problematic due to the extensive destruction wrought by the bulldozer and plow. It is abundantly clear that construction increased dramatically at BR-180 following the Terminal Preclassic, resulting in a structure of ~12 m in height. Surface analysis of ceramics was used to roughly understand the post Terminal Classic construction sequence. The pyramid was bulldozed back on itself from west to east and this can be discerned on the modern ground surface by a huge mass of destroyed masonry and architecture extending east of the BR-180 plaza. Ceramic analysis revealed horizontal bands of material radiating backward from the remaining structure which roughly dated to the Early Classic and Late Classic period. It seems likely that as it was bulldozed back, the Early Classic component was pushed immediately east of the plaza, whereas the bulk of the Late Classic was deposited further to the east. Generally, the proportions of ceramics suggest that ~80% of the structure was Late to Terminal Classic in date, while ~20% was Early Classic. This is corroborated by ceramic analysis of the complete stratigraphic sequence in the plaza test unit excavated by Willey and colleagues (1965: 249-251). A complete energetics analysis was conducted for the plaza and early stages of construction on BR-180. The latter stages of construction on BR-180 were extrapolated based on a minimum number of internal construction phases based on the proportional volume of the structure. Under the circumstances, this was the best that could be done.

A worse situation exists for the elite residence at BR-168. A rough energetics estimate for each phase was based on the total volume of the mound group (in the 1950s) divided by the proportions of sherds dating to different phases present on the ground surface. This provided an even rougher set of numbers than those calculated for BR-180 but under the current circumstances, little else could be done.

5.6.2.3 The Lower Dover Civic-Ceremonial Center

A very rough labor estimate for the construction of the Lower Dover civic-ceremonial center was calculated. This took into account the rough architectural volume of the civic-ceremonial core (148700 m³), which was split between Plaza A (85100 m³), Plaza B excluding the palace (42500 m³), the palace (19100 m³), Plaza C (600 m³), Plaza D (900 m³), Plaza E (400 m³). In addition to these central civic-ceremonial plazas, the volume of surrounding aulic elite plazas such as Plaza F (4000 m³), Plaza G (570 m³), Plaza H (970 m³), and SG 2 (3700 m³), resulting in a combined architectural volume of 158000 m³. These volumes were calculated by Claire Ebert and are reported by Walden and colleagues (2020a: 206-207). If anything, this is an underestimate as it does not account for the constructed plateau upon which the civic-ceremonial core sat (see Guerra 2016), or the potentially substantial portion of the site which was bulldozed in the 1960s (see Petrozza 2015: 5).

Architectural energetics were calculated based on reports from the civic-ceremonial core (see Collins 2018; Guerra and Arksey 2012; Guerra and Awe 2017; Guerra and Collins 2016: 231; Guerra and Romih 2017; Romih 2019a; Watkins et al. 2017; Wilkinson and Hude 2011), and comparison with similar Late Classic construction at the Tutu Uitz Na and Floral Park centers. This produced a rough labor figure of 1,746,000 person-days to construct the entire civic-ceremonial core. Construction fairly consistently split fairly equally into two major construction phases (dating to the early Late Classic and Late Classic periods) in multiple structures across the civic-ceremonial core (Guerra and Awe 2017). Therefore, this might suggest an initial construction cost of ~873,000 person-days around the Early Classic/Late Classic transition (Tiger Run phase), and a second construction cost of ~873,000 person-days firmly in the Late Classic (Spanish Lookout phase). Architectural energetics has been applied more frequently to residential architecture than monumental construction in the Maya lowlands, but these figures are roughly

corroborated by McCurdy (2016a) who calculates a total of 580,000 person-days for El Castillo at Xunantunich. This figure for Lower Dover represents the entire civic-ceremonial center and associated aulic elite plazuelas, in contrast to El Castillo which is the single largest structure at Xunantunich. El Castillo is fairly large in comparison to the architecture at Lower Dover, and the idea that the single largest structure at Xunantunich represents roughly 35% of the overall total construction costs of the entire Lower Dover core does not seem improbable given that the entire Xunantunich core (a combined architectural volume of ~1175000 m³) is almost eight times larger than the Lower Dover center (~158000 m³).

5.6.2.4 Ancient Maya Dependency Ratios

Understanding the tax rates associated with monumental construction then required comparing person-days with the population of the architectural catchment zone. In the case of the Lower Dover civic-ceremonial center, this architectural catchment was considered to be the 2,400 people living in the Lower Dover polity. In contrast, the obvious architectural catchment zones for Tutu Uitz Na, Floral Park, and BR-180/168 were their respective districts. Moving from population to labor force was another tricky issue. This involved calculating dependency ratios. Estimating dependency ratios for the ancient populations is notoriously difficult as this involves putting a static number on dynamic family developmental cycles which are prone to all manner of external changes over long time periods. While dependents may have worked on monumental construction their ability to work would likely have represented a fraction of the overall world load of a healthy adult. A 65% dependency ratio was applied to district populations based on Wood (1998: 105), to arrive at rough laboring age populations for estimates of architectural construction. McCurdy (2016b: 66) uses a 20% dependency ratio based upon the notion that each household contained a single adult male of laboring age. This number was also employed for comparability with labor estimates for Xunantunich.

5.6.3 Quantitative Analysis

Quantitative analysis of artifact assemblages involved calculating the proportions of artifacts relative to the total artifacts present in that particular excavation context. Several different

approaches allow us to characterize and compare assemblages between contexts, the use of proportions of different artifacts is one particularly useful way of standardizing between contexts (Drennan 2009). While total sherds are often used to standardize excavation area (Hoggarth 2012: 70), total artifacts were used in this instance because some artifact classes were more abundant than the number of total sherds in some contexts (e.g. chert tools in a lithic workshop). Bullet graphs offer a simple, visually intuitive way of showing the proportions of artifacts in multiple different contexts. The upper and lower bars of each bullet offers a simple way of comparing the confidence implications associated with error ranges. The central error bar represents the 80% confidence level, while the middle bar represents the 95% confidence level and the longest, thinnest bar represents the 99% confidence level. Visual inspection of whether bars overlap, and at which confidence interval, reveals whether assemblages of a particular artifact type varied in a statistically significant fashion between periods, or between households (Drennan 2009: 149-150, 181-182; for previous application in the Belize River Valley see Hoggarth 2012: 69-70). To examine the extent to which commercialized exchange proliferated over time, two different versions of the distributional approach are employed. The first, following Hirth 1998 involves a series of ANOVAs (analysis of variance) to examine the variability in the presence of imported items at commoner and elite contexts. The second approach involves the modified distributional approach developed by Hoggarth (2012; see also Hoggarth and Awe 2014). This employs bullet graphs as described above to chart the proportions of imported items in commoner and elite residential contexts over time.

6.0 RECONSTRUCTING CHANGES IN THE LOWER DOVER HINTERLANDS

This chapter reconstructs life at Lower Dover, moving from the macro-scale (the polity) to the micro-scale (the household). The chapter synthesizes: **(1)** the results of analyses of the settlement pattern at Lower Dover, **(2)** the three districts under investigation, and **(3)** the households excavated within these districts. Detailed information about each excavated context is available in site reports which can be downloaded from the BVAR website. The site reports also provide information about the settlement survey (Walden, Biggie, and Ebert 2017), the faunal remains (Roa et al. 2020), ceramic analysis (Ellis et al. n.d.), and the lithic analysis (Saldaña, Walden, and Levin n.d.). This chapter also summarizes data from 33 burials. A full burial analysis is provided by Izzo and colleagues (n.d.; see also Bachy 2021), and the respective reports for each excavation context (Biggie et al. 2019; Brown et al. 1996; Glassman, Conlon, and Garber 1995; Levin et al. 2020; Walden et al. 2018; Walden et al. 2020b; Willey et al. 1965).

6.1 Situating the Lower Dover Polity in the Central Belize River Valley

The settlement of the west-central Belize Valley has long been characterized as forming a single “ribbon strip” along the river banks (Willey et al. 1965: 310, 573). Early settlement research in the Maya lowlands seemed to suggest that the demography did not reduce dramatically between political centers. Barton Ramie was often cited as an example of a rural settlement with a density of 100 mounds per square kilometer (Willey et al. 1965: 573). We now know however that Barton Ramie was the northern settlement of Lower Dover, although much of the settlement predates the Late Classic rise of the civic-ceremonial center.

In reality, the idea of a continuous demographic “ribbon strip” was the product of spotty survey coverage, biased by the fact such coverage was limited to areas like the Baking Pot core, Barton Ramie, and Spanish Lookout, which had been cleared for agriculture (Helmke et al. 2020: 11-13; Hoggarth et al. 2010: 172, 176; Chapter 6.2; see also Willey 2004: 20-22; Willey et al. 1965: 30, 295, 301). This was not a coincidence; soils data were available to the Barton Ramie

estates and similar agricultural ventures and no doubt influenced their decision to establish estates on better soils, which ultimately led Willey and colleagues there due to their preference for cleared agricultural land (Willey 2004). Rather unsurprisingly, these areas which were ideal for agriculture were favored by Maya farmers and had higher settlement densities in prehistory. Generally, the spatial clustering of population based on LiDAR assisted full-coverage survey corroborates the predictive model proposed by Ford, Clarke, and Morlet (2011: Fig. 6). The only major deviation being that population was lower than expected, and barely extended into the southern foothills. This was probably because their population densities were based on the BRASS transects and Barton Ramie survey (Ford, Clarke and Morlet 2011: 82). The fact that these areas not only were the most productive agriculturally but could also support a greater range of plants (including cacao) probably explains why households in these contexts were relatively affluent (in terms of access to wealth items and exotica). LiDAR actually shows fairly high degrees of settlement aggregation around major and minor centers in the central Belize River Valley. This is not surprising as this sort of clustering is apparent in settlement patterns in the upper Belize Valley/Macal and Mopan Valleys, and further east along the central Belize River Valley (A.F. Chase and Garber 2004: 4-5; Willey et al. 1965: 303).

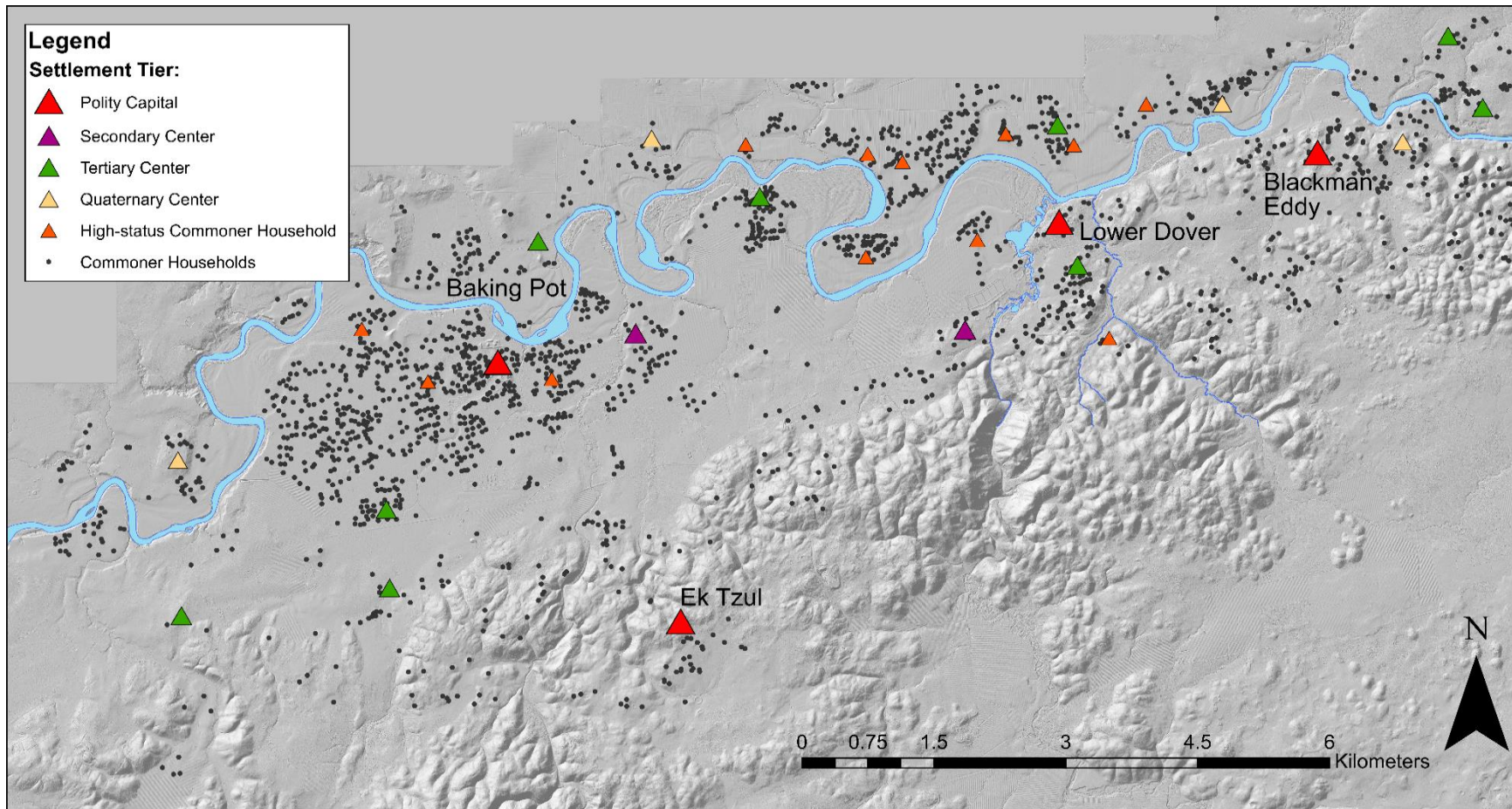


Figure 6.1 Map of the settlement in the central Belize River Valley
Polity capitals (apical elites), intermediate elites, and commoners are shown

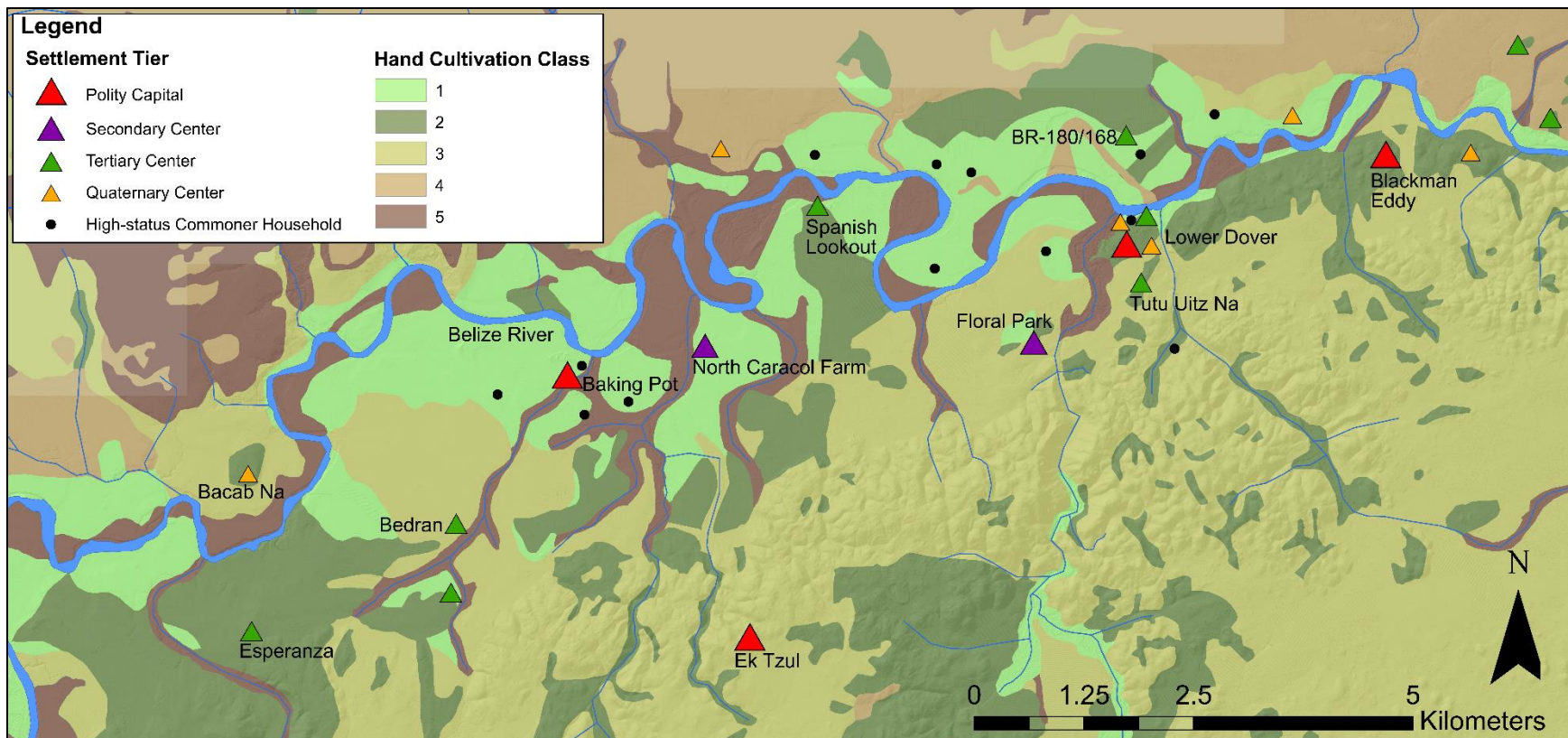


Figure 6.2 Soils map of the central Belize River Valley

Polity capitals (apical elites), and intermediate elites shown overlaid upon soil classes based on hand cultivation (Fedick 1988).

Note the position of major and minor centers on belts and islands of high class soils

A brief comparison of the Classic Maya settlement pattern in the Belize River Valley with truly dispersed settlement patterns, like the Alto Magdalena in Colombia (Peterson and Drennan 2012; see also Drennan, Berrey, and Peterson 2015), shows that Maya settlement falls midway on the spectrum of dispersed to nucleated settlement patterns (Prufer and Thompson 2014; see also Roberts 2013; Figure 6.1). Examination of settlement clustering in relation to soil variability based on hand cultivation quality explains the vast amount of variability in settlement location in the central Belize River Valley (see Figure 6.2; soils data based on Fedick 1995, 1996; see Chapter 5.2.4). Major and minor centers are situated on Rank 1 soils, as are a large number of the larger more successful households (following patterns established by Fedick and Ford 1990). It likewise seems clear that these alluvial soil zones also attracted migrants into the region in the Postclassic period (see Hoggarth, Freiwald, and Awe 2021). The fact that major and minor centers developed in good agricultural areas means that discerning the degree to which commoner settlement clustered around major and minor centers or good soil is complicated.

6.1.1 Settlement Choice

The distribution of settlement suggests that Preclassic settlers selected places to live based on the quality of soil for hand cultivation, topography (elevation and slope), and distance to the river. There was a general preference for relatively elevated hillocks, on good soils, fairly close (but not too close) to the river. While some Preclassic settlements such as Baking Pot, North Caracol Farm, Spanish Lookout, and BR-180/168 are situated on expansive areas of Class I soil, others like Bacab Na, Floral Park, Tutu Uitz Na, and two newly discovered tier 3 minor centers north of Blackman Eddy, are situated on isolated pockets of Class I and II soils (see Table 6.1). This latter pattern, when combined with the sizeable distances between residences is suggestive of a heavy reliance (at least early on) on infield agriculture (Drennan 1988; Dunning 2004; Fisher 2014; Sanders 1981: 362-363; see also Netting 1993). Micro-regional scale studies often find that settlement is situated adjacent to the most productive land, not physically upon it, to maximize the amount of cultivable land (Douglass 2002; Guderjan 2007: 18). Therefore, the fact that households were directly situated on pockets of the best soils in the central Belize River Valley might suggest that competition for land involved staking a claim by physically residing on a plot. The spatial scattering of residences associated with dispersed settlement patterns is the product of a multitude

of individual decisions on the part of different households about where to settle over several thousand years. This pattern of earlier households situating themselves in the best spots on the landscape, and later households developed around them in increasingly sub-optimal locales are fairly common (Prufer et al. 2017; Thompson and Prufer 2021).

Table 6.1 Polity Capitals and Intermediate Elite Sites and Related Soil Classes.

| <i>Soil Class</i> | <i>Tier 1 Polity Capitals#</i> | <i>Percentage of Capitals by Soil Class</i> | <i>Tiers 2-5 Intermediate Elites#</i> | <i>Percentage of Elites by Soil Class</i> |
|-------------------|--------------------------------|---|---------------------------------------|---|
| 1 | 1 | 25 | 16 | 54 |
| 2 | 2 | 50 | 12 | 40 |
| 3 | 1 | 25 | 1 | 3 |
| 4 | 0 | 0 | 1 | 3 |

6.1.2 Buffer Zones and Polities

Buffer zones between polities and districts are apparent in the settlement clustering in the central Belize River Valley. The argument that these uninhabited areas are possibly political buffer zones becomes stronger considering the fact they are generally situated on relatively good agricultural land. Even in the Preclassic period, it seems that some areas with good alluvial soils went uninhabited, the most cogent explanation for this lies in the fact they were located between emerging polities. This suggests the formation of buffer zones between emerging polities and corroborates patterns evident in the Upper Belize River Valley (D.Z. Chase 2004: 332; LeCount and Yaeger 2010c: 347; Yaeger 2008; see also Bullard 1960; Puleston 1974; Sanders 1981; Willey 1956b).

The Early Classic period saw expansion on Class I and II soils but with a clear preference for aggregation around pre-existing settlement. The minor center of Bedran is founded in the Early Classic period outside Baking Pot on Class IV soils. However, the construction of an extensive ditched field system might have reduced issues associated with the poor surrounding soils (see Kirke 1980; see also Ebert, Hoggarth, and Awe 2016b). This trend is most evident however in the Late Classic period when expanding populations across the landscape are settling near pre-existing settlement, irrespective of soil zone (a clear avoidance of Class IV and V is apparent though). This

desire to live near pre-existing settlement is likely reflective of kinship practices (Gillespie 2000a; McAnany 1995). These observations at the regional level are corroborated by application of the Ideal Free Distribution at Lower Dover (see Chapters 5.2.13, 6.2.8).

The greatest degree of residential clustering in the Belize River Valley seems to occur around minor centers, more so than major centers. Walden et al. (2019a) showed that some polity capitals, like Baking Pot and Cahal Pech had dense settlement aggregations, whereas others, like Lower Dover, did not. In contrast, Tier 3 minor centers and many Tier 5 high-status commoner households consistently had dense clusters of commoner settlement around them (see also Willey 1956b: 111-112). While our understanding of the temporal development of most households in the region remains incomplete, every architectural group excavated or tested at Lower Dover (n = 96) and Baking Pot (n = ~60) has a Late Classic component (Hoggarth 2012; see below). Similar findings are reported for the hinterlands of Xunantunich where 91% of residential sites show evidence of Late Classic occupation (Yaeger 2010b: 238). This justifies assigning a tentative Late Classic occupation to all households for the purposes of synchronic spatial analysis.

6.1.3 The Domestic Cycle and Household Development

Classic Maya settlement groups follow a residential cycle and acquire more structures as the family unit grew, culminating in four to six structures being eventually constructed around a central patio (Haviland 1988; Tourtellot 1988; Thompson and Prufer 2021: 21; Yaeger 2000). This dynamic did not exist to the same degree in the Belize River Valley where a much higher number of commoner settlement groups comprise a single mound (Ford 1990, 2004: 244; Ford and Fedick 1992; Yaeger 2010b: 240; Yaeger and Robin 2004: 163). Robin, Yaeger, and Ashmore (2010: 330) argue that this propensity for single structure residences in the Xunantunich region was a product of the rapid emergence of the polity and the arrival of newer households in the region. It seems single or double mound groups proliferate at both Lower Dover and Baking Pot (two polities that developed along different developmental trajectories). Moreover, many of these smaller single or double mound groups exhibit evidence of residential occupations spanning at least several hundred, if not a thousand years (Hoggarth 2012; Levin et al. 2020; Nachamie and Walden 2020).

In theory, the longevity of occupation at some single or double mound groups suggests there was not an idealized household size (see Douglass 2002: 152), or if there was it was very small (see also Levi 2003). McAnany (1995: 119) suggests that political centralization and increasing top-down taxation burdens might have resulted in the formation of large extended families at Tikal. In contrast, according to this logic, we may expect to see smaller dispersed residences and less overarching extended family organization in a more decentralized political landscape like the Belize River Valley. Alternatively, the agricultural productivity of the region may negate factors that prompted in situ family growth in other areas of the Maya lowlands (less need to pool labor to build terraces, etc.), resulting in higher levels of commoner residential fissioning. This truncated pattern seems most common in the alluvial plains of the central Belize River Valley. Settlement surrounding Cahal Pech, and other Upper Belize River Valley centers have higher proportions of formal plaza groups than Baking Pot and Lower Dover (Hoggarth et al. 2010: 176-178).

6.1.4 Regional Settlement Densities

Settlement pattern analysis conducted as part of this dissertation confirms that population densities in the Belize River Valley are much higher than the surrounding regions immediately to the north and south of the valley. The northern and southern flanks of the valley show clear buffer zones with very little signs of habitation. Settlement densities then increase ~5 km kilometers to the south, in the hinterlands of the Lower Barton Creek and Pacbitun polities (Healy et al. 2007; Kollias 2016; Micheletti and Powis 2020). The same is noticeable to the north, where a rough buffer zone of limited settlement seems to extend at least ~5 km before settlement densities increase again in association with the El Pilar and Aguacate Cuatro/Pescado Creek polities (Ford and Horn 2017: 87; Koenig 2014, 2015; Iannone 2005: 29). The reduction in population in these locales is almost certainly associated with a steep drop-off in the productivity of soils for hand cultivation (Ford, Clarke, and Morlet 2011).

6.2 The Lower Dover Polity

Reconstructing the spatial extents of ancient polities without written documents, ethnohistory or marked frontiers is a complicated task (Alden 1979; de Montmollin 1989a; Drennan and Peterson 2012; Stoner 2012). The spatial distribution of commoner households and apical and intermediate elite focal nodes, and the scale of architecture offer opportunities to reconstruct political territories through spatial models. Whether these territorial entities represented meaningful social and political entities to the Classic Maya themselves is a complicated issue, but this is addressed below (see Hutson 2016). The boundaries of the Late Classic Lower Dover polity were reconstructed using spatial measures like *k*-means clustering (Kintigh and Ammerman 1982), inverse-distance clustering (Drennan and Peterson 2012), the interaction model (Alden 1979), and kernel density (Thompson, Meredith, and Pruffer 2018; 5). The Xtent model (Renfrew and Level 1979; Stoner 2012) was used to project catchments based on labor tax associated with the construction of monumental architecture onto the spatial clustering of associated population. While these models have traditionally been used to reconstruct regional polities themselves, they are equally useful for reconstructing intermediate social units within polities (Walden, Biggie, and Ebert 2017; Walden et al. n.d. see Chapter 5.2). This section presents the extents of the Lower Dover polity using some of the aforementioned analyses.

The reconstructed Lower Dover polity extends from Floral Park in the southwest, to BR-96 in the northwest, to SG 115 in the southeast, and SG 173 in the northeast. The northern side of the polity was delineated by a dramatic settlement drop-off north of Barton Ramie. The spatial drop-offs in demography on all sides of the polity are fairly obvious to the naked eye without the use of spatial models (Figure 6.1). A clear demographic drop-off is evident between Floral Park and the minor center of Spanish Lookout (and its associated cluster). These patterns strongly corroborate Hoggarth and colleagues' (2010: 178) initial assessment that the polity of Lower Dover encompassed both Barton Ramie and Floral Park. However, a well-defined political boundary is unlikely, and instead, a more fluid situation was likely on the polity margins. Spatial analysis suggests the Spanish Lookout minor center may have been associated with Baking Pot (Hoggarth et al. 2010: 179). In reality, Spanish Lookout (like Bacab Na and Esperanza) probably housed a frontier elite who sometimes fell under the aegis of the Baking Pot regime and sometimes was

quasi-autonomous (Driver and Garber 2004; Walden et al. 2019; see also Golden and Scherer 2013; Chapter 2).

Table 6.2 Late Classic Population Estimates for Different Parts of the Polity.

| <i>District/Neighborhood</i> | <i>Late Classic</i> | <i>Late Classic Population (20%</i> |
|---|---------------------|-------------------------------------|
| Floral Park District | 275 | 200 |
| Island Neighborhood | 120 | 100 |
| Lower Dover Core District | 225 | 180 |
| Middle River District | 880 | 700 |
| Northeast Neighborhood | 65 | 50 |
| Oxbow District | 295 | 240 |
| Southeast Neighborhood | 40 | 30 |
| Texas District | 335 | 240 |
| Tutu Uitz Na | 380 | 300 |
| Western District | 205 | 160 |
| Outlying Unaffiliated Southern Settlement | 140 | 110 |
| Outlying Unaffiliated Northern Settlement | 65 | 50 |
| Total Polity Population (rounded) | 3000 | 2400 |

The reconstructed Late Classic Lower Dover territory covered 18 km². This territory had a Late Classic population of ~2400 people living in 446 settlement groups. The polity as a whole had a population density of ~130 people per km² (with a 20% reduction; see Table 6.2; see Chapter 5.2.2; Walden, Biggie, and Ebert 2017: 201). Population is split among seven sizeable districts, three neighborhoods (lacking district affiliations), and around 20 smaller neighborhoods (nested within districts). The larger districts are situated around sizeable intermediate elite households such as Tutu Uitz Na, Floral Park, and BR-180/168. The smaller districts are associated with lesser intermediate elite and high-status commoner residences such as BR-19, BR-96, BR-147, SG 60, SG 115, and SG 173. The neighborhoods are smaller clusters of low-status commoner residences situated around a single high-status commoner neighborhood head household such as BR-260, SG 3, SG 42, SG 92, SG 129, and SG 138 (see Chapter 2.6.2). These are a little larger than Ashmore’s “group focused patio cluster”, and are generally equivalent to Bullard’s (1960) “house mound cluster”. More information is provided on these social units in Chapter 6.1.3.

Internal population can be broken down as follows (all numbers are rounded). A Late Classic population estimate of 980 people lived in the settlement south of the Belize River (with a 20% reduction). This included 180 people in the Lower Dover core, 200 people at the Floral Park District, 300 people at Tutu Uitz Na District, 160 people in the Western District, and 30 people in the Southeast Neighborhood, 110 people in outlying dispersed farmsteads without a neighborhood or district affiliation. Population estimates for the Late Classic period were slightly higher on the northern side of the Belize River equaling 1380 people (with a 20% reduction). This figure included 700 people in the Middle River District, 240 people in the Texas District, 240 people in the Oxbow District, 100 people in the Island Neighborhood, 50 people in the Northeast Neighborhood, and 50 people living in outlying dispersed farmsteads.

The reconstructed territorial extents of the Lower Dover polity compare well with those of the nearby Belize River Valley polities of Cahal Pech, Baking Pot, Blackman Eddy, Ek Tzul, and Lower Barton Creek (Awe, Ebert, and Hoggarth 2015; Ebert, Hoggarth, and Awe 2016a; Helmke and Awe 2012; Helmke et al. 2020; Hoggarth et al. 2010; Walden et al. 2019). The other Belize River Valley major centers have populations of roughly 2000-5000 people, spread out across areas of roughly 20 km² (Awe 2012; Hoggarth 2012: 46). Figure 6.1 shows the location of commoner households identified through a combination of full coverage settlement survey and TPI analysis of LiDAR data from the BVAR project region.

Commoner households included within a polity would have provided labor for the construction of the monumental epicenter (Abrams 1994). Calculating the labor required for construction and assessing how it was distributed between households allows a way of scrutinizing reconstructed polities based on spatial settlement data. The polities of the Belize River Valley contain substantial civic-ceremonial architecture at their epicenters, and presumably had similar means of extracting commoner labor (Awe 2008; Helmke and Awe 2012). If labor loads per commoner household differ from expectations, then this might suggest different elite strategies and forms of labor organization (Abrams 1994). If the labor loads vary hugely then this undermines the reconstructed political territories. For example, if the Lower Dover polity encompassed the territory projected in this dissertation (Floral Park, Tutu Uitz Na, and Barton Ramie), then the overall Late Classic construction volume of 180,400 m³, would have involved ~400 cubic meters per household over the entire period. The Baking Pot polity had about twice the population of

Lower Dover (Hoggarth 2012). The Baking Pot civic-ceremonial center and its satellite centers of North Caracol Farm, Yaxtun, Atalaya, Lubul Huh, Ixim, Spanish Lookout, Bacab Na, Esperanza, Riverside, and the Orchard Group (comprised 323,811 m³ of architecture) would have involved roughly 300 m³ per household (Hoggarth et al. 2010: 173; Walden et al. 2019; see also Conlon and Moore 2003; Conlon and Powis 2004). It has been suggested that the Lower Dover settlement only comprised the Tutu Uitz Na District (Collins 2018: 12; Fig. 2.3). This is unlikely because this projected territory is significantly smaller than would be expected normally for a Classic Maya polity with civic-ceremonial architecture of the scale apparent at Lower Dover. If this were the case then the 46 commoner households (~300 people) of the Tutu Uitz Na District would have faced a labor burden of ~3500 cubic meters per household for constructing Late Classic Tutu Uitz Na (2300 m³) and Lower Dover (158,000 m³). While only a rough labor estimate for the Lower Dover civic-ceremonial center was calculated for this dissertation (see Chapter 5.6.1, Guerra n.d.), the combined labor costs of constructing the initial Late Classic phase (Tiger Run) architecture at Lower Dover and Tutu Uitz Na (886000 person-days) would have resulted in roughly 50 person-days a year for each laboring age inhabitant of the Tiger Run phase Tutu Uitz Na District (based on the 65% dependency ratio), and roughly 160 days a year (based on the 20% dependency ratio). This seems highly improbable given that some of the most onerous corvée labor tax rates known (from Han Dynasty China) sit at around one month a year for adult males (Abrams 1994: 101; see also Loewe 1968: 175).

Table 6.3 The Lower Dover Settlement Dataset.

| <i>Settlement Group</i> | <i>District</i> | <i>Hierarchical Status</i> | <i>References</i> |
|-------------------------|-----------------|----------------------------|--|
| Tutu Uitz Na (SG 1) | Tutu Uitz Na | Tier 3 Intermediate Elite | Biggie et al. 2019; Petrozza 2015; Petrozza and Biggie 2015; Walden and Biggie 2017; Walden et al. 2018; Wölfel et al. 2009. |
| Rockshelter 2 (RS 2) | Tutu Uitz Na | Tier 3 Intermediate Elite | Walden et al. 2018 |
| SG 3 | Tutu Uitz Na | High-Status Commoner | Walden et al. 2018 |
| SG 9 | Tutu Uitz Na | Low-Status Commoner | Walden and Biggie 2017 |
| SG 11 | Tutu Uitz Na | Low-Status Commoner | Walden et al. 2018 |
| SG 13 | Tutu Uitz Na | Low-Status Commoner | Guerra n.d.; Walden, Guerra and Qiu 2019 |
| SG 17 | Tutu Uitz Na | Low-Status Commoner | Guerra n.d.; Walden, Guerra and Qiu 2019 |
| SG 20 | Tutu Uitz Na | Low-Status Commoner | Guerra n.d.; Walden, Guerra and Qiu 2019 |
| SG 23 | Tutu Uitz Na | Low-Status Commoner | Guerra n.d.; Walden, Guerra and Qiu 2019 |
| SG 28 | Tutu Uitz Na | Low-Status Commoner | Walden et al. 2018 |
| SG 29 | Tutu Uitz Na | Low-Status Commoner | Guerra n.d.; Walden, Guerra and Qiu 2019 |
| SG 34 | Floral Park | High-Status Commoner | Levin et al. (2020) |
| SG 35 | Floral Park | Low-Status Commoner | Garcia, Walden and Martinez 2020 |
| SG 38 | Tutu Uitz Na | Low-Status Commoner | Guerra n.d.; Walden, Guerra and Qiu 2019 |
| SG 42 | Tutu Uitz Na | High-Status Commoner | Shaw-Müller et al. 2019 |
| SG 45 | Tutu Uitz Na | Low-Status Commoner | Guerra n.d.; Walden, Guerra and Qiu 2019 |
| SG 50 | Tutu Uitz Na | Low-Status Commoner | Guerra n.d.; Walden, Guerra and Qiu 2019 |
| SG 51 | Tutu Uitz Na | High-Status Commoner | Walden et al. 2018 |
| SG 87 | Lower Dover | Low-Status Commoner | Guerra n.d.; Walden, Guerra and Qiu 2019 |
| SG 91 | Lower Dover | Low-Status Commoner | Guerra n.d.; Walden, Guerra and Qiu 2019 |
| SG 129 | Floral Park | High-Status Commoner | Ellis, Walden and Rick 2020 |
| SG 132 | Floral Park | Low-Status Commoner | Nachamie and Walden 2020 |
| SG 142 | Floral Park | Low-Status Commoner | Shaw-Müller, Walden and Nachamie 2020 |

| <i>Settlement Group</i> | <i>District</i> | <i>Hierarchical Status</i> | <i>References</i> |
|-------------------------|-----------------|----------------------------|---|
| SG 143 (Group 3) | Floral Park | Low-Status Commoner | Brown et al. 1996 |
| Floral Park Plaza A | Floral Park | Tier 2 Intermediate Elite | Brown et al. 1996; Glassman, Conlon, and Garber 1995; Walden et al. 2020b; Willey et al. 1965 |
| Floral Park Group 2 | Floral Park | Tier 2 Intermediate Elite | Brown et al. 1996; Glassman, Conlon, and Garber 1995; Walden et al. 2020b |
| BR-169 | Texas | Low-Status Commoner | Willey et al. 1965 |
| BR-170 | Texas | Low-Status Commoner | Willey et al. 1965 |
| BR-174 | Texas | Low-Status Commoner | Willey et al. 1965 |
| BR-179 | Texas | Low-Status Commoner | Willey et al. 1965 |
| BR-180/168 | Texas | Tier 3 Intermediate Elite | Walden et al. 2020c; Willey et al. 1965 |
| BR-184 | Texas | Low-Status Commoner | Willey et al. 1965 |
| BR-189 | Texas | Low-Status Commoner | Willey et al. 1965 |
| BR-194 | Texas | Low-Status Commoner | Willey et al. 1965 |
| BR-260 | Texas | High-Status Commoner | Willey et al. 1965 |

Full coverage survey data for the whole polity is presented in Walden, Biggie, and Ebert (2017). Excavation data employed as part of this dissertation is shown above in Table 6.3 (note this table does not include excavated households from Barton Ramie located outside the Texas District). All the districts investigated, and their intermediate elite centers existed as autonomous villages with local elite leaders prior to the rise of Lower Dover. Evidence of substantial earlier occupation is apparent across the Western, Floral Park and Tutu Uitz Na, and the Barton Ramie Districts. Middle and Late Preclassic occupations uncovered at Tutu Uitz Na and Floral Park seemed sporadic and dispersed across these respective districts (in a comparable fashion to Barton Ramie; Willey et al. 1965: 279-281). This dispersal might reflect sampling issues however, parts of Barton Ramie, which were more intensively investigated, revealed small clusters of Preclassic residences (Drennan 1988: 278; Willey et al. 1965: 280-282). The most substantial demographic event in the area occurred in the Terminal Preclassic period (Mount Hope and Floral Park phases) when the number of households doubled at both Tutu Uitz Na and Floral Park (Table 6.4). This Terminal Preclassic population explosion is comparable to that noted at Barton Ramie (Willey et al. 1965: 281-285, 292). These settlement groups were largely consistently occupied through the Early Classic Hermitage phase. Several new households appeared at both the Tutu Uitz Na and Floral Park Districts in the Hermitage phase. The dating of the initial construction phases at households like SG 42 and SG 129 is largely based on ¹⁴C dates, not the ceramic assemblage which comprises predominantly Floral Park phase materials (see Chapter 5.4.1 and 5.4.2). As such it remains possible that some of the households Willey and colleagues (1965: 286) attribute to the Floral Park phase on the basis of the ceramic assemblage emerged during the Early Classic period. Lastly, the entirety of households in the Floral Park and Tutu Uitz Na Districts were occupied in the Late Classic period (Tiger Run and Spanish Lookout I and II phases). This corroborated a similar pattern of gradual population growth at Barton Ramie (Willey et al. 1965: 285-289).

The transition to the Late Classic period saw an increase in population across the polity. At its founding in the Early Classic/Late Classic transition, the polity contained ~1500 people, by the Terminal Classic the population was ~2400 people. The projected growth rate of 0.1% per year would lead to a polity population of around ~2000 people by AD 900 (see Chapter 5.2.15). The discrepancy between the two numbers is not dramatic but may speak to some in-migration into the polity during the Late Classic period. Any incoming population into the polity probably came from

nearby, but existed “under a different sphere of central authority” and are considered migrants (Inomata 2004: 178; see also Anthony 1990). Still, there is no reason to suspect that the Late Classic emergence of Lower Dover saw a dramatic influx of population into the area, in a manner documented nearby during the Early Classic rise of Buenavista del Cayo (Brown and Yaeger 2020: 302), or the Late Classic rise of Xunantunich (Robin, Yaeger, and Ashmore 2010: 318). As outlined in greater depth below, the only district which saw overt Late Classic growth was Tutu Uitz Na. This variability in district-level population growth is also evident at Late Classic Xunantunich (Robin, Yaeger, and Ashmore 2010: 320).

Table 6.4 Population Growth Over Time in the Lower Dover Area.

| <i>Time Period</i> | <i>Sampled Contexts#</i> | <i>Occupations #</i> | <i>Percentage Occupied</i> | <i>Estimated Polity Population</i> |
|-----------------------|--------------------------|----------------------|----------------------------|------------------------------------|
| Late/Terminal Classic | 96 | 96 | 100 | 2400 |
| Early Classic | 96 | 60 | 62 | 1500 |
| Terminal Preclassic | 96 | 60 | 62 | 1500 |
| Late Preclassic | 96 | 22 | 23 | 550 |
| Middle Preclassic | 96 | 22 | 23 | 550 |

This picture of in-migration is corroborated by strontium isotope data, two people from the Macal Drainage (BR-123-Burials 9 and 18) and one from the southern lowlands (BR-144-Burial 2) are found at Late Classic Barton Ramie, and constitute roughly 17% of the burial sample tested ($n= 18$; Freiwald 2011a: 213-214; Willey et al. 1965: 549-550, 553). There was also one Late Classic individual from the Macal Drainage at the Floral Park center (Group 2-Burial 9). This individual represented 33% of the tested burial population from Floral Park ($n= 3$; Brown et al. 1996: 44; Freiwald 2011a: 205). A third individual from Barton Ramie also originated in the Macal Drainage, although it was unclear where this sample came from and which period it dated to (Krueger 1985, reported in Freiwald 2011a: 210). Strontium isotope analysis was conducted on four individuals as part of this dissertation, a single Terminal Preclassic elite from BR-180 (BR-180-Burial 3), two Late Classic elites from Tutu Uitz Na (SG 1-Burials 1 and 4), and a Late Preclassic high-status commoner from SG 3 (SG 3-Burial 2).

Table 6.5 Isotope Values of Tooth Enamel from Lower Dover Individuals.

| <i>Lab #</i> | <i>Burial information</i> | <i>Tooth</i> | $^{87}\text{Sr}/^{86}\text{Sr}$ | $d^{13}\text{C}_{\text{VPDB}}$ | $d^{18}\text{O}_{\text{VPDB}}$ |
|--------------|---------------------------|-----------------|---------------------------------|--------------------------------|--------------------------------|
| UM467 | SG 1-Burial 1 | LRM1 | 0.708669 | -1.71 | -3.62 |
| UM468 | SG 3 -Burial 2 | LM1? | 0.708539 | -8.19 | -2.70 |
| UM469 | BR 180-3 | UP ⁴ | 0.708267 | -5.87 | -3.10 |
| UM470 | SG 1-Burial 4 | UMRM1 | 0.708863 | -3.51 | -3.06 |
| F5902 | FPK-Burial 2 | LRM1 | 0.708470 | N/A | N/A |
| F5903 | FPK-Burial 6 Ind. A | LLM1 | 0.708580 | N/A | N/A |
| F5904 | FPK-Burial 9 | M | 0.710290 | - | - |

Strontium isotope values associated with all four individuals fall within those expected for the Belize River Valley, with an average value $0.70858 \pm .0003$ $^{87}\text{Sr}/^{86}\text{Sr}$, similar to the local mean of twenty Barton Ramie samples (0.70864 $^{87}\text{Sr}/^{86}\text{Sr}$). Table 6.5 shows strontium isotope values associated with this dissertation and those measurements obtained by Freiwald (2011a). The range of values also closely matches $^{87}\text{Sr}/^{86}\text{Sr}$ found in both human tooth and bone and modern fauna reported in the valley (Freiwald 2021, 2020, 2011a). These may be interpreted as local to Lower Dover, with the understanding that individuals born in a region with similar values, such as parts of the northern Yucatan Peninsula, would be isotopically indistinguishable. Oxygen isotope values provide a second source of information on where a person lived at the time the dental enamel formed. The mean value for the four samples is $-3.12\text{‰} \pm .38$, similar to that of 38 samples from the Belize River Valley ($-2.90\text{‰} \pm .99$ in Freiwald 2011a: 268, Table 6.8). Like the strontium isotope ratios, no outlying values were present, providing additional support for local origins for these individuals. Lower values might suggest an origin to the south near the Pacific Coast and Highlands (Lachniet and Patterson 2009), while more enriched values have been reported in the Peten (Freiwald 2020; Price et al. 2010). The tentative findings of this very small sample suggest that more elites at Floral Park were non-local compared to Tutu Uitz Na and BR-180/168 although this is tentative. The dietary isotopes associated with these burials and others are discussed under wellbeing (see Chapter 7.2.2).

6.2.1 Lower Dover and Blackman Eddy

The political landscape of the Classic period Belize River Valley was complicated. There is still much we do not know about the relationship between Lower Dover and Baking Pot. That said, the two polities represent contemporaneous separate geospatial entities located 7 km apart. There seems little reason why we should not, at least for now, treat the two polities as separate competing/allied peer-polities. In contrast, the relationship between Blackman Eddy and Lower Dover is more opaque. Yet, sufficient settlement pattern and architectural data exist to suggest that Late Classic Blackman Eddy, can also be treated as a separate, if politically weaker, competing or allied peer-polity. The relationships between Lower Dover and Blackman Eddy are pivotal to this dissertation and the reasons for thinking they formed separate polities are unpacked in detail below. The Blackman Eddy civic-ceremonial center is situated only 3 km east of Lower Dover on a hilltop rising above the floodplain on the south bank of the Belize River. Blackman Eddy was intensively investigated by BVAP under James Garber from 1990-2003.

Blackman Eddy was one of several Belize River Valley centers which rose in the Middle Preclassic, the others being Cahal Pech, Pacbitun, Arenal, and Early Xunantunich (Awe 1992; Brown et al. 2011; Garber et al. 2004a). Blackman Eddy has royal burials, carved stelae, and all the architectural traits of a Belize River Valley major center (Garber et al. 2004b: 49; Helmke and Awe 2012; see Figures 1.2, 3.2, and 6.3). Initially forming in the Early Preclassic, Blackman Eddy grew in size through the Middle Preclassic and was one of the largest Late Preclassic centers in the Belize River Valley (Garber et al 2004a: 25). The Early Classic period saw multiple construction phases across the civic-ceremonial center, including the construction of the ballcourt and the erection of a carved stela in Plaza A (Brown and Garber 2005: 60-62).

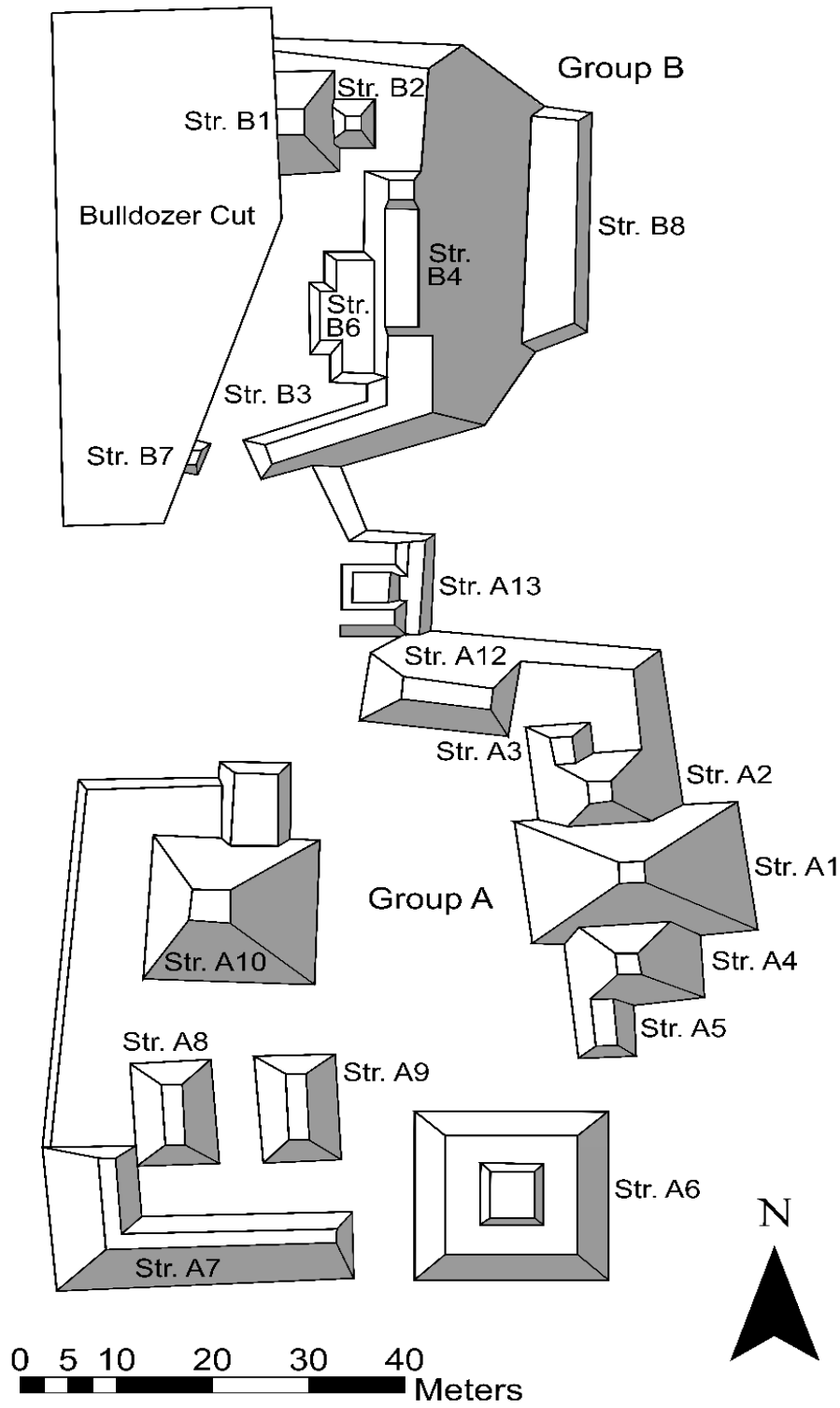


Figure 6.3 Map of the Blackman Eddy civic-ceremonial center
 (Adapted from Garber et al. 2004b: Fig. 4.1 by X. Li)

A construction hiatus is apparent in the late Early Classic through the early Late Classic period at Blackman Eddy. While architectural construction was minimal in comparison to other Belize River Valley centers in the Late Classic, substantial remodeling and expansion occurred on several structures in Plaza A, including the ballcourt and the sizeable eastern triadic assemblage (Brown and Garber 2005: 62; Garber et al. 2004b). Moreover, a particularly wealthy elite crypt burial dating to the Late Classic was present in terminal architecture on Structure B1 (Garber et al. 2004b: 52-53; Fig. 4.2). This interment contained an Anonal-Buff Polychrome cylinder vase (which are uncommon in the region), carved bone and shell, a slate mirror back, a large jade bead, and a drilled jaguar canine (very similar to the drilled jaguar canines carved from limestone evident at Barton Ramie and Lower Dover; see Chapter 6.3.2.1). This suggests that while the political power and authority of the apical elite household was reduced, they were still in residence at the polity capital at this time. An analogous situation is likely found at Actuncan, which was a dominant polity in the Late Preclassic and Early Classic periods. Despite the rise of Late Classic Xunantunich, ongoing construction still occurred at Actuncan throughout the Late Classic period, despite the scope of this work being limited to modifications and renovations (LeCount 2004; LeCount and Blitz 2005; McGovern 2004; Mixter 2017; Yaeger 2010b: 248).

The clustering of settlement around the civic-ceremonial center suggests that the Blackman Eddy polity was smaller than previously thought. Previous estimates as to the size of the Blackman Eddy polity projected governance over a region extending from Floral Park to the west (encompassing Barton Ramie), and potentially Ontario and Warrie Head to the east (Driver and Garber 2004: 292; Garber et al. 2004b: 67). This territorial projection was based on the position of minor centers, not commoner households as settlement survey had not yet been conducted. This would constitute a hypothesized territory comparable in size to that of Baking Pot. While full coverage survey and settlement pattern analysis of the Blackman Eddy polity is needed to understand the temporal relationship between the center and the settlement. In lieu of these data, TPI analysis of LiDAR provides the only option for modeling the scale of the Blackman Eddy polity. LiDAR is currently lacking for the eastern portion of the Blackman Eddy polity, but there is a clear demographic drop-off in settlement clustering 1 km to the north, 2 km to the south, 1.5 km to the west (see Figure 6.4). Based on the settlement pattern it seems Blackman Eddy should be treated as a contemporaneous but smaller, peer of Lower Dover.

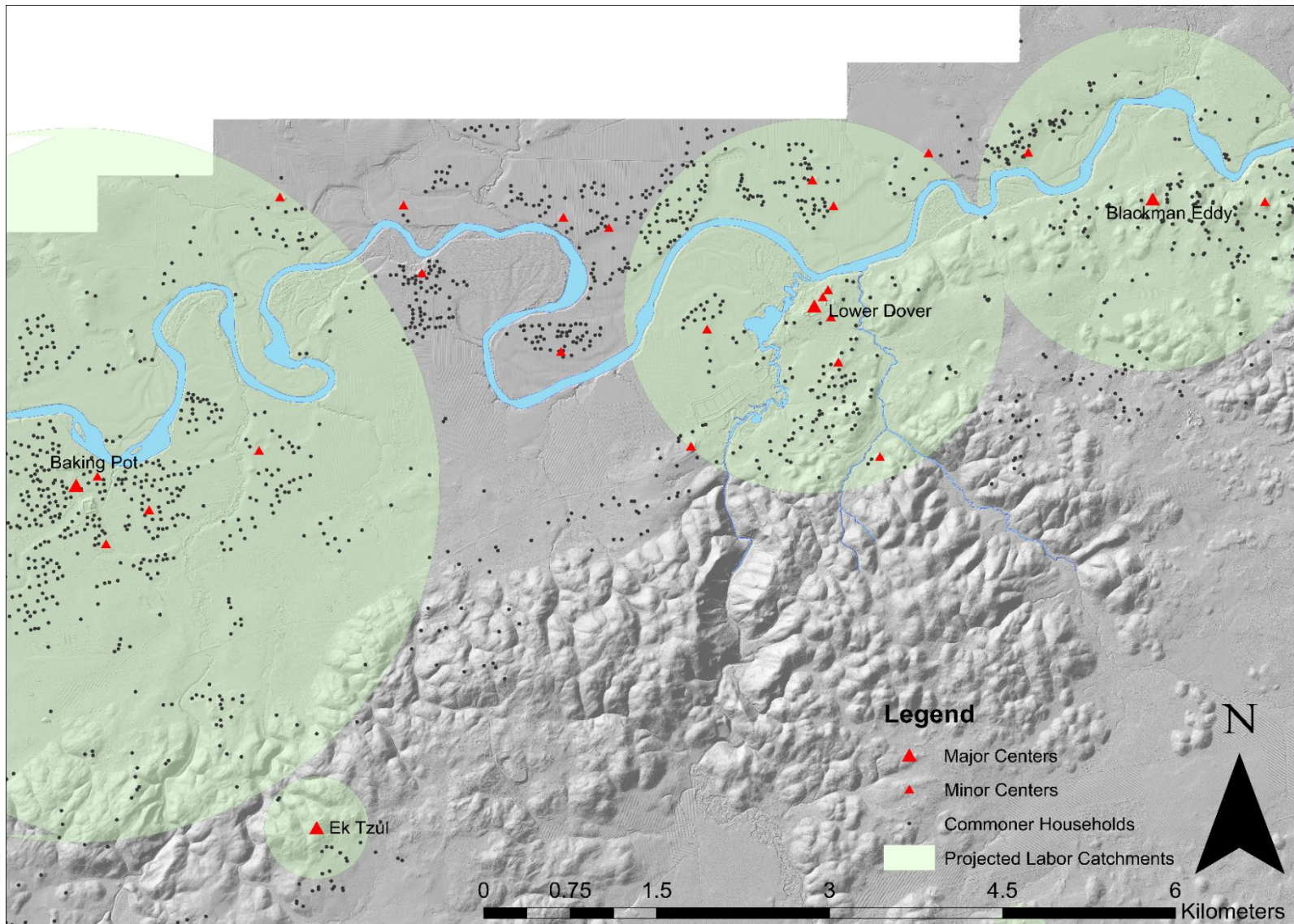


Figure 6.4 Map of the central Belize River Valley polities with labor catchments

The tempo and scale of construction at Blackman Eddy strongly corroborate the smaller polity size suggested by the general clustering of households around the center and its subsidiaries. Unlike Baking Pot and other larger polity capitals to the west, the scale of architectural construction at Blackman Eddy is relatively small (Garber et al. 2004b: 49). The construction sequence suggests that the general tempo of architecture was very slow compared to centers like Lower Dover. In contrast to the Late Classic construction at Lower Dover (158000 m³ in ~400 years), Blackman Eddy's monumental center (136800 m³) has construction phases dating to the Middle Preclassic through Late Classic (~1800 years). The difference between slow accretional construction and rapid booms is important for understanding the distribution of labor and reconstructing political territories and the power of apical elites. The overall scale of monumental architecture at Blackman Eddy, including the secondary center at Manbatty (8850 m³) is 145650 m³. TPI of settlement around the center reveals ~400 commoner households in the immediate vicinity, suggesting a labor tax rate of 360 cubic meters per household which falls in the same ballpark range as values calculated for Baking Pot and Lower Dover. Based on this comparison it seems highly unlikely that the Blackman Eddy apical elite would have required construction labor from Tutu Uitz Na or Barton Ramie, let alone Floral Park. A rough labor catchment for each polity based on a projection of the architectural volume of the core (m³) is shown in Figure 6.4. This roughly correlates with settlement clustering and suggests that each polity had sufficient labor to construct it. Labor is simply projected out as though it were evenly spread through space. A better approach involves the Xtent model. The distribution of labor for monumental construction at Lower Dover and Blackman Eddy is best encapsulated through the Xtent model with an *a* constant of 0.6 and a *k* constant of 0.5 (Figure 6.5). Only full coverage survey and test pitting of the Blackman Eddy settlement will provide solid answers to these issues, especially for early time periods when regional settlement densities are less clear (Garber et al. 2004a: 41).

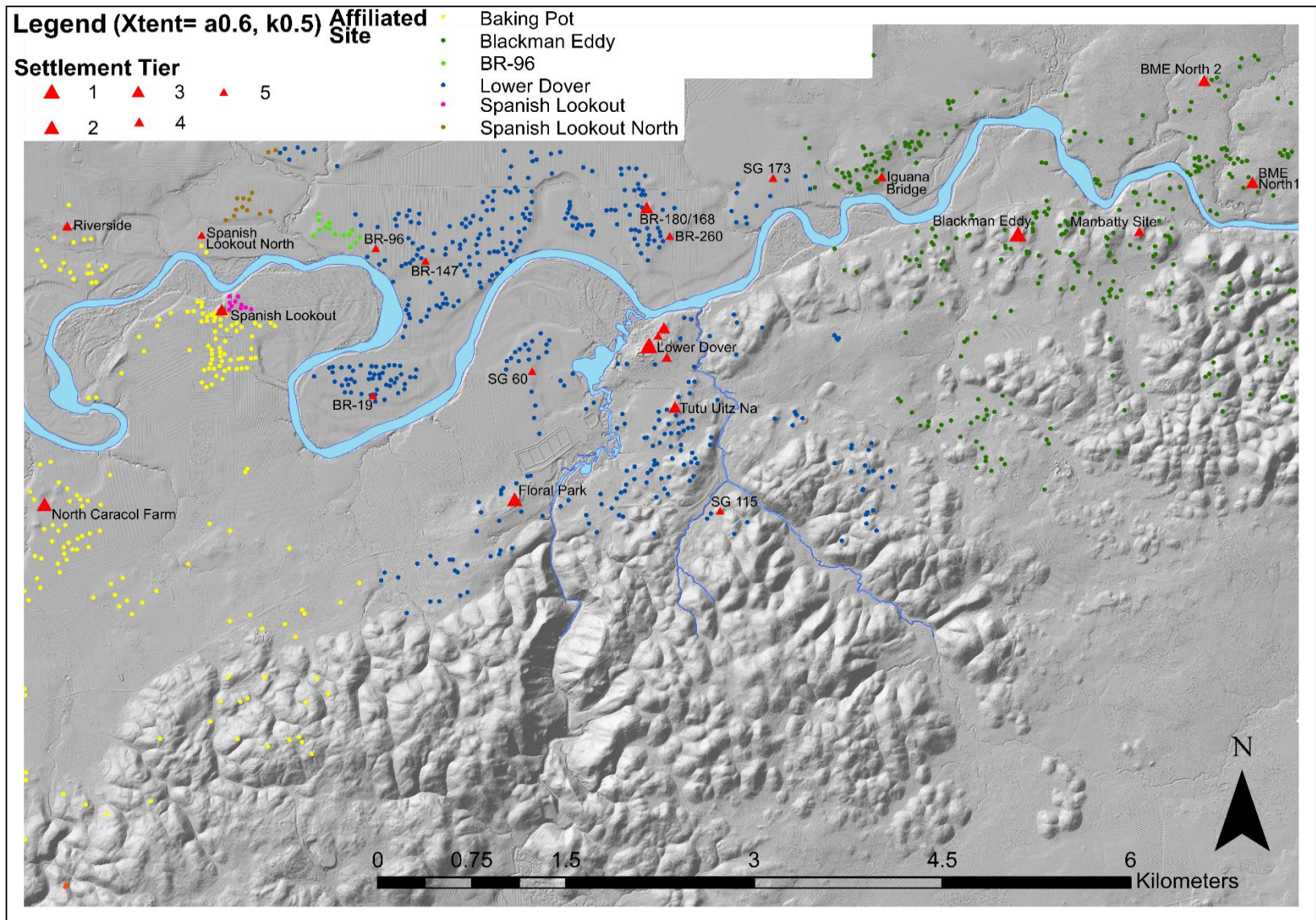


Figure 6.5 Regional Xtent model ($a=0.6, k=0.5$)

In review, in lieu of epigraphic statements of dominance and subordination, settlement pattern data provides a basis for reconstructing political territories, but political relationships can extend over noncontiguous clusters of settlement (A. Smith 2003). While this necessitates a pause for concern, it is worth noting that if Blackman Eddy had a similar-sized territory to Baking Pot, we could expect it to have access to a similar labor pool which would result in similar-sized monumental architecture. However, Baking Pot (284000 m³) is more than twice the size of Blackman Eddy. Settlement pattern and architectural data indicate that Middle Preclassic through Early Classic Tutu Uitz Na, Floral Park, and BR-180/168 were very much separate spatial entities from Blackman Eddy, and for that matter, Baking Pot. If either of these political entities were routinely extracting labor from commoner households situated within the Tutu Uitz Na, Floral Park, or Texas districts (in addition to their own commoner subordinates clustered around their respective cores), then we would expect the civic-ceremonial architecture at their respective capitals to be much larger. For these reasons, I treat the local elite households at these minor centers as autonomous local elite regimes prior to the rise of Lower Dover.

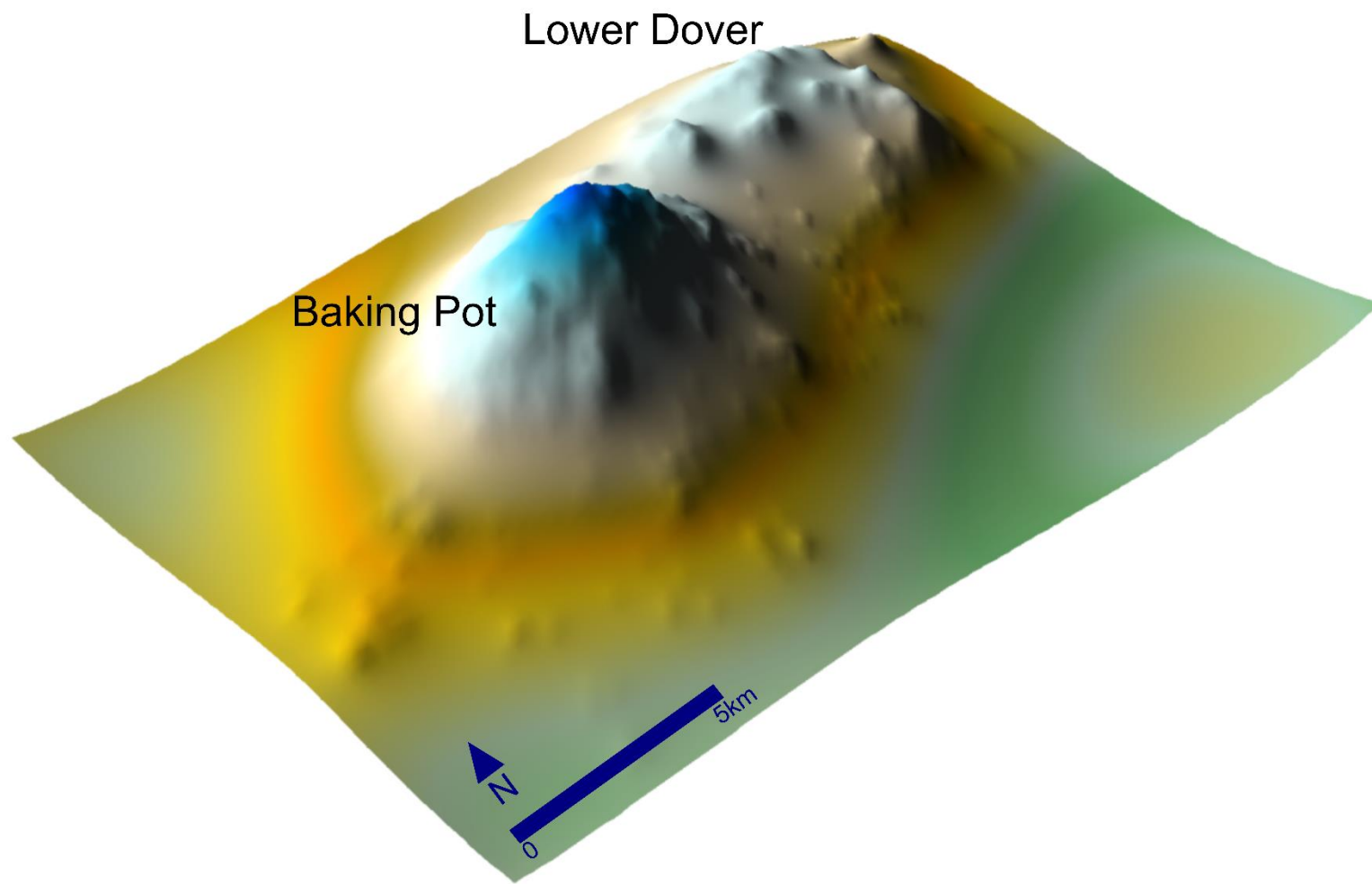
The relationship between the Late Classic apical elite regime at Blackman Eddy and their peers at Lower Dover also requires some discussion. The power of the Blackman Eddy apical elite to command labor for monumental construction seems to have waned, but not disappeared, in the early Late Classic. The Blackman Eddy apical elite commissioned several large construction programs on Plaza A at this time. This focused on the large eastern triadic assemblage which contained several Late Classic interments (Structures A1, A2, A3, A4, and A5; Garber et al. 2004b). Strontium isotope analysis of dentition from three Late Classic burials located within Structure A4 (the eastern triadic structure) show that the individuals were of local origin (Freiwald 2011a: 217). Other structures with Late Classic components around Plaza A include Structures A10, A12, A6, and A7-9 (the ballcourt; Garber et al. 2004b: 51-62). Some construction also occurred on Plaza B, at Structures B1, B2, B6. It is difficult to gauge the architectural increase at Late Classic Blackman Eddy, but it involved dramatically less labor than the construction of monumental architecture at Lower Dover. Three scenarios can be suggested for the relationship between the two centers: **(1)** Lower Dover might have been founded by the Blackman Eddy apical elite who wished to situate themselves in a better position to control the local elites of the Lower Dover region; **(2)** Lower Dover and Blackman Eddy might have been competing or allied peer

polities. (3) Lower Dover and Blackman Eddy could have represented two centers of a single polity ruled by the same apical elite family (for examples of this dynamic see Houston 1992: 68; Fitzsimmons 2015). This seems unlikely given the depopulated buffer zone running between the two centers. Either way, it seems that the rise of Lower Dover did not entirely curtail the ability of the Blackman Eddy elite to construct monumental architecture.

6.2.2 Lower Dover and Baking Pot

To the west of Lower Dover lay the polity of Baking Pot (Aimers 1997; Audet 2006; Audet and Awe 2004; Bullard and Bullard 1965; Helmke et al. 2020; Helmke and Awe 2012; Hoggarth 2012; Piehl 2005; Ricketson 1931; Willey et al. 1965). Baking Pot was occupied in the Middle Preclassic and rose as a regional polity in the Late Preclassic (Audet 2006; Audet and Awe 2004; Helmke and Awe 2012; Hoggarth 2012: 40). Baking Pot was a regional power by the Early Classic period (Awe and Helmke 2005), but likely operated under the aegis of Naranjo and Caracol intermittently throughout the Classic period (Hoggarth 2012: 48). The polity capital of Baking Pot and its closest districts (Settlement Clusters A-H) are situated on highly productive Class I soils (Hoggarth 2012: 40). A possible royal title has been found on a cacao drinking vessel (Helmke and Awe 2012). BVAR survey led by Conlon (Conlon 1993; Conlon and Ehret 2000, 2001; Golden and Conlon 1996), and Hoggarth and colleagues (2008) has extended across most of the hinterland (see also Hoggarth et al. 2010; Jobbová 2009).

Comparison of the population surfaces for Lower Dover and Baking Pot shows very different patterns of demographic centralization (Figure 6.6). At Lower Dover population is aggregated around the intermediate elites, not the polity capital, reflecting “evenly dispersed, tight clusters of elite and commoner housing indicative of leader-follower groupings well suited to factional competition (Brumfiel 1994a: 11).” In contrast, a radically different picture of demographic centralization appears at Baking Pot; the polity capital exerted a centripetal force on demography, which clearly nucleates around the core. These variable levels of demographic centralization likely reflect different types of political organization.



**Figure 6.6 Inverse distance contour model of Baking Pot and Lower Dover
(model by Ran Weiyu and Walden)**

Demographic centralization around the Baking Pot core might be due partly to the highly productive nature of the soils in this region, which likely led to demographic clustering in the Preclassic during the rise of the polity. The earlier component at Baking Pot is less clearly understood compared to nearby Blackman Eddy and Cahal Pech due to the immense scale of Classic period overbuilding and the fact that much of the Preclassic levels are not only deep but intermixed with dense layers of river clay construction fill which makes for onerous excavation. There is good reason to suspect that the variation in demographic centralization between the two polities is political in nature and not purely associated with environmental productivity, this being the scale of intermediate elite architecture at the hearts of the decentralized districts. At Lower Dover, the demographic decentralization (into intermediate elite headed districts) coincides with considerable architectural investment at the intermediate elite level. District heads at Lower Dover could command the labor of the commoners residing in their respective districts. This is not the case at Baking Pot where generally intermediate elite district heads in the central core are comparatively small. The intermediate elites at district centers like Ixim and Lubul Huh could command a minuscule amount of labor in comparison to their peers elsewhere. Even farther-flung minor centers, like the tertiary center of Bedran are comparatively small in relation to similar sites elsewhere in the valley (Walden et al. 2019). Subsequently, at Baking Pot it would seem that over time labor control became centralized at the apical elite level, corroborating the patterns of demographic centralization.

6.2.3 Settlement Excavations at Settlement Cluster C

Data from eight households at Baking Pot Settlement Cluster C excavated by Hoggarth (2012) is employed for comparative purposes in this dissertation. A summary of these excavations is provided to situate these data. Settlement Cluster C forms a district of comparable size to Tutu Uitz Na, Texas, and Floral Park. Excavation targeted seven commoner households (tier 6) and the district head household (tier 5) at Ixim (M-99). Despite their small size, the lesser intermediate elite centers of Ixim, Lubul Huh, and Atalaya acted as the focal nodes of fairly large districts of commoners. These districts are comparable in size to those governed by much more powerful intermediates in the Baking Pot periphery, or Tutu Uitz Na, Floral Park and BR-180/168 at Lower

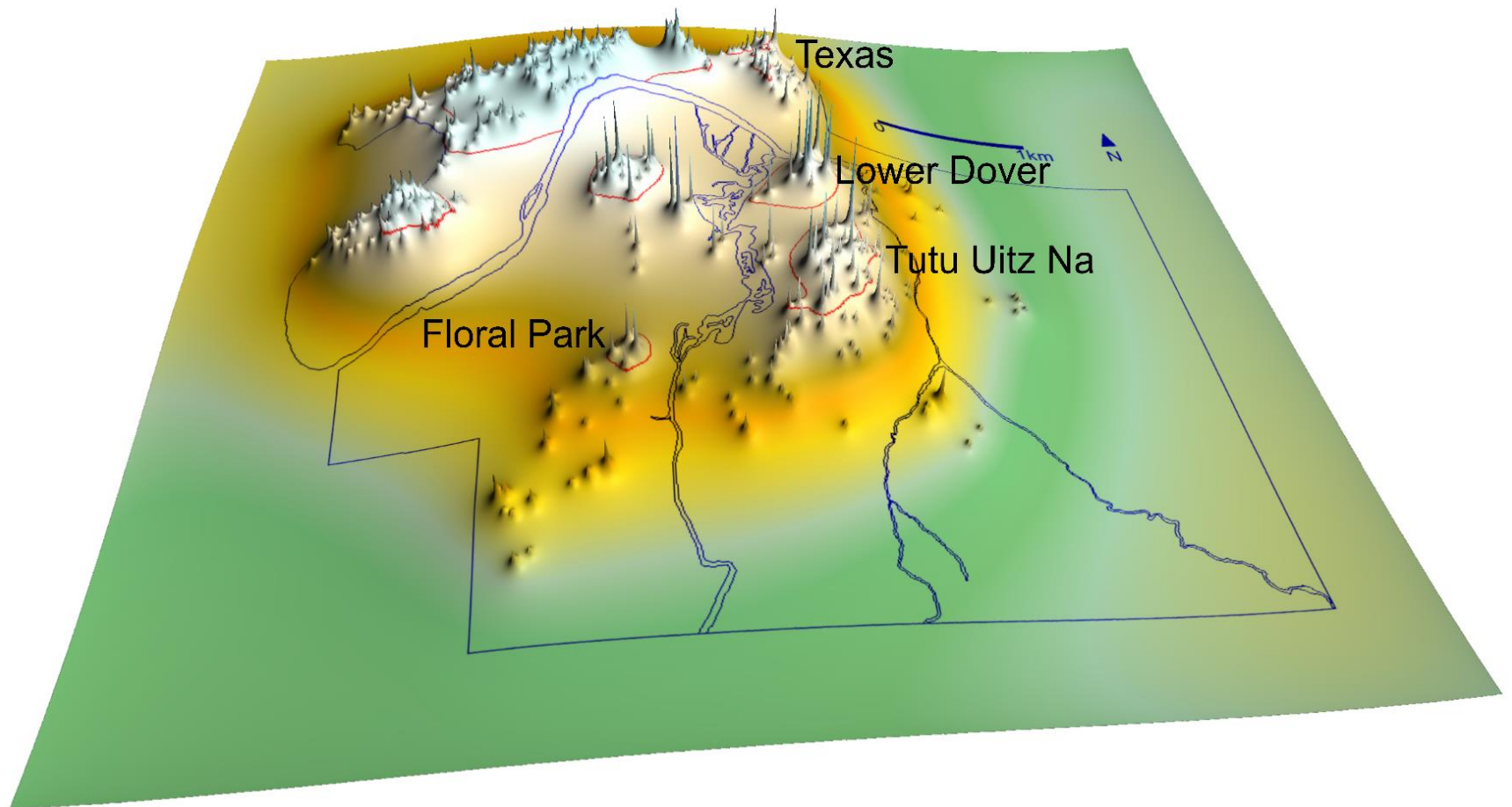
Dover. However, in terms of size, the epicentral district centers conform to lower levels of the political hierarchy (tier 5), and are more comparable to the large plazuelas district heads at Barton Ramie (BR-19, BR-147, BR-96). Ixim shares a similar trajectory to the larger intermediate elite centers which surround Lower Dover, beginning in the Middle to Late Preclassic and experiencing a series of architectural improvements through the Classic period (Hoggarth 2012: 74). In many ways, the smaller size of the Baking Pot district heads like Ixim might be due to earlier co-option into the more politically and demographically centralized Baking Pot polity. This earlier co-option effectively truncated the development of the household and reduced the ability of the household to command labor. Connell (2003, 2010) notes the construction of L-shaped structures at the Chaa Creek minor centers in the Late Classic following their incorporation by Xunantunich, which are somewhat similar to those reported at Ixim in the Early Classic by Hoggarth (2012: 74). The main difference being that the L-shaped structures at Chaa Creek were corbelled vault constructions. Either way, the construction of similar structures might suggest the Ixim elite were co-opted by Baking Pot at the onset of the Early Classic period. Generally, the Ixim elite seems to reflect heavily co-opted administrative “middle men”. They lack evidence of an articulated downward face, such as the sizeable plazas, public ceremonial architecture, and ritual assemblages found at larger intermediate elite households. The household(s) situated at Ixim in the Terminal Classic and Late Postclassic periods hosted increasingly larger feasts, suggesting that the high-status household regained its downward face following the collapse of higher-level governance at Baking Pot (Hoggarth 2012: 146-156, 167).

Generally, Settlement Cluster C shows a slightly different developmental trajectory to the districts at Lower Dover, because commoner occupation does not appear to begin until the Late Preclassic/Early Classic period. Hoggarth (2012) split the households into high and low-status commoners based on similar criteria used at Lower Dover. This variability roughly conforms to the difference between tiers 5 and 6 (Walden et al. 2019). Of these, M-96, M-90, and M-108 were high-status commoners, while M-100, M-184, M-94, and M-181 were low-status commoners. M-90 was founded in the Late Preclassic, and M-184 was founded in the Early Classic period, while the others were all founded in the Late Classic period (Hoggarth 2012: 77-100). The commoner households comprised large platforms filled with dense river clay fill, much like those found at Barton Ramie. The limestone used for the construction of walls and floors was likely hauled ~2

km from the foothills of the Maya Mountains to the south. This is a comparable distance to Barton Ramie, but much less than households at Tutu Uitz Na and Floral Park, which had abundant surrounding limestone. The commoner households at Settlement Cluster C had access to a broad range of wealth items including marine shell, greenstone (but not jade), and decorated ceramics (Hoggarth 2012: 105-111, 150-153). The Settlement Cluster C household dataset provides an ideal opportunity to understand the degree to which trends at Lower Dover are a result of specific local circumstances associated with the rise of Late Classic center, or whether these changes are more likely associated with regional trends.

6.2.4 Districts and Neighborhoods

Traditionally, Maya archaeologists based their interpretations of settlement organization simply by ‘eyeballing’ residential clusters on the landscape, based on the distance between patio groups, and topographic features, vacant spaces, walls, boundaries, and transportation routes (Bullard 1960: 367; Hutson 2016: 73; Kintz 1983b: 181; Kurjack 1974: 80-81; Lemonnier 2012). This is effective because Maya polities often readily exhibit strong settlement clustering. Some degree of intra-polity settlement clustering is immediately observable at Lower Dover. The Lower Dover settlement does not cluster around the civic-ceremonial center but around hinterland intermediate elite households (Petrozza 2014: 199; Walden, Biggie and Ebert 2017). I used several analyses commonly utilized in regional settlement pattern analysis to discern districts and neighborhoods in a more quantifiable and comparative fashion (see Chapter 5.2). These spatial models represent a logical starting point for understanding social groups in the past, actual reconstruction of such groups requires other lines of evidence to clarify (see Connell 2010: 299; Hammond 1974: 322).



**Figure 6.7 Inverse distance contour model of Late Classic Lower Dover
(note the lack of clustering around the civic-ceremonial center)**

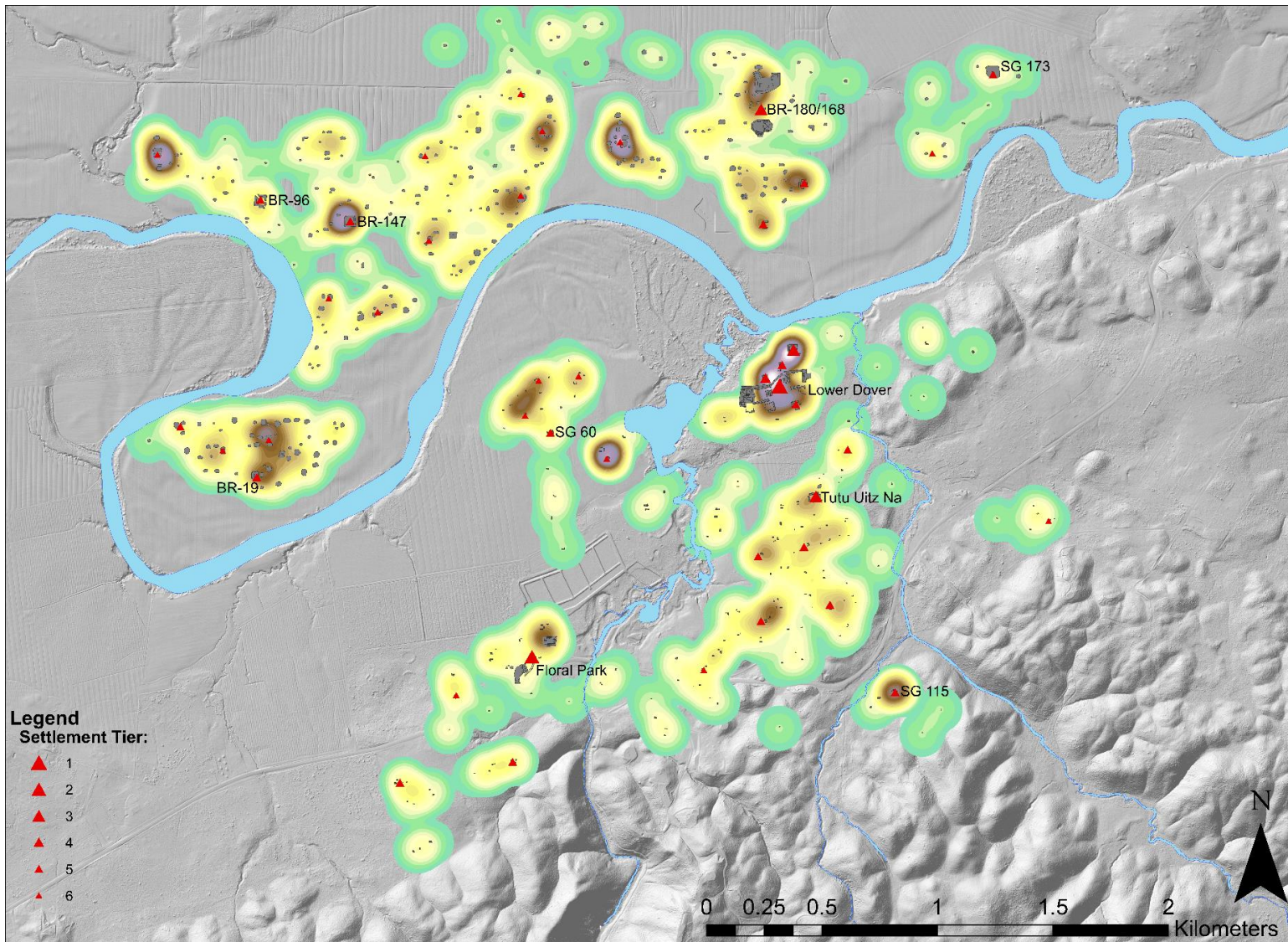


Figure 6.8 Kernel density model of the Lower Dover districts

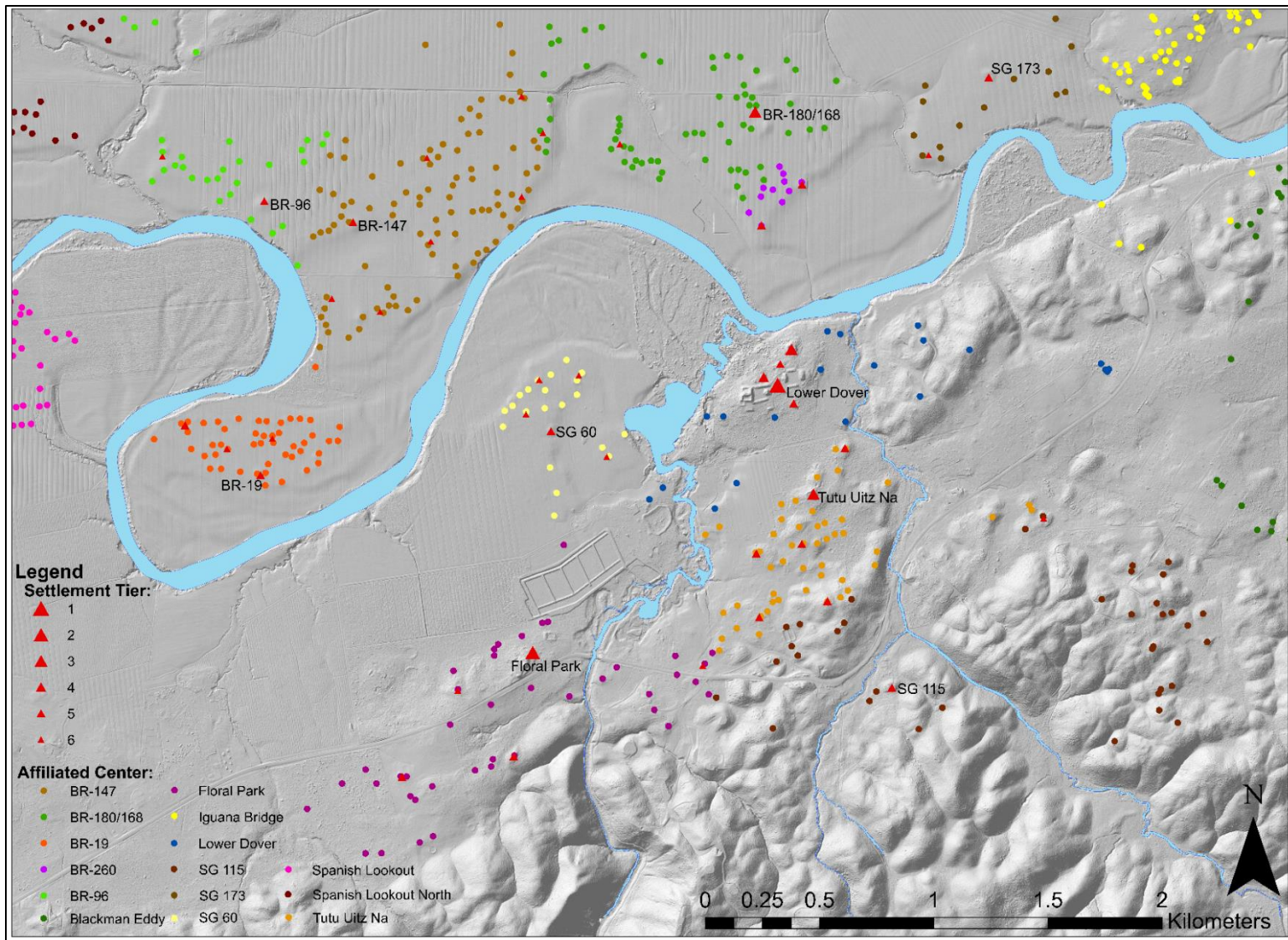


Figure 6.9 Xtent model of the Lower Dover districts ($a= 0.6$ $k= 0.4$)

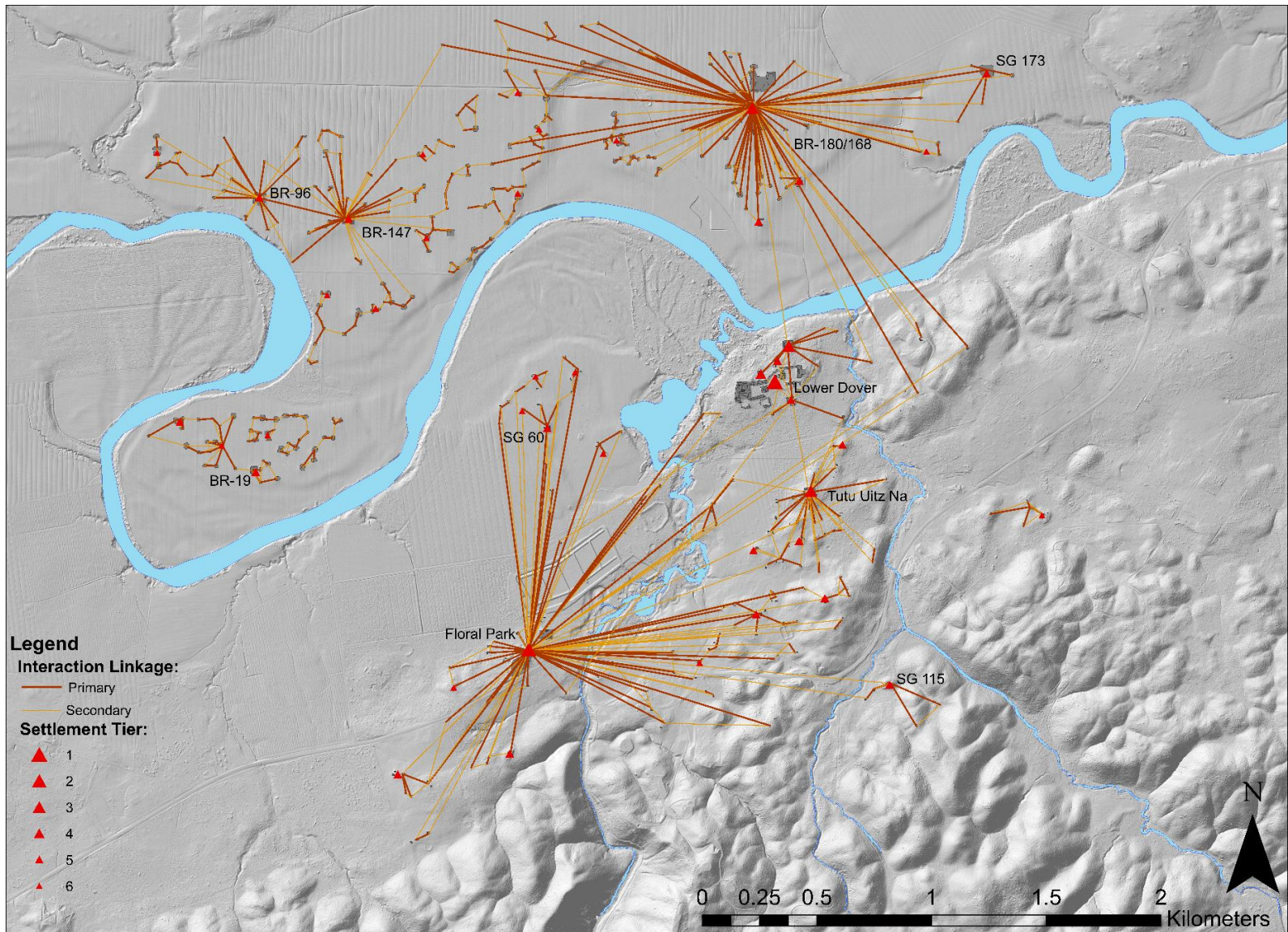


Figure 6.10 Interaction model of the Lower Dover districts (constant = 2)

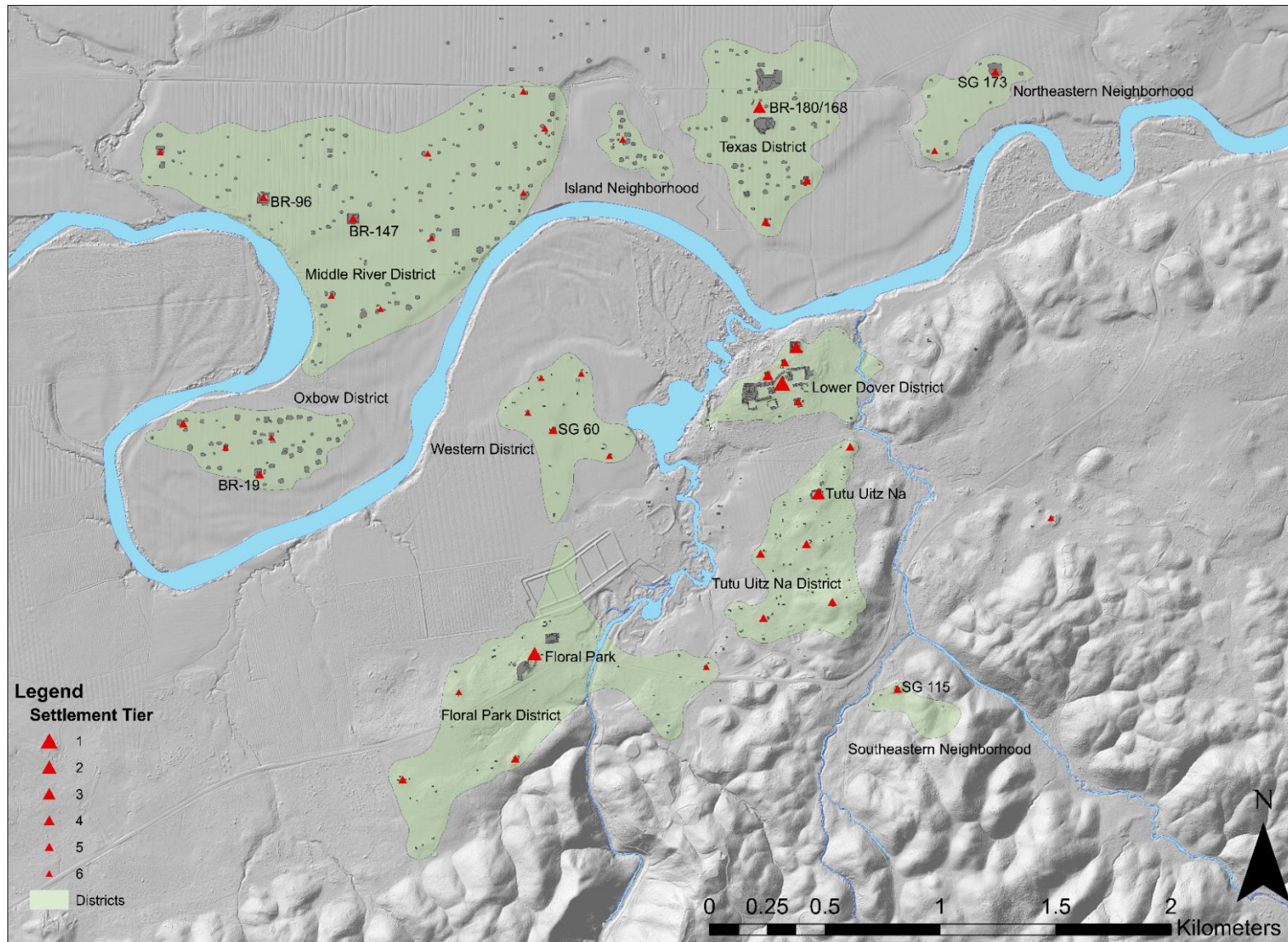


Figure 6.11 Map of the Lower Dover districts (based on models)

6.2.5 Spatial Approaches to Reconstructing Districts

The results of the different spatial analyses outlined in Chapter 5 were overlaid and compared. None of these techniques perfectly encapsulated all elements of the clustering by themselves, but the combination of all the analyses allowed a clearer, less-subjective definition of the possible boundaries of different districts. Of the analyses used, the K-means was the least useful as it assesses patterns based solely on geographic spread, not population (not shown here but see Walden, Biggie, and Ebert 2017). The inverse distance contours and kernel density models employed population and geographical distance and both produced fairly comparable results (Figures 6.7 and 6.8).

The inverse distance approach generally produced the most visually impressive results. The kernel density and inverse distance approaches both created a smaller cluster for the Floral Park District. In contrast, the Floral Park District was more clearly apparent with the Xtent and Interaction models which took into account the architectural size of focal nodes at the centers of the districts to project out territories (Figures 6.9 and 6.10). In contrast to the other approaches, the Xtent model projected districts and neighborhoods out from the centers (high-status commoner and intermediate elite households) based on their architectural volume. The Xtent model largely corroborated the other settlement pattern analyses which involved population and geographic distance. The Xtent arrangement which best encapsulated the districts involved an a constant of 0.4 and a k constant of 0.5. This was useful for delineating the Floral Park District which had a relatively low density of commoner settlement but large intermediate elite architecture. All these analyses were collectively employed to delineate districts at Lower Dover (Figure 6.9).

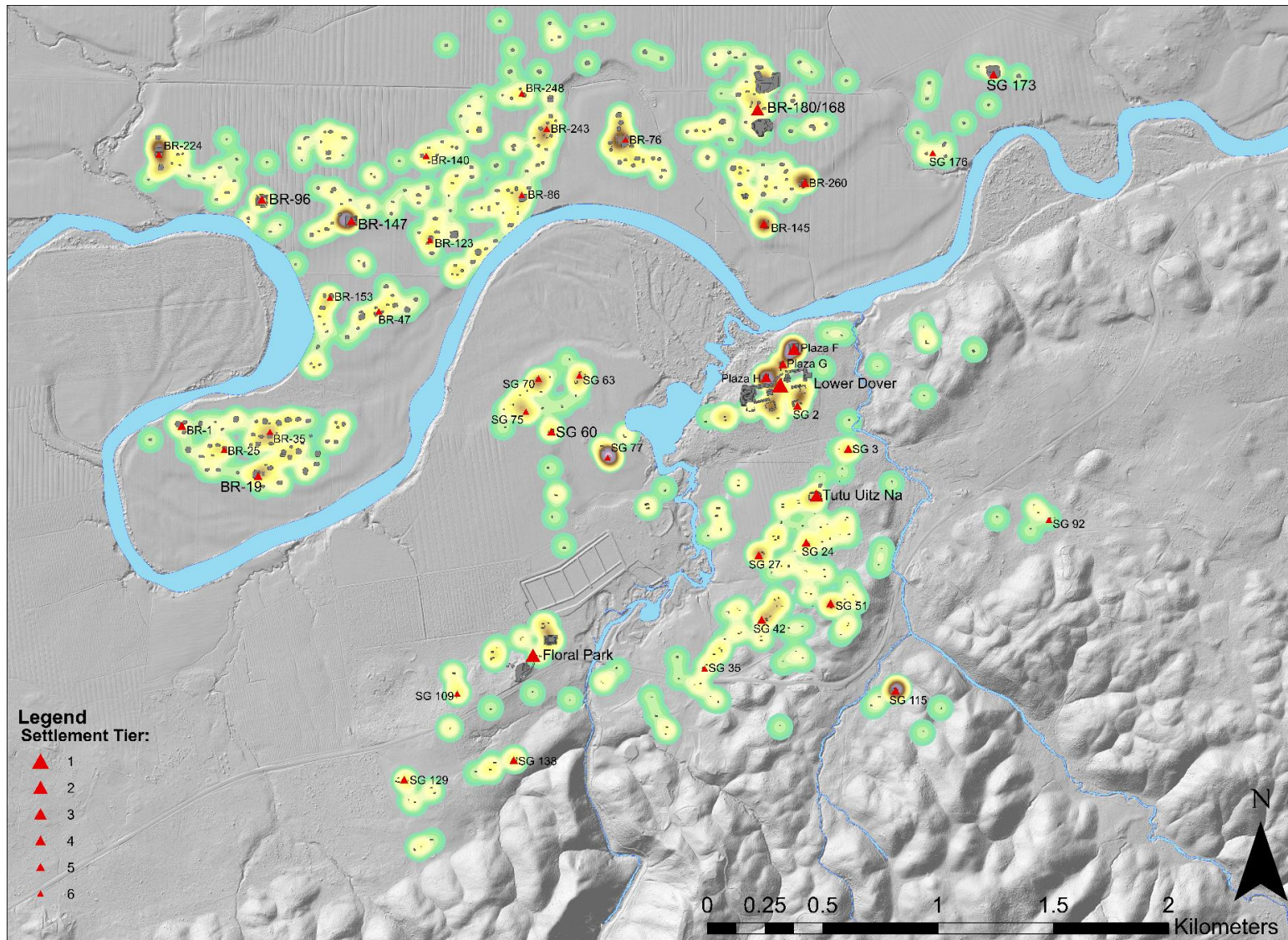


Figure 6.12 Kernel density map of Lower Dover neighborhoods

6.2.6 Spatial Approaches to Reconstructing Neighborhoods

Several of the approaches highlighted the existence of commoner neighborhoods, a smaller intermediate social unit between the household and the district. These neighborhoods were not readily apparent from visually eyeballing clustering but were particularly apparent when the Kernel Density buffer radius was set to 100 m instead of the 200 m used to delineate districts (Figure 6.12). These neighborhoods generally consisted of four to ten low/middle status commoner households clustered around a single high-status commoner household which represented the residence of a neighborhood head. The high-status commoner household generally had more structures (an average of four), larger patios (100-400 m²), and eastern mortuary shrines. Excavation data discussed below corroborated these surface patterns. Compared to other commoner households, high-status households had greater access to material wealth and also had higher proportions of ritual items and feasting-related paraphernalia. Overall, it appears that most neighborhoods had multiple (2-8) smaller neighborhoods nested within them. There are several neighborhoods that were not associated with a district. The architecture of the high-status commoner neighborhood heads showed similar, but downscaled forms of the types of integration evident among intermediate and apical elites (large patios and eastern shrines).

6.2.7 Districts and Neighborhoods

The district concept seemed applicable to the larger intra-polity clusters at Lower Dover as they are large co-residential units with clear focal nodes (intermediate elite households and reservoirs). The spatial clustering would have guaranteed high degrees of the types of face-to-face interaction considered fundamental to the district/neighborhood as a socio-residential unit. These units of around 100-300 people are fairly similar in scale to what has been referred to as districts at other Classic Maya polities (A.S.Z. Chase 2016a; Thompson, Meredith, and Prufer 2018). The district term is generally associated with top-down control on the part of the ruling power (M. Smith 2010), however, Smith notes that social districts exist which are more autonomous residential entities more akin to downscaled neighborhoods (see Hutson 2016). The use of social districts is apt at Lower Dover because the districts existed as autonomous villages before the rise

of the polity. Nested within these districts were multiple commoner neighborhoods. These neighborhoods are smaller in scale than neighborhoods at Caracol (A.S.Z. Chase 2016a), but are comparable to those at Uxbenká and Ix Kuku'il (Thompson, Meredith, and Prufer 2018). These units could have represented supra-kin groups or may have purely been co-residential in nature.

6.2.8 Ecology, Settlement Choice and the Ideal Free Distribution

There are numerous economic, social, and political reasons why settlement might form clusters like the districts at Lower Dover (Douglass 2002: 17; Dunning 2004; Green 1973). Logistic regression analysis was used to assess the importance of ecological variables in structuring settlement location. This involved comparison between the settlement locations and a set of randomly generated points. Slope was the most important variable in explaining settlement location (odds ratio: 1.086 estimate: 0.083, SE: 0.021, Z: 4.039, $p < 0.05$), followed by soil quality (odds ratio: 1.025 estimate: 0.021, SE: 0.006, Z: 3.285, $p < 0.001$), followed by distance to river (odds ratio: 1.001 estimate: 0.001, SE: 0.001, Z: 2.709, $p < 0.007$) and finally elevation (odds ratio: 0.6901 estimate: -0.369, SE: 0.197, Z: -1.874, $p < 0.061$). The importance of slope relates to an (unsurprising) preference for living on flat ground. A general preference for higher elevations is logical as some of the lowland areas are susceptible to flooding (A.F. Chase and Garber 2004: 3; Willey et al. 1965: 23). This suggests a preference for clustering that seems not to result purely from soil fertility, meaning that social factors could potentially be determining settlement clustering into social units like neighborhoods and districts. Furthermore, this could represent tentative evidence of commoners choosing to situate themselves near intermediate elite patrons.

The Ideal Free Distribution model was used to examine choices made about where to settle (see the outline in Chapter 5.2.13). Based on the logic of the Ideal Free Distribution, people would occupy all the top-ranked locales before moving into the second rank locales (based on the variables outlined above; see also Winterhalder et al. 2010; see Chapter 5.2.5). The settlement locales were ranked based on the variables outlined above and were then compared with the settlement patterns for each period. The households with an earlier component (Middle Preclassic-Late Preclassic) generally settled in the top-ranked locales conforming to the predictions of the model. In the Classic period, however, people simply settled in the second and third-ranked locales

as close to the pre-existing older households, despite there being plenty more top-ranked locales present in the general region. There are several reasons for this, none mutually exclusive. The pattern is probably best explained by a desire to live near family and friends. Indeed, most clustering occurs at the district level but also is found at the commoner neighborhood level. Secondly, people may have been prohibited from settling on relatively open arable land due to land tenure systems (see de Montmollin 1989b; LeCount et al. 2019). This seems logical for the floodplain north of Floral Park and around the Western District. Lastly, there may well have been a desire not to live in what are generally less densely inhabited buffer zones between polities. The important point is that application of the IFD at Lower Dover revealed that districts and neighborhoods reconstructed through my spatial analysis were not simply clustered around productive soils or preferable topographic spots, but were the product of a desire for social propinquity. This finding highlights the fact that there were tangible benefits at the household level for living in a district or neighborhood.

The initial Middle and Late Preclassic settlement groups in the Lower Dover area were unsurprisingly situated relatively close to the river (but not too close), on good soils for hand cultivation (Classes I and II), and at higher elevations that were less prone to flooding but not so steep as to make construction difficult. At the end of the Late Preclassic period, there was an abundance of good places left unoccupied as settlement density was simply not high enough to fill the landscape. This patterning of residences adhered to the expectations of the ideal free distribution. The Terminal Preclassic/Early Classic period saw both expansion into these previously unoccupied places, and increasing amounts of settlement clustering in less optimal places near established settlement. This latter trend means that by the Terminal Preclassic/Early Classic periods the settlement no longer adhered to the ideal free distribution. This trend continued in the Late Classic period, and distance to pre-existing settlement seems to be an important variable structuring settlement choice. In theory, the desire to live near people might result from the Allee effect as these habitats become more desirable as more people settle (Allee et al. 1949). The role of founding households was probably important in this regard because architecturally they show evidence of integrative ceremonial facilities like plazas and mortuary shrines. That said, these habitats might become increasingly suitable because the pre-existing population ensured increased security and the pooling of labor reducing strenuous work costs. These findings are generally

consistent with the idea that as demography increased in the region, people began farming increasingly marginal and more difficult soils (Fedick 1992). These trends corroborate patterns observed by Fedick (1996: 122) who noted that Class II lands have the greatest settlement densities, but that sites on Class I lands have greater architectural labor investment (based on Arnold and Ford 1980).

The results deviated from expectations of the IDF because at no point in the entire trajectory were all the rank 1 habitats occupied. This suggests that settlement choice was not structured by ecological variables alone. Hypothetically some of the rank 1 habitats were not occupied as they formed larger unoccupied political buffer zones (Driver and Garber 2004), Blackman Eddy was located to the east of the area which later became Lower Dover, and Baking Pot was to the west. In theory, the settlement clustering apparent in the IFD could be considered suggestive of the various polities pursuing acrimonious relations which dissuaded people from living in the borderlands situated equidistantly between polity capitals. This might explain the paucity of settlement on otherwise productive and highly suitable land to the west of Lower Dover, and might also partly explain the lack of habitation in less suitable but still viable land to the east.

6.2.9 The Districts and Neighborhoods of Late Classic Lower Dover

Spatial analysis divided settlement into ten clusters. Seven of these clusters represent districts: Floral Park, Lower Dover, Middle River, Northeast, Oxbow, Texas, Tutu Uitz Na, and Western. Only three of these clusters represent outlying neighborhoods, these being the Island, Northeast, and Southeast neighborhoods. Floral Park, Tutu Uitz Na, and Texas are employed as the analytical sub-units in this dissertation and are discussed in much more detail below. The other districts and non-district neighborhoods are briefly discussed (see Table 6.6).

Table 6.6 The Number of Settlement Groups in each District.

| <i>District/Neighborhood</i> | <i>SG#</i> | <i>Commoner Households#</i> | <i>Focal Nodes</i> |
|------------------------------|------------|-----------------------------|--------------------|
| Floral Park District | 35 | 32 | 3 |
| Island Neighborhood | 20 | 19 | 1 |
| Lower Dover District | 16 | 9 | 7 |
| Middle River District | 146 | 144 | 2 |
| Northeast Neighborhood | 11 | 10 | 1 |
| Oxbow District | 51 | 49 | 2 |
| Southeast Neighborhood | 5 | 4 | 1 |
| Texas District | 54 | 50 | 4 |
| Tutu Uitz Na District | 46 | 45 | 1 |
| Western District | 22 | 21 | 1 |
| Total (Districts) | 406 | 383 | 23 |
| Total | 446 | 423 | 0 |

Four districts and a single outlying neighborhood are situated on the southern bank of the Belize River, the largest two being Tutu Uitz Na and Floral Park. A third smaller district is situated around the civic-ceremonial epicenter of Lower Dover. This district comprises the aulic elite plaza groups adjacent to the civic-ceremonial center (Plaza G, Plaza H, Plaza F, and SG 2) and some small commoner dwellings. The population of this district is difficult to calculate because it involves assigning population estimates to civic-ceremonial architecture in the Lower Dover core. The royal court could have housed around 20-30 royals and nobles, with 20-30 retainers, this equates with the figure Restall (2001: 364) estimates for similarly sized Postclassic courts in the Yucatan (see also Martin 2001). The rest of the district housed 120 people based on the conventional method outlined in Chapter 5, suggesting a district population of around 200 people. This epicentral district is surrounded by a 500 m uninhabited buffer zone. This is surprising as even in low-density/dispersed urban contexts there is generally some degree of nucleation around the political center. The unoccupied buffer zone appears to have been a product of incoming migrants situating themselves in the districts (see section 6.1.8). It seems plausible that this buffer zone might have represented farmland.

The Western district is a small cluster of relatively wealthy commoner dwellings situated around SG 60. This settlement group was probably a sizeable high-status commoner (Group 5) or even a small intermediate elite center (Group 4) but is now unintelligible because of heavy plowing. Generally, the mounds in this cluster are larger and show greater evidence of both Preclassic and Postclassic occupations than surrounding districts. The size and developmental trajectory of these households resembles Barton Ramie. Similarities between the Western District and Barton Ramie also extend to settlement location. The Western District settlement groups were located on the upper alluvial river terraces, leaving the lower terraces devoid of occupation like at Barton Ramie (Willey et al. 1965: 31).

A small outlying neighborhood is apparent on the south-eastern flank of the Lower Dover polity. This neighborhood is situated around SG 115, a large high-status commoner settlement group. Two smaller loose clusters of outlying residences exist to the northeast around SG 92, a sizeable single platform, and in the hills to the immediate east of the Lower Dover civic-ceremonial center. The entire hillside shows dramatic evidence of quarrying, the most parsimonious explanation is that most of the limestone for the civic-ceremonial center was extracted here and then carried across Lower Barton Creek. SG 95, a large solitary 3 m high platform sits on the eastern edge of this loose swathe of settlement and overlooks the valley to the south. Settlement density is very low in the eastern and southern areas (15-20 people per km²). In time, these neighborhoods might hypothetically have developed into larger aggregates like the districts nearby (McAnany 1995: 125).

The arbitrary settlement clusters of Barton Ramie were never intended to reflect community organization (Willey et al. 1965: 31; see also Yaeger 2003a: 49). Barton Ramie was split into three districts based on the spatial analyses; Middle River, Texas, and Oxbow. Two smaller neighborhoods were included; the Island Neighborhood, and a newly surveyed cluster, the Northeast Neighborhood, immediately east of the Texas District. Most of the reconstructed districts contain a single high-status commoner (tier 5) focal node at its epicenter (Weller 2009: 310). The spatial analyses effectively lumped several of Willey and colleagues' arbitrary clusters into a single district. The Middle North, Estate, Benchmark, Airstrip, Northwest, and Middle River areas all cluster into a single large Middle River district. The only real focal nodes associated with this district are BR-147, which represents a very high-status commoner residence (Tier 5) with an

eastern mortuary structure, and BR-96, which was probably the center of a separate district (the Northwestern District) which merged with the large Middle River District over time (Weller 2009: 129). The Texas District remained largely unchanged from Willey and colleagues' (1965) original designation, although several additional households which lay beyond the original survey boundary were added (see below for details; see also Weller 2009: 315, Fig. 5.34). The Oxbow District and Island Neighborhood remained as the original clusters outlined (Willey et al. 1965). Each of these seemingly has a Tier 5 high-status commoner district head household respectively situated at BR-19 and BR-75 (Weller 2009: 355). A sixth neighborhood was identified outside of the original Barton Ramie settlement boundary to the east (see Weller 2009: 315, Fig. 5.34). This cluster was situated around the high-status commoner residence of SG 173. In keeping with the original terminology this was named the Northeast Neighborhood. Each of the Barton Ramie districts contains multiple neighborhoods which corroborate Weller's (2009: 310) spatial analysis. At least some of the clustering associated with these districts and neighborhoods is due to a desire not to be situated on prohibitive terrain (Willey et al. 1965: 34).

The high-status commoner district heads, situated at BR-19, BR-96, BR-147, SG 60, SG 173, form units commonly referred to as "plazuelas"; these all fit into the regional typology as tier 5 high-status commoners (Walden et al. 2019). Willey and colleagues (1965: 572) investigated BR-19, BR-96, BR-147 and exposed early components dating to the Floral Park phase, but suggested that these groups only took on their final plazuela form during extensive remodeling in the Late Classic periods when clear construction episodes become evident (see Yaeger 2003a: 53). If this developmental trajectory is correct then the emergence of these households as district heads occurred in tandem with the rise of Lower Dover. Little can be said about whether this reflects top-down processes exerted by the emergent Lower Dover ruling elite, or more bottom-up processes at the district and neighborhood levels. Today, BR-19, BR-96, BR-147, along with SG 60 in the Western District and SG 173 in the Northeast Neighborhood, are a shadow of what they were. Repeated plowing has gradually shaved meters of construction from the tops of the settlement groups and exposed earlier materials. Currently, a slew of ceramics dating from the Jenney Creek to New Town phases are apparent on the surface of all these settlement groups. The sheer volume of Preclassic materials suggests all were occupied earlier than previously thought.

6.2.10 Polity and District Population and Demography

The population of the Lower Dover area is shown in Figure 6.13. These population estimates are based on full coverage survey for the Late Classic period and a mixture of full-coverage settlement survey and excavation for earlier time periods (see Chapter 5.1). Temporal assignments to settlement groups were based on surface ceramics for most households, but were fine-tuned using excavation data from the 20% sample of excavated households and ceramic analysis of plowed settlement groups. Generally, the rate of population increase corroborates the findings of Willey and colleagues (1965) at Barton Ramie. The Lower Dover area shows population stasis for the Middle to Late Preclassic periods and then a major rise in the Terminal Preclassic and Early Classic periods. Willey and colleagues (1965: 281) attributed this to the Terminal Preclassic (Floral Park phase) but radiocarbon dating and ceramic analysis associated with this dissertation have problematized the division of these two phases (see Chapter 5.4.1 and 5.4.2). Given the nature of mixed residential assemblages at Barton Ramie, and based on current knowledge of the Terminal Preclassic ceramics (following Lincoln 1985), it seems highly likely that the major population increase at Barton Ramie began in the Terminal Preclassic but lapsed over into the Early Classic period. Interestingly, this pattern suggests mass influx of people into the region prior to the rise of the Late Classic polity.

The general pattern of population increase apparent across the Lower Dover area is corroborated by the patterns at the district level (see Figure 6.14). The district-level population estimates are derived from the total population calculated for each district based on house counts, from the survey with a 20% population reduction (as outlined in Chapter 5.2.2). Understanding temporal patterns in Classic Maya settlement data is notoriously difficult due to a propensity to overbuild.

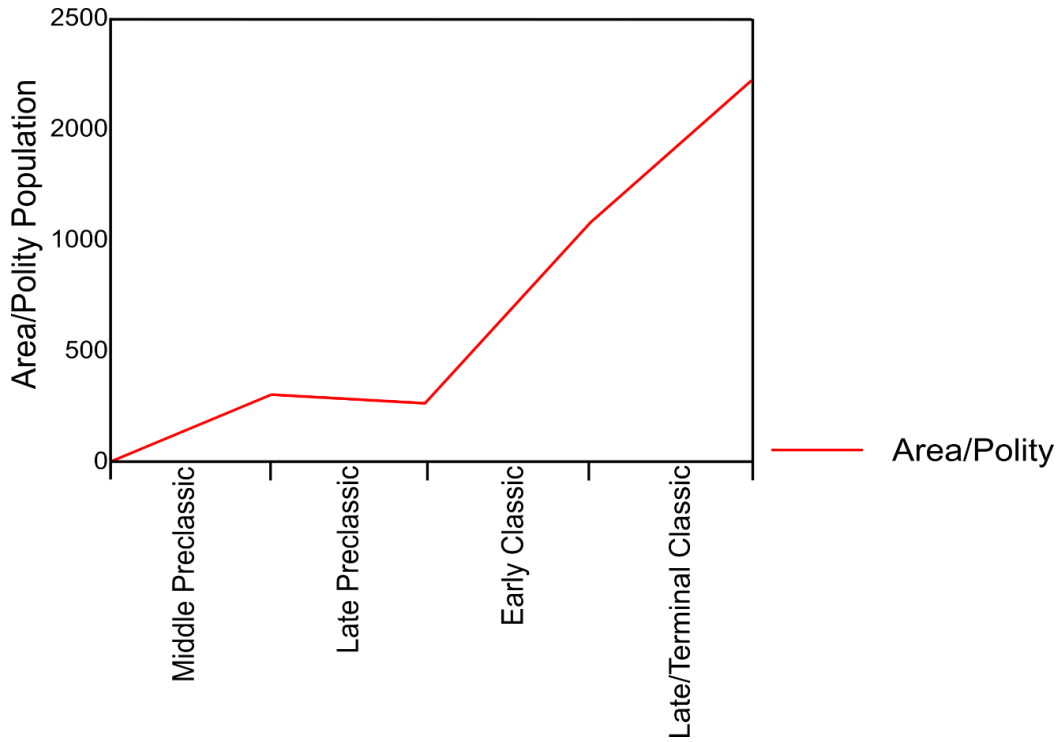


Figure 6.13 Line graph showing the population of the Lower Dover area

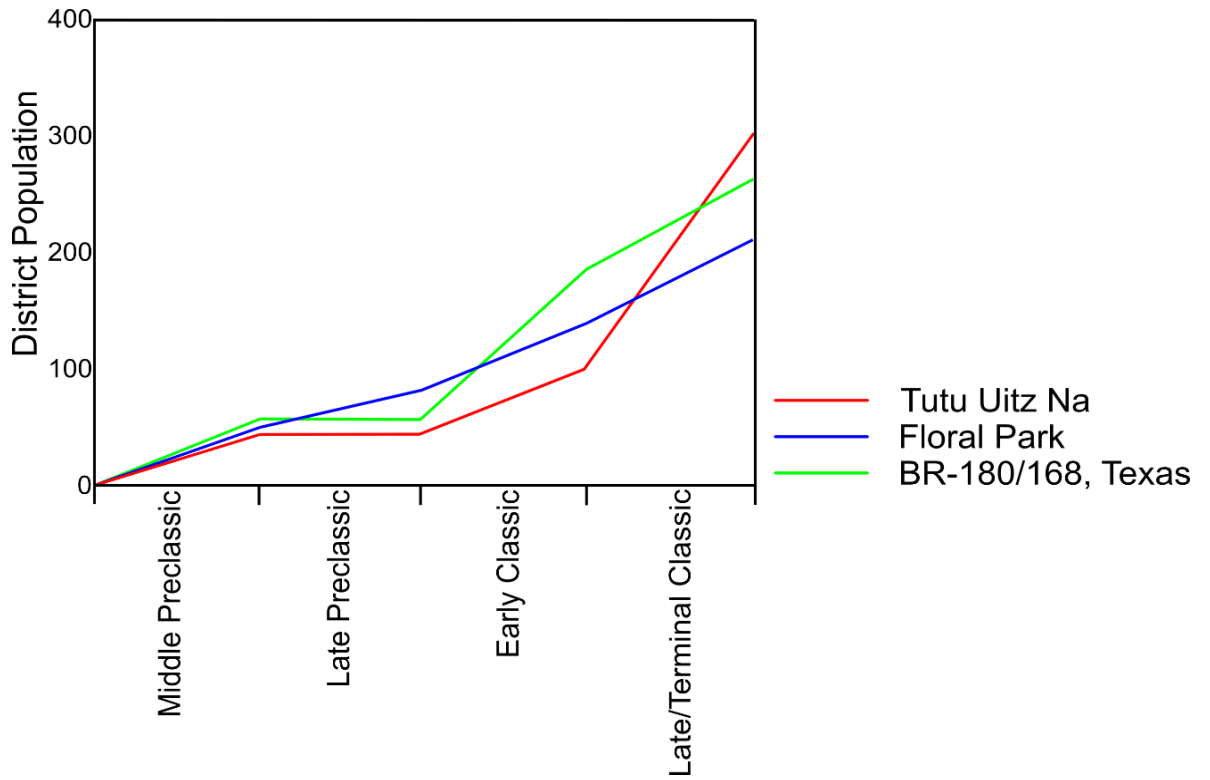


Figure 6.14 Line graph showing the population of the Lower Dover districts

Table 6.7 Occupied Contexts Based on the Proportions of Excavated Sites.

| <i>Context</i> | <i>Period</i> | <i>Estimated Occupied</i> | <i>Excavated Sampled</i> | <i>Occupations (excavation)</i> | <i>Population (20% Reduction)</i> |
|----------------|-------------------|---------------------------|--------------------------|---------------------------------|-----------------------------------|
| Polity | Late Classic | 446 | 96 | 96 | 2400 |
| | Early Classic | 278 | 96 | 60 | 1500 |
| | Late Preclassic | 92 | 96 | 20 | 500 |
| | Middle Preclassic | 102 | 96 | 22 | 550 |
| Barton Ramie | Late Classic | 262 | 65 | 65 | 1300 |
| | Early Classic | 201 | 65 | 50 | 1000 |
| | Late Preclassic | 60 | 65 | 15 | 770 |
| | Middle Preclassic | 72 | 65 | 18 | 600 |
| Texas | Late Classic | 54 | 9 | 9 | 240 |
| | Early Classic | 42 | 9 | 7 | 185 |
| | Late Preclassic | 12 | 9 | 2 | 55 |
| | Middle Preclassic | 12 | 9 | 2 | 55 |
| Tutu Uitz Na | Late Classic | 46 | 15 | 15 | 300 |
| | Early Classic | 15 | 15 | 5 | 100 |
| | Late Preclassic | 6 | 15 | 2 | 40 |
| | Middle Preclassic | 6 | 15 | 2 | 40 |
| Floral Park | Late Classic | 35 | 8 | 8 | 200 |
| | Early Classic | 21 | 8 | 5 | 125 |
| | Late Preclassic | 13 | 8 | 3 | 75 |
| | Middle Preclassic | 8 | 8 | 2 | 50 |

Table 6.8 Occupations Based on Surface Ceramics and Excavated Sites.

| <i>Context</i> | <i>Period</i> | <i>Excavated sample</i> | <i>Occupations (excavation)</i> | <i>%</i> | <i>Surveyed</i> | <i>Surface Ceramics</i> | <i>%</i> |
|----------------|-------------------|-------------------------|---------------------------------|----------|-----------------|-------------------------|----------|
| Tutu Uitz Na | Late Classic | 15 | 15 | 100 | 46 | 46 | 100 |
| | Early Classic | 15 | 5 | 33 | 46 | 14 | 30 |
| | Late Preclassic | 15 | 2 | 13 | 46 | 7 | 15 |
| | Middle Preclassic | 15 | 2 | 13 | 46 | 2 | 4 |
| Floral Park | Late Classic | 8 | 8 | 100 | 35 | 35 | 100 |
| | Early Classic | 8 | 5 | 62 | 35 | 17 | 48 |
| | Late Preclassic | 8 | 3 | 37 | 35 | 12 | 34 |
| | Middle Preclassic | 8 | 2 | 25 | 35 | 1 | 2 |

Table 6.9 Excavated Households Showing Occupation and Construction.

| <i>District(s)</i> | <i>Ceramic Phase</i> | <i>Occupied Households</i> | <i>Groups Occupied (%)</i> | <i>Construction Phases</i> | <i>Construction Phases (%)</i> |
|--------------------|----------------------|----------------------------|----------------------------|----------------------------|--------------------------------|
| Tutu Uitz Na | New Town | 1 | 7 | 0 | 0 |
| | Spanish Lookout | 15 | 100 | 15 | 100 |
| | Tiger Run | 15 | 100 | 15 | 100 |
| | Hermitage | 5 | 33 | 5 | 33 |
| | Floral Park | 5 | 33 | 5 | 33 |
| | Mount Hope | 5 | 33 | 5 | 33 |
| | Barton Creek | 2 | 13 | 2 | 13 |
| | Jenney Creek | 2 | 13 | 2 | 13 |
| Floral Park | New Town | 0 | 0 | 0 | 0 |
| | Spanish Lookout | 8 | 100 | 8 | 100 |
| | Tiger Run | 8 | 100 | 8 | 100 |
| | Hermitage | 5 | 63 | 5 | 63 |
| | Floral Park | 5 | 63 | 5 | 63 |
| | Mount Hope | 5 | 63 | 5 | 63 |
| | Barton Creek | 5 | 63 | 5 | 63 |
| | Jenney Creek | 2 | 25 | 2 | 25 |
| Barton Ramie | New Town | 62 | 95 | 53 | 82 |
| | Spanish Lookout | 65 | 100 | 65 | 100 |
| | Tiger Run | 55 | 85 | 50 | 77 |
| | Hermitage | 50 | 77 | 30 | 46 |
| | Floral Park | 50 | 77 | 29 | 45 |
| | Mount Hope | 24 | 37 | 5 | 8 |
| | Barton Creek | 15 | 23 | 4 | 6 |
| | Jenney Creek | 18 | 28 | 3 | 5 |

Two different approaches were used to understand the relative populations in different time periods: **1)** analysis of ceramics on the ground surface around each settlement group, **2)** calculating the proportion of excavated households in each district based on stratigraphic excavation, ceramic and radiocarbon analysis (see Chapter 5.2, 5.4.1, and 5.4.2). A basic breakdown of the occupations based on survey and excavation data is presented in Tables 6.7, 6.8, and 6.9. Table 6.9 shows the counts and proportions of excavated household with evidence of occupation (ceramic materials) and construction (building phases dating to a specific period). Surprisingly, the two methods revealed fairly similar results for the Tutu Uitz Na and Floral Park districts for most periods. The

most problematic period was the Middle Preclassic period because surface ceramics underrepresented occupations that were detected through excavations.

Figure 6.14 shows variable rates of population growth and decline across the different districts. Most districts show little growth during the Middle and Late Preclassic periods (corroborating polity-wide patterns at this time). The Terminal Preclassic and Early Classic periods saw fairly substantial increases across all three districts, but this was most apparent in the Texas District. The Late Classic period saw variable rates of population increase across the three districts, Tutu Uitz Na saw a dramatic increase in population, whereas Floral Park only saw a slight increase, and Texas saw a leveling off of population. Despite being the least populous district from the Middle Preclassic to the Early Classic period, the Tutu Uitz Na District shows a dramatic Late Classic population increase, becoming the largest district. The Floral Park District shows the opposite pattern and goes from being the largest Preclassic district to the smallest Late Classic district. The Texas District follows a different trajectory, starting as the most populous in the Middle Preclassic period, but then undergoing a population decline in the Late Preclassic, and then increasing in the Early Classic, before slowing in the Late Classic.

The results of the demographic modeling at the polity and district scales are shown in Table 6.10. This is based on the approach outlined in Chapter 5.2.15 and evaluates the degree to which the population increase deviates from an expected internal population increase of 0.1% per year based on data from Kaminaljuyu (see Hassan 1978: 68-69; Sanders 1974; see also Chapter 5.2.15.). While this figure is largely experimental it does provide a uniform figure from which to extrapolate variability in demographic growth at each district, all other things being equal. The results of this analysis have limited interpretive potential, but some concern is assuaged by the fact that most of the predicted numbers are close to the expected values. The results also corroborate Willey and colleagues' (1965) argument that the Terminal Preclassic period saw the greatest population increase. The Texas and Floral Park Districts saw Late Classic population increases which fell under the expected range and suggest stasis. Tutu Uitz Na however saw some in-migration or, less plausibly, an increased internal birth rate in the Late Classic period (see Chapter 7.4 for the implications of these findings).

Table 6.10 Polity and District Populations Compared to Expected Populations

| <i>Context</i> | <i>Period</i> | <i>Population</i> | <i>Expected Population (0.1% per year)</i> | <i>Interpretation</i> |
|----------------|-----------------------|-------------------|--|-----------------------|
| Polity | Late/Terminal Classic | 2400 | 2240 | In-migration |
| | Early Classic | 1500 | 745 | Heavy in-migration |
| | Late Preclassic | 500 | 905 | Out-migration |
| | Middle Preclassic | 550 | N/A | N/A |
| Tutu Uitz Na | Late/Terminal Classic | 300 | 150 | Heavy in-migration |
| | Early Classic | 100 | 60 | Some in-migration |
| | Late Preclassic | 40 | 65 | Stasis |
| | Middle Preclassic | 40 | N/A | N/A |
| Floral Park | Late/Terminal Classic | 200 | 185 | Stasis |
| | Early Classic | 125 | 110 | Stasis |
| | Late Preclassic | 75 | 80 | Stasis |
| | Middle Preclassic | 50 | N/A | N/A |
| Texas | Late/Terminal Classic | 240 | 280 | Some out-migration |
| | Early Classic | 185 | 80 | Some in-migration |
| | Late Preclassic | 55 | 90 | Out-migration |
| | Middle Preclassic | 55 | N/A | N/A |

6.2.11 The Lower Dover Area in the Preclassic and Early Classic

It would seem that prior to the rise of Lower Dover, the three local elites and their respective districts formed quasi-autonomous villages situated between the Baking Pot and Blackman Eddy polities. Lower-level entities not associated with a polity have not received that much archaeological attention in the Maya lowlands. A possible comparable example might be the Rio Bec sites (Arnauld et al. 2012), although these seem to have been functioning as some type of larger political entity in a manner that seems unlikely in the Lower Dover area. There is evidence for an intermediate elite lineage at Tutu Uitz Na and BR-180/168 by the Late Preclassic period, as indicated by both the presence of elite burials in eastern shrine structures and the presence of elite residential architecture. Evidence of an intermediate elite lineage is less clear at Floral Park until the Late Classic period, although this lack of evidence is almost certainly the result of sampling issues. The structures which later functioned as residences at Tutu Uitz Na and BR-168 both had

Middle Preclassic components meaning that the existence of earlier elites at these centers is likely in the Middle Preclassic period (J. Doyle 2017: 66). That said, elsewhere in the Maya lowlands, there is evidence for the construction of early communal structures and the emergence of actual elites later (Inomata et al. 2017a). Generally, the intermediate elite population of the Early Classic Lower Dover area, prior to the rise of the polity represented about 2% of the population. By the late Classic this rose to roughly 4% of the total populace. It seems unlikely that the intermediate elites represented a middle class (see Webster 1985: 385).

6.2.12 Lower Dover as a Disembedded Capital

In addition to likely representing a type of disembedded capital (Blanton 1976; Santley 1980; Willey 1979), Lower Dover was demographically disembedded (Petrozza 2014: 199). The lack of commoner settlement clustering around Lower Dover is reminiscent of the Xunantunich political capital, which likewise did not exert much in the way of a centripetal force on demography (Yaeger 2003b: 127; 2010b: 236). The general settlement pattern strongly suggests a center placed top-down in the middle of multiple competing intermediate elites. Viewshed analysis revealed the Lower Dover polity capital represented a panopticon with clear lines of sight to each of the surrounding minor centers (Messinger, Walden, and Besaw 2020; see also Golden and Scherer 2013: 408–414; LeCount and Yaeger 2010d: 351; Robin 2012c: 322; Scherer and Golden 2009). It would seem that even during the latter stages of the sustainable swidden cycle when fields were left fallow for some time it was probably possible to see the pyramids at Floral Park and BR-180 from the top of the apical elite palace at Lower Dover. Interestingly, given the clear forest scenario, it would seem that the only major center Lower Dover could not see was Blackman Eddy. This might suggest that the center did not constitute a threat and could indicate some type of alliance. Equally this lack of clear sightlines could be the result of happenstance, given the undulating terrain in this part of the central Belize River Valley.

6.3 The Tutu Uitz Na District

A sizeable cluster of settlement is focused around the Tutu Uitz Na elite household and extends to the south (Figure 6.15). The district covers .3 km² of residential clustering and around .5 km² if extended house lots and associated fields are included, with a Late Classic population of 300 people (~600 people per km²). The district was named after the minor center at its heart, Tutu Uitz Na. Within this district are five discernable commoner neighborhoods based around high-status neighborhood heads at SG 3, SG 24, SG 26/27, SG 42, and SG 51. The commoner households situated in the district were relatively affluent throughout the trajectory (see Chapter 7). The six sampled commoner households in the Tutu Uitz Na District included Mamna (SG 3), Pechna (SG 9), Acbalamna (SG 11), Tokna (SG 28), Mamjuchtun (SG 42), and Ikilna (SG 51).

Estimating populations for the Middle to Late Preclassic period is problematic, but the district was likely very small at this time (~40 people). By the end of the Early Classic period, the district grew to ~100 people. Population increased dramatically to ~300 people by the end of the Terminal Classic period. Based on the 0.1% growth estimate outlined in Chapter 5, the population could have grown to an estimated ~150 people by the end of the Terminal Classic, although the actual population estimate for this time is ~300. This suggests an influx of migrants during this period. Some of this in-migration may have been ‘residential mobility’ within the Lower Dover polity (following Cadwallader 1992: 4). Late Classic migrants into the polity did not end up in the immediate vicinity of the civic-ceremonial center or epicentral district, but in pre-existing districts like Tutu Uitz Na. This settlement trend partly corroborates patterns at Xunantunich, where the founding of the Late Classic polity seemingly exerted little centripetal force on demography. Most incoming migrants settled in long-established districts headed by intermediate elites, with little apparent effort on the part of the state to coercively resettle people (LeCount and Yaeger 2010d: 356; Robin 2012c: 322). The Tutu Uitz Na District is situated on relatively good soils for hand cultivation, the upland zone of densest habitation is situated on thin Rendzina class soils but these are well-drained and form Class II soils. The majority of the commoner households were situated on lower-lying lands adjacent to Lower and Upper Barton Creeks which comprise Chromic Vertisols. These form Class III soils as they were less well-drained and potentially quite swampy in antiquity.

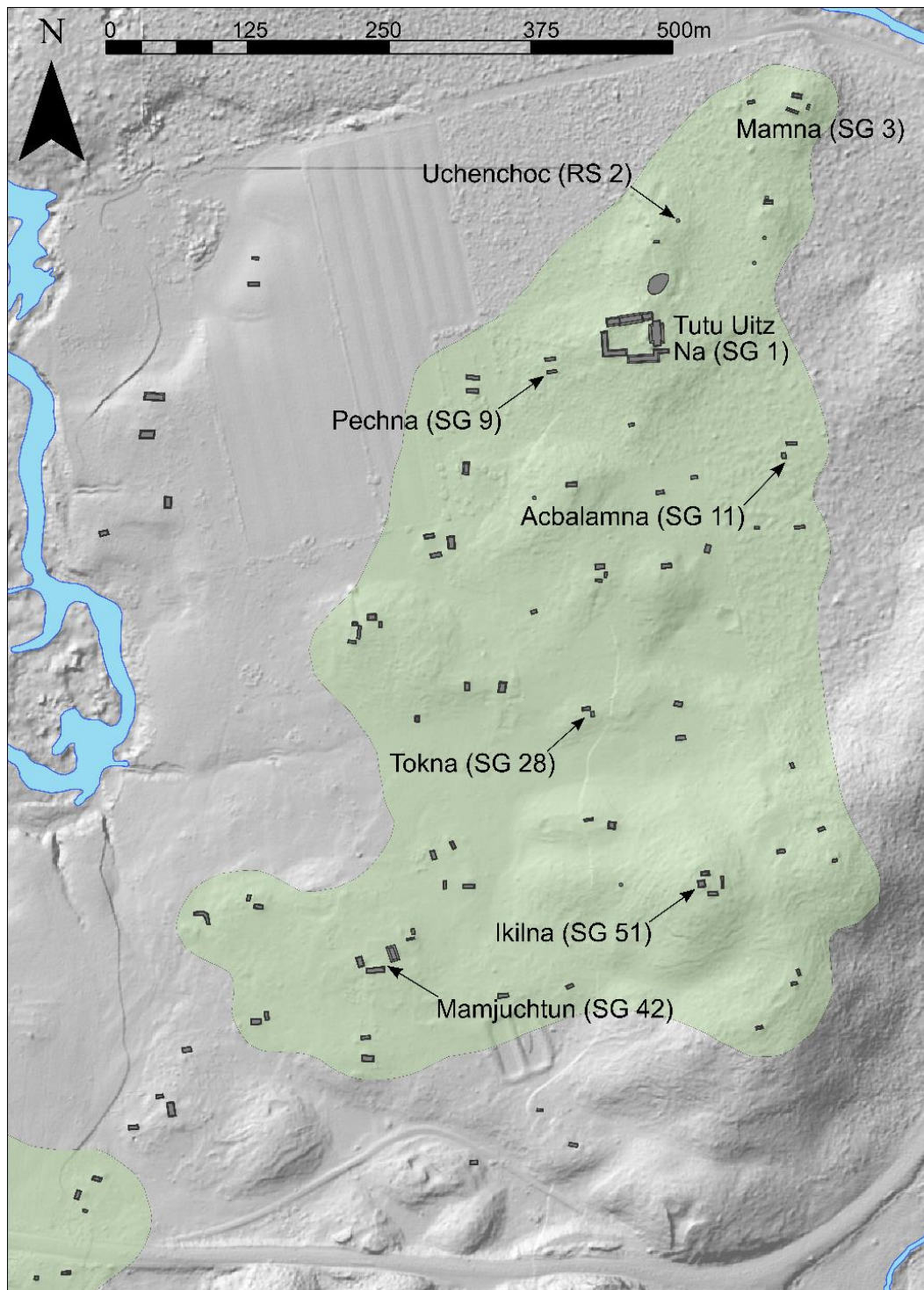


Figure 6.15 Map of the Tutu Uitz Na District

The Tutu Uitz Na center, rockshelter and excavated commoner settlement groups are shown

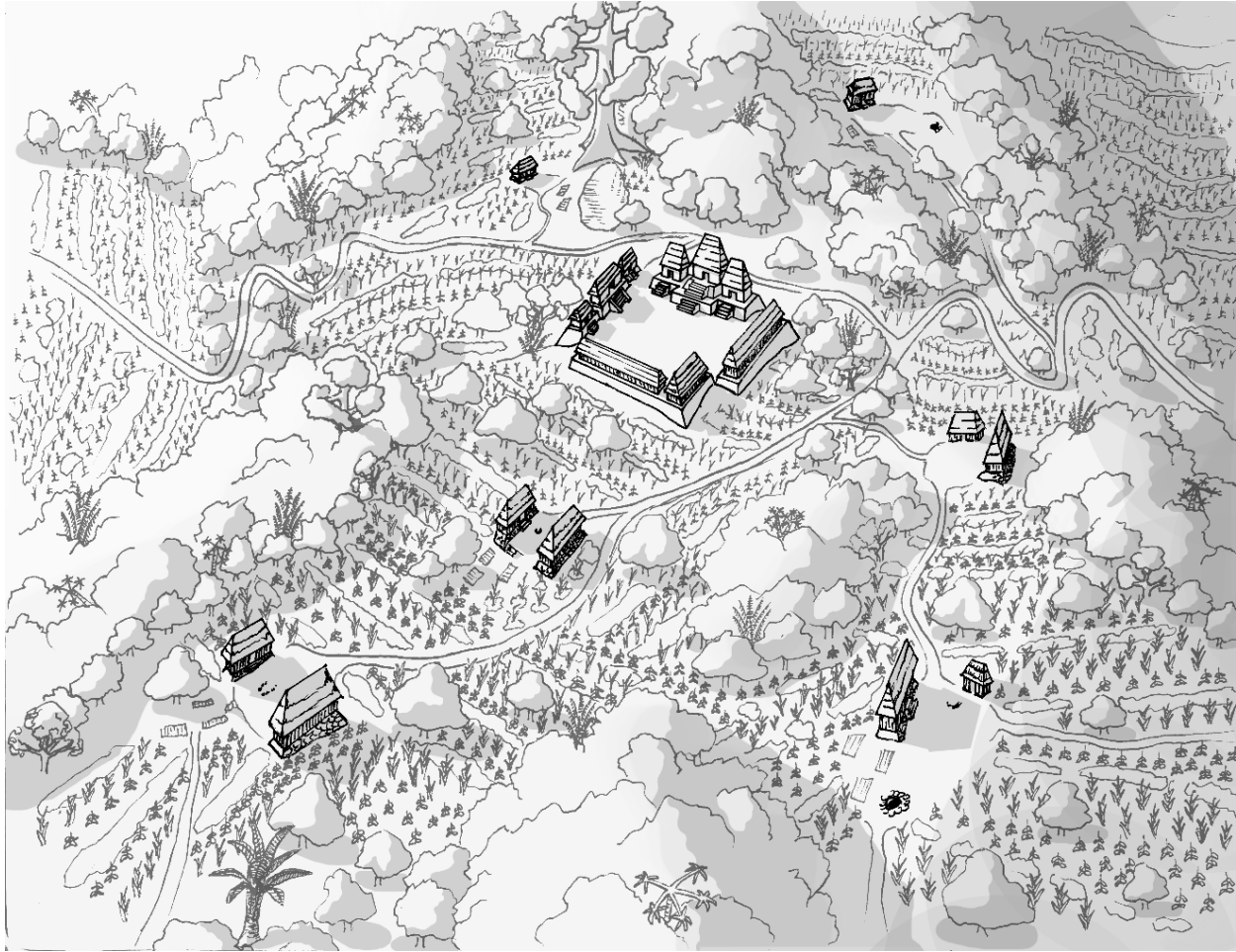


Figure 6.16 Illustration of the Tutu Uitz Na center

Illustration by Kyle Shaw-Müller (adapted from Walden et al. 2020a: Fig.3c)

6.3.1 The Tutu Uitz Na Minor Center

The minor center of Tutu Uitz Na was first recorded as Plaza F by Wölfel and colleagues (2009: 23-26; Fig. 5). It was subsequently renamed LWD Group/Plaza 1 by Petrozza (2014), before being renamed again as SG 1, to fall in line with established BVAR settlement nomenclature. The minor center is sited atop a hill (65 masl), situated 600 m south of the Lower Dover center. The minor center comprises four main structures (with a combined architectural volume of 3726 m³) around a large central plaza (of 702 m²). At 3.20 m high, the northern residential range structure (Structure. N1) is the largest structure at the center, followed closely by the eastern triadic structure (Structure E2) which is 3 m high. Tutu Uitz Na is a textbook example

of Walden and colleagues' (2019a) Tier 3 middle-sized minor center, in that it has an eastern triadic structure, an inaccessible central plaza, and a high surrounding commoner density (see Figure 6.16). The center was heavily looted. Two large looters' trenches run east/west through the eastern triadic structure (see Figure 6.17), while a single large trench runs north/south through the northern range structure.



Figure 6.17 Photograph of the Tutu Uitz Na eastern triadic structure

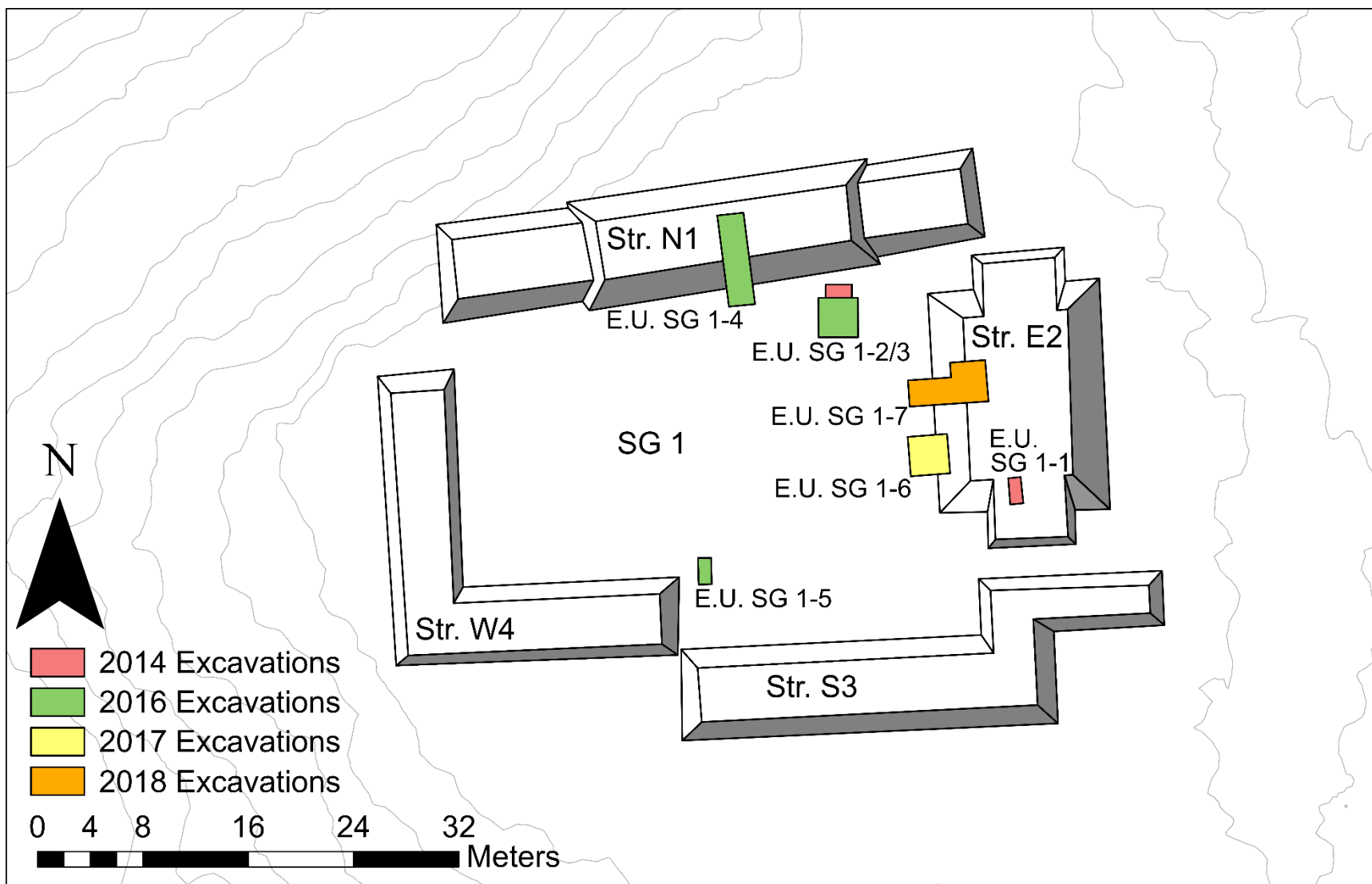


Figure 6.18 Map showing the locations of E.U.s SG1-1 to SG1-9 at Tutu Uitz Na (SG 1)

Initial excavations at Tutu Uitz Na involved the cleaning and profiling of looters' trenches (Petrozza 2014, 2015; Petrozza and Biggie 2015; Wölfel et al. 2009). A series of excavations were undertaken (Petrozza 2014, 2015; Petrozza and Biggie 2015; Walden and Biggie 2017), and a single trench was placed through both Str. N1 (Walden and Biggie 2017), and Str. E2 (Biggie et al. 2019; Walden et al. 2018). These excavations revealed construction sequences dating from the Middle Preclassic to the Terminal Classic periods. Excavations on Str. E2 revealed seven elite inhumations dating from the Late Preclassic through to the Terminal Classic periods. Walden et al. (2020a) included Tutu Uitz Na in their analysis of accessibility among different settlement groups at Lower Dover (see the overview of methods in Chapter 5). The Tutu Uitz Na plaza was one of the most spatially restricted compounds in the Lower Dover polity in terms of accessibility (see also Chapter 9.1.3.2.). A glance at the plan reveals an uncommon “dog-leg” at the point at which the southern structure (Str. S3) articulates with the western structure (Str. W4; see Figure 16.8). This dogleg resulted from Late Classic renovations to increase plaza capacity to include a growing district populace and to accommodate the southern wing of the eastern triadic structure (Str. E2).

A sizeable (20x14 m) reservoir lies 10 m to the north of Tutu Uitz Na. This probably started life as a borrow pit from which limestone was extracted for the construction of the monumental architecture. The term reservoir is used as this was a man-made feature, not a modified natural feature (see A.S.Z. Chase 2016: 885). Lucero (1999) has argued water management was important to political power and authority in the Classic Maya lowlands (see also Scarborough and Lucero 2010). Only one aguada is associated with the Lower Dover center, and no smaller ponds are evident in association with commoner households like at Caracol (A.S.Z. Chase 2016b). The only reservoirs apparent in the hinterland of the polity are associated with Tutu Uitz Na and Floral Park (see also Chapter 6.4.1). This association suggests that some degree of water control existed at the intermediate elite level. The political implications of this are difficult to ascertain however, because unlike other areas of the Maya lowlands (A.S.Z. Chase 2016b; Ferrand et al. 2012), sources of flowing water were abundant at the Lower Dover polity, undercutting the water control argument. The possibility that these districts formed units akin to waterhole groups (Vogt 1969: 24-25; see also Davis-Salazar 2003) is unlikely because these smaller reservoirs could not have provided sufficient water for the entire district, and because the creeks and rivers were much closer

to many households within the districts than the intermediate elite reservoirs. An archaeoastronomical analysis of the alignment of the different components of the Tutu Uitz Na eastern triadic structure has Eastern-Central-Azimuths between 83 and 96 degrees, suggesting at least tentatively that this structure functioned in a similar way to a true Preclassic E group. This would mean that observers standing in the plaza could watch the sunrise over the northern wing of the eastern triadic during the summer solstice, the central component on the spring and autumn equinox, and the southern wing on the winter solstice (see Chapter 9.2.3). The solar alignments may have conferred increased importance to the ceremonies staged within the compound and augmented the ceremonial authority of the Tutu Uitz Na intermediate elite.

6.3.1.1 The Tutu Uitz Na Plaza

Petrozza and Biggie (2015) excavated a formal unit in the plaza (E.U. SG1-1; see Figure 6.18), uncovering a thick layer of freshwater *jute* snails and other freshwater species such as apple snail, and river clam (see Figure 6.19a and b). These freshwater species were intermixed with 143 conch shell beads (Strombidae) at various stages of the production sequence and Middle Preclassic (Jenney Creek phase) ceramics including Jocote Orange Brown and Savana Orange. Walden and Biggie (2017: 241-245) placed a new, 3x3 m unit (E.U. SG1-3; see Figures 6.20 and 6.21) adjacent to the 2014 unit to sample more of the *jute* deposit. This unit, in addition to the plaza unit SG 1-E.U. 5, and units on Structures N1 and E2 described later, yielded a staggering 94,000 *jute* and revealed that the deposit extended under the structures and probably across the entire plaza. If this was indeed the case then, based on the densities identified the deposit could contain around 20 million *jute* (Biggie et al. 2018; Petrozza 2015; Walden and Biggie 2017). Puncturing and “spire-logging” are two ways of extracting *jute* from the shell for consumption (Figure 6.19c and d; see also Keller 2012: 258-259; Solis 2011: 26-27). High proportions of both activities in the SG 1 *jute* sample indicate the *jute* were consumed prior to deposition. In addition to marine shell beads and bead production debris, these units also identified the presence of low proportions of crudely made Middle Preclassic Savana Orange paste figurines in the deposit (Figure 6.19e).

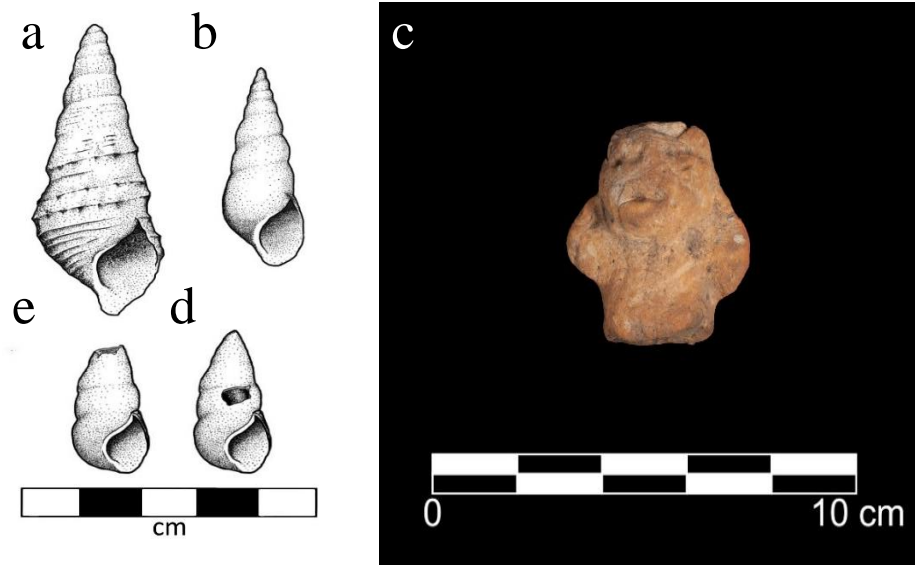
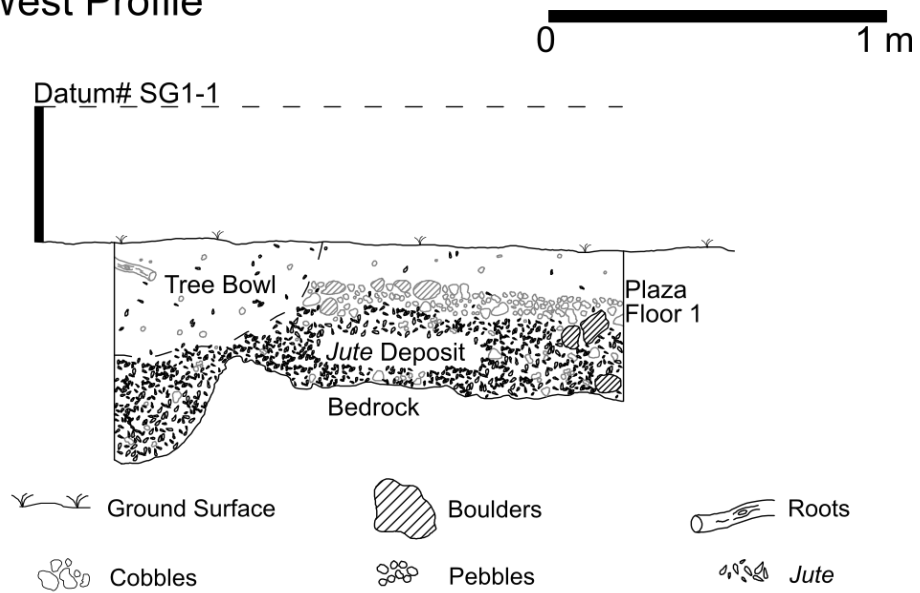


Figure 6.19 Artifacts within the Tutu Uitz Na (SG 1) *jute* deposit

Clockwise from top left: (a) *Pachychilus glaphyrus* (b) *Pachychilus indiorum* (c) Savana paste figurine (d), punctured *jute* and (e) spire-lopped *jute* (E.U. SG1-3; drawn by K. Shaw-Müller)

The presence of *jute* in ritual caches across the region is common, especially in the Preclassic period but declines into the Classic period (Brown, Garber, and Hartman 1999: 43-46; Ferguson 1999: 46-50; Guderjan 2007: 80; Halperin et al. 2003; Healy, Emery, and Wright 1990; Keller 2012: 254; Jamison and Wolff 1995: 31-32; Michelletti, Crow, and Powis 2018: 22; Seibert 1999: 36-38; for Classic period decline see Boileau 2014; Sharpe et al. 2020; Willey et al. 1965: 526-527). The reduction noted in shell size may reflect the demographic collapse of *jute* populations due to over-harvesting in the Preclassic. No usable charcoal was retrieved from the *jute* deposit units, but radiocarbon from construction phases on Structure N1 overlaying the deposit indicates that it was laid prior to cal 540-400 BC (PSUAMS#8091 Unmodeled). This is roughly corroborated by a cist excavated into bedrock beneath Structure E2, which was likely co-eval with the laying of the *jute* deposit. Fill associated with the base of the cist yielded a date of cal 765-535 BC (PSUAMS#8094 Modeled). Collectively, these dates and the ceramic assemblage strongly suggest the deposit was laid sometime prior to 500 BC. The deposition of the *jute* and creation of the large plaza atop the hill at this time reflect a common pattern of Middle Preclassic monumental construction at both major and minor centers on the highest point in the surrounding landscape (Powis et al. 2020: 282; Robin et al. 2012a: 25).

Tutu Uitz Na (SG 1)
 Northeastern Plaza, E.U. SG1-3
 West Profile



Profile by J. Walden, M. Biggie, K. Gruntorad and R. Duncan

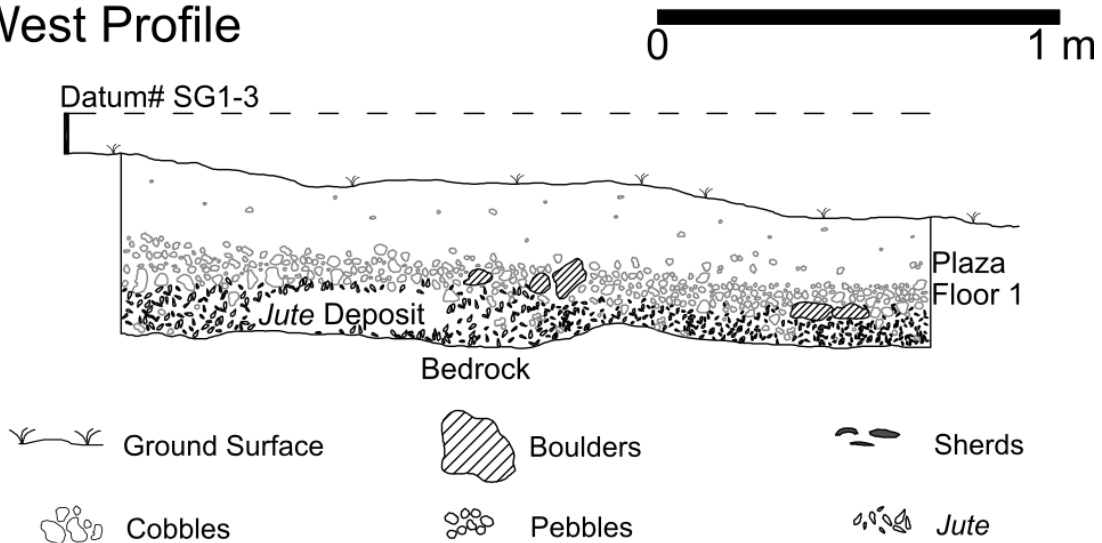
Figure 6.20 West profile of the Tutu Uitz Na (SG 1) northeastern plaza



Figure 6.21 Photograph of the SG 1 Plaza Floor 1 ballast

Tutu Uitz Na (SG 1) Southwestern Plaza, E.U. SG1-5

West Profile



Profile by J. Walden, M. Biggie, K. Gruntorad and R. Duncan

Figure 6.22 West profile of the Tutu Uitz Na (SG 1) southwestern plaza

A second plaza unit (E.U. SG1-5; see Figures 6.21 and 6.22) was situated on the southeastern portion of the plaza adjacent to the dog-leg in Structures S3 and W4 (Walden and Biggie 2017: 261-264). This 1x2 m unit was placed to ascertain whether the *jute* deposit extended to the south of the plaza and verify whether this structural offset was constructed in the Late Classic period. While there was evidence of the *jute* deposit in this unit, unlike the northern part of the plaza, this context was greatly disturbed and included high densities of Late Classic ceramics. This indicated that the plaza had been extended, potentially involving the removal of an earlier southern structure. This served to increase plaza capacity and facilitated the expansion of the eastern mortuary shrine into a full eastern triadic structure (with northern and southern wings) in the early Late Classic period (see Figures 6.17 and 6.18).

Biggie and colleagues (2019) hypothesize that the *jute* deposit was constructed to consecrate the ceremonial plaza as a “primordial sea”, from which the structures rose as *witz* (Biggie et al. 2018; see also Brady and Ashmore 1999; Finamore and Houston 2010; Freidel, Schele, and Parker 1993; Reilly III 1994; Wagner, Box, and Morehead 2013). Freshwater *jute* snails and marine shell, as aquatic items were associated with fertility, the watery underworld, and

caves, and were commonly used to imbue caches with characteristics of the underworld (Boileau and Stanchly 2020; Blackmore 2011: 172-173; Jamison 1993: 25; Keller 2012; Moholy-Nagy 1978, 1985). Halperin and colleagues (2003) propose that *jute* was considered a ritual foodstuff associated with sacred waters from caves. The resulting ceremonial plaza would have been ideologically consecrated, which may have served to further legitimate the types of rituals and ceremonial narratives disseminated from this space (Estrada-Belli 2012: 220). The relative absence of quotidian items usually uncovered in fill, such as ceramic sherds and chert debitage, but the presence of Savana Orange paste figurines reinforces this interpretation (see Figure 6.19e; see also South 2019). Similar Preclassic deposits containing freshwater and marine shell have been uncovered elsewhere in the Belize Valley at Callar Creek (Kurnick 2013a: 130, 2016b: 301), Pacbitun (Boileau and Stanchly 2020; Healy, Hohmann, and Powis 2004: 224-225), Blackman Eddy (Garber et al. 2004a: 37), Chan (Keller 2012: 257), and Las Ruinas de Arenal (Horowitz et al. 2020: 292). Other Middle Preclassic expressions of similar beliefs at Lower Dover might be evident at BR-155, which had pits containing “great quantities of shellfish” (Willey et al. 1965: 237-238). The *jute* also served functionally as architectural fill to level the hilltop for the plaza construction (see Boileau and Stanchly 2020). Much higher volumes of *jute* were present in undulations in the bedrock, and the deposit tapers off in the midsection of Str. E2, which was built on a natural rise in bedrock that emerges through the *jute* layer. Relatively high proportions of serving vessels, and faunal remains (excluding the ~94,000 freshwater shells) were found in Middle Preclassic structural fill at Tutu Uitz Na suggesting that large public ceremonies occurred within the plaza at this time. The rough densities of *jute* suggest sufficient snails for 800,000 meals (Healy, Emery, and Wright 1990; Keller 2012: 259). It seems plausible that the *jute* were consumed in large feasts and then deposited in the plaza fill. Hosting these feasts might have been the way in which the aspiring elite household compensated people for labor invested in the creation of the plaza and initial construction on Structure N1. The *jute* shells themselves were not worked or used to make jewelry.

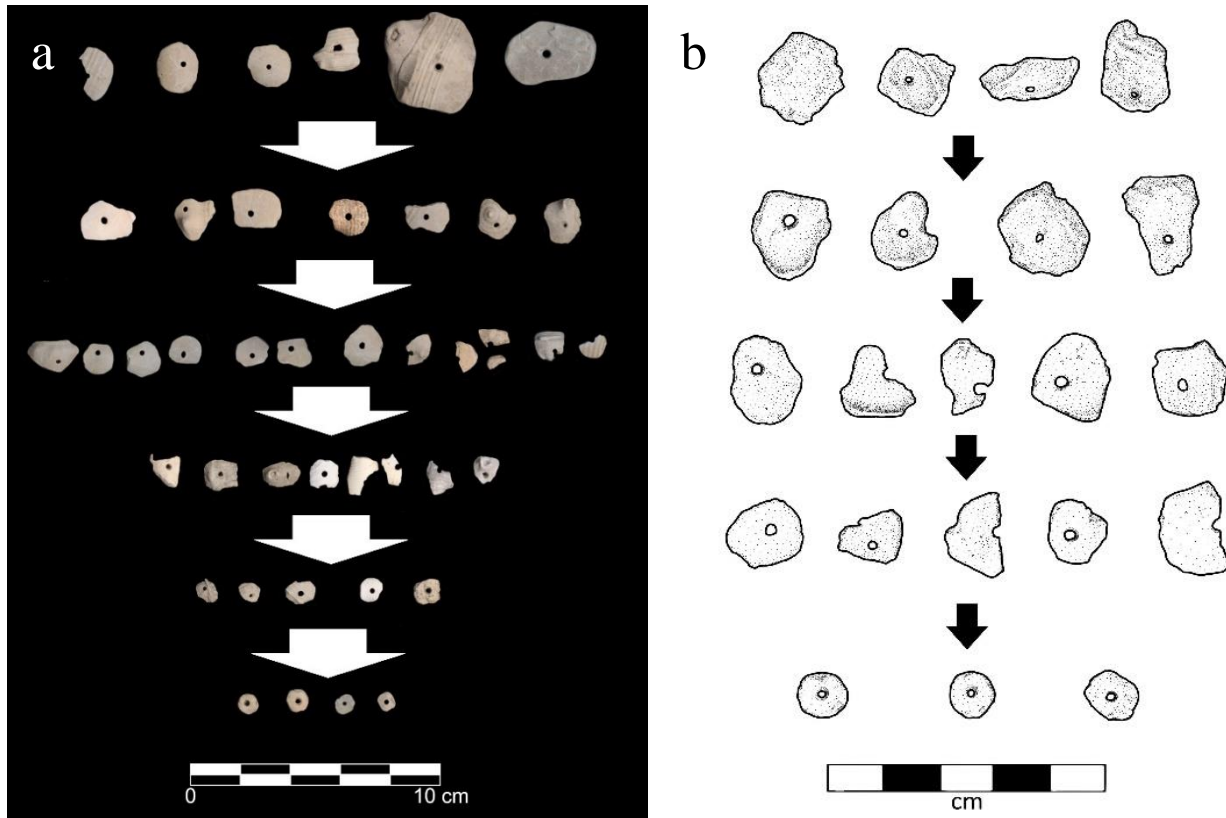


Figure 6.23 Marine shell bead production sequence

(a) photograph of beads at various stages of the production sequence, (b) illustration of production sequence (drawn by K. Shaw-Müller; see also Keller 2012: Fig. 13.5)

High proportions of production debris associated with marine shell (*Strombus* spp.) jewelry production were also found in this *jute* deposit and may indicate elite involvement in craft production, or a possible workshop nearby (Figure 6.23). The shell beads are worked to various degrees reflective of stages on a production sequence (Hohmann 2002: 137). The initial stage of the production sequence seems to involve breaking the shell with a possible hammerstone, then the creation of blanks by percussion flaking. The centers of these pieces were then drilled through. The drilled blanks were then carved and smoothed to make beads (Hohmann 2002: 138).

Unlike other examples of marine shell jewelry production in the Belize River Valley, there is a paucity of production tools such as chert drills at Tutu Uitz Na (for the co-occurrence of beads, debris and drills see Cochran 2010; Hohmann 2002: 172; Hohmann, Powis, and Healy 2018; Horn 2015: 417-458). This likely indicates that the shell was removed from its primary production locale and deposited in the plaza. A similar situation is apparent at early Middle Preclassic period

Pacbitun, where high volumes of conch shell debris and beads (both finished and at various stages of the production sequence) are found deposited in alleyways between platforms (Powis et al. 2020: 274), and at Chan where the marine shell was redeposited without the chert drills (Keller 2012: 266; for the difficulties of identifying shell workshops see Hohmann 2002). The presence of marine shell beads at multiple stages in the production sequence implies that bead manufacture was occurring at or around Tutu Uitz Na. A second, less likely interpretation is that the local elite were importing beads at varying stages of the production sequence and debitage to place in the *jute* deposit. Evidence of marine shell bead production is common across the Belize River Valley during this period. At Chan, Robin and colleagues (2014: 379) suggested that the local elite household was manufacturing marine shell jewelry in the Middle-Terminal Preclassic period, but surrounding commoners were not involved in this activity. Bead production on the part of the Tutu Uitz Na elites probably reflects a strategy of tapping into long-distance exchange networks to produce items of symbolic importance for negotiating political power and authority with emergent patrons and clients (Clark and Blake 1994; LeCount 1999). A comparable example from elsewhere in the Lower Dover polity involves the district head household of BR-147, where the Classic period high-status commoner residents (tier 5) employed chert drills/triangular broken flakes to produce marine shell and bone items (Weller 2009: 197).

6.3.1.2 The Northern Elite Residence at Tutu Uitz Na (Structure N1)

The 2016 excavation on Structure N1 at Tutu Uitz Na comprised a 2x7 m axial trench, which ran through the sub-structure (E.U. SG1-4; see Figure 6.18). The northern structure likely served as a residence. This is inferred from the presence of quotidian items evident in collapse and humus above the terminal phase floors, and in the fill of earlier construction episodes. There was no evidence of a corbelled vault/masonry ceiling. A fair amount of daub was uncovered indicating that the superstructure was pole and thatch. Excavation revealed the linear range structure was occupied concurrently from the Middle Preclassic through to the Terminal Classic period. In total 13 construction phases were identified and there was no good evidence to suggest episodic abandonment and reoccupation (Figures 6.24 and 6.25; see also Walden and Biggie 2017: 245-260). Despite the prolonged duration of occupation at Structure N1, reconstructing the architectural sequence was relatively straightforward because there was little in the way of re-entry

or disturbance into earlier construction phases. Most architectural contexts contained ceramic materials dating to a single, or sometimes two phases which were commonly sealed by subsequent walls and plaster floors. A total of three radiocarbon samples corroborated the ceramic analysis for this structure (see Table 6.11). These dates were so far apart stratigraphically that Bayesian modeling had little impact on constraining the date ranges.

Table 6.11 AMS Radiocarbon Dates from SG 1, Structure N1.

| <i>Lab ID#</i> | <i>Location</i> | <i>Context</i> | <i>Conventional</i> | <i>2σ Calibrated</i> | <i>Modeled 2σ</i> |
|----------------|-----------------|------------------|---------------------|--|-------------------------------------|
| PSU-8091 | SG 1 Str. N1 | Floor 1 ballast | 2395 \pm 20 | 540-400 BC | N/A |
| PSU-8090 | SG 1 Str. N1 | Feature 1 | 1530 \pm 20 | AD 440-600 | N/A |
| PSU-8089 | SG 1 Str. N1 | On Plaza Floor 2 | 1215 \pm 15 | AD 770-885 | N/A |

Tutu Uitz Na (SG 1) Structure N1, E.U. SG1-4 East Profile

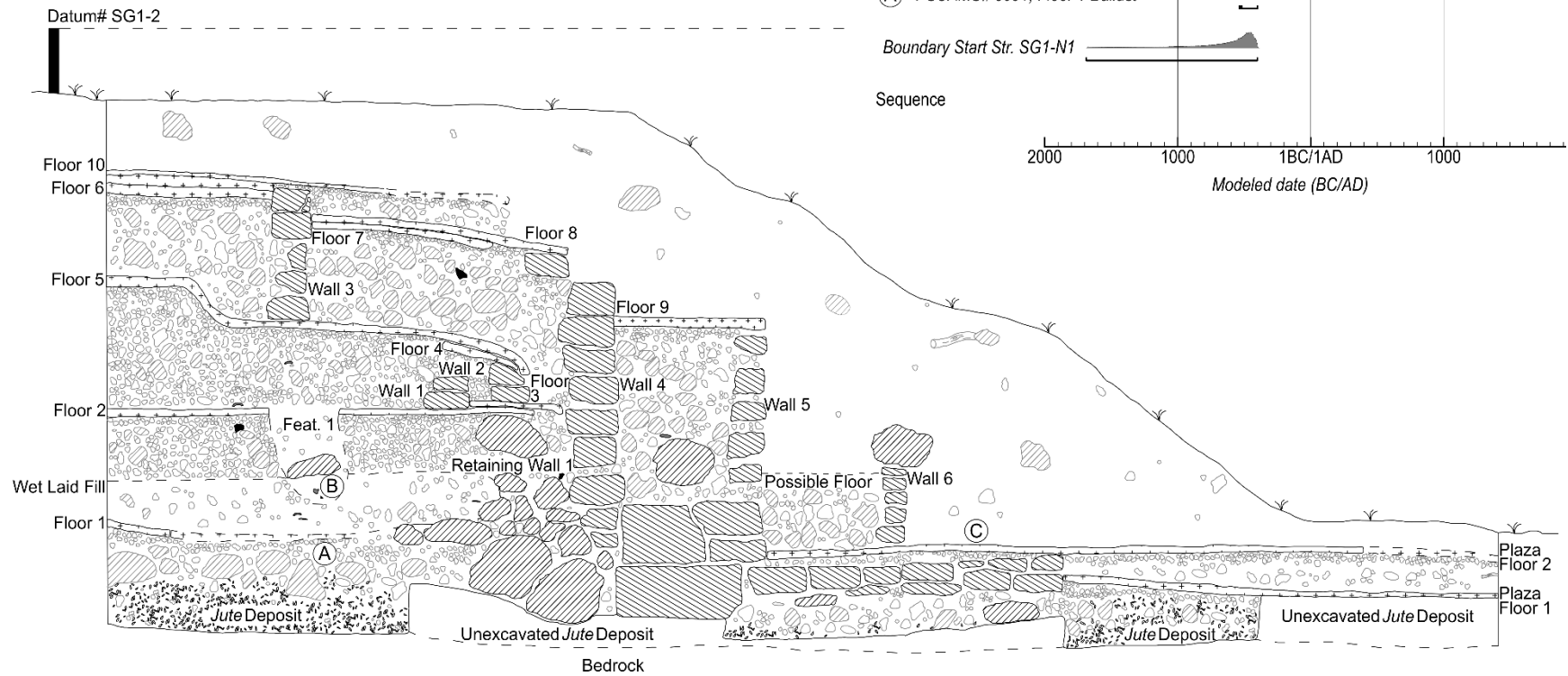
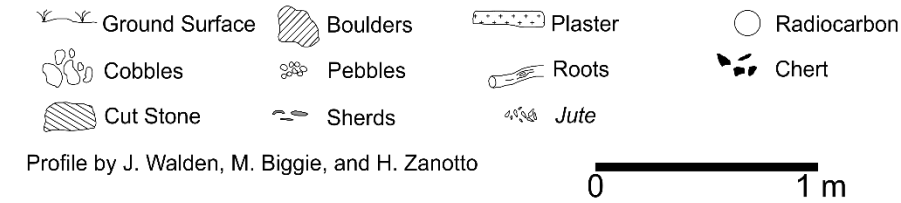


Figure 6.24 East profile of Tutu Uitz Na (SG 1) Structure N1



Figure 6.25 Photograph of architectural stratigraphy of SG 1 Structure N1

6.3.1.2.1 Structure N1: The Middle Preclassic (900-300 BC)

The first construction phase started with the Middle Preclassic *jute* deposit which was laid atop bedrock prior to construction of the substructure (Figures 6.25 and 6.26). The *jute* deposit seems to extend beneath the entire structure. Subsequently, a low Middle Preclassic platform of about 50 cm high and possibly 4 meters north/south was built above the *jute* deposit/plaza floor. Radiocarbon from this platform dated it to cal 540-400 BC (PSUAMS#8091 Unmodeled). Low

rectangular platforms dating to the Middle Preclassic period have been identified at Blackman Eddy (Garber et al. 2004a: 38), Pacbitun (Powis 2020), Nohoch Ek (Coe and Coe 1956), and Nakbe (R. Hansen 1998). The large northern structure and the *jute* deposit, which would have required sizeable amounts of labor, indicates that the founding household at Tutu Uitz Na was of relatively high status from its inception (for a similar argument see Triadan et al. 2017). Leveling the bedrock hilltop and the construction of the initial plaza was likely a far more labor-intensive task than might be expected (Guderjan 2007: 21). Initial construction on Structure N1 involved carving sizeable cut-limestone slabs. The architectural fill of this contained domestic refuse and marine shell beads.



Figure 6.26 Photograph of Preclassic phase SG 1 Structure N1

6.3.1.2.2 The Late-Terminal Preclassic (300 BC-AD 300)

Structure N1 underwent two construction episodes during the Late Preclassic period. In the Late Preclassic period, this initial platform was covered with a grey matrix, similar to the wet-laid matrix found in Preclassic contexts at Blackman Eddy and Cahal Pech (Garber et al. 2004a: 37; Sunahara and Awe 1994: 201). This grey matrix served as fill for a taller, 1 m high platform. Atop this wet-laid grey matrix was a second construction phase involving a dense river cobble fill (Figure 6.26). The Preclassic structures at Tutu Uitz Na were constructed with large well-cut limestone blocks with dense river cobble fill. This construction style resembled contemporaneous architecture constructed at nearby centers (Awe 1992; Garber et al. 2004a: 25; Gerhardt 1988: 9–2; Healy et al. 2004: 107). The architectural fill of this construction included domestic refuse and a broken sandstone burnisher (Figure 6.28e).

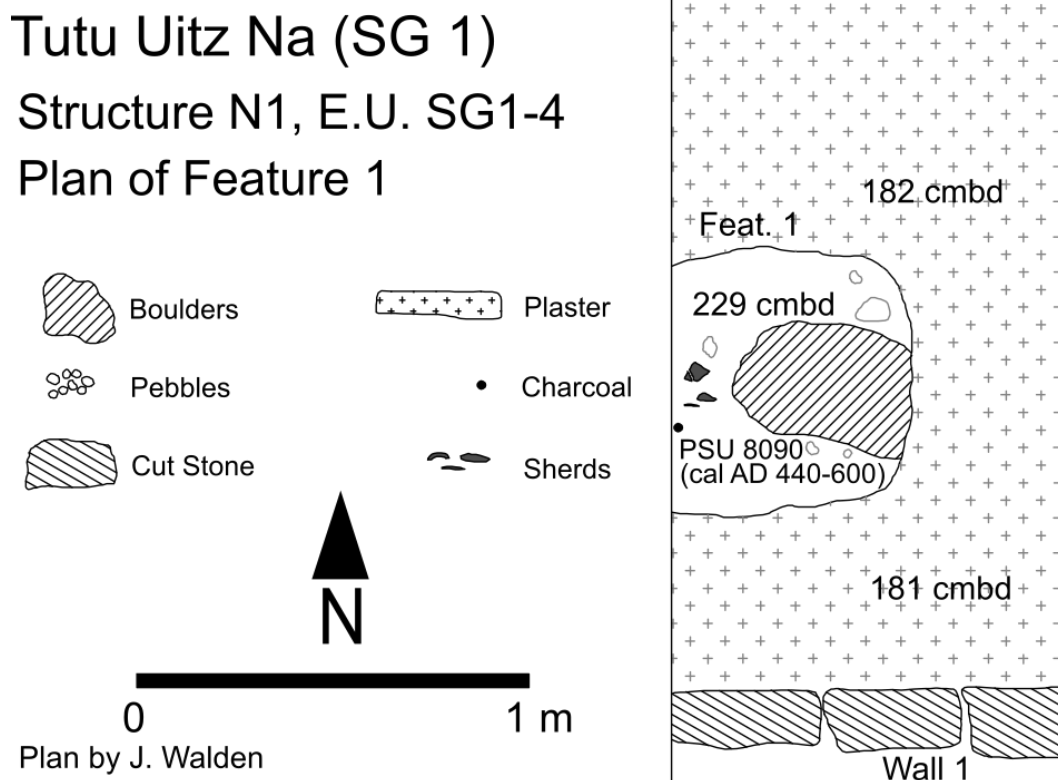


Figure 6.27 Plan of SG 1 Structure N1 Feature 1
Early Classic pit cut into the Late Preclassic sub-structure (Floor 2)

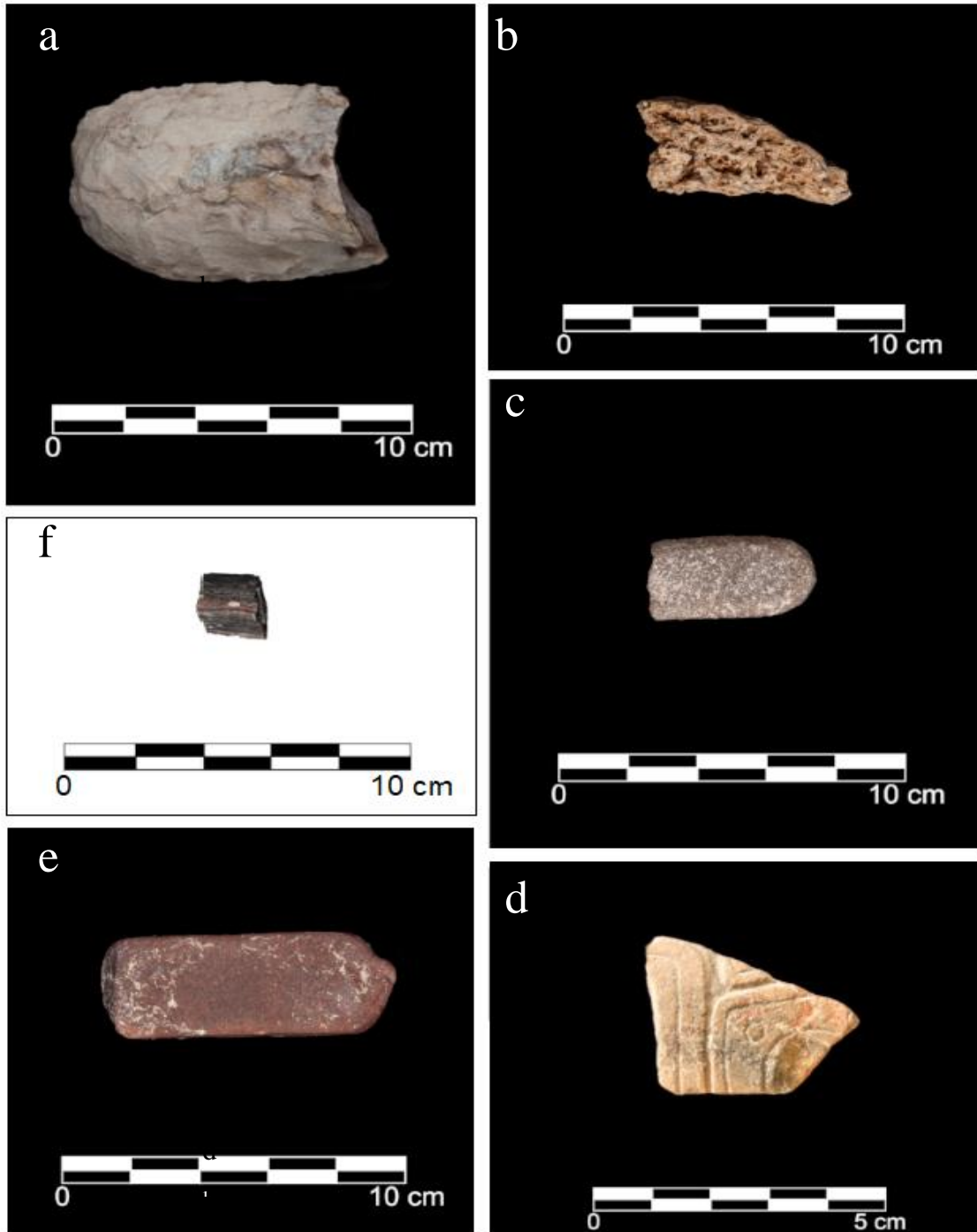


Figure 6.28 Selected small finds from SG 1 Structure N1

Clockwise from top left: (a) rough chert biface, (b) fragment of pumice, (c) granite burnisher, (d) Urita Gougged incised bowl sherd (possible 'drinking-implement'), (e) sandstone burnisher, (f) fragment of worked slate

6.3.1.2.3 The Early Classic (AD 300-600)

The first clear Early Classic modification was a pit cut into the uppermost floor of the Late/Terminal Preclassic structure (Figure 6.27). This contained a dark organic matrix possibly from an offering and Dos Arroyos Orange Polychrome sherds from a basal flange bowl. Radiocarbon dating of a charcoal sample from this pit dated it to cal AD 440-600 (PSUAMS#8090 Unmodeled). The fill of the pit was collected for flotation and palaeobotanical investigation although this yielded nothing noteworthy; that said the darker humic soil noted in the base of the pit (alongside the basal flange bowl sherds) might indicate some form of perishable offering. Excavation of this pit was shortly followed by the two more Early Classic construction phases. These comprised extensions to the platform which resulted in an overall height of 1.5 meters. The fill within this construction phase contained an Urita Gouged incised bowl sherd with an incomplete glyphic inscription. Christophe Helmke suggested that this partial glyph may potentially identify the bowl as a *y-uk'-ib* or 'drinking-implement' (see Figure 6.28d; see also Walden and Biggie 2017). The presence of this vessel speaks to the relatively high status of the Early Classic residents of Tutu Uitz Na (Reents-Budet 1998: 73). An intermediate elite burial (Burial 2) within an early Late Classic construction phase at Bedran (Tier 3) contained a similar Urita Gouged Incised bowl with a glyph band which identified it as a cacao drinking vessel (Colas et al. 2002; Conlon and Powis 2004: 77). It seems likely that such vessels were gifted down by higher-level patrons during feasting events. While the Bedran elite had obvious patrons situated at Baking Pot, it remains unclear who the patrons of the Early Classic Tutu Uitz Na elite were. By the end of this phase, the Tutu Uitz Na household was almost three times larger than the largest surrounding commoner households like SG 3 and SG 42. (Figure 6.24).



Figure 6.29 Photograph of terminal phase architecture at SG 1 Structure N1

6.3.1.2.4 The Late and Terminal Classic (AD 600-900)

The Late Classic period saw major architectural changes at Structure N1. This included three major construction phases which saw the structure rise in height to 3.20 m (Figure 6.29). A sizeable outset staircase running into the plaza was built together with a stair-side outset on either side and a lower terrace running along the base of the structure. These additions emulated elite

architectural styles in vogue at the time. A large apron was also constructed flanking the base of the residence in front of Structure N1. No evidence of corbelled vault masonry was discovered, strongly suggesting that Structure N1 had a pole and thatch superstructure atop the sizeable masonry substructure. Despite the substantial architectural investment at this time, the general proportions of wealth items present in the construction fill declined (see Chapter 7.4.1). Structure N1 was abandoned between cal AD 770-885 based on a charcoal sample situated in a lens between the terminal plaza floor and structural collapse (PSUAMS#8089 unmodeled). Late Classic architectural contexts included numerous items in fill including domestic refuse, worked slate (see Figure 6.27f), a granite burnisher (see Figure 6.27c), several chert bifaces (see Figure 6.27a), and a piece of pumice (see Figure 6.27b).

6.3.1.3 The Evolution of an Eastern Triadic Structure (Structure E2)

Three units were excavated on Structure E2, the first was a salvage excavation situated on the southern wing of the eastern triadic structure (E.U. SG1-2) to remove a Late Classic burial (SG 1-BU1) which was apparent in a looters' pit (Petrozza and Biggie 2015; see Figure 6.18). The second (E.U. SG1-6) was intended to expose the outset staircase but exposed a sizeable pile of looters' back dirt (Biggie et al. 2019; Walden et al. 2018). E.U. SG1-6 did successfully identify the *jute* deposit running directly in front of Structure E2. This led to the successful placement of a third unit (E.U. SG 1-7) through the northern side of the central outset stair and into the main structure. This unit exposed six burials dating from the Late Preclassic through to the Terminal Classic period. Placing units on Str. E2 was difficult due to the extensive looting. This summary of Structure E2 combines information from all three excavation units but focuses on E.U. SG 1-7.

Understanding the architectural sequence of Str. E2 was complicated by the extensive looting and a colossal early Late Classic (Tiger Run) remodeling episode which saw many parts of the original eastern mortuary shrine dismantled and completely rebuilt (Figure 6.30). It seems likely that this remodeling event saw the structure transformed from a rectangular eastern shrine into a full eastern triadic structure, although it remains possible that the structure was once an E group that was remodeled into an eastern triadic structure. The former explanation makes more sense because excavation and cleaning of looters' trenches on the southern wing suggests it was entirely Late Classic. This is corroborated by the fact that the dog-leg in the southern structure

occurred coevally in the Late Classic, presumably to extend the plaza to accommodate the southern wing of the eastern triadic structure. The architectural sequence was further complicated by a Terminal Classic funerary pit dug around the time of abandonment. The description of the sequence offered below largely omits the vast amount of unprovenienced material associated with piles of looters' back dirt strewn atop the architecture. These contexts included a variety of items that speak to the relative wealth of the Tutu Uitz Na elite. Wealth items in looter's back dirt and other disturbed contexts included carved limestone spindle whorls (like those identified at Burial 6 at BR-123 and Burial 1 at BR-4; see Weller 2009: 227; Figs. 4.118 and 4.119; Willey et al. 1965: 402), jade beads and pendants, and polychrome ceramics (see Figure 6.31). Bayesian modeling of 10 radiocarbon dates was employed to reconstruct the architectural sequence (see Table 6.12).

Table 6.12 AMS Radiocarbon Dates from SG 1, Structure E2.

| <i>Lab ID#</i> | <i>Location</i> | <i>Context</i> | <i>Conventional ¹⁴C yr (BP)</i> | <i>2σ Calibrated Range</i> | <i>Modeled 2σ cal range</i> |
|-------------------|-----------------|------------------------------------|--|--------------------------------|---------------------------------|
| PSU-8094 | SG 1 Str. E2 | Feature 1 | 2485 ± 15 | 765-540 BC | 765-535 BC |
| PSU-8092 | SG 1 Str. E2 | Wet laid fill | 1575 ± 20 | AD 425-550 | AD 430-550 |
| PSU-8096 | SG 1 Str. E2 | SG 1 Burial 7, Minanha Red bowl | 1570 ± 15 | AD 430-555 | AD 430-550 |
| PSU-8095 | SG 1 Str. E2 | Fill around SG 1 Burial 5 crypt | 1545 ± 15 | AD 435-585 | AD 435-560 |
| PSU-8573 | SG 1 Str. E2 | SG 1 Burial 4 | 1550 ± 20 | AD 430-580 | AD 480-595 |
| PSU-8093 | SG 1 Str. E2 | Floor 1 ballast | 1405 ± 20 | AD 600-660 | AD 600-660 |
| UCIAMS- 172401 | SG 1 Str. E2 | SG 1 Burial 1 | 1245 ± 20 | AD 675-880 | AD 675-825 |
| PSU-3367 | SG 1 Str. E2 | SG 1 Burial 2, Individual 1 | 1210 ± 15 | AD 780-880 | AD 780-880 |
| PSU-3464 | SG 1 Str. E2 | SG 1 Burial 2, Individual 2 | 1185 ± 15 | AD 770-890 | AD 770-890 |
| PSU-3365 | SG 1 Str. E2 | SG 1 Burial 3 | 1190 ± 20 | AD 770-890 | AD 770-890 |

6.3.1.3.1 Structure E2: Middle Preclassic (900-300 BC)

The first construction phase at Structure E2 involved the creation of the *jute* deposit beneath and around the structure. The central component of the structure was set on a natural rise in bedrock which rose above the *jute* deposit to the east. The deposit was about 30 cm deep in front

of the structure. The bedrock rose out of the *jute* deposit in a manner reminiscent of an island. The southeastern portion of the unit was largely looters' pits filled with their back dirt. An empty Middle Preclassic cist (Feat. 1) was exposed on the bedrock rising above the *jute* deposit (see Figure 6.30). This was situated below the looters' backfill however. Careful screening of the soil and flotation of a matrix sample from this cist revealed no evidence of human bone. However, a radiocarbon sample was present in undisturbed fill at the base of the cist, dating the context to cal 765-535 BC (PSUAMS# 8094 modeled). While potentially serving a mortuary function, this cist may have functioned as a cache containing perishable items. The *jute* deposit contained another fragment of a Savana Orange paste figurine and small quantities of ceramic material. Those sherds present dated to the Middle Preclassic. Despite the lack of human remains, this cist probably once served a mortuary function. The interment of burials in bedrock cists was common in the region at this time (Awe 1992: 182, 334-339; Awe, Aimers, and Blanchard 1992: 123; Healy, Hohmann, and Powis 2004: 215; Kosakowsky et al. 2012: 293; Novonty 2012: 235; Robin et al. 2012b: 126).

6.3.1.3.2 Structure E2: Late-Terminal Preclassic (300 BC-AD 300)

The second construction phase involved what is presumed to be a small eastern mortuary shrine in the Late Preclassic period. It is highly likely that a smaller Middle Preclassic structure existed on the eastern fringe of the plaza, but this could not be established because of the looters' pits. The Late Preclassic component was also somewhat dubious and largely comprises miscellaneous fill contexts situated below later Early Classic fill, and a possible Late/Terminal Preclassic crypt burial (SG 1 Burial 5) This burial could not be directly dated due to the condition of the remains. It seems possible that the burial was Early Classic in date. Aside from this burial and fill, no clear architectural features (walls or floors) were discernable. It is presumed that any walls were removed and reused in the later remodeling episodes in the Early Classic and early Late Classic periods.

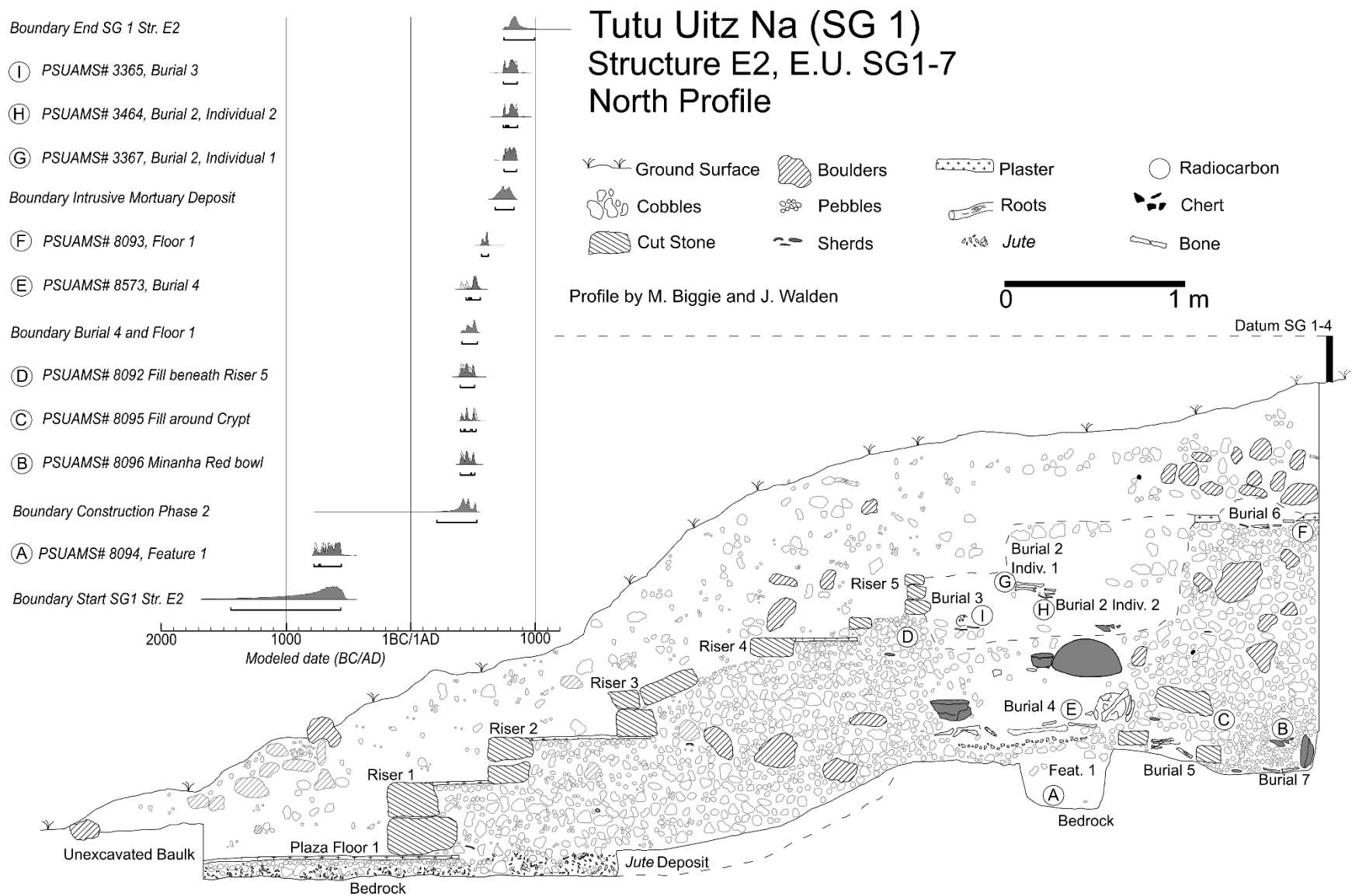


Figure 6.30 North profile of Tutu Uitz Na (SG 1) Structure E2



Figure 6.31 Small finds from SG 1 Structure E2

Clockwise from top left: (a) incised faunal (mammal) bone tube, (b) ceramic pestle, (c) basalt burnisher, (d) jade and greenstone beads and debris, (e) decorate limestone spindle whorls, (f) speleothems (stalactites), (g) Pedregal Modeled incensario attachment, (h) carved conch shell pendant

Tutu Uitz Na (SG 1) Structure E2, E.U. SG1-7 East Profile

0 1 m

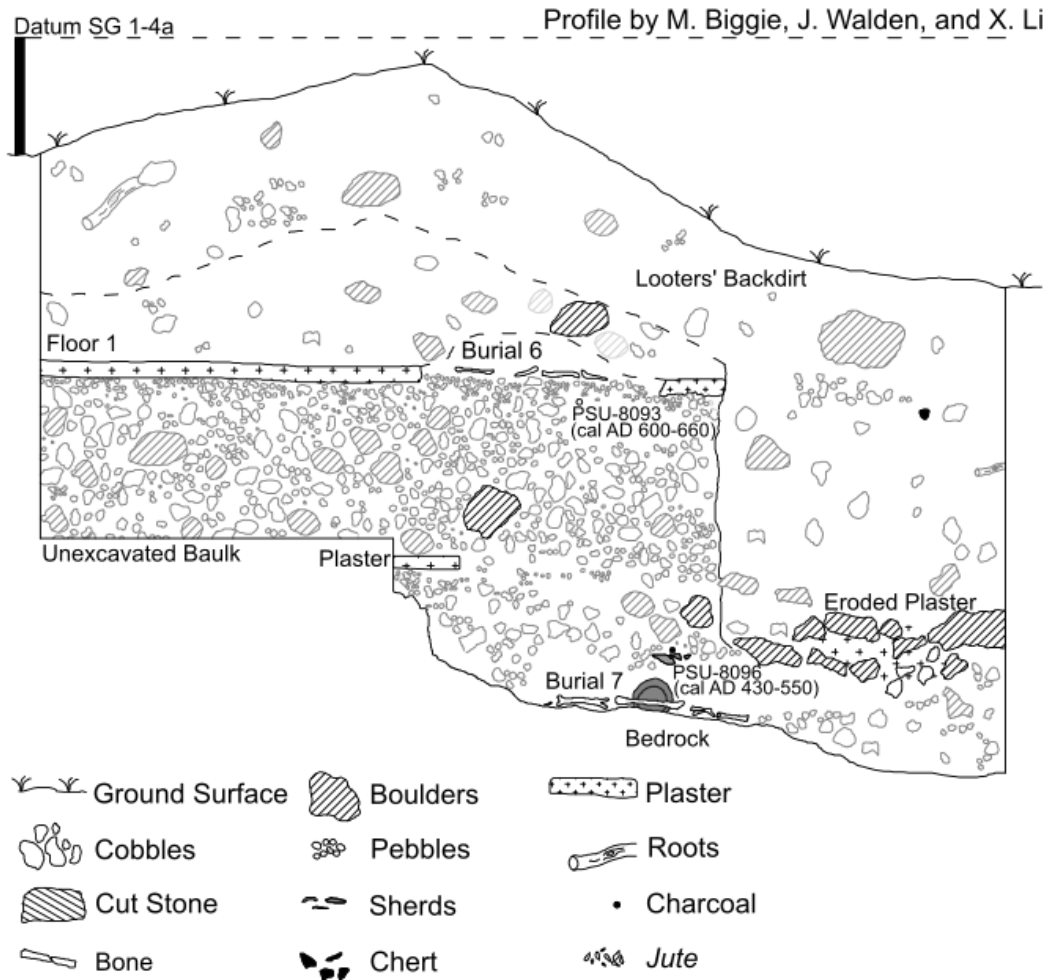


Figure 6.32 East profile of Tutu Uitz Na (SG 1) Structure E2

The Late Preclassic fill comprised dense layers of sizeable cobbles and small boulders, characteristic of Preclassic fill across the Lower Dover settlement (Figure 6.32). The assemblage contained a small Middle Preclassic Savana Orange paste figurine fragment. Curation of these items and placement in later construction fill appears fairly common in the Belize River Valley (Kosakowsky et al. 2012: 294). This fill contained predominantly Late Preclassic ceramics. Two burials were located at the heart of this Late Preclassic construction phase.

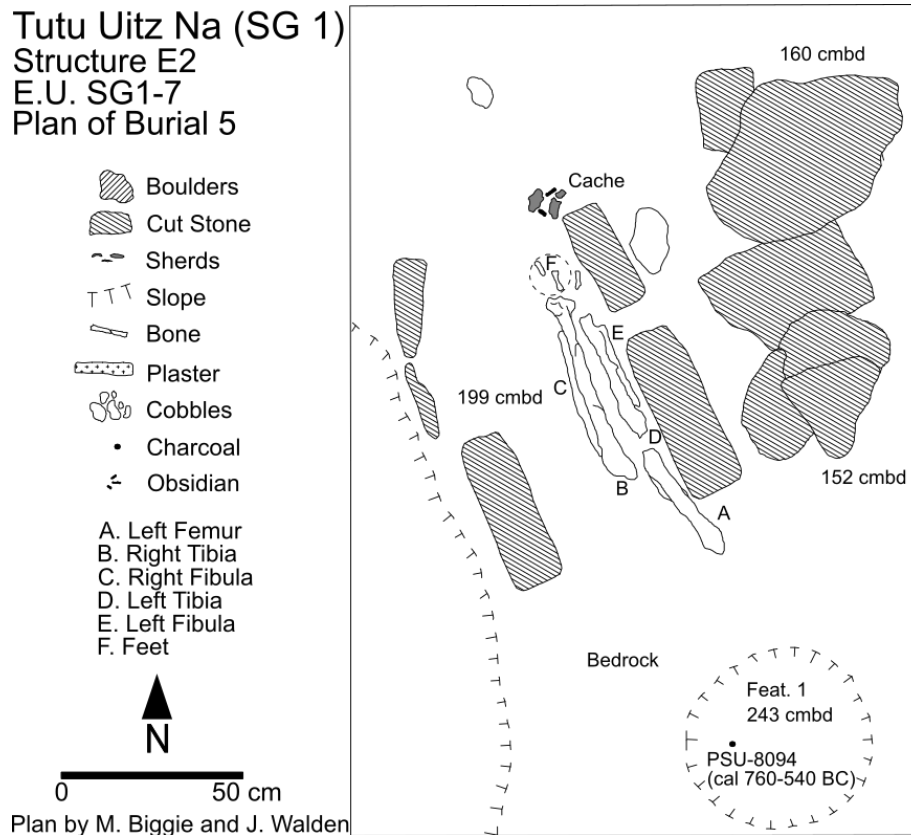


Figure 6.33 Plan of SG 1 Burial 5

Burial 5 was a badly disturbed crypt burial (Figures 6.33 and 6.34). The sides of the crypt consisted of large flat cut-stones that stood vertically, with the bedrock modified in some places to keep the stones in an upright position. The preservation was poor, and the bones had fused to the bedrock. This crypt contained an adult in an extended prone position, head to the south. All skeletal remains were present up to the right tibia/fibula and halfway up the left femur. Any other remains, associated grave goods, and crypt stones were missing, having been located in the looted southern portion of the unit. The capstones on the northern portion of the crypt had been removed and set to the east side in antiquity. A layer of chert debitage was placed over the crypt. The placement of obsidian and chert layers above burials is fairly common and a range of interpretations about the significance of this exist (Coe 1988: 227; Hall 1989: 308; Healy, Awe, and Helmuth 2004: 230; Fitzsimmons 2009: 103; Moholy-Nagy 1997; for Belize Valley examples see Conlon and Awe 1991: 8; Horowitz et al. 2020: 291; Yaeger et al. 2015: 188). Immediately north of the crypt, a cache of 36 obsidian blades/blade fragments (all from the El Chayal source)

and a Sierra Red ceramic bowl were set directly atop the bedrock. Associated ceramics were Middle to Terminal Preclassic in date, including Reforma Incised, Chan Pond Unslipped, Sierra Red, Hillbank Red, Flor Cream, and San Antonio Golden Brown types.



Figure 6.34 Photograph of SG 1 Burial 5

6.3.1.3.3 Structure E2: Early Classic (AD 300-600)

The next phase saw the construction of what was likely a small mortuary shrine atop the earlier construction phases. Like the previous phase, all walls and floors associated with this construction phase had been removed in subsequent remodeling in the early Late Classic. Unlike the previous construction phase, two radiocarbon dates securely dated the construction fill associated with this phase to AD 430-560 (PSUAMS#8092 modeled and PSUAMS#8095 modeled). Another interment (SG 1 Burial 7) was also associated with this phase.

Tutu Uitz Na (SG 1)
Structure E2, E.U. SG1-7
Plan of Burial 7

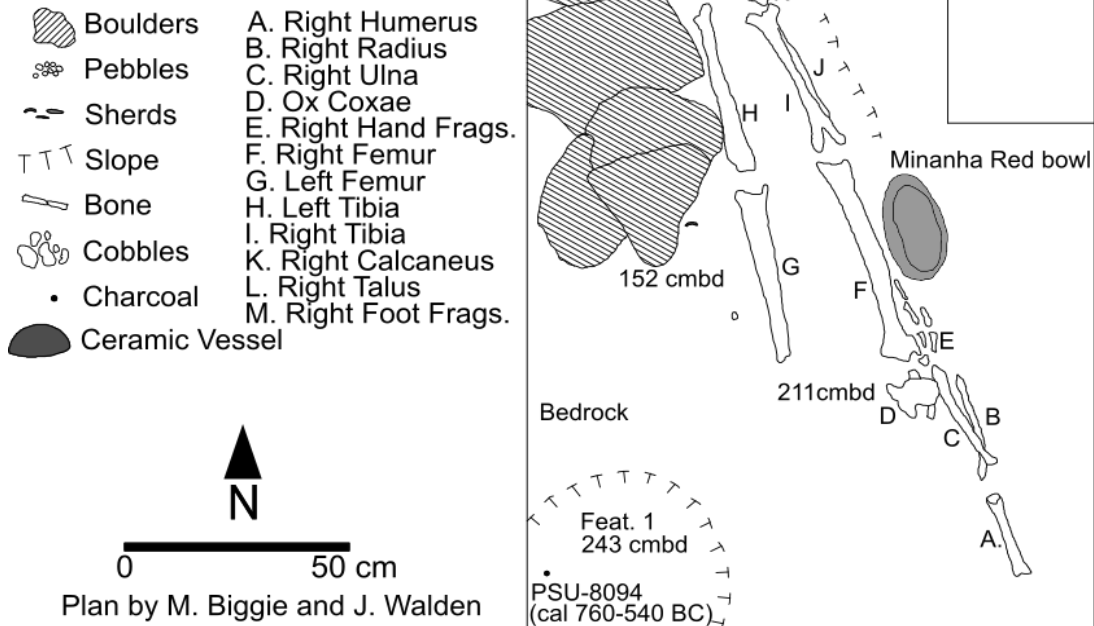


Figure 6.35 Plan of SG 1 Burial 7

SG 1 Burial 7 was a simple interment covered by a layer of cobbles and small boulders. The grave contained an adult individual in an extended position with the head to the south. The individual had been placed directly on bedrock to the east of the crypt wall of Burial 5 (described below). The remains had subsequently fused to the limestone bedrock. Because of the poor preservation, the sex and other anatomical characteristics could not be determined. The legs were extended with the right arm also extended along the right side of the body, palm down with fingers straight out. Just east of the right femur was an intact but highly fragmentary Minanha Red bowl (see Figures 6.35 and 6.36). Other associated grave goods included a marine shell bead, carved shell, and an obsidian blade (see Figure 6.37). All skeletal remains and any other grave goods in the southern portion of the burial were removed by looters. The burial was covered with a 25 cm layer of fist-sized stones. A disintegrated unslipped bowl containing charcoal was placed on top of the crypt stones providing a *terminus ante quem* for the burial. Unfortunately, usable gelatin could not be extracted from bone collagen for ^{14}C dating, but the charcoal from this bowl was radiocarbon dated to cal AD 430-555 (PSUAMS#8096 modeled). However, the burial was likely not much earlier, as the Minanha Red bowl provides an Early Classic *terminus post quem*.



Figure 6.36 Photograph of SG 1 Burial 7

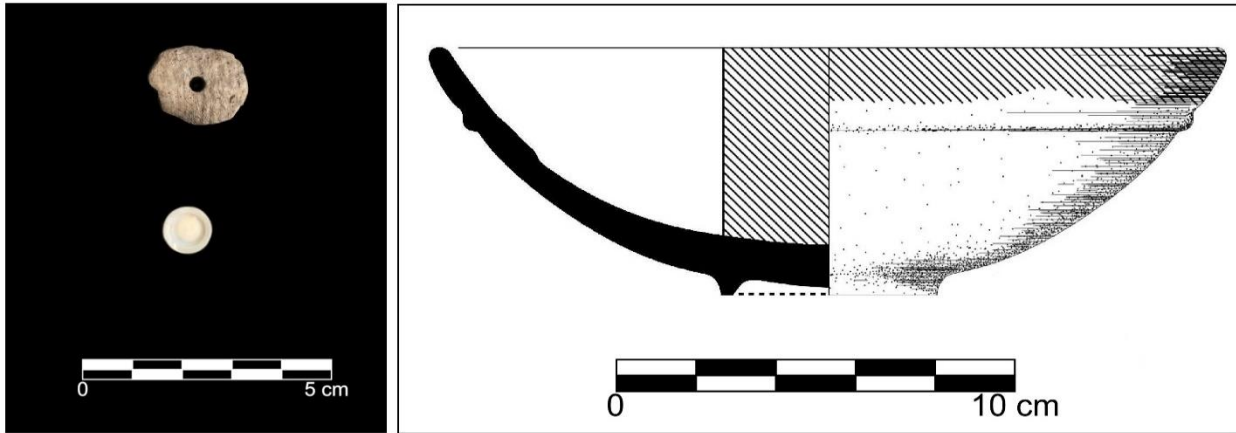


Figure 6.37 Grave goods from SG 1 Burial 7

Marine shell disk and bead from SG 1 Burial 7 (left), and Minanha Red Bowl (right; drawn by Kyle Shaw-Müller)



Figure 6.38 Photograph of Late Classic phase SG 1 Structure E2

6.3.1.3.4 Structure E2: Late Classic (AD 600-800)

The next major construction phase evident on Structure E2 dated to the Early Classic/Late Classic transition (Tiger Run phase; Figure 6.38). Extensive modification of the structure is evident both in E.U. SG1-7 and E.U. SG1-1 on the southern wing of the eastern triadic structure, which dated solely to this period (Petrozza and Biggie 2015). At the onset of the Late Classic period, a substantial outset staircase was added to the front of the structure. This construction phase was likely contemporaneous with the remodeling of the eastern mortuary shrine into an eastern triadic structure. This is further corroborated by the southern plaza excavation (E.U. SG1-5; see above) which revealed that the plaza was extended to accommodate the southern wing of the eastern triadic structure. At this stage, Structure E2 had a sizeable outset staircase running two meters from the front of the central component of the eastern triadic.

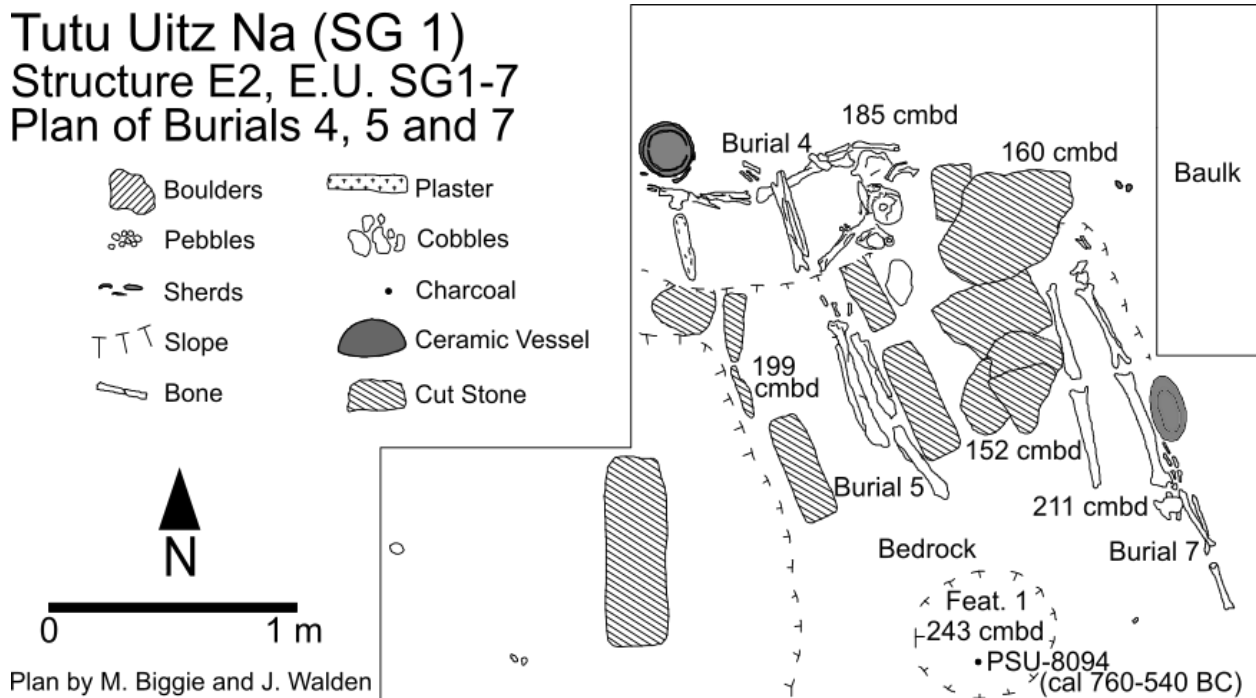
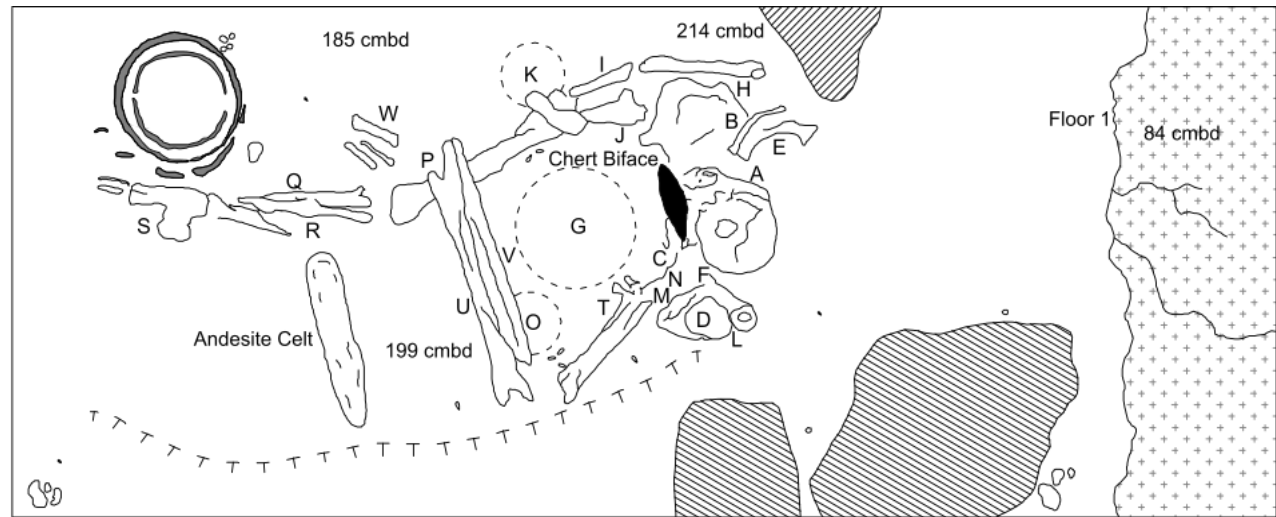


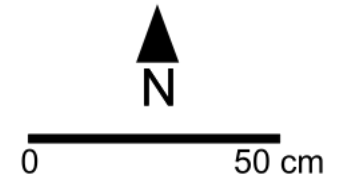
Figure 6.39 Plan of SG 1 Burials 4, 5, and 7

Tutu Uitz Na (SG 1)
 Structure E2,
 E.U. SG1-7
 Plan of Burial 4

- A. Cranium and Mandible
- B. Right Clavicle
- C. Cervical Vertebrae
- D. Left Clavicle
- E. Right Scapula
- F. Left Scapula
- G. Rib, Vertebrae and Pelvis Cluster
- H. Right Humerus
- I. Right Radius
- J. Right Ulna
- K. Right Hand
- L. Left Humerus
- M. Left Radius
- N. Left Ulna
- O. Left Hand
- P. Right Femur
- Q. Right Tibia
- R. Right Fibula
- S. Right Foot
- T. Left Femur
- U. Left Tibia
- V. Left Fibula
- W. Left Foot



- | | | |
|----------------|--------------|----------------|
| Ceramic Vessel | Boulders | Plaster |
| Cobbles | Pebbles | Andesite Celt |
| Cut Stone | Sherds | Oliva Tinklers |
| Bone | Chert Biface | |



Plan by M. Biggie, X. Li, and J. Walden

Figure 6.40 Plan of SG 1 Burials 4, 5, and 7

The early Late Classic remodeling of the structure was contemporaneous with the interment of the two wealthiest burials uncovered at SG 1. The earliest of the two interments was SG 1 Burial 4. Burial 4 comprised a single adult male aged around 28-35 years. The individual was interred in the seated position within the apex of the outset staircase facing the plaza to the west (see Figures 6.39, 6.40, 6.41, 6.42, 6.43). The intrusive pit in which Burial 4 was placed, directly overlay SG 1 Burial 5 (see Figure 6.39). The initial stages of the interment of SG 1 Burial 4 may have been coeval with the intrusive removal of the capstones from the northern portion of SG 1 Burial 5 to remove ancestral remains for curation. This individual dated to AD 480-595 (PSUAMS# 8573 modeled), charcoal from the ballast of the floor capping the interment provided a date of AD 600-660 (PSUAMS#8093 modeled). It seems highly likely given the construction sequence and burial ceramics that SG 1 Burial 4 was interred in the latter part of the 6th century.



Figure 6.41 Photographs of SG 1 Burial 4

Top-down view showing andesite/olivine celt in relation to leg position (left), photograph of chert ceremonial biface placed in mouth of individual (right)

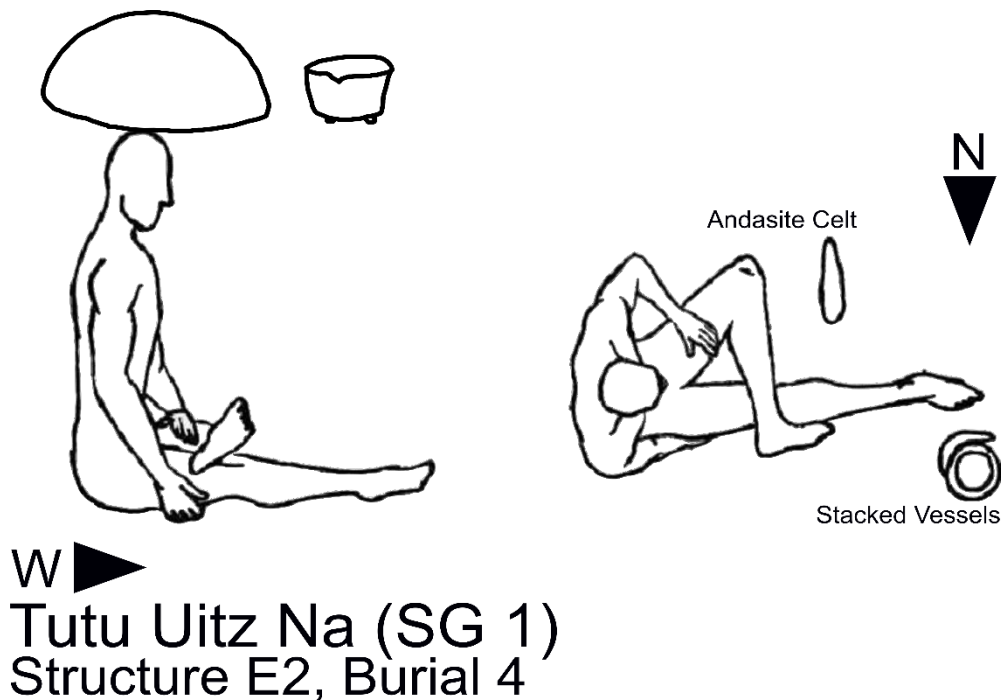


Figure 6.42 Illustration of SG 1 Burial 4 burial position

Drawing by M. Biggie and K. Shaw Müller

The individual was interred with a finely made chert biface (from the Northern Belize chert bearing zone) placed through their mouth, with the tip pointing south (see Figures 6.41 and 6.43a). This chert biface was similar to two bifaces located in a cache in Structure B1 at Lower Dover (Guerra and Awe 2017: 246). The inhumation was accompanied with 30 olive shell tinklers, likely attached to the wrists or neck (see Figure 6.43c). The ankle and foot were placed in the raised heel position, signifying dancing as portrayed in iconography (see Figure 6.44; see also Looer 2009: 47). Scherer and colleagues (2014: 207-216) have previously identified burials interred in dance-like positions in the Usumacinta region (see also Scherer 2015: 90-92). To the outside of the right foot was a poorly preserved Belize Red dish, and nested within it were two intact Dolphin Head bowls (see Figure 6.45). A substance resembling copal (incense) remained in the base of the inner bowl. Just west of the bent left leg was a grey/green andesite celt with olivine inclusions (Sheldon Skaggs Personal Communication 2018; see Figure 6.43b). The surface layer of the celt was eroded and pitted, closely resembling one identified by Willey and colleagues (1965: 472) at BR-123. When submerged, the celt became a bright dark green color. A sizeable, intact Late Classic Vaca Falls bowl, approximately 45 cm in diameter and 17 cm deep was placed inverted over the head, with a sizeable break on one side, which was interpreted as a “kill hole” (see Figure 6.45; see also

Lucero 2010: 142-145). To the west of this bowl was an upright Belize Red nubbin-footed dish. Lucero (2006: 106-110) encountered a seated burial with an inverted dish placed over the head, nearby at Saturday Creek.

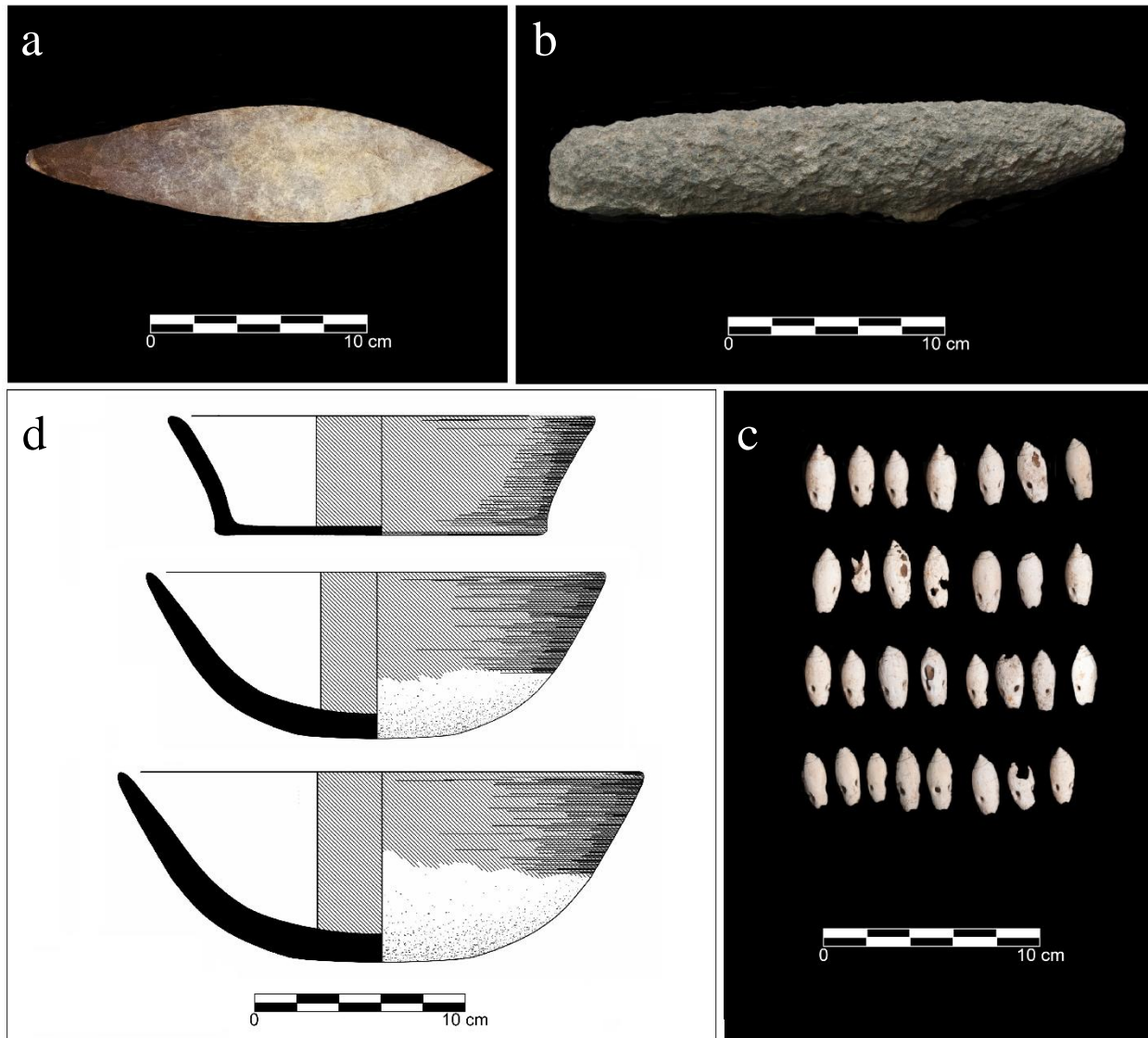


Figure 6.43 Selected grave goods from SG 1 Burial 4

Clockwise from top left: (a) Northern Belize Chert Bearing Zone Ceremonial Biface, (b) andesite celt with olivine inclusions, (c) olive shell tinklers, (d) Belize Red Bowl (top), Dolphin Head Red bowls (middle and bottom; drawn by Kyle Shaw-Müller)



Figure 6.44 Photograph showing the right foot placed in the raised heel position

The right leg of the individual was extended with the right foot severely dorsiflexed (in the raised heel position). The left leg was bent at the knee, the left ankle crossed over the right knee and the left foot plantarflexed (see Figure 6.44). The right arm was extended along the right side of the individual, with the right hand below the right femur. The left arm was extended along the left side of the individual, with the left hand above the left femur. Multiple bones showed signs of infection. Infection was observed in the vertebrae, the temporal bone, the frontal bone, the maxillary bone (which may be evidence of an abscessed tooth and not the same infection in the other elements), the pubis, and the humerus. Widespread infection of this type may be caused by a variety of factors, such as osteomyelitis or tuberculosis. The poor health of this individual is also evident from the dentition. The right maxillary third molar exhibits signs of an abscess and antemortem tooth loss. The left mandibular incisors have calculus on the lingual surface and cementosis is present on several of the roots of the mandibular dentition. The left mandibular first molar and right mandibular molars 1 and 2 have carious lesions. This individual exhibits signs of

perimortem trauma to multiple skeletal elements. Perimortem fractures are observed on the vertebrae, ribs, right zygomatic, and left ulna. It is not determined if these injuries (nor infection) were the cause of death, however, it is evident that healing did not occur after the injuries, therefore occurring at or around the time of death. Strontium and oxygen isotope analysis of dentition indicated a local origin for this individual (UM470 $^{87}\text{Sr}/^{86}\text{Sr}$ value .708863, $\delta^{18}\text{O}$ value -3.06). The carbon isotope value ($\delta^{13}\text{C}$ value -3.51) from tooth enamel suggests a typical diet for the region during the earlier stages of life. This is corroborated by dietary isotopes from bone collagen which suggest this pattern continued during the individual's later years ($\delta^{13}\text{C}$ value -7.1, $\delta^{15}\text{N}$ value 8.4).



Figure 6.45 Photograph showing the ceramic vessels above SG 1 Burial 4 (note kill hole in upturned Vaca Falls bowl above crania, the fragmentary vessel is a Belize Red dish)

Interpreting this burial deposit overall is a complicated feat. SG 1 Burial 4 is the wealthiest interment uncovered in the eastern triadic structure at Tutu Uitz Na. The individual was accompanied with a total of five complete vessels, the andesite celt, a high-quality chert biface, and 30 olive shell tinklers. The individual was of high social status but was probably very unwell

and almost certainly died a particularly unpleasant death, be it from their ailments or the array of perimortem trauma. SG 1 Burial 4 is interpreted as representing a highly venerated individual whose death caused a sizeable tear in the social fabric of life at Tutu Uitz Na. This may in part be due to the likely painful and unpleasant nature of the individual's passing. The nature of the trauma sustained may speak to having achieved some important deeds in life.

The seated position speaks to veneration, and it seems plausible that the decision to place the individual in the dancing position with the olive shell tinklers may have been an overt attempt to speed the passage of the deceased. The wealthy funerary assemblage may suggest that the individual was the lineage headman of Tutu Uitz Na at this time. While the radiocarbon date from the individual's bone collagen yielded a date of cal AD 480-595 (PSUAMS#8573 modeled), the Tiger Run ceramic assemblage and the associated construction around the interment (cal AD 600-660 PSUAMS#8093 modeled) suggest a date in the latter 6th century or early 7th. This discrepancy may be in part due to time passing between the individual's death and the construction of the eastern triadic structure. The interment co-occurs with the sizeable event which saw the small eastern mortuary structure remodeled into a full eastern triadic assemblage. While this huge construction event could have been in some way directly related to the death of this individual, sampling issues preclude us from this conclusion as the density of overall burials in the structure seems high and the scale of the looters' pits suggest far wealthier interments were placed in the center of the structure. Regardless of the minutiae of the temporal sequence, the most important finding is that Burial 4 was coeval with the emergence of the polity capital at Lower Dover. This may be no coincidence; it is quite likely the initial emergence of the Lower Dover polity saw antagonistic relations between the emergent apical elite and pre-existing intermediate elites. Potentially the death of the individual may have been associated with conflict surrounding this process. The elaborate funerary rites may reflect a time at which the continuation of the lineage was imperiled by the emergence of a higher political order. Theatrical and elaborate burial rites may have aided in the successful transmission of authority (see Goody 1966).

Curiously, the individual appears to have been buried in a dance position, with the heel raised, the leg flexed and the left hand placed on the hip (Scherer et al. 2014: 216). The olive shell tinklers may further corroborate this interpretation as these are often shown placed around the waists and the legs of dancers (Scherer 2015: 91). Dancing is associated with the sacrifice of

captives (Looper, Reents-Budet, and Bishop 2009), and for expediting the passage of the deceased (Fitzsimmons 2009: 155). Dance was also associated with the concurrence of the soul of a living person and a deity or deified ancestor (Houston 2006: 148-149). Scherer (2015: 89) argues that the single flexed leg is indicative of dance in Maya iconography, and cites the raised heel and inclusion of tinklers as indicative of a dancer burial. Scherer also notes that the placement of the hand on the hip is also suggestive of dance (although this also seems to be associated with seated burials; Willey et al. 1965: 81). Scherer and colleagues (2014) argue that dance was often associated with the maize god and the theme of resurrection (see also Taube 2009). Based on burials from El Kinel and Tikal, Scherer (2015: 89-91; see also Scherer et al. 2014: 216) argues that the placement of an individual in a dancing position indicates a desire for their resurrection or a celebration of life over death. While hard to substantiate (or refute), this interpretation is consistent with the individual having been a respected and important member of the Tutu Uitz Na elite household who succumbed to violent trauma and/or illness.

Dance is often associated with inheritance and accession (Looper 2009: 19), and potentially the remains were interred in such a fashion to legitimate the claim of the inheritor of his position as head of the Tutu Uitz Na household. None of the burials interred in dance positions were seated, however. The seated burial position is likely suggestive of status or authority (Lucero 2006; McAnany et al. 1999), or sacrifice (Tourtellot 1990). Freiwald, Mixter, and Billstrand (2014: 101) compared a sample of seated burials from across the lowlands and noted that a high proportion had relatively wealthy grave assemblages and that males were more likely to be placed in a seated position. Classic period seated burials are generally not very common (Freiwald, Mixter, and Billstrand 2014: 100). Eight seated burials dating to the Hermitage and Tiger Run phases were excavated at Barton Ramie (Willey et al. 1965). Three Late Classic seated burials were excavated at BR-1 (Burials 6 and 7 and 9; Willey et al. 1965: 81-84). Burial 6 faced west like Burial 4 at Tutu Uitz Na, and was accompanied with many wealth items, but was situated in a middle status commoner household. This individual was accompanied by twenty ceramic vessels and sixteen accompanying bone and stone artifacts, and a turtle carapace drum. Burials 7 and 9 at BR-1 were likewise seated, but Burial 7 faced north and Burial 9 faced south. Neither of these individuals were accompanied by grave goods. Burial 13 at BR-123 was an Early Classic seated burial facing

north (Willey et al. 1965: 101, 118). This individual was accompanied by a relative abundance of grave goods including an Actuncan Orange Polychrome basal flange bowl.

The perimortem trauma evident on the SG 1 Burial 4 individual could be considered in keeping with the idea of sacrifice (Tourtellot 1990), especially when coupled with the ceremonial biface being lodged in the mouth. Yet this interpretation seems unlikely considering the general location of the individual and the high level of burial wealth. Interpreting the biface placed through the mouth is even more challenging. Despite a literature search, this treatment remains without known precedent. The placement of the biface horizontally through the mouth, and not perpendicular (impaled into) the crania, effectively differentiates it from later Aztec examples (Ragsdale, Edgar, and Melgar 2016). The biface was inserted with some force and potentially tied into the mouth; evident from the fact that even when the torso and skull dropped into the pelvis as the body decayed, the biface remained firmly wedged in the mouth. One speculative possibility is that the biface was placed there to symbolically represent teeth (Hall 1989: 308).

A second high-status burial dating to later in the Late Classic period was uncovered in the southern wing of the eastern triadic structure (E.U. SG1-1). SG 1 Burial 1 was excavated by Petrozza and Biggie (2015: 31-36; see also Petrozza 2015: 50-65), but was subjected to radiocarbon and dietary and strontium isotope analysis as part of this dissertation. This burial comprised two individuals, the first being a primary adult male interred in a sizeable cut-stone crypt. The second individual(s) was a secondary burial involving a stack of long bones at the southern end of the crypt. Individual 1 dated to cal AD 675-825 (UCIAMS#172401 modeled). The burial conformed to common mortuary norms in the region and was extended, prone with the head to the south (Petrozza and Biggie 2015: 50-65; see Figure 6.46). Grave goods include three obsidian blades (two El Chayal, one San Martin Jilotepeque), marine shell pendants, two drilled brocket deer antlers (*Mazama* spp., representing a possible headdress like that described by Sheets 2000), a river clam pectoral, and a miniature Belize Red jar, suggestive of a relative level of affluence. A Belize Red bowl was inverted over the capstones of the crypt (see Figure 6.47). *Jute* shells were placed in the clenched fist and mouth of the individual. While the presence of *jute* in burials is relatively common (Halperin et al. 2003; Powis 1996), the *jute* deposit under the plaza indicates greater symbolic significance (see Chapter 9). Strontium and oxygen isotope analysis of dentition revealed the individual to be local (UM467 $^{87}\text{Sr}/^{86}\text{Sr}$ value .708669, $\delta^{18}\text{O}$ value -3.62).

The carbon isotope value ($\delta^{13}\text{C}$ value -1.71) from tooth enamel indicates a fairly typical diet during the earlier stages of life. Likewise, dietary isotopes from bone collagen show this pattern remain during their later years ($\delta^{13}\text{C}$ value -9.3, $\delta^{15}\text{N}$ value 8.6).

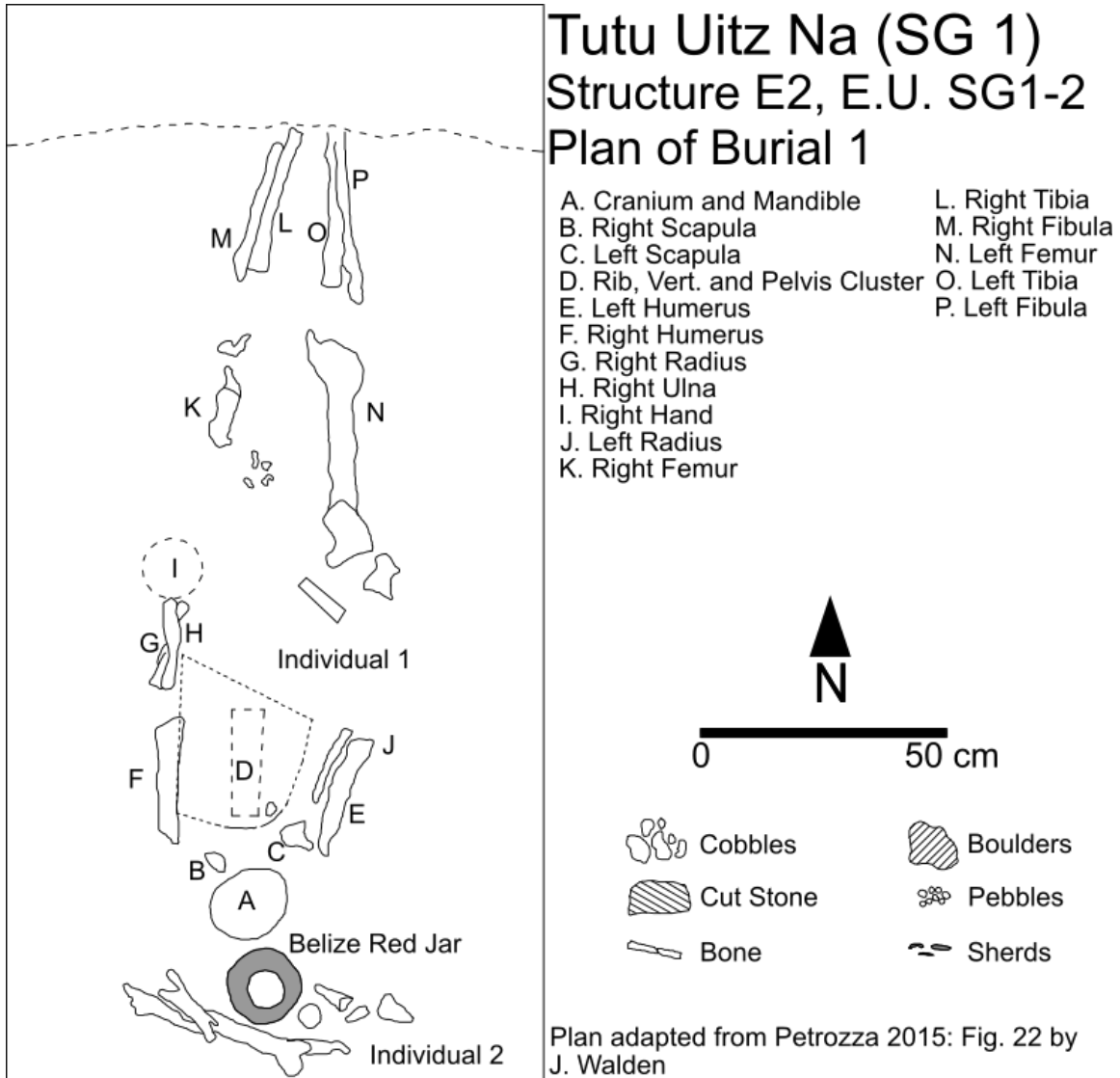


Figure 6.46 Plan of SG 1 Burial 1

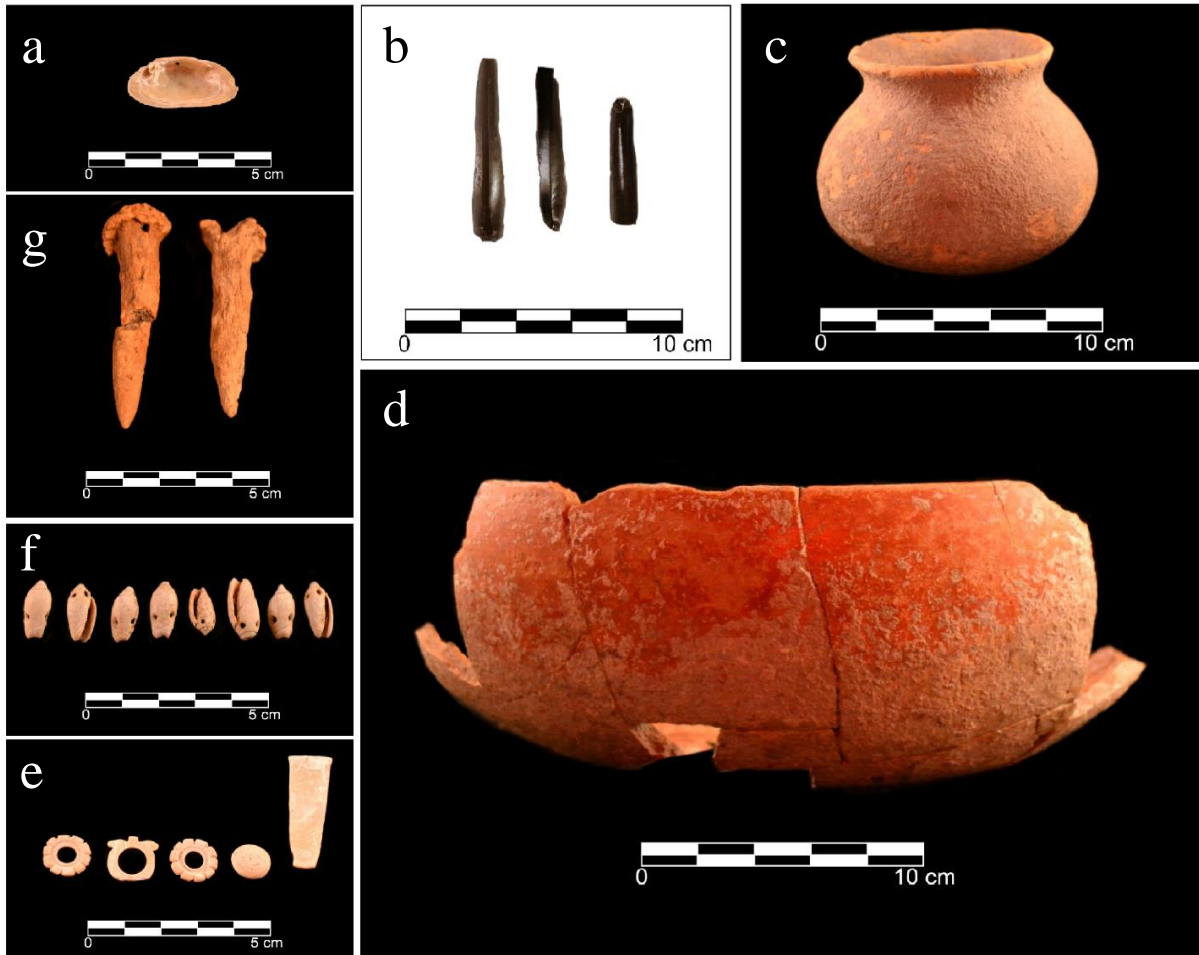


Figure 6.47 Selected grave goods from SG 1 Burial 1

Clockwise from top left: (a) river clam pendant with perforation, (b) obsidian blades, (c) miniature Belize Red jar, (d) Belize Red bowl, (e) conch shell jewelry, (f) olive shell tinklers, (g) drilled antlers

6.3.1.3.5 Structure E2: Terminal Classic (AD 800-1000)

Around the time of abandonment, a sizeable mortuary deposit was interred in Structure E2 (Terminal Classic). This involved the excavation of a large pit into the upper portion of the staircase of Structure E2. SG 1 Burials 2 and 3 were then layered within this pit. SG 1 Burial 6 was laid in a small cut in the apical terminal structure floor, presumably at this time (see Figure 6.48). Radiocarbon ^{14}C dates firmly place the deposit in the Late-Terminal Classic and this is corroborated by Spanish Lookout II ceramics. The large deposit penetrated through the two uppermost risers in the staircase of Structure E2 and would have left this portion of the structure unscalable. This has led to the interpretation that the funerary deposit was peri-abandonment in

nature (although it differs from conventional “peri-abandonment deposits; see Awe et al. 2020a; Hoggarth et al. 2020; see Chapter 3.4.2).

SG 1 Burials 2 and 3 were both placed prone, semi-flexed in the ‘VPLF’ (ventrally placed, legs flexed) position, ~20-30cm above SG 1 Burial 4 (Wrobel and Graham 2015, see also Donis 2013; Izzo 2018; see Figures 6.49, 6.50, 6.51, 6.52, and 6.53). This position is common at Terminal Classic Marco Gonzalez (Graham and Pendergast 1989), Early Postclassic Lamanai and Chau Hiix (Andres and Pyburn 2004: 419), and Late Postclassic San Pedro (Wrobel and Graham 2015). Nine burials that adhere to this VPLF position have been identified at Lower Dover, one in the Lower Dover palace (Watkins et al. 2017; see also Chapter 3.4.2), and six in residential contexts at Barton Ramie (Willey et al. 1965: 101-121, 202, 242, 534; see Table 6.13). All but one of these date to the Late-Terminal Classic period. BR-123 Burial 20 was placed in the VPLF position but with the head placed in a Floral Park phase Aguacate Orange: Privaccion Variety bowl. This earlier example of the burial position is likely unrelated to the Terminal Classic tradition. Skeletal material from BR-123 Burial 9 was submitted for strontium isotope analysis which revealed the individual to be non-local ($^{87}\text{Sr}/^{86}\text{Sr}$.70959), corroborating patterns evident at Lamanai (Freiwald 2011a: 209, 213-214; Howie 2010: 392; see below for a discussion of the implications of these burials at Tutu Uitz Na).

Table 6.13 VPLF Burials in the Lower Dover Polity.

| <i>Burial #</i> | <i>District</i> | <i>Status</i> | <i>Tentative Date</i> | <i>Reference</i> |
|-----------------|-----------------|---------------|-----------------------|-----------------------------|
| BR-82 BU1 | Island | Commoner | Late-Terminal Classic | Willey et al. 1965: 202 |
| BR-123 BU7 | Middle River | Commoner | Late-Terminal Classic | Willey et al. 1965: 114-118 |
| BR-123 BU9 | Middle River | Commoner | Late-Terminal Classic | Willey et al. 1965: 114-118 |
| BR-123 BU20 | Middle River | Commoner | Terminal Preclassic? | Willey et al. 1965: 101-121 |
| BR-167 BU2 | Oxbow | Commoner | Late-Terminal Classic | Willey et al. 1965: 242 |
| BR-167 BU4 | Oxbow | Commoner | Late-Terminal Classic | Willey et al. 1965: 242 |
| CT2 BU1 | Lower Dover | Apical elite | Late-Terminal Classic | Watkins et al. 2017 |
| SG 1 BU2 | Tutu Uitz Na | Elite | AD 775-885 | Biggie et al. 2019 |
| SG 1 BU3 | Tutu Uitz Na | Elite | AD 770-890 | Biggie et al. 2019 |

Tutu Uitz Na (SG 1)
 Structure E2,
 E.U. SG1-7
 Plan of Terminal Architecture
 and Intrusive Burials

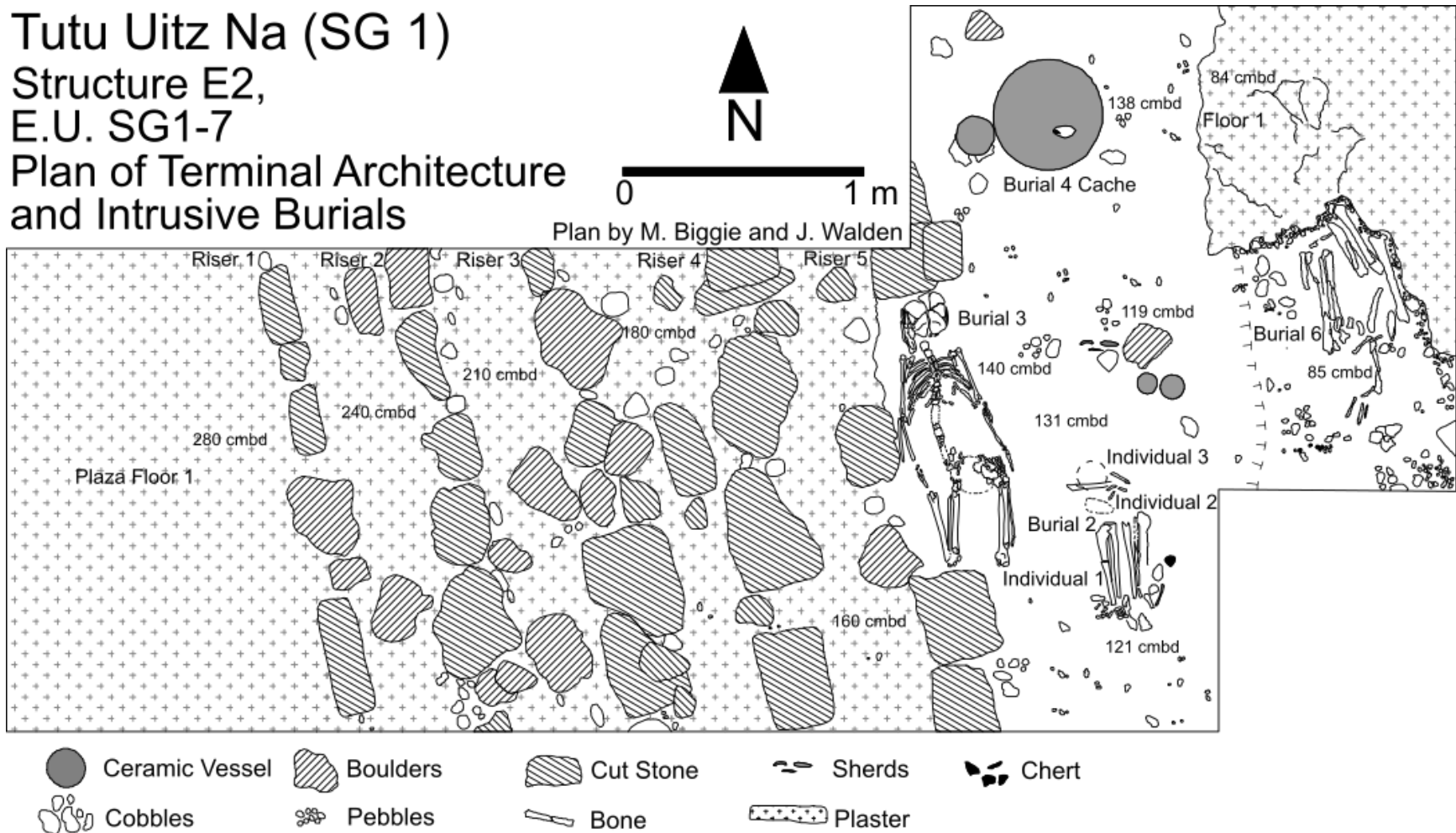
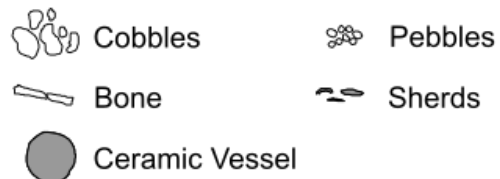
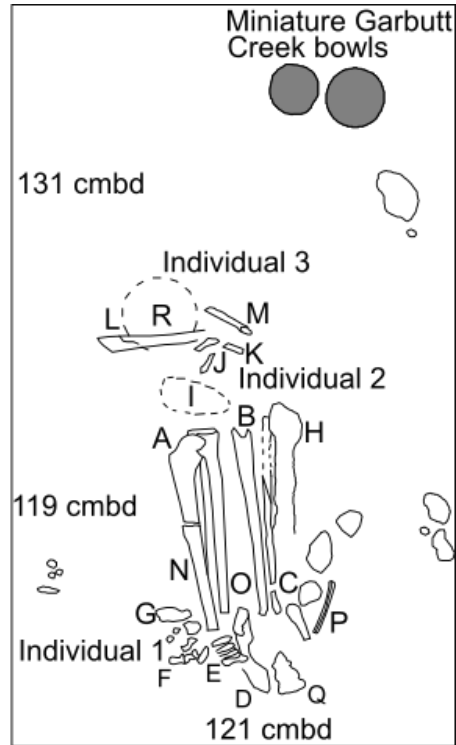
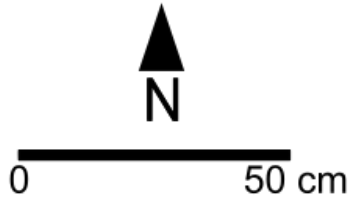


Figure 6.48 Plan of terminal architecture and SG 1 Burials 2, 3, and 6 at Structure E2

Tutu Uitz Na (SG 1)
 Structure E2,
 E.U. SG1-7
 Plan of Burial 2
 Individuals 1-3

- Individual 1:
 A. Right Tibia
 B. Left Tibia
 C. Left Fibula
 D. Right Ox Coxae
 E. Left Metatarsals
 F. Phalanges
 G. Tarsal Bones
 H. Right Femur

- Individual 2:
 I. Mandible
 J. Fifth Metatarsal
 K. Metatarsals
 L. Tibial Shaft
 M. Radius
 N. Right Fibula
 O. Right Femur
 P. Left Ox Coxae
 Q. Sacrum
 Individual 3:
 R. Dentition



Plan by A. Thompson, M. Swearingner, K. Green Mink, and J. Walden

Figure 6.49 Plan of SG 1 Burial 2

SG 1 Burial 2 contained a primary interment of a young adult female of 15-29 years (Individual 1), and secondary interments of an adult female (Individual 2), and an infant of 1 year \pm 4 months (Individual 3; see Green Mink and Bye 2020: 276; see Figure 6.50). These individuals were likely buried during a single event, based on the stratigraphic sequence and the fact the radiocarbon dates from the human remains overlap. Individual 1 dates to cal AD 780-880 (PSUAMS#3367 modeled) and Individual 2 dates to cal AD 770-890 (PSUAMS#3464 modeled). The primary individual was buried prone, head to the south, hands beneath the pelvis, with palms towards the body. The legs were likely bound, as the upper legs were straight, but the lower legs were bent so that the feet were over the ox coxae. The hand placement also indicated possible binding. The upper half of the individual's body was missing, having been in the looters' trench area, with radius and ulna cleanly cut and nothing above the first few lumbar vertebrae. Stature estimation was recorded by Swearingner in the field using Genovés' (1967) formula to estimate the

stature of the individual (accounting for the total length of the femora, tibiae, and fibulae). This individual was estimated to be approximately 169 cm (5ft 5”). Individuals 2 and 3 were situated to the north of Individual 1. Individual 2 included metacarpals, metatarsals, a radius, and a tibia, whereas Individual 3 simply consisted of a mandible fragment and some loose teeth (Green Mink and Bye 2020). Bone pins and pin fragments located near the east baulk possibly indicate that these remains are from a secondary bundle burial (see Figure 6.50). Sherds from two highly fragmentary miniature Garbutt Creek bowls were also found, although these may not have been directly associated with this interment. The prevalence of miniature vessels in burials at Tutu Uitz Na and Barton Ramie corroborates the notion that these smaller versions of commonly used vessels held some ritual significance. Dietary isotopes from bone collagen suggest that both Individual 1 ($\delta^{13}\text{C}$ value -9.2, $\delta^{15}\text{N}$ value 8.7) and Individual 2 ($\delta^{13}\text{C}$ value -9.9, $\delta^{15}\text{N}$ value 8.9) consumed a fairly typical diet in their later years.








**Figure 6.50 Photographs of SG 1 Burial 2 and small finds
SG 1 Burial 2 (left). Faunal bone pins and an awl (right)**

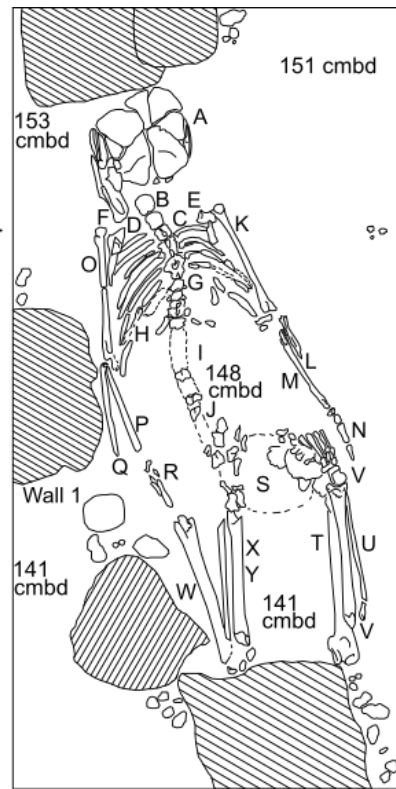
SG 1 Burial 3 contained the remains of a probable young female adult individual. The individual had been interred face down, with the head to the north. SG 1 Burial 3 dates to a similar period as SG 1 Burial 2, cal AD 770-890 (PSUAMS#3365 modeled). The upper legs were straight, with lower legs flexed with feet over the ox coxae. The feet seem bound to the waist as they rested upon the buttocks in a somewhat unnatural position (see Figures 6.51 and 6.52). The arms also appear to have been bound, the shoulders were raised and scapulae vertical, arms straight alongside

the body with right hand tight to leg, palm inward. Though skeletally intact, poor preservation caused bones to crumble upon removal. An overturned intact bowl was located on the same level near the eastern baulk, but at enough distance that it did not appear to be associated with this individual. The individual had dental modification which involved a square carving in the buccal bulge of the premolars, and the carving of the incisors in the *ik'* style (a status symbol representing wind and essence; Scherer 2015: 35). Cranial modification was also apparent, this involved the flattening of the frontal bone of the skull which is fairly common in the Belize River Valley (Green Mink and Bye 2020; see also Palomo, Inomata, and Triadan 2017; Tiesler 2014). Cranial and dental modification may speak to the relatively high social status of the interred individual (Geller 2009, 2014). Dietary isotopes from bone collagen indicate this individual consumed a typical diet in their later years ($\delta^{13}C$ value -11.2, $\delta^{15}N$ value 7.7).

**Tutu Uitz Na (SG 1)
Structure E2,
E.U. SG1-7
Plan of Burial 3**

- A. Cranium and Mandible
- B. Cervical Vertebrae
- C. Right Clavicle
- D. Left Clavicle
- E. Right Scapula
- F. Left Scapula
- G. Right Ribs
- H. Left Ribs
- I. Thoracic Vertebrae Cluster
- J. Lumbar Vertebrae Cluster
- K. Right Humerus
- L. Right Radius
- M. Right Ulna
- N. Right Hand
- O. Left Humerus
- P. Left Radius
- Q. Left Ulna
- R. Left Hand
- S. Sacrum/Pelvis/Feet Cluster
- T. Right Femur
- U. Right Tibia
- V. Right Fibula
- W. Left Femur
- X. Left Tibia
- Y. Left Fibula

-  Cobbles
-  Pebbles
-  Cut Stone
-  Bone
-  Boulders



Plan by K. Shaw-Müller, Q. Yijia, and J. Walden

0 50 cm

Figure 6.51 Plan of SG 1 Burial 3



Figure 6.52 Photograph of SG 1 Burial 3

A fourth individual was placed in a thin cut into the apical plaster floor of the substructure. SG 1 Burial 6 was an intrusive burial, dug into (but not through) the re-plastering of Floor 1 (see Figures 6.53 and 6.54). This burial contains a single adult male individual and fragments of the cranium, ribs, clavicle, vertebrae, humerus, radius, femur, tibia, fibula, and feet. The preservation of the remains is poor, and it is unclear how this individual was interred. The remains were not extended but rather contained in a small area. It is unclear whether the remains were articulated and therefore, whether this is a primary (double flexed or bundle burial) or secondary burial. Two muscle markers on these remains suggest a determination of Male. The right tibia exhibits a marked soleal (popliteal) line, which is the inferior boundary of the popliteus muscle insertion and gives rise to the popliteus fascia and soleus muscle. The left femur exhibits platymeria and a marked gluteal tuberosity, which is the insertion point of the gluteus maximus muscle.

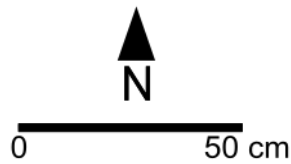


Figure 6.53 Photograph of SG 1 Burial 6

Tutu Uitz Na (SG 1)
 Structure E2,
 E.U. SG1-7
 Plan of Burial 6

- A. Right Femur
- B. Ulna
- C. Metacarpal
- D. Radius
- E. Left Femur
- F. Radius
- G. Humerus Fragments
- H. Tibia
- I. Shaft Fragments
- J. Cranial Fragments

- Faunal Tools
- Plaster
- Pebbles
- Cobbles
- Bone
- Sherds



Plan by M. Biggie, X. Li, and J. Walden

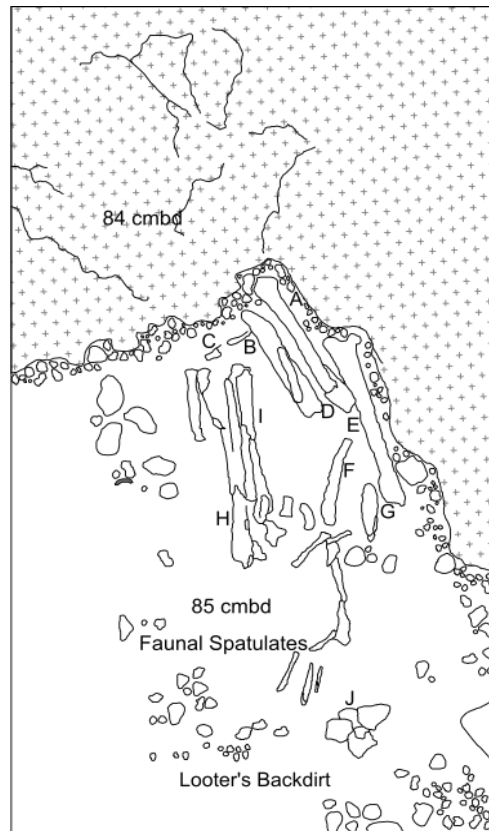


Figure 6.54 Photograph of SG 1 Burial 6

Spatulate objects fashioned from faunal bone (large mammal) were found near the crania fragments of this individual (see Figure 6.55). Based on the position of similar faunal spatulates in

association with the crania of BR-1 Burial 22 and BR-260 Burial 1, Willey and colleagues (1965: 494) speculate these spatulates could have functioned as hair ornaments (see also Weller 2009: 238). The burial had been topped with 3 large capstones. It is unclear how this fourth burial related to the others, but it seems likely that this individual was interred around the same time based on ceramic dating and architectural stratigraphy. Construction fill surrounding this burial is earlier than the burial, dating the terminal construction phase and major remodeling of the eastern triadic structure to the early Late Classic cal AD 600-600 (PSUAMS#8093 modeled).



Figure 6.55 Faunal spatulates from around the crania of SG 1 Burial 6

The burial deposit on Structure E2 was probably associated with the final occupation of this structure. As mentioned previously, the burials were uncapped, rendering the steps to the summit of the eastern triadic structure unusable (see Robin et al. 2012b: 124 for the logic underlying this). Moreover, the intrusive deposit removed two sets of risers problematizing the use of the staircase. Potentially, this deposit was tied to some event around AD 750-850 which signified the end of the Tutu Uitz Na household, and the abandonment of the eastern triadic

structure. Either way occupation of the group seems to finish around the time of this funerary deposit.

VPLF (ventrally placed, legs flexed) burials have been found associated with seated burials at Structures N10/2 and N10-4 at Lamanai suggesting a possible link to the earlier interment of Burial 4 (Wrobel and Graham 2015: 87). To retain the position in the grave, the legs would most likely have been bound above the pelvis (Graham, Simmons, and White 2013: 174). As Green Mink and Bye (2020: 281) state in their osteological report of SG 1 Burials 2 and 3, there is no physical evidence of binding (see also Bye 2020). The numerous instances of binding depicted in the iconography shows the usage of biodegradable twine or rope, the preservation of which would definitely not be expected given the climate in the region. Binding of the legs remains the most logical explanation as to why the legs would have been held in this position (Graham, Simmons, and White 2013: 174). Whereas the VPLF burials in Northern Belize and the Cayes have their hands in a variety of positions, Burials 2 and 3 from Tutu Uitz Na have their hands by their sides and at the same relative level as their feet (meaning they could also have been bound). The prone position and placement of the feet over the buttocks and wrists by the sides seem highly indicative of binding associated with sacrifice. The position of both skeletons is reminiscent of iconographic representations of captives lying face down with legs and arms bound (J. Marcus 1993: 146; see Figures 6.51 and 6.52). A large carved stone monument of a captive lying prone with the legs flexed back over the buttocks and arms tucked along the chest was found just 11 km downriver at the small major center of Bacna (Helmke, Kettunen, and Awe 2005: 70). The meager grave assemblages might also indicate that these individuals lacked status in the eyes of those who interred them. Generally, the Terminal Classic interments at Tutu Uitz Na seem less “individualizing” than the earlier Late Classic interments, these burials are not accompanied with lavish grave assemblages, but are far more frugal and might be more consistent with the idea that the individuals were interred to reverse the structure as opposed to the other way round (see Becker 1992).

A broader comparative perspective problematizes the sacrifice interpretation. At Lamanai, the majority of the Buk phase (Early Postclassic) burial assemblage comprised of VPLFs, and many of these were associated with grave goods (Wrobel and Graham 2015; see also Donis 2013). The sheer prevalence of this practice across northern Belize and the Cayes during the Terminal

Classic through to Late Postclassic periods renders the sacrifice interpretation unlikely. While the placement of burial CT2-BU1 in a peri-abandonment deposit atop the Lower Dover palace seems somewhat similar in terms of context as the Tutu Uitz Na VPLFs. These peri-abandonment contexts on elite structures could feasibly have been stages for the binding of captives and their subsequent sacrifice, however, the prevalence of this practice among the commoners of Barton Ramie seems to also problematize this assumption as it somewhat unlikely that commoner households were the setting for the binding and sacrifice of captives. Another alternative interpretation involves the binding of the dead to facilitate easy transportation in canoes. This might make logical sense as many of the known VPLFs are situated along watercourses or the coast although this remains speculative. What is clear however is that the VPLF position is far more common in Northern Belize and the Cayes than in the Belize River Valley. To date, only a handful of VPLFs are known elsewhere in the Belize River Valley, a single individual (Burial 3, Individual 4) was interred in the VPLF position in Late Classic plaza fill in front of Structure A1 at Zubin, a Tier 3 minor center (similar to Tutu Uitz Na) in the hinterlands of Cahal Pech (Iannone 1996: 357; see also Hoggarth et al. n.d.). Another individual in a similar position has recently been uncovered at Xunantunich Group B (Michael Petrozza, personal communication, 2021). Temporally, the only known settlement practicing the tradition in the Terminal Classic is Marco Gonzalez on Ambergris Caye. This may suggest some connection between elites and commoners at Lower Dover and the community at Marco Gonzalez.

6.3.1.4 Uchenchoc, an Elite Rockshelter Shrine (Rockshelter 2)

Uchenchoc, or Rockshelter 2 is located 80 meters north of the Tutu Uitz Na center, below SG 14, on the flanks of the hill overlooking the Lower Dover center to the north (see Figure 6.15 and 6.56). Excavation at RS 2 involved a 1x2 m unit with a central 1x1 m extension placed in the mouth of the rockshelter (see Figure 6.57). Uchenchoc was larger in the Classic period. Today, the rockshelter is only roughly 3 m deep, although, in the past, the ceiling probably extended another 6 m to the north. Caves and rockshelters were considered cosmologically significant spaces by the ancient Maya (Brady and Ashmore 1999; Prufer 2005; see Chapter 2.9.2). This belief was manifested in substantial ritual assemblages found in many caves (Moyes et al. 2009). Investigations of larger Maya caves have revealed theatrical spaces within which public

ceremonies could be staged (Moyes et al. 2020a). Smaller caves and rockshelters were likely considered just as ritually significant as larger caves (Wrobel et al. 2017). In geographical regions where large caves were rare, the Maya conducted ritual in less impressive caves and rockshelters (King et al. 2012). This certainly seems true at Lower Dover. In addition to Rockshelter 2, Rockshelter 1 at Plaza G in the Lower Dover civic-ceremonial center shows evidence of Classic Maya ritual and a Postclassic interment (Romih, Izzo and Burns 2017; see also Hoggarth et al. n.d.). Excavation of Uchenchoc was initiated following the discovery of substantial amounts of ceramics and lithics in the vicinity of the rockshelter, and because its location immediately beneath the Tutu Uitz Na center suggested some relationship with the elite.

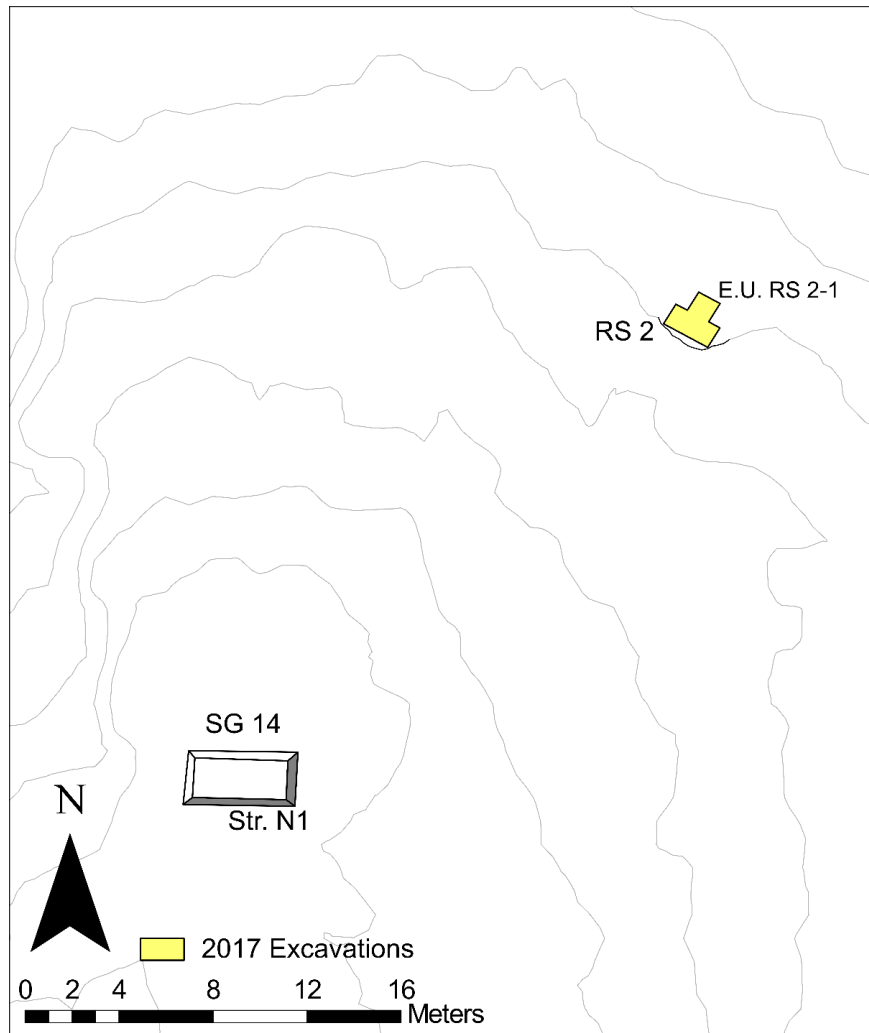
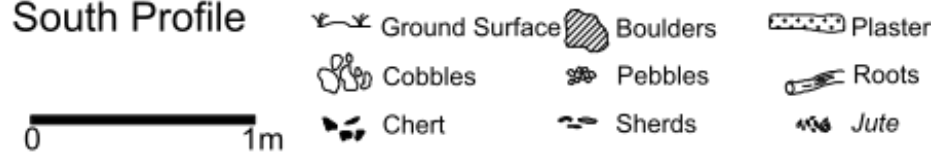


Figure 6.56 Map showing the location of E.U. RS2-1 at Uchenchoc (RS 2)

Uchenchoc (RS 2)
 Rockshelter, E.U. RS2-1
 South Profile



Profile by M. Biggie, A. Nachamie, and J. Walden

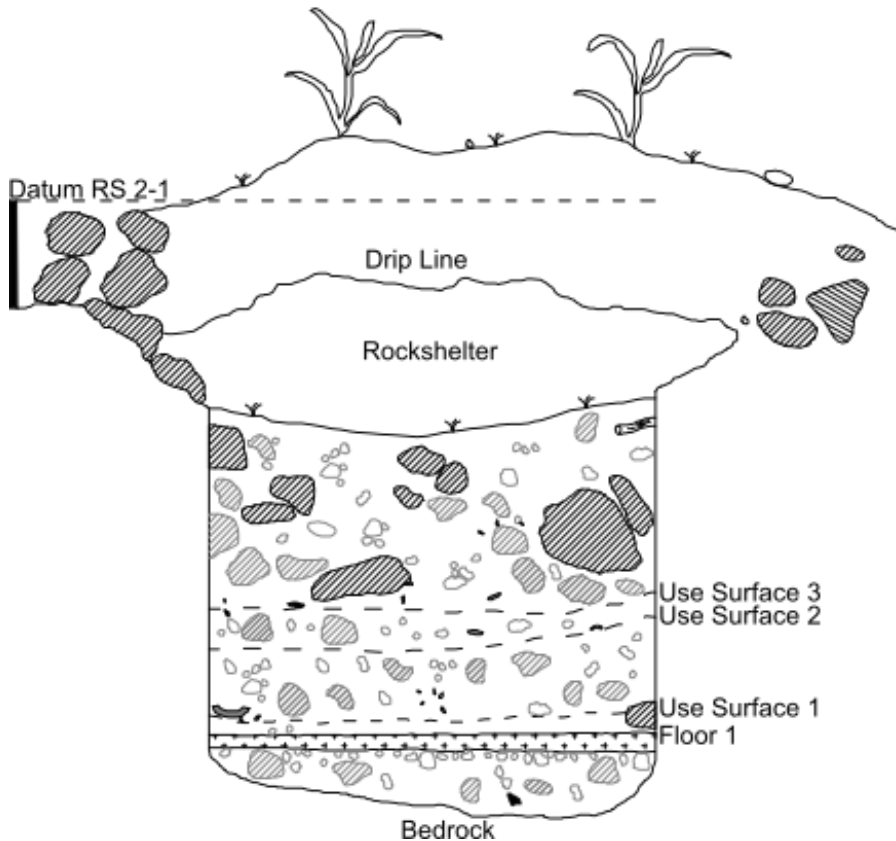


Figure 6.57 South profile of Uchenchoc (RS 2)

6.3.1.4.1 Late Preclassic-Early Classic (300 BC-AD 600)

The first phase in Rockshelter 2 (RS 2) involved the construction of a well-built Late Preclassic plaster floor (Floor 1) on a layer of ballast on the limestone cave floor (see Figures 6.57 and 6.58). A use surface situated on a thin level of clay matrix and spall was sat directly upon this floor (see Figures 6.58 and 6.59). Placed on the use surface was a series of offerings including an upturned broken ring base, beneath which lay *jute* and a canine from a large carnivore, probably a jaguar (*Panthera onca*; see Figure 6.60). The presence of formal construction in the rockshelter

suggests that it was used as a shrine at this time (Walden et al. 2018; for construction in caves and rockshelters in the region more broadly see Moyes 2020b: 319).

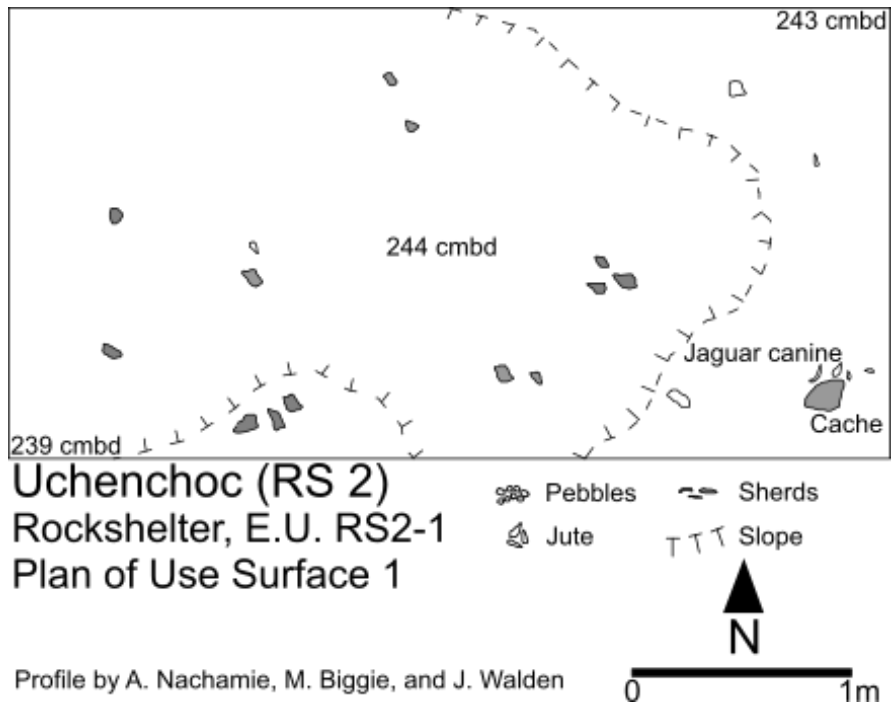


Figure 6.58 Plan of Use Surface 1 on top of Floor 1 at RS 2



Figure 6.59 Photograph of rockshelter mouth showing Floor 1 at RS 2

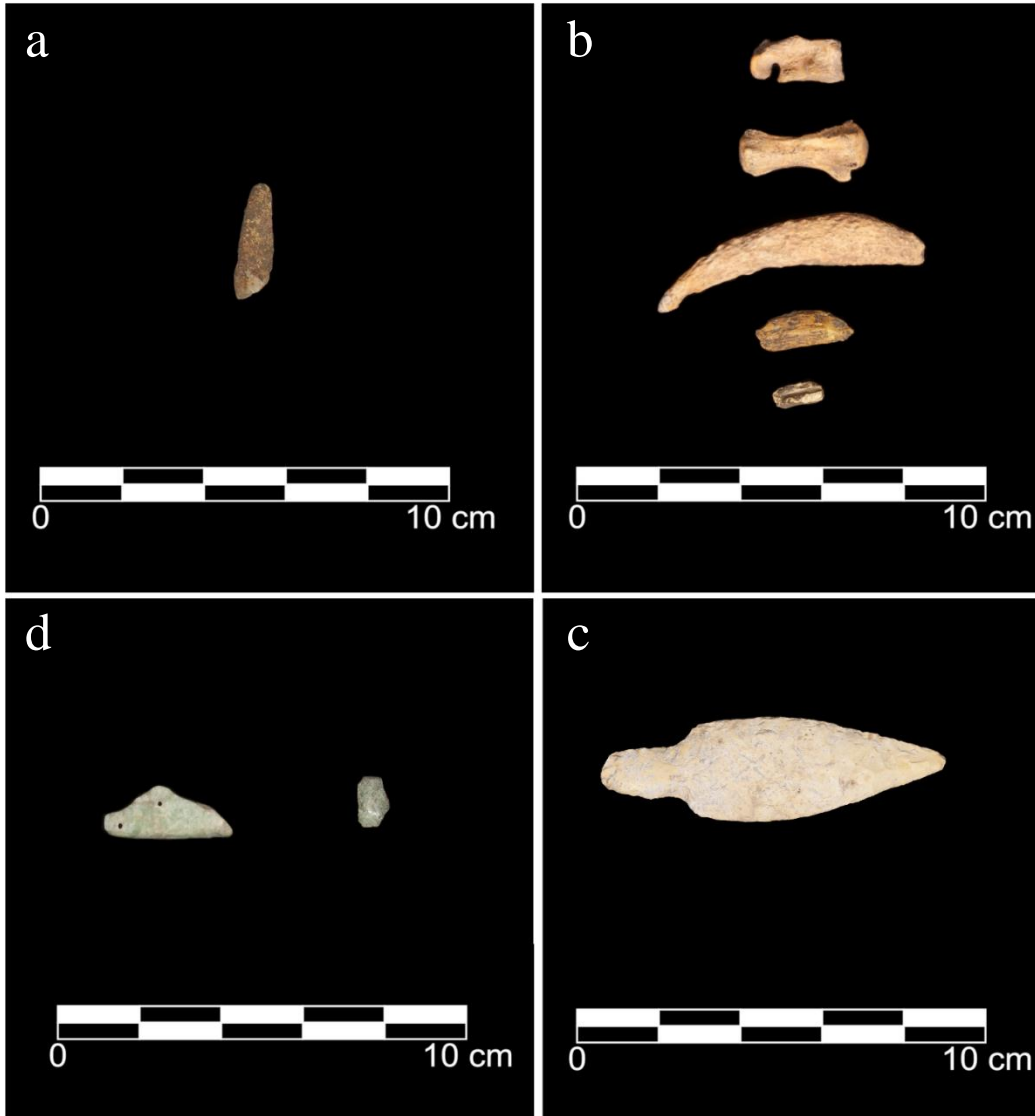


Figure 6.60 Small finds from RS 2

Clockwise from top left (a) human canine, (b) jaguar vertebrae, tarsal, and dentition (from top to bottom), (c) jade pendant and bead, (d) stemmed lenticular biface

6.3.1.4.2 Late-Terminal Classic (600 BC-AD 1000)

Rituals staged within the rockshelter became much less formalized in the Late Classic period. Later activity in the rockshelter shrine occurred upon two crude use surfaces tamped into the collapsed spall from the ceiling (see Figure 6.59). Late Classic materials placed on and above these use surfaces including dentition, vertebrae, and a tarsal from one or more adult jaguars (see Roa et al. 2020: 244), a human canine, seven obsidian blade fragments, three pieces of marine shell (*Strombidae* spp.), deer bones (*Cervidae*), a finely made stemmed lenticular biface, an

incensario prong, a jade bead, a jade pendant, and over 1200 *jute* shells (see Figure 6.60). Like caves themselves, marine shell, *jute*, and jade were associated with the watery underworld (Halperin et al. 2003). The *incensario* speaks to the burning of incense within caves, which still occurs in traditional Maya communities today. The placement of teeth in caves was fairly common in the eastern lowlands (Moyes 2006: 207). The placement of jaguar remains in caves is not a common phenomenon (but see Peterson 2006: 206). Known symbolic associations between jaguars and caves are limited to an Olmec painting of a human copulating with a jaguar in the cave of Oxtotitlan (Grove 1973: 133; see also Becker 1996). Although cave mouths are commonly associated with the earth monster or jaguars (Moyes 2006: 39). Taphonomic explanations remain possible but unlikely for the presence of jaguar remains in the cave. For instance, the loose remains could have been naturally deposited in the rockshelter through bioturbation or surface runoff. This seems unlikely as there was little evidence of bioturbation through the layers of dense spall, and the jaguar remains were associated with ceramics, lithics, and other materials.

Whatever the cosmological significance of the items, it is also clear that ostentatious wealth items were being left in the rockshelter. Geographical proximity to the Tutu Uitz Na center and the presence of jade (which is largely found in elite contexts at Lower Dover) strongly suggest that the Tutu Uitz Na elite were the primary custodians/users of the rockshelter. The presence of elaborate wealth items within rockshelters and smaller caves is not uncommon (Morton, Isa, and Wrobel 2015: 112). The rockshelter may have been perceived as housing an earth lord who dwelled and owned the hill on which Tutu Uitz Na sat (Watanabe 1990: 141; see also Baron 2016a: 104; Moyes 2005). Propitiating the earth lord may have been a fundamental part of cave ritual at RS 2 prior to the rise of Lower Dover. This may have become more politically problematic in the eyes of the Lower Dover apical elite in the Late Classic, as the Tutu Uitz Na elite would have had a long relationship with the earth lord, and may have considered them their patron deity (Baron 2016: 128). Such a dynamic might explain why formalized ritual stopped in the Late Classic, but such ostentatious wealth items such as jade beads were still left in the rockshelter.

6.3.1.5 Tutu Uitz Na Center Summary

The Tutu Uitz Na center emerged in the Middle Preclassic. The first discernable architecture comprises the *jute* deposit and the construction of a substantial low platform at

Structure N1. This Middle Preclassic architecture is generally substantial enough to suggest that the Tutu Uitz Na elite had access to some commoner labor from their inception. Artifactual evidence suggests that the trans-egalitarian elites at Tutu Uitz Na employed a range of strategies including the creation of ceremonial ritual space, the production of wealth items, and the hosting of feasts to accrue authority at this time. The Late Preclassic period saw the founding of the shrine in Uchenchoc (RS 2) and the construction of several more phases on the northern elite residential structure. It seems likely that construction occurred around this time on Structure E2 also, although this phase was generally hard to detect. It remains probable that the first elite interment (Burial 5) was placed in Structure E2 at this time. The Early Classic period saw little drastic change at the Tutu Uitz Na center. Substantial construction occurred at both the northern residence (Str. N1) and the eastern mortuary shrine (Str. E2). The Early Classic period saw the interment of Burial 7 in Structure E2. It remains unclear at this time what was occurring in Uchenchoc (RS 2) due to issues dating radiocarbon from this context. It seems likely based on ceramics that the Early Classic period saw the accumulation of the use surface directly upon the Late Preclassic plaster floor, although this could have occurred in the early Late Classic period.

The major change apparent at the Tutu Uitz Na center throughout the trajectory was in the early Late Classic period. The scale of architecture doubled in size at this time, suggestive of much greater labor control. The architectural increase was apparent at Structure N1 which not only increased in size but also saw several elaborate architectural additions such as an outset staircase with a stair-side outset and multiple terraces. The changes on Structure E2 were even more extensive and likely saw its remodeling into an eastern triadic structure with northern and southern wings. This alteration saw the southern structure (Str. S3) set back and the plaza expanded. It is also during this time that wealthier more elaborate burials like Burials 1 and 4 were interred into the newly constructed eastern triadic structure. These alterations and the elaborate burials which were placed within them strongly suggest the augmentation of intermediate elite public ancestor veneration in the Late Classic period. Despite the increase in the scale of architecture and material wealth in burials, the proportions of wealth items in fill decrease somewhat drastically at this time however (see Chapter 7.4.1). By the Late Classic, the earlier formal rituals at Uchenchoc clearly declined and were likely replaced by less formalized ceremonies which resulted in the deposition of wealth items on the natural use surfaces within the rockshelter. The Tutu Uitz Na center saw a

fairly swift decline in the Terminal Classic period. Multiple radiocarbon dates from Structures N1 and E2 both suggest the abandonment of the center between cal AD 770-890. This final period saw the interment of the most impoverished burials apparent at Tutu Uitz Na (Burials 2, 3, and 6).

6.3.2 The Commoner Households of the Tutu Uitz Na District

A total of six commoner households from the broader Tutu Uitz Na District were excavated (see Figure 6.15). Following the sampling strategy laid out in Chapter 5.3.1, a stratified random sample of settlement groups were selected with several criteria in mind. This involved the excavation of several high-status commoner neighborhood head households with longer developmental trajectories (SG 3 and SG 42), lower-status commoner households which straddled the Early to Late Classic transition (SG 11 and SG 28), and single component Late Classic households (SG 9 and SG 51). A larger sample of Late Classic commoner households were test pitted by Guerra (see Walden, Guerra, and Qiu 2019), data from these excavations are used in demographic models but are not discussed here (see Guerra n.d.). Three charcoal samples and one burial were radiocarbon dated with the primary goal of distinguishing between Early and Late Classic contexts within commoner households in the Tutu Uitz Na District (see Table 6.14).

Table 6.14 AMS Radiocarbon Dates from the Tutu Uitz Na District Commoners.

| <i>Lab ID#</i> | <i>Location</i> | <i>Context</i> | <i>Conventional ¹⁴C yr (BP)</i> | <i>2σ Calibrated Range</i> | <i>Modeled 2σ cal range</i> |
|----------------|-----------------|--------------------|--|--------------------------------|---------------------------------|
| PSU-8099 | SG 3 Str. N1 | Fill above bedrock | 2360 ± 15 | 465-385 BC | N/A |
| PSU-3366 | SG 3 Str. N1 | SG 3-Burial 1 | 1960 ± 20 | AD 5-125 | 25 BC-AD 85 |
| PSU-8098 | SG 11 Str. N1 | Floor 3 Ballast | 1725 ± 15 | AD 250-405 | N/A |
| PSU-8100 | SG 42 Str. S1 | Fill above bedrock | 1615 ± 15 | AD 415-540 | N/A |

6.3.2.1 Mamna (SG 3), A High-Status Commoner Household

SG 3 or Mamna is a sizeable high-status commoner household located on a small hillock 250 meters north of Tutu Uitz Na, and 350 meters southeast of the Lower Dover civic-ceremonial center (see Figures 6.15 and 6.61). This household probably housed a high-status commoner neighborhood head, who acted as patron to several lower status commoner clients residing nearby

at SG 13, SG 15, and SG 111. SG 3 is fairly sizeable for a commoner household (299 m³) and has a sizeable patio for gatherings (150 m²). It has three structures, a northern structure (Str. N1), a small eastern mortuary structure (Str. E2), and a narrow southern range structure (Str. S3). SG 3 was the only commoner dwelling excavated at Tutu Uitz Na which had a Middle Preclassic component. Mamna Str. N1 went through at least eight-building phases prior to its Terminal Classic abandonment. A 2x5.5 m unit was placed through the northern structure (N1).

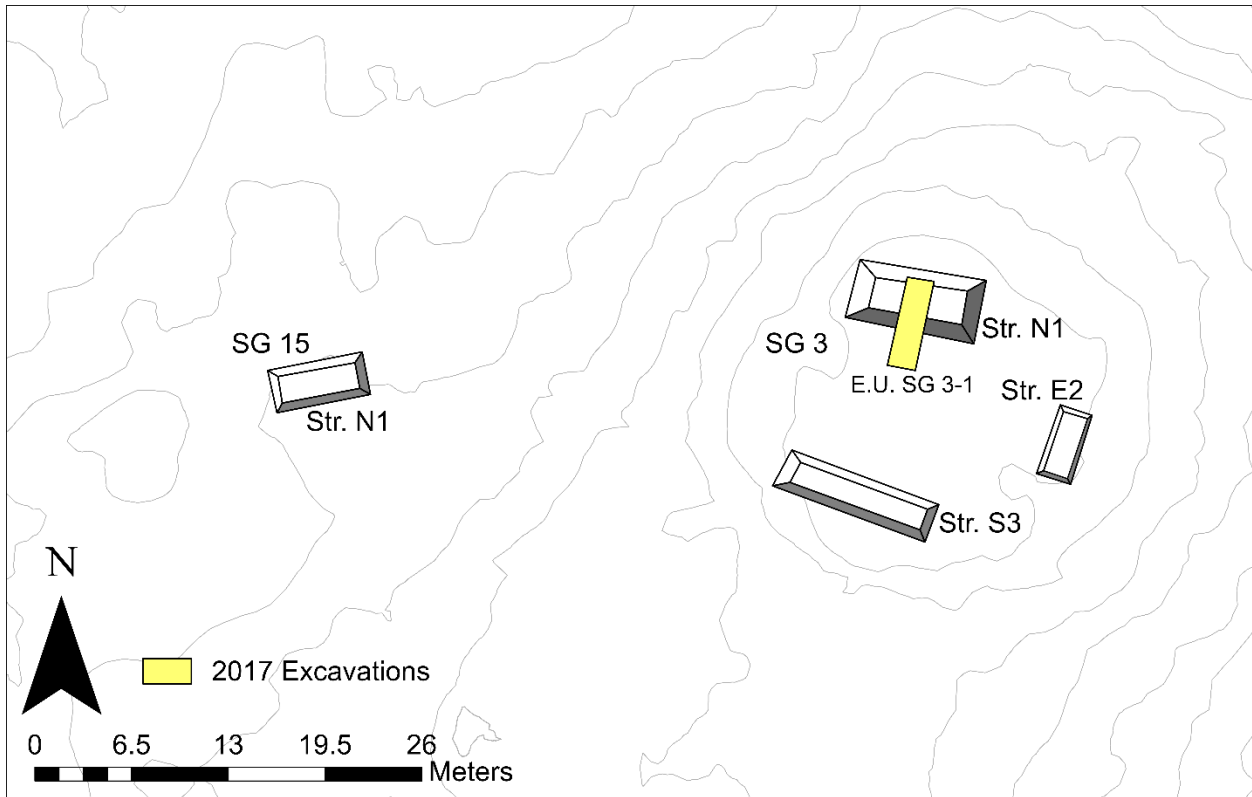


Figure 6.61 Map showing the location of E.U. SG 3-1 at Mamna (SG 3)

Mamna (SG 3) Structure N1, E.U. SG3-1 East Profile

0 1m

- | | | | | | |
|--|----------------|--|----------|--|----------|
| | Ground Surface | | Boulders | | Plaster |
| | Cobbles | | Pebbles | | Roots |
| | Cut Stone | | Sherds | | Charcoal |
| | Bone | | Obsidian | | Jute |

Datum# SG 3-1

Profile by J. Walden and A. Levin

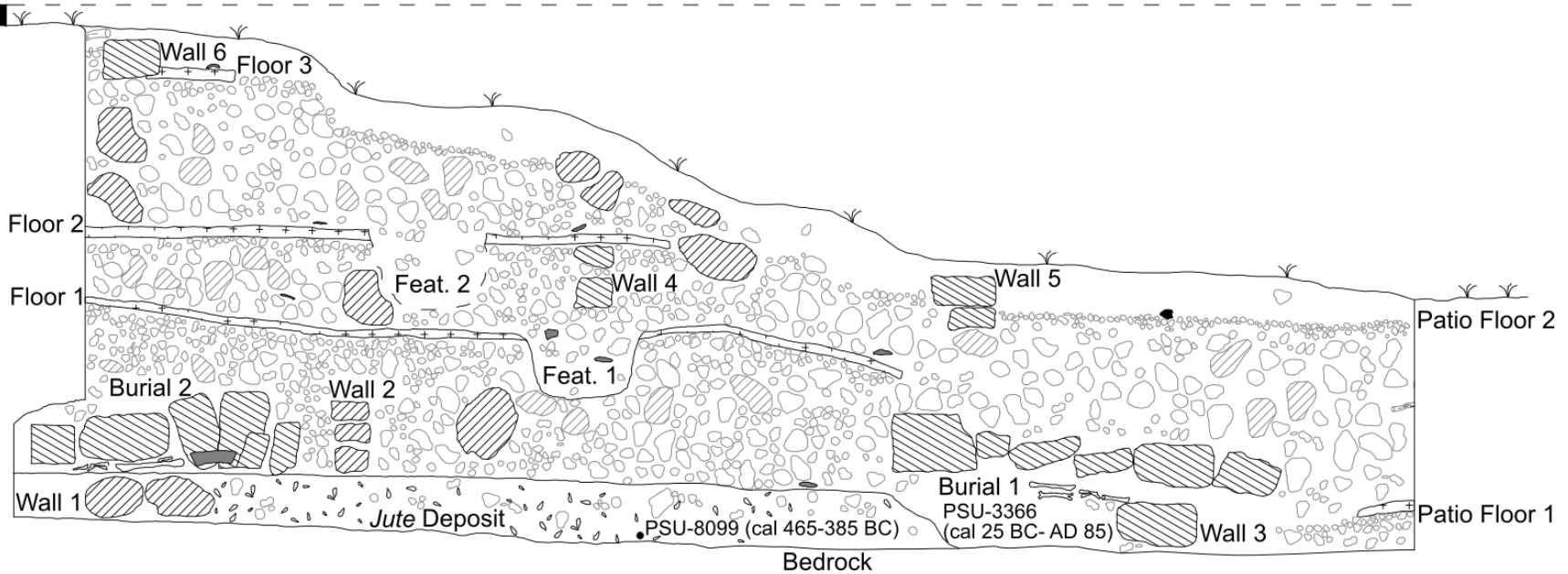


Figure 6.62 East profile of Mamna (SG 3) Structure N1

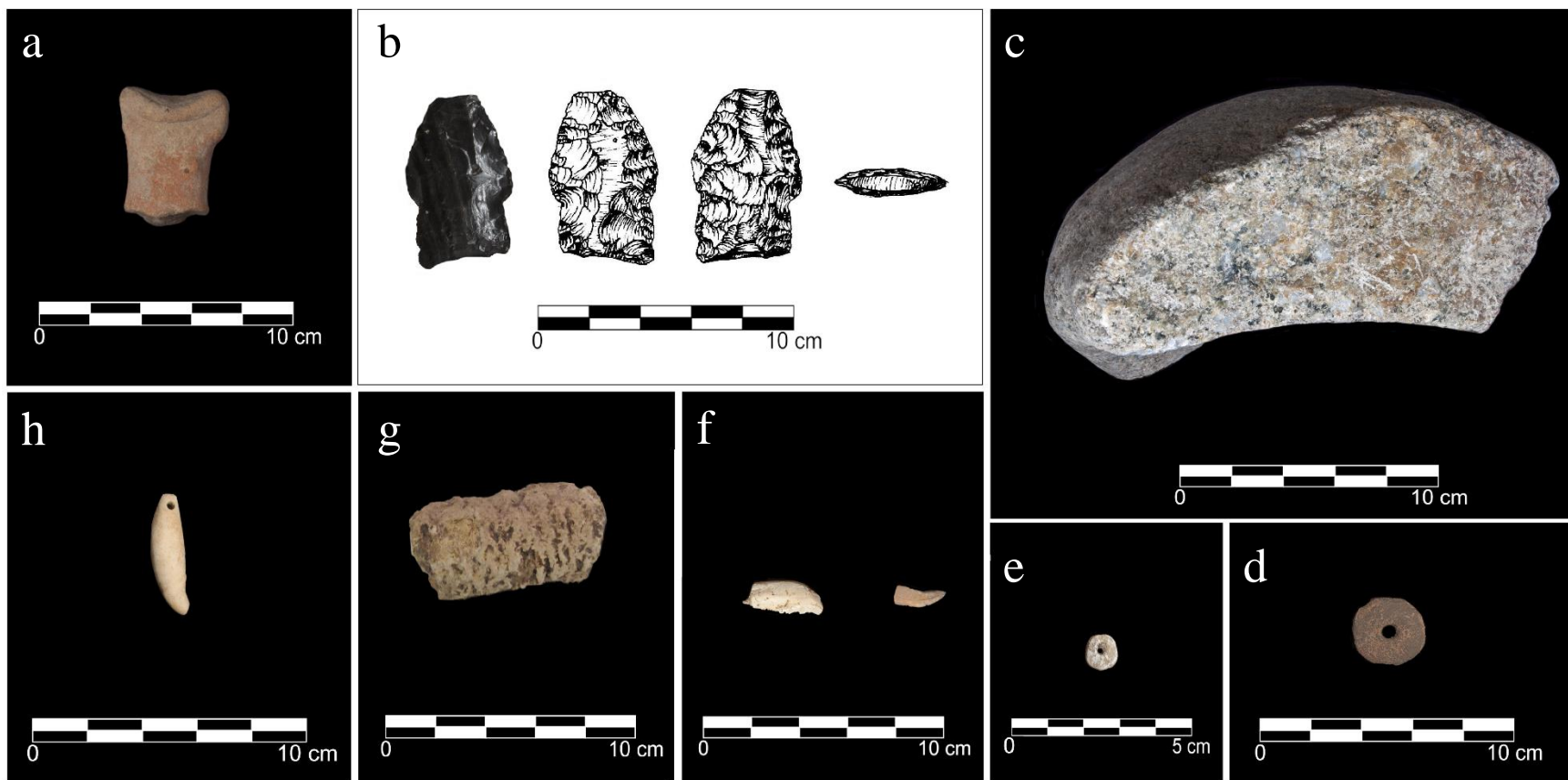


Figure 6.63 Selected small finds from SG 3 Structure N1

Clockwise from top left: (a) figurine body fragment, (b) obsidian biface (drawn by K. Shaw-Müller), (c) granite metate fragment, (d) ceramic perforated pot disk, (e) marine shell bead, (f) marine shell debris, (g) speleothem (stalagmite), (h) carved limestone animal tooth pendant

6.3.2.1.1 SG 3: Middle Preclassic (900-300 BC)

The establishment of SG 3 involved the construction of a ~30 cm high platform, rising above a layer of *jute* and marl, similar to the *jute* deposit at the Tutu Uitz Na center (SG 1) at this time (see Figure 6.62). This deposit contained some Middle Preclassic ceramics, three pieces of marine shell and a finished marine shell bead, and 1234 *jute* (see Figure 6.63e and 6.63f). Interestingly, the high densities of *jute* below the Preclassic patio floor may suggest the commoner residents were emulating the Tutu Uitz Na local elites, located just 250 m away (Walden and Biggie 2017). While *jute* were almost certainly a popular foodstuff and useful leveling agent, the co-occurrence alongside marine shell beads once again speaks to some type of cosmological beliefs possibly pertaining to the primordial sea (see Chapter 6.3.1.1.). Charcoal from this *jute* deposit dated to cal 465-385 BC (PSUAMS#8099 unmodeled). This suggests that Mamna was founded around the end of the Middle Preclassic period.

6.3.2.1.2 SG 3: Late Preclassic (300 BC-AD 300)

The Late Preclassic saw one major and three minor construction phases at SG 3 Str. N1 and the interment of two individuals, SG 3 Burial 1 (interred in the patio) and SG 3 Burial 2 (interred in the central portion of the platform). Construction fill from the Late Preclassic phase contained an assortment of quotidian refuse including Barton Creek and Jenney Creek phase ceramics, lithics, several granite and basalt *manos* and *metates*, a perforated pot disk spindle whorl (see Figure 6.63d), and a strange figurine body fragment (see Figure 6.63a). SG 3 Burial 2 was likely the earlier of the two burials based on architectural stratigraphy (bone collagen did not yield sufficient gelatin for radiocarbon dating). This burial was located in the core of a sizeable ~1 m high Late Preclassic residential platform. This well-built crypt contained an adult male (of 30 to 55 years) interred extended, prone, with the head to the south. The crypt had several substantial capstones measuring approximately 30x40 cm (see Figures 6.64 and 6.65). A Sierra Red bowl and a Matamore Dichrome: Unspecified Variety bowl were interred with the individual (see Figure 6.66; see also Kosakowsky 2012). The cranium was originally placed in the Matamore Dichrome bowl but had seemingly rolled forwards. The bowl could have been used to extract the cranium for curational purposes (a similar pattern is evident at BR-20, Burial 1; Willey et al. 1965: 171; see also Robin et al. 2012: 123). The Sierra Red bowl was placed next to the head. In addition to

architectural stratigraphy, and burial ceramics, a Late Preclassic date is corroborated by the presence of Jenney Creek and Barton Creek sherds in surrounding construction fill. Both arms were slightly flexed at the elbows such that the hands were resting in the pelvic region and the legs were fully extended.

Mamna (SG 3) Structure N1, E.U. SG3-1 Burial 2

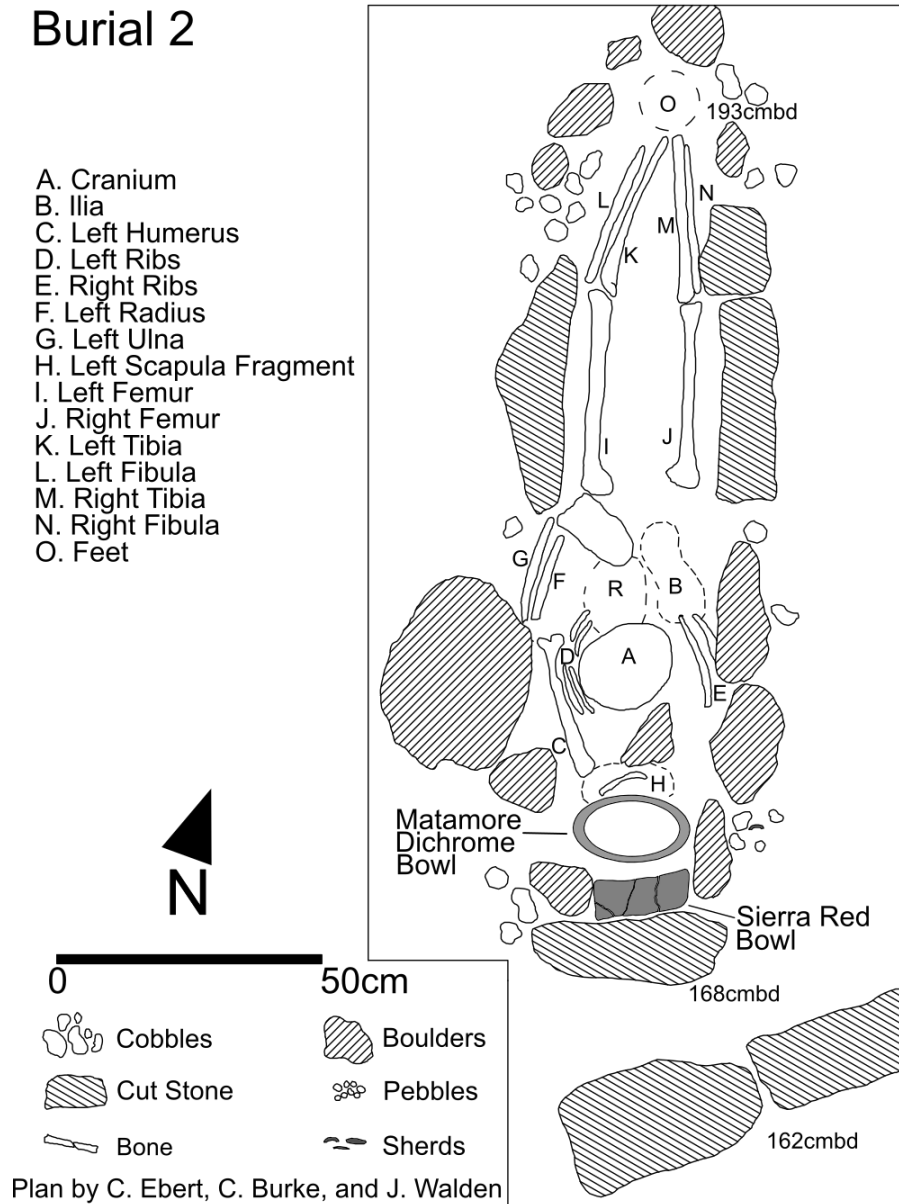


Figure 6.64 Plan of SG 3 Burial 2

Age at death was estimated based on antemortem loss of the left second and third mandibular molar with complete remodeling of the alveolar bone, moderate enamel attrition (wear) on most teeth with heavy wear on the maxillary right first molar and the mandibular left first molar, and the presence of osteophytes and porosity on the end plate of the only body from a lumbar vertebra. Strontium and oxygen isotope analysis of dentition indicated a local origin for this individual (UM468 $^{87}\text{Sr}/^{86}\text{Sr}$ value .708539, $\delta^{18}\text{O}$ value -2.70). The carbon isotope value ($\delta^{13}\text{C}$ value -8.19) from tooth enamel is a low statistical outlier from the regional norm ($-5.56\text{‰} \pm 1.7$), suggestive of an atypical diet during the earlier stages of life.



Figure 6.65 Photograph of SG 3 Burial 2



Figure 6.66 Grave goods from SG 3 Burial 2

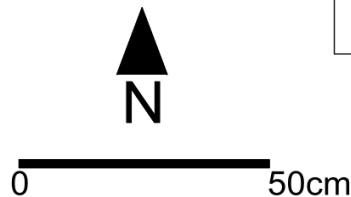
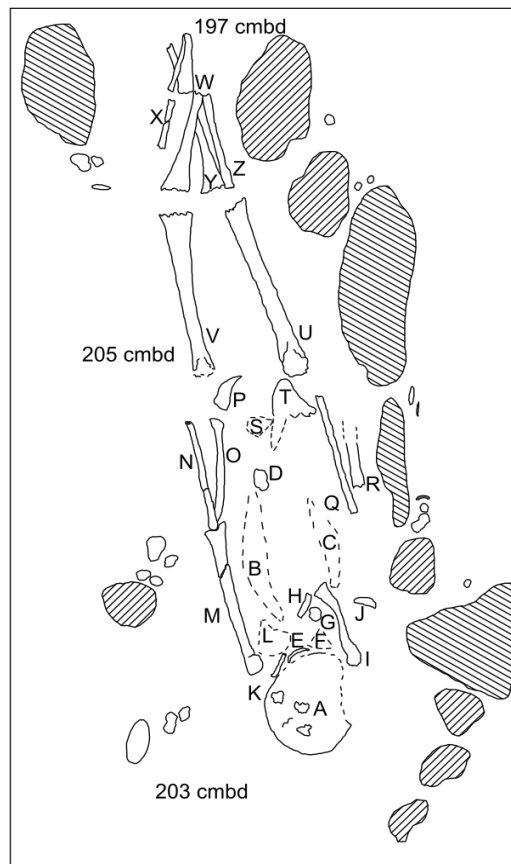
Matamore Dichrome bowl (top), Sierra Red bowl (bottom; drawn by K. Shaw-Müller)

A second well-built crypt was constructed intrusively into the Middle Preclassic fill in the patio (SG3 Burial 1). It contained an elderly male individual in an extended, prone position with his head to the south. The burial was covered by several large (~20-30 cm) capstones (see Figures 6.67 and 6.68). AMS ¹⁴C dating of bone collagen from Burial SG 3 Burial 1 places the interment between cal 25 BC-AD 85 (PSUAMS#3366 unmodeled), consistent with the relative Late Preclassic dating from ceramics in the crypt fill. The individual suffered periodontal disease on the mandible with extreme alveolar resorption and activity. This suggested habitual use of dentition for some activity other than eating. Despite the individual's age and probable importance, no grave

goods were present in the burial. Atop this crypt was a thick layer of limestone cobble and boulder fill and the ballast of the Late Preclassic patio floor. Willey and colleagues (1965: 562) noted that earlier burials were interred head to the north at Barton Ramie and that only in the Classic period orientation switched to head to the south, this pattern now seems less clear as there is growing evidence of Late Preclassic interments with the head orientated to the south, both at Tutu Uitz Na and at Barton Ramie (Walden et al. 2020c). Dietary isotopes from bone collagen indicate this individual consumed a typical diet in their later years ($\delta^{13}\text{C}$ value -12.6, $\delta^{15}\text{N}$ value 8.5).

Mamna (SG 3) Structure N1, E.U. SG3-1 Burial 1

- A. Cranium and Mandible
- B. Right Rib Cluster
- C. Left Rib Cluster
- D. Vert. Body
- E. Right Clavicle
- F. Cervical Vert. Cluster
- G. Vert. Body
- H. Rib Body Fragment
- I. Left Clavicle
- J. Left Scapula Fragment
- K. Fragment
- L. Right Scapula Cluster
- M. Right Humerus
- N. Right Ulna
- O. Right Radius
- P. Right Pelvis
- Q. Left Ulna
- R. Left Radius
- S. Sacrum Fragments
- T. Left Pelvis
- U. Left Femur
- V. Right Femur
- W. Right Tibia
- X. Right Fibula
- Y. Left Tibia
- Z. Left Fibula



- Cobbles
- Boulders
- Cut Stone
- Pebbles
- Bone
- Sherds

Plan by K. Green-Mink, J. Walden, and V. Izzo

Figure 6.67 Plan of SG 3 Burial 1



Figure 6.68 Photograph of SG 3 Burial 1

6.3.2.1.3 SG3: Terminal Preclassic-Early Classic (AD 150-600)

The next major remodeling phase saw the substructure increase in height by 60 cm, resulting in an overall height of about 160 cm. Fill from this construction episode suggested a *terminus post quem* of the Early Classic. Like the previous period, the walls associated with this phase are well-cut limestone blocks and the plaster floors were well-laid and relatively thick. An associated construction phase was apparent in the patio. This construction episode contained

similar types of domestic refuse as earlier construction phases. This included a mixture of Barton Creek, Mount Hope, Floral Park, and Hermitage Phase ceramics, lithic tools and debitage, and granite *manos* and *metates*. Architectural fill contained relatively high proportions of obsidian blades and some obsidian flakes suggesting that obsidian tool production potentially occurred in this locale. Evidence of ritual activities from this phase includes several *incensario* sherds.

6.3.2.1.4 SG 3: Late-Terminal Classic (AD 600-1000)

The final construction phase consisted of a dramatic remodeling in the Late Classic. This saw the structure rise in height by another meter (260 cm). The patio was substantially raised at this time also, reducing the height of the residential structure relative to the patio floor (Figure 6.69). This construction phase contained generic quotidian fill items, alongside a speleothem that was removed from a cave and is suggestive of domestic ritual (Brady and Rissolo 2006). A limestone pendant in the form of feline tooth was also found (see Figure 6.63h), this was identical to one included in the grave assemblage of Burial 18 at BR-123 (Willey et al. 1965: 120, Fig. 297 see also Weller 2009: Fig. 4.113). A substantial (8x11 cm) obsidian biface was placed on the terminal patio floor (Figure 6.63b). The presence of such a sizeable obsidian artifact on a Late Classic surface is noteworthy because most households only had access to obsidian blades by the Late Classic, and not the sizeable cores needed to make a biface (Awe and Healy 1994). Furthermore, the poor level of workmanship evident on the biface indicates it was not worked by a specialist, but probably was produced at SG 3 due to the relatively higher proportions of obsidian flakes (not just blades in the assemblage). In contrast to surrounding households, SG 3 had preferential access to San Martin Jilotepeque obsidian in the Preclassic period. Evidence for obsidian flake tool production becomes much more scarce in the Belize River Valley after the Preclassic when it was largely replaced by prismatic blades (Awe and Healy 1994; Healy et al. 2004: 114). It would seem that the occupants were engaged in some low-level specialized production of obsidian artifacts possibly. Similar activities potentially took place at BR-123 (see Weller 2009: 357).

Atop this Late Classic construction phase was an assortment of flat-lying sherds in association with a single Paxcaman Red Postclassic scroll foot (Aimers 2004). This part of the Belize Valley was likely depopulated during the Early Postclassic and as such evidence of

Postclassic re-visitation probably reflects new groups entering the region in the Late Postclassic (Hoggarth et al. 2014, n.d.). The deposit represents meager evidence for Postclassic activity, and probably reflects re-visitation rather than residential occupation. The nature of this re-visitation is unclear, but it seems possible that larger abandoned households located in prominent positions, like SG 3, might become the focus of ritual activity or simply objects of curiosity.



Figure 6.69 Photograph of terminal architecture at SG 3 Structure N1

6.3.2.1.5 Mamna (SG3) Summary

Throughout its long trajectory SG 3 Str. N1 fulfilled a residential role. The structure fill contained a standard domestic assemblage: utilitarian bifaces for agriculture, storage and serving vessels, and *manos* and *metates*. Other items included *incensario* fragments, figurines, musical instruments, and speleothems, which in conjunction with the burials and possible offering pits point to the types of domestic ritual common in Maya household contexts. The large obsidian

biface indicates that this Late Classic household had access to either large nodules of the material, either from trade contacts, or from early construction contexts, or sourced a ready, but poorly made obsidian biface from elsewhere. The sizeable patio space at the center of the settlement group and the artifactual evidence of ritual activities such as *incensarios* suggest a low-level ceremonial role as neighborhood heads.

6.3.2.2 Pechna (SG 9): A Low-Status Commoner Household

Pechna (which received its name because everyone working there became infested with ticks) is a small low-status commoner settlement group located 80 m west of the Tutu Uitz Na center. The settlement group has two low mounds (Str. S1 and Str. N2), of 60 and 50 cm high respectively, and an overall architectural volume of 90 m³. A single 1x3 m unit was placed perpendicular to the larger, southern house platform (Structure S1; see Figures 6.15 and 6.70).

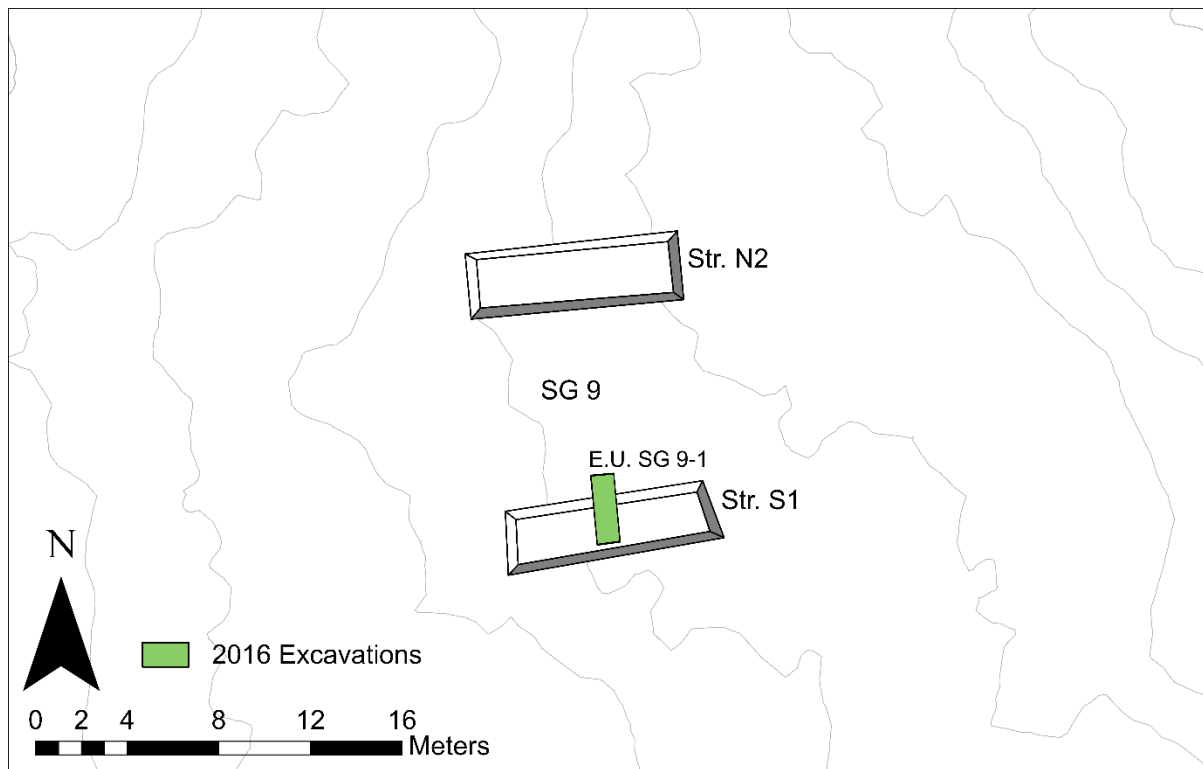
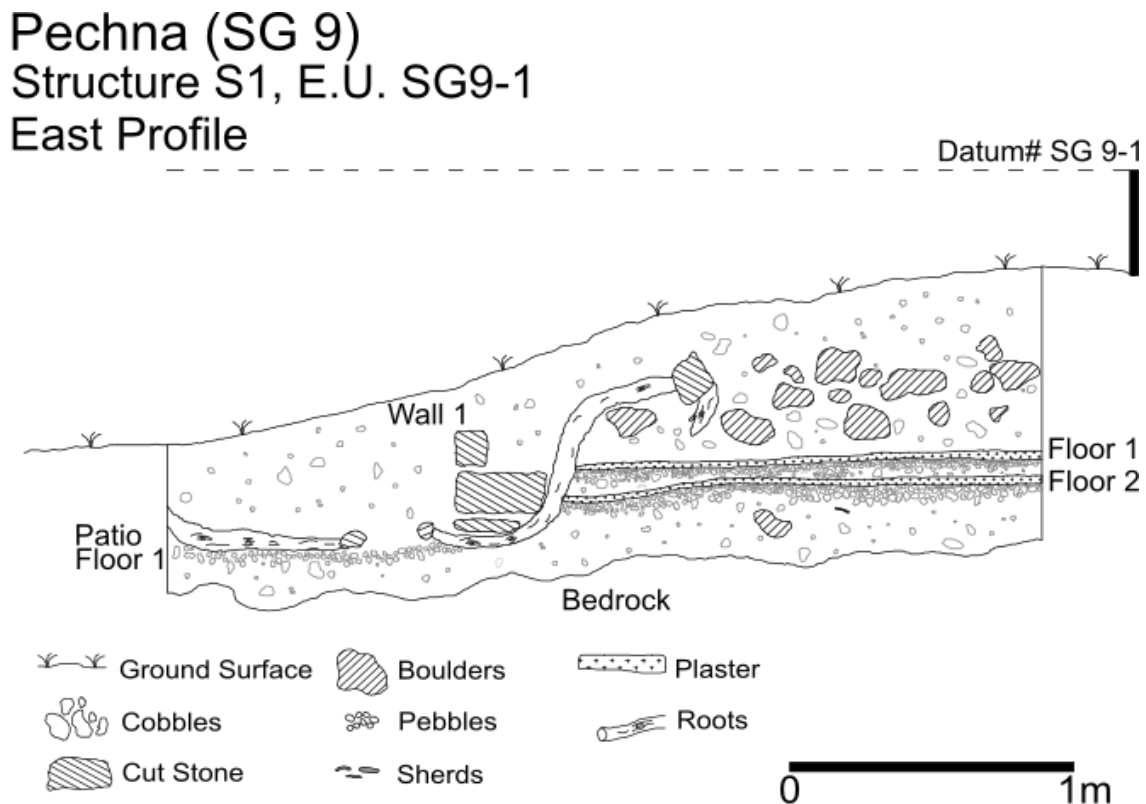


Figure 6.70 Map showing the location of E.U. SG 9-1 at Pechna (SG 9)

6.3.2.2.1 SG 9: Late-Terminal Classic (AD 600-1000)

Structure S1 had two clear construction phases which dated to the Terminal Classic period and a third possible phase which was entirely bioturbated (Walden and Biggie 2017; see Figure 6.71). Pechna is notable for two reasons. Despite containing few overt wealth markers such as polychrome sherds or marine shell, sherds from an Ahk'utu' Molded-carved vase were found in the patio floor (Helmke and Reents-Budet 2008). This category of vessel dates to the Terminal Classic and has been interpreted as an elite feasting item and prestige gift (Helmke 2001; LeCount 1999; Ting, Graham, and Martínón-Torres 2014: 54). The presence of this vessel at Pechna may indicate a patron-client relationship with the Tutu Uitz Na intermediate elites (LeCount 1999: 253-254). Aside from this item, the only other notable finds were a slate disk and a large chunk of petrified wood (see Figure 6.72). In contrast, Structure S1 at Pechna was relatively poorly constructed. Figure 6.71 shows that the floors had a very thin layer of ballast and sat directly on the humic soil (see Figure 6.73). The replastering attempt on this floor suggests that subsidence quickly occurred and was followed by a further botched attempt to fix the floor.



Profile by J. Walden, K. Gruntorad, Y. Qiu, and R. Duncan

Figure 6.71 East profile of Pechna (SG 9) Structure S1



Figure 6.72 Small finds from SG 9 Structure S1

Slate disk (left), petrified wood (right)



Figure 6.73 Photograph of penultimate architecture at Pechna (SG 9) Structure S1

6.3.2.2.2 Pechna (SG 9) Summary

The occupation at Pechna began late on in the regional trajectory. While no datable charcoal was retrieved from Structure S1, Terminal Classic (Spanish Lookout II) ceramics were fairly abundant throughout indicating that the residence was constructed between AD 750-900. While the presence of molded carved in this household might be suggestive of some type of patron-client relationship with the Tutu Uitz Na elite at this time, it remains plausible that this vessel originated at the Lower Dover apical elite level. This might make sense given the fact the Tutu Uitz Na center was declining during this time (see Chapter 6.3.1.2). Overall, Pechna reflects a somewhat impoverished Late to Terminal Classic household which despite lacking impressive architecture and elaborate wealth items contains all the quotidian necessities of daily life.

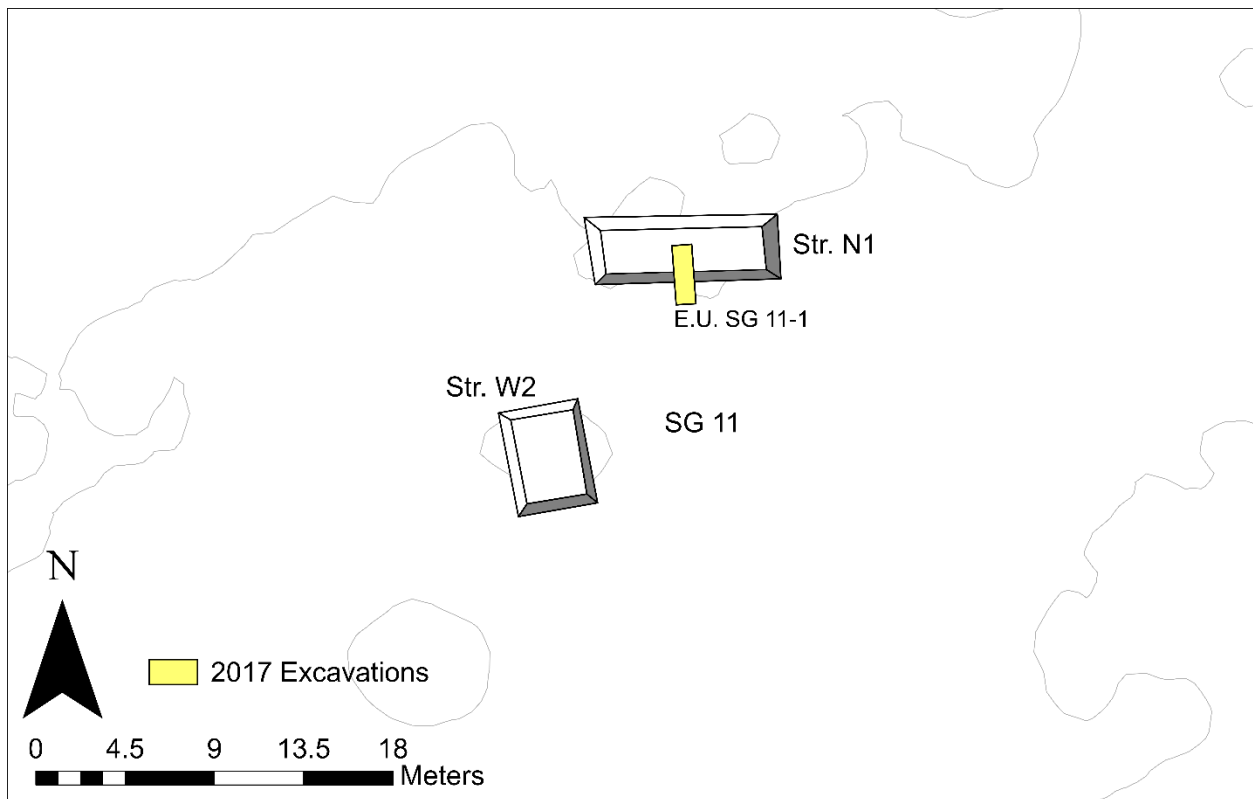


Figure 6.74 Map showing the location of E.U. SG 11-1 at Acbalamna (SG 11)

6.3.2.3 Acbalamna (SG 11): A Low-Status Commoner Household

Acbalamna is a double mound group (Structures N1 and W2) situated in a seasonal bajo 170 m southeast of the Tutu Uitz Na center (see Figures 6.15 and 6.74). Surface ceramics were entirely Spanish Lookout I and II. This settlement group was sampled because the surface ceramics in conjunction with the overall diminutive size of the house platforms (70 cm in height and an architectural volume of 180 m³), and insalubrious location in a swamp gave the impression it was probably an impoverished single component Late Classic low-status commoner household. However, excavation of a small 1x3 m unit on Structure N1 revealed that the platform had multiple components dating to the Terminal Preclassic/Early Classic and Late Classic periods (Walden et al. 2018; Figure 6.75). SG 11 received its moniker because of the diversity of the local wildlife.

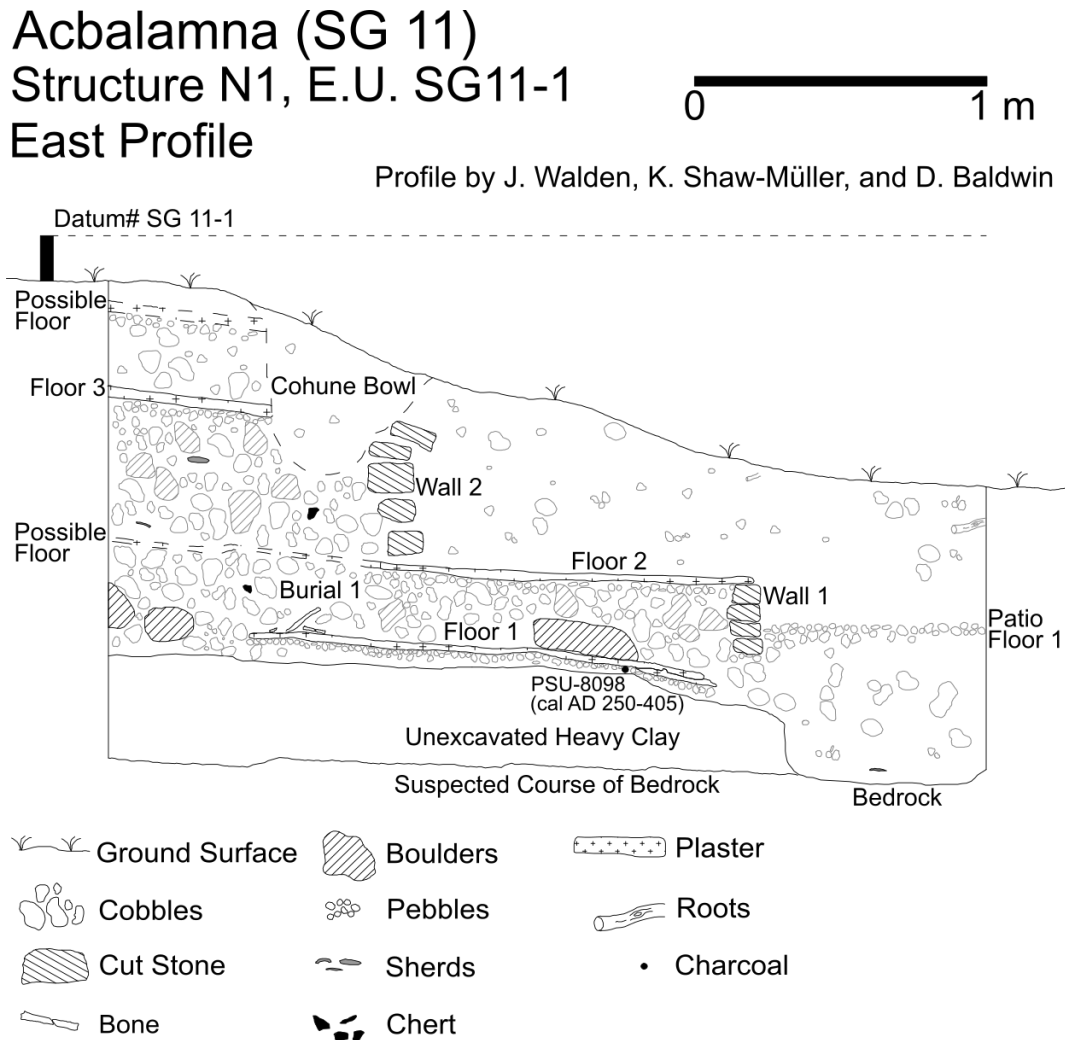


Figure 6.75 East profile of Acbalamna (SG 11) Structure N1

6.3.2.3.1 SG 11: Terminal Preclassic-Early Classic (AD 300-600)

The initial construction phase on Acbalamna involved the construction of a low platform on a dense clay paleosol that overlaid the heavily eroded layer of breccia bedrock. This low platform was modified into a large 40 cm high platform, and a secondary burial was interred within. SG 11 Burial 1 included large cranial and femoral fragments from a young adult, fused into waterlogged breccia below, and a marl deposit dumped into the structure as fill above. Cranial fragments and dentition were located to the northwest of the femoral shaft (Figure 6.76). The dentition showed a deep groove or band occurring around the crown on several of the teeth, reminiscent of enamel hypoplasia, where a time of high stress during development of these adult teeth causes stasis in the growth pattern for that period of time (Wright 1997). Charcoal included in the fill of this initial construction episode dated to cal AD 250-405 (PSUAMS#8098 unmodeled). Artifacts included in Early Classic construction fill include Floral Park and Hermitage phase ceramics, lithic tools and debitage, and some polychrome ceramics like Dos Arroyos Orange Polychrome and Actuncan Orange Polychrome.

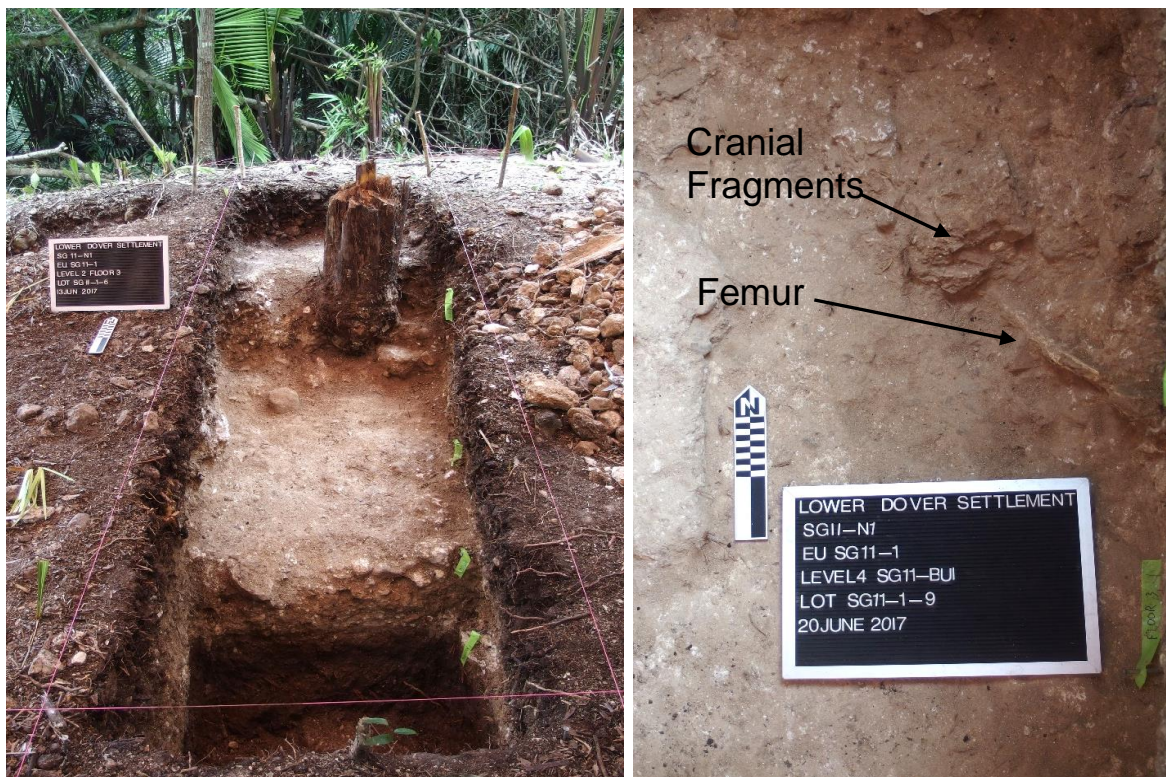


Figure 6.76 Photographs of Acbalamna (SG 11) Str. N1 and SG 11 Burial 1
Late Classic construction at Str. N1 (left), SG 11 Burial 1 (right)

6.3.2.3.2 SG 11: Late-Terminal Classic (AD 600-1000)

Two construction phases occurred at Acbalamna in the Late Classic. The structure grew to a height of ~1 m above the patio. The first episode involved a sizeable remodeling, while the second was difficult to discern as it was bioturbated by cohune palms (see Figures 6.75 and 6.76). Regardless, by the Late Classic period, the occupants of Acbalamna could draw on some amount of local construction labor. Late Classic construction fill contained the usual plethora of domestic refuse including Hermitage, Tiger Run, and Spanish Lookout ceramics, lithic tools, and debitage, a granite mano, and obsidian blades. Less common artifacts included a ceramic figurine body fragment and a piece of fossilized wood which appeared to have been carved/knapped into some crude tool, and relatively high volumes of polychrome ceramics (see Figure 6.77).



Figure 6.77 Small finds from SG 11 Structure N1

Figurine fragment (left), carved fossilized wood (center), and granite mano fragment (right)

6.3.2.3.3 Acbalamna (SG 11) Summary

Rather than representing a late-emerging household that was forced to situate itself in far from optimal circumstances, it would appear that the occupants of SG 11 probably chose to situate themselves in the bajo. In theory, the bajo might have served an agricultural function or offered specific swamp-based resources (Kunen and Hughbanks 2003). The archaeological correlates of such an enterprise remain difficult to identify and there is no evidence of raised field farming. Potentially, occupation of this locale enabled the production of foodstuffs or other commodities which were exchangeable for polychrome ceramics. Despite access to these high-quality ceramics, it would appear that the household may have struggled to feed their young as is indicated by the

enamel hypoplasia evident on the individual interred in SG 11 Burial 1. Overall, the household was occupied for longer than expected and revealed a surprising level of affluence.

6.3.2.4 Tokna (SG 28): A Low-Status Commoner Carpentry Workshop

Tokna represents the most atypical household in the entire sample of commoner households at Lower Dover. The group was named Tokna or “flint house” because it functioned as a chert tool/carpentry workshop and commoner residence (Walden et al. 2018: 207-212). Tokna is situated 330 m south of the Tutu Uitz Na center and has two structures (Structures E1 and N2) situated around a small patio (see Figures 6.15 and 6.78). Initial survey classified Tokna as a low-status commoner residence and this attribution was corroborated through excavation which generally revealed low levels of portable wealth items and access to construction labor. Like Acbalamna, Tokna was assumed to be a single-component Late Classic structure, but excavation revealed that initial construction began at some point around the Terminal Preclassic/Early Classic transition. A 1x3 m unit was placed on Structure N2 exposing two construction phases, heavy with chert debitage, borers, and cores (Walden et al. 2018; see also Levin 2019; Figure 6.79). The unit was placed on Structure N2 (the second tallest mound) because it was the largest by volume.

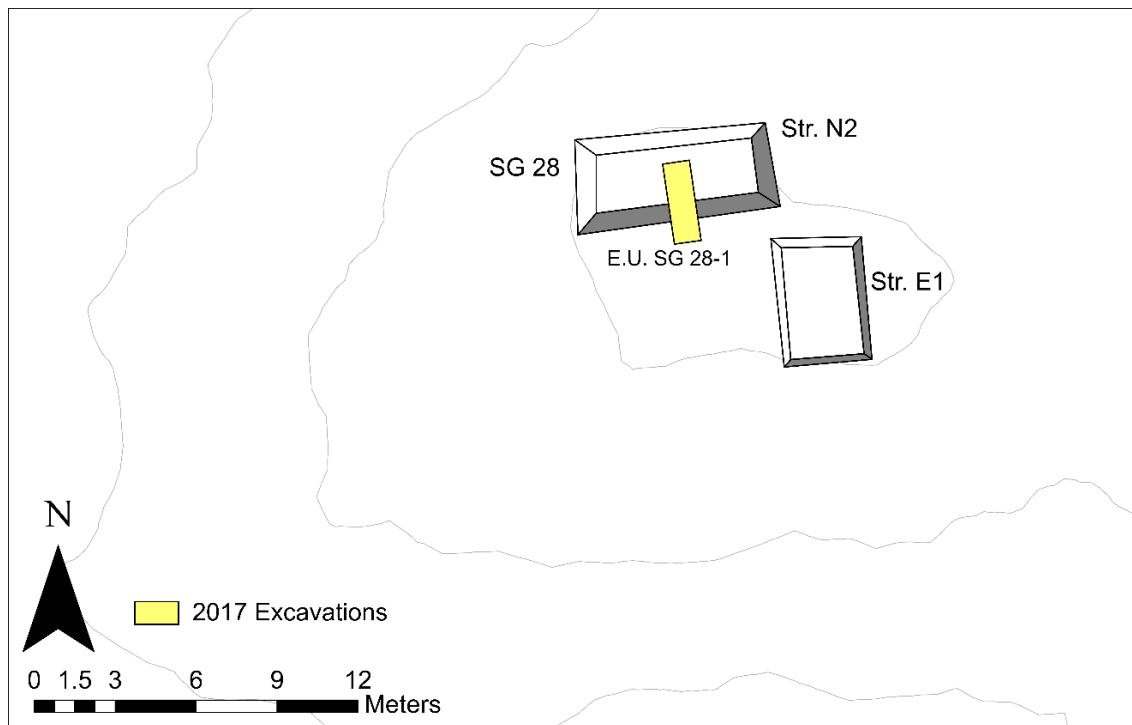


Figure 6.78 Map showing the location of E.U. SG 28-1 at Tokna (SG 28)

Tokna (SG 28)

Structure N2, E.U. SG28-1

East Profile



Profile by A. Levin, J. Walden, A. Thompson, and J. D. Baldwin

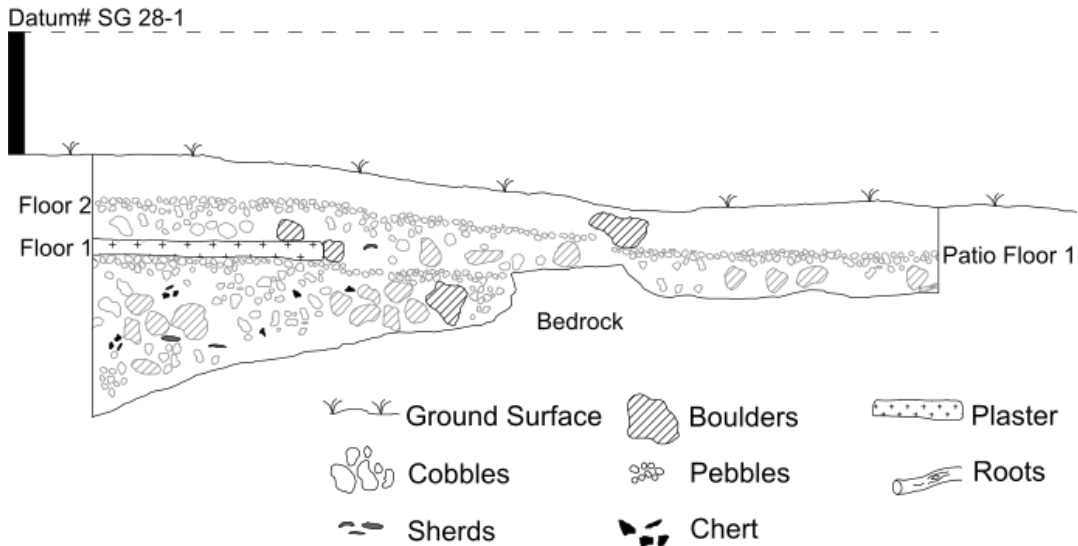


Figure 6.79 East profile of Tokna (SG 28) Structure N2

6.3.2.4.1 SG 28: Terminal Preclassic-Early Classic (AD 150-600)

The first construction phase at SG 28 was a low platform with a plaster floor rising ~20 cm above the surrounding patio (Figures 6.79, 6.80, and 6.81). The fill contained nine chert blades, 23 chert borers, two chert drills, a chert scraper, two rough chert bifaces, 45 chert cores, and 275 pieces of chert debitage. The borers were similar to drills but were unifacially worked (Figure 6.81a). All the implements identified were made of locally available medium-quality chert. Some were situated on the floor associated with this phase but were likely from fill (Figure 6.80). Debitage analysis suggested that these items were crafted in the vicinity of the settlement group as fill contained atypically high proportions of pressure flaking debitage. Although it seems likely at this period that sizeable chert nodules were brought to SG 28, and were reduced in this context because relatively high proportions of primary decortification flakes were present. Like most lithics workshops in the Maya region, these materials were redeposited from midden fill and did not reflect in-situ activities (Moholy-Nagy 1990). Ceramics recovered from this construction phase included Barton Creek and Hermitage types like Aguila Orange, Quintal Unslipped, and Polvero Black, providing a terminus post quem of the Early Classic period. The assemblage associated

with this phase suggests that the settlement group was functioning as both a workshop and residence at this time as it contained general quotidian items such as utilitarian ceramics and general activity bifaces (see Figure 6.81c).

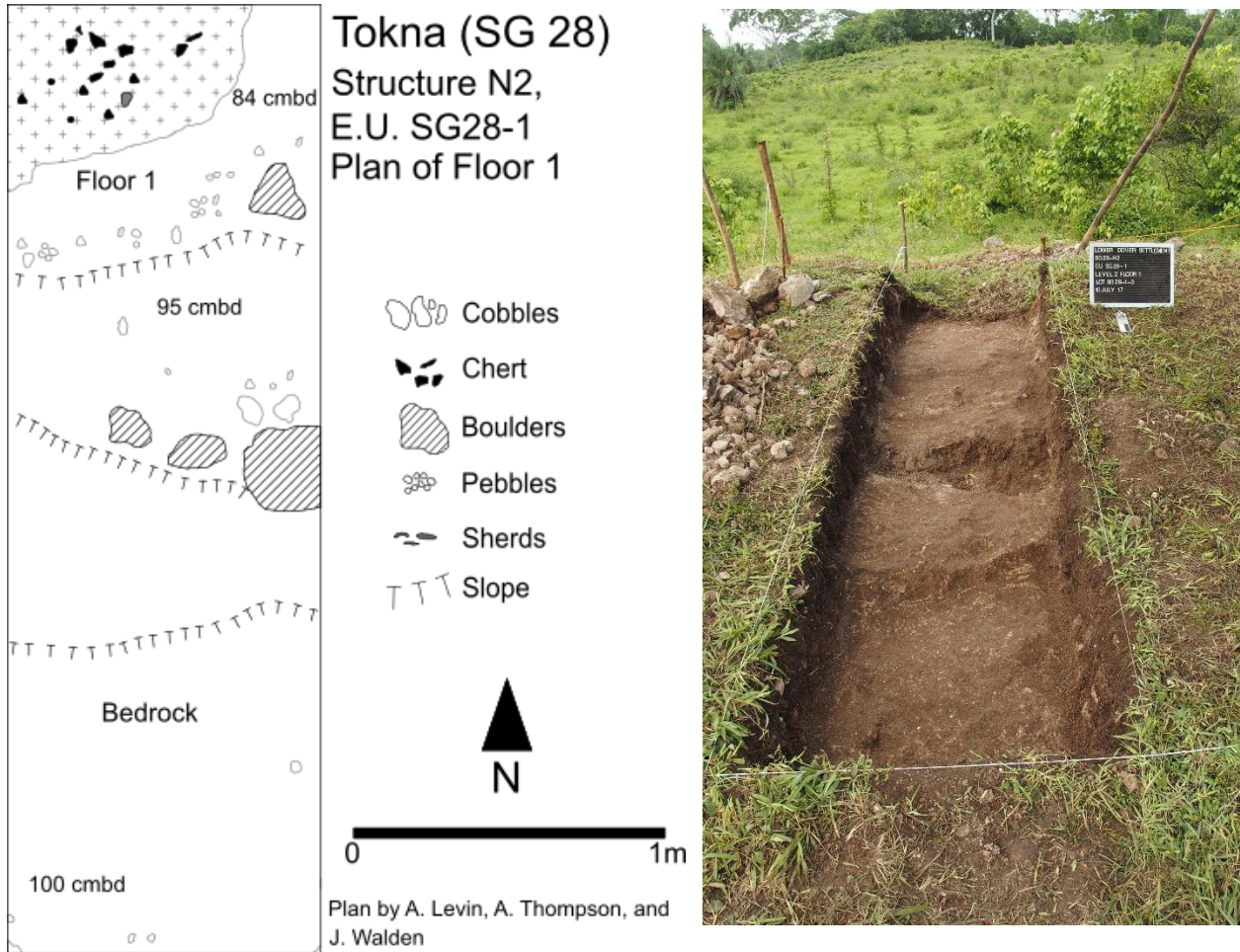


Figure 6.80 Plan and photograph of Phase 1 at Tokna (SG 28) Structure N2

6.3.2.4.2 SG 28: Late-Terminal Classic (AD 600-1000)

The structure grew in height by ~20 cm in the Late Classic period (see Figure 6.79). The architectural fill of the second phase contained a single chert biface, a single chert chisel, 567 chert borers, 133 chert blades, two obsidian blades, 44 chert cores, and 1715 pieces of chert debitage (see Figure 6.81a). Like the tools identified in the previous phase, all the implements identified were made of locally available medium quality chert. In contrast to the earlier phase, evidence of primary decortification debitage disappears in the Late Classic period, which suggests that prepared cores were brought to SG 28, and the primary stage decortification was occurring

elsewhere. That said, the proportions of pressure flake debitage remains particularly high which is consistent with the tools themselves which are pressure flaked (although a small number appear burinated). This outsourcing of unspecialized tasks is common in the production chaîne opératoire in Classic Maya contexts (Kovacevich 2015), and is consistent with the interpretation that the craftspeople resident at the site were becoming increasingly specialized at this time. Alongside the lithic tools in fill were small quantities of quotidian refuse suggestive of a residential role. Artifacts included Tiger Run and Spanish Lookout ceramics, a spindle whorl, several pieces of marine shell debris, some *incensario* sherds, and an olive shell tinkler (see Figure 6.81c). Olive shell tinklers are not uncommon in residential structural fill (Willey et al. 1965: 508)

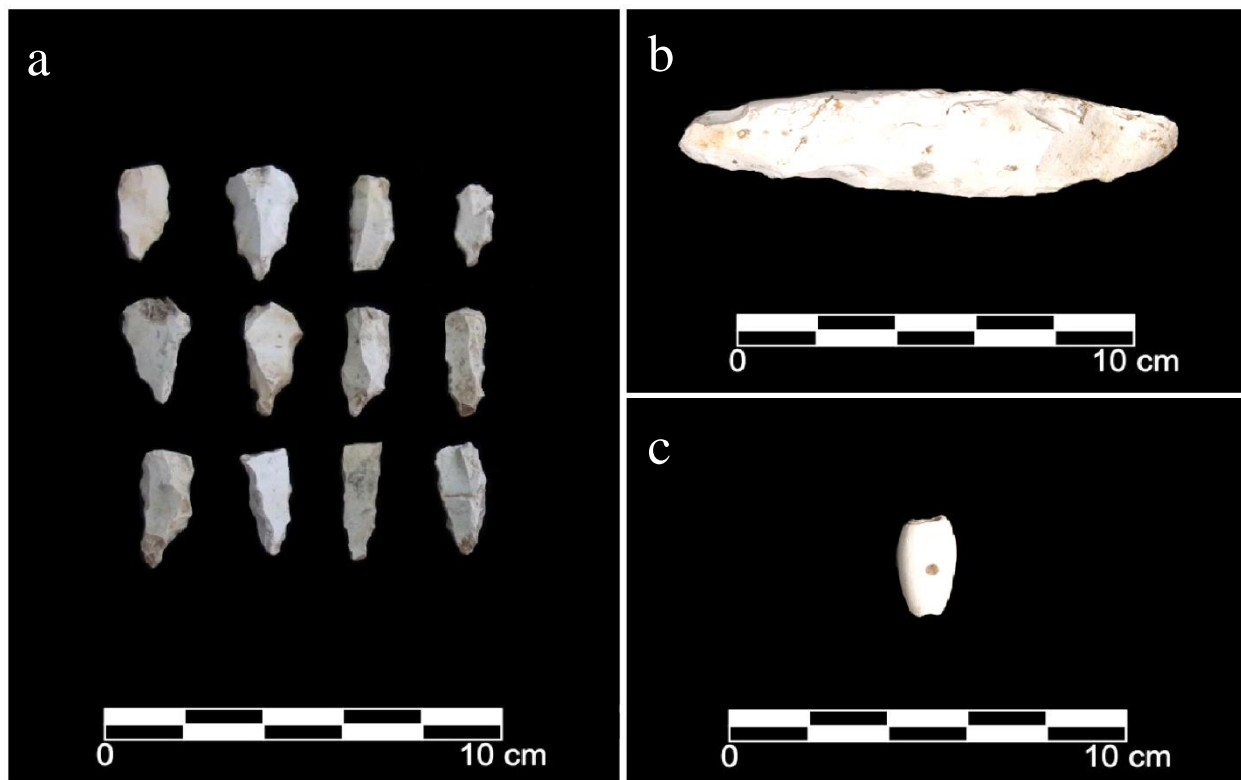


Figure 6.81 Selected small finds from SG 28 Structure N2

Clockwise from top left: (a) chert borers, (b) chert biface, (c) Olive shell tinkler

6.3.2.4.3 SG 28: A Classic Maya Carpentry Workshop

The vast majority of chert tool production in the Classic Maya lowlands was carried out at a household level and was relatively unspecialized. Most households produced the range of tools they required for domestic and agriculture tasks in small numbers (Ford and Olson 1989; Gonlin

2004: 228; Sheets and Simmons 2002; Robin 2003: 320–321). The term workshop seems apt when referring to Tokna because production occurred on a far larger scale than was necessary for consumption. No worked material like marine shell, slate, or bone was found. The borers being produced were used at the locus, as indicated by the heavily used borers discarded in the fill. Tokna differs from other known chert workshops in the Belize River valley in several ways. At SG 28 small borers, blades and drills were produced for a specific purpose, used, and discarded in situ. This pattern differs from workshops with abundant biface production flakes, but little in the way of finished tools such as Cahal Tok in the El Pilar polity (Ford, Whittaker, and Kamp 2009; Whittaker et al. 2009), and C-199 at Chan (Hearth 2012: 203). There are no apparent chert sources near Tokna and the assemblage is dramatically different from larger chert workshops located near chert sources. Examples of more general lithic production workshops include the nearby Etz'nab Tunich workshop at Esperanza (K. Sullivan, Awe and Montgomery 2016), the Callar Creek Quarry (Horowitz 2015), T/A1-oo2 and T/A1-oo3 in the Xunantunich polity (Vandenbosch, LeCount, and Yaeger 2010: 276), Site 229 near El Pilar (Ford and Olson 1989), several households within Group H at Chan Chich (Houk and Zaro 2015), or the renowned chert workshops of the northern Belize chert bearing zone at Colha (Shafer and Hester 1983; Hester and Shafer 1984). Instead, Tokna seems to be a “functionally specific lithic working area” (Fry 1967: 11; reported in Becker 1973: 400). It seems likely that this specific function was carpentry. This argument is based on comparison with a handful of other examples, similarities with tool types, the functional nature of tools, and the complete absence of production debris in the vicinity (suggestive of processing organic materials).

The borers encountered at Tokna slightly resemble chert drills used for making marine shell jewelry (Hohmann 2002), but the SG 28 borers are, by definition, unifacially, not bifacially worked like chert drills. The chert borers found at Tokna closely resemble those found at the Gateway Group at Caracol (Martindale Johnson 2014; Pope 1994), Latón (Site 272-136) at El Pilar (Hintzmann 1990; Michaels 1993), and Groups E and D at Xunantunich (J. Braswell 2010: 161; Chapman, Sword, and Brown 2015). Other instances of sites with similar tools include Barton Ramie (Willey et al. 1965: 434-437), and Tikal (Moholy-Nagy 1991, 1994: 98), although they have not been found in sufficient numbers to suggest specialized production in these locales. Latón had high proportions of chert gravers, borers, drills, and flakes with battered edges (Hintzmann

1990; Michaels 1993). Anaïs Levin who conducted lithic analysis on the Latón (Site 272-136) assemblage noted that the tools were identical to those at Tokna (see Levin 2019). The Tokna borers closely resemble the Gateway Group “drills” which Pope Jones (1996: 103) describes as being manufactured through percussion striking a multidirectional core platform to produce blades. The dorsal surface of these blades was then laterally retouched. The chert borers identified are morphologically similar to drills used for woodworking (Aldenderfer 1991: 211; Martindale Johnson 2014: 91; see also Lewenstein 1998; Martindale Johnson et al. 2015). As Martindale Johnson (2014: 91), and J. Braswell (2010: 174) point out, while these tools are reminiscent of “drills” they were likely used for a range of functions including jabbing, gouging, scraping, piercing, and incising. Chapman, Sword, and Brown (2015: 40) note that only two of the 2650 tools found at Xunantunich Group E show microwear patterns indicative of drilling.

The absence of evidence of production debris also points in the direction of the use of organic materials (Brown et al. 2011). Martindale Johnson (2013: 85) argues that woodworking was the most congruent explanation for the function of these borers at the Gateway Group as no evidence of slate, bone, or shell debris was apparent (see also Chapman, Sword, and Brown 2015: 39). J. Braswell (2010: 161) speculates that the tools found at Group D were used to produce slate, shell, or wood items, but argues that slate working might have been more likely due to the presence of some slate fragments at the site. T. Chapman (2014) conducted use-wear analysis on the tools from Xunantunich Groups E and D, and suggested they were used to process organic materials such as wood, gourds, or tubers, not slate (see Chapman, Sword, and Brown 2015; and Devio 2016 for the possibility that these tools were used to process manioc). This would suggest that the presence of slate at Group D was coincidental. This corroborates the absence of production debris at Tokna and the Gateway Group. Tangential evidence against the slate or marine shell processing argument comes from the relative dearth of slate objects and marine shell jewelry across the Late Classic Lower Dover polity (Roa et al. 2020), meaning such items would have had to be destined for long-distance regional exchange. While the tools could have been used to fashion items from any number of organic components, wood seems more likely as other tasks involving organic products like hide processing would have required scrapers (Stemp, Helmke, and Awe 2010).

Aldenderfer (1991) describes the extensive toolkit associated with carpentry and it is clear that only a small fraction of these items are present at Tokna (see also Aldenderfer, Kimball, and

Sievert 1989). Early-stage wood processing tools such as bifacial axes for felling and chisels for splitting are largely absent. This seems logical as much of these trees would largely be felled as part of (sustainable) swidden agriculture by commoners and probably brought to Tokna as part of a production sequence which involved multiple stages of production by different people (see also Kovacevich 2015 for a similar process with jade). This absence of early-stage wood processing tools like bifaces is replicated at the other sites where these tools are encountered archaeologically (J. Braswell 2010: 170). Another similarity lies in the fact that at these other workshops, the tools were being produced, used, and discarded in situ (Martindale Johnson 2013: 91). While the idea that these tools represent a specialized woodworking toolkit requires further investigation using use-wear and residue analysis (see Hardy and Garufi 1998), it seems fairly clear that the Gateway Group, Group D, Site 272-136, and Tokna all represent the same type of workshop. Like the more common general lithic workshops (Stemp, Helmke, and Awe 2010: 224; Moholy-Nagy 1997), these specialist carpentry workshops also served a residential function (J. Braswell 2010). This seems to have been the case at SG 28, as the construction fill also contained domestic refuse such as quotidian ceramics, freshwater shell, a spindle whorl, and an Olive shell tinkler.

The Gateway Group at Caracol (Martindale Johnson 2014: 92), and Group D at Xunantunich (J. Braswell 2010: 162), are both situated in the immediate cores of their respective polities. Group D housed affluent aulic elites, and it seems likely the Gateway Group also served as a higher-status commoner household. Tokna is not located in the immediate core but is situated in the dense commoner settlement of the Tutu Uitz Na District. Furthermore, the site is of the lowest social status in the region. The location of Tokna outside the civic-ceremonial core makes it more comparable to Latón (Site 272-136) in the El Pilar hinterland. However, Latón was associated with a intermediate elite household of much higher status than Tokna, and likely represented a small minor center/district head at the heart of a cluster of commoner residents (Ford 2004). Moreover, unlike the other examples, the residents at Latón were involved in the production of obsidian and other chert tools in addition to carpentry. Understanding elite patronage of specialists is notoriously difficult (Andrieu 2013; but see Horowitz 2021: 10-11). It is not immediately clear if the household worked under the patronage of the Lower Dover apical elite, the intermediate elite at Tutu Uitz Na, the local high-status commoner neighborhood heads at Mamjuchtun (SG 42), or anyone at all. This corroborates the idea that some Classic Maya

specialized craft locales were geographically dispersed on the landscape (Potter 1993: 292; Rice 1987: 77). That said, it remains highly plausible that the site was operating under elite patronage despite its distance from the Tutu Uitz Na center (see Garrison, Houston, and Alcover Firpi 2019; see also Horowitz 2015). The fact that specialist manufacture occurred at Tokna in the Early Classic prior to the rise of Lower Dover implies that production was not necessarily reliant on the presence of the Lower Dover apical elite. That said, the intensification of Late Classic manufacture could have been stimulated by the rise of Lower Dover.

6.3.2.5 Mamjuchtun (SG 42): A High-Status Commoner Household

Mamjuchtun, the highest-status commoner household in the Tutu Uitz Na District, is located 580 meters southwest of Tutu Uitz Na center, in the heart of a cluster of commoners (see Figures 6.15 and 6.82). The settlement group consists of two patios, a main patio with three structures (Strs. S1, W2, and E3), and a separate northeastern patio with two structures (recorded as SG 43; Strs. S1 and E2; Walden, Biggie, and Ebert 2017). SG 42 has a sizeable patio of 310 m², which had been extended to the north. The position of SG 42 amid many lower-status commoner residences implies it served as a commoner neighborhood head household. This was corroborated by the large patio which could easily accommodate much of the surrounding commoner population. The group was named Mamjuchtun (literally “Old shell rock”) after a chert cobble with fossilized *jute* snails within it in was found in the terminal structural fill (Shaw-Müller et al. 2019). The inclusion of fossils in architectural fill for ritual purposes is noted at Palenque (Alvarado-Ortega et al. 2017; Riquelme et al. 2012).

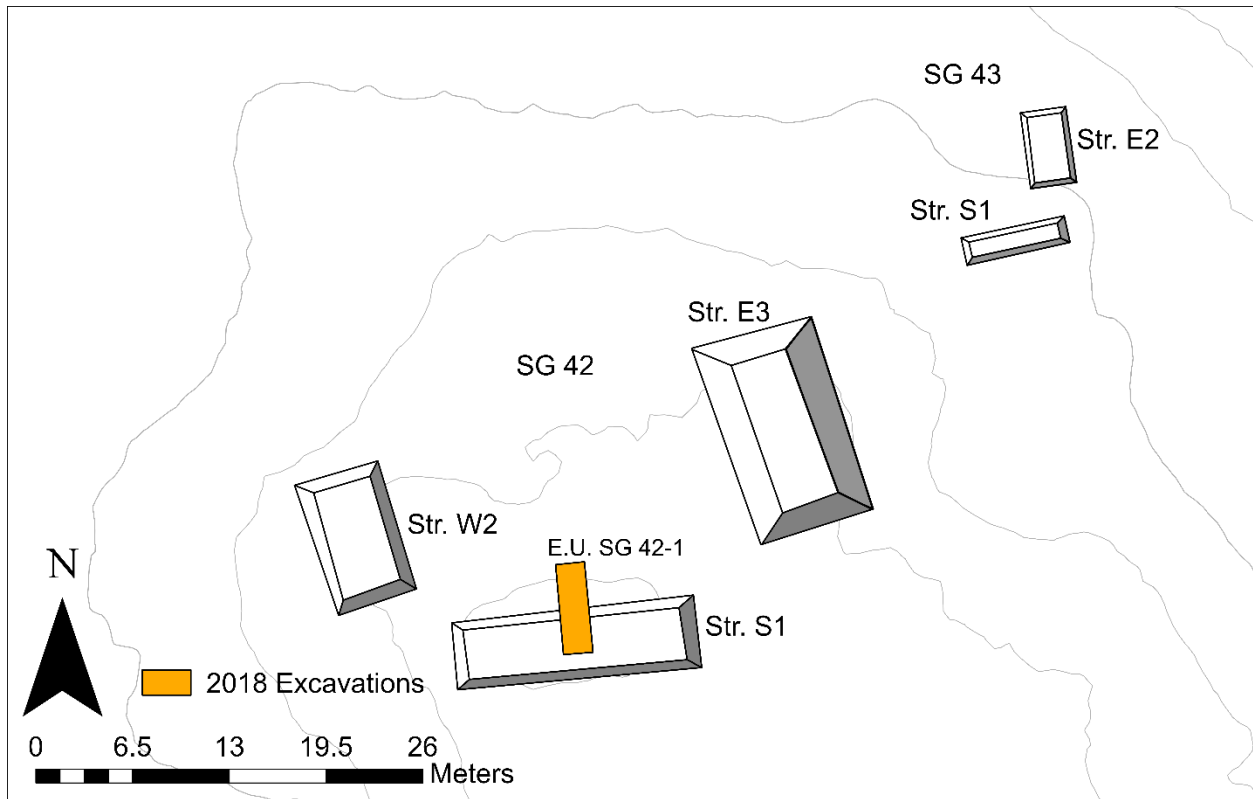













Figure 6.82 Map showing the location of E.U. SG 42-1 at Mamjuchtun (SG 42)

6.3.2.5.1 SG 42: Terminal Preclassic-Early Classic (AD 150-600)

SG 42 Str. S1 had six phases of construction beginning in the Terminal Preclassic/Early Classic period and finishing in the Terminal Classic period (Figure 6.83). The initial construction consisted of a low platform. The ceramic assemblage was largely Terminal Preclassic but a charcoal sample included within dated to the Early Classic period, cal AD 415-540 (PSUAMS#8100 unmodeled). The structure was abandoned for some duration in the Early Classic period, shortly after its first construction phase. This hiatus is evident in a layer of dark humic soil which became established over the top of the platform. The settlement group was reoccupied later in the Early Classic period and underwent four remodeling phases in relatively quick succession (Figure 6.84). Early Classic residents of Mamjuchtun possessed access to substantial amounts of labor and wealth items like Dos Arroyos Orange Polychrome ceramics. A calcite crystal from a cave was found in this context (Sheldon Skaggs, personal communication, 2021). Such items reflect offerings frequently found in architecture (Brady and Prufer 1999: 137; Brady and Rissolo 2006: 474).

Mamjuctun (SG 42) Structure S1, E.U. SG42-1 West Profile

- | | | | | | |
|--|----------------|---|----------|---|----------|
|  | Ground Surface |  | Boulders |  | Plaster |
|  | Cobbles |  | Pebbles |  | Roots |
|  | Cut Stone |  | Sherds |  | Charcoal |
|  | Bone |  | Chert | | |

0 1 m

Profile by K. Shaw-Müller, J. Walden, A. Nachamie, and O. Ellis

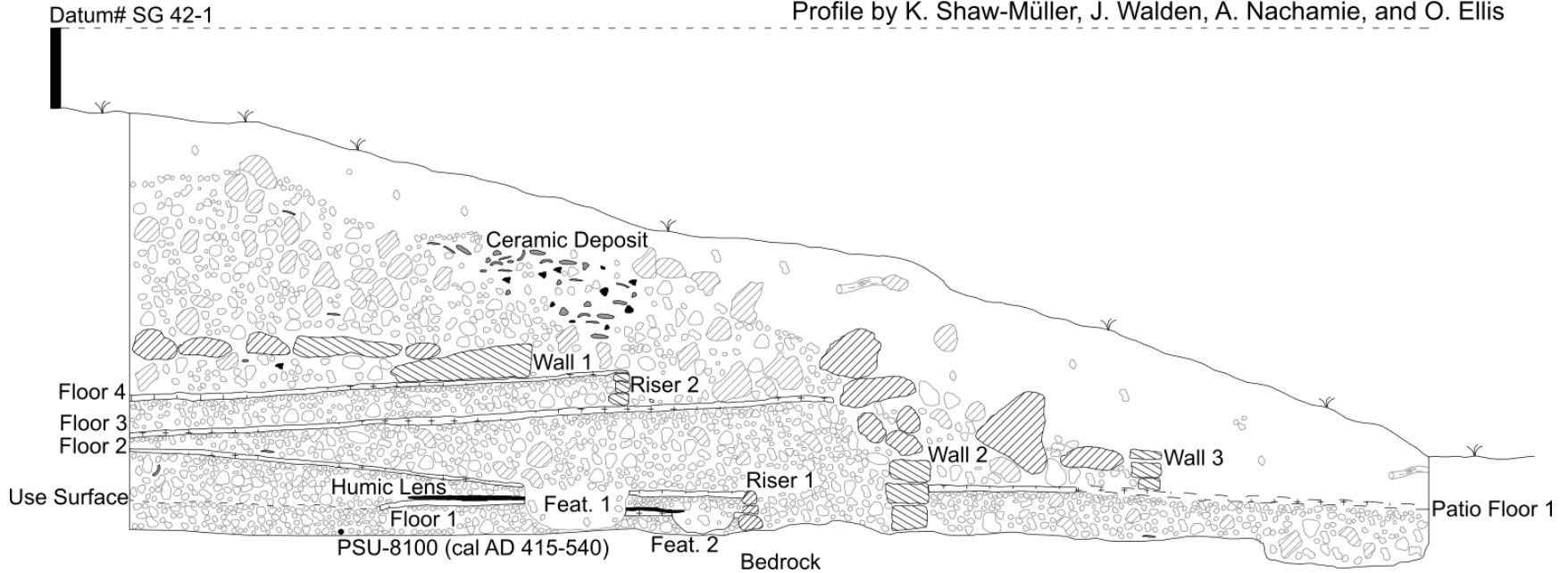


Figure 6.83 West profile of Mamjuctun (SG 42) Structure S1

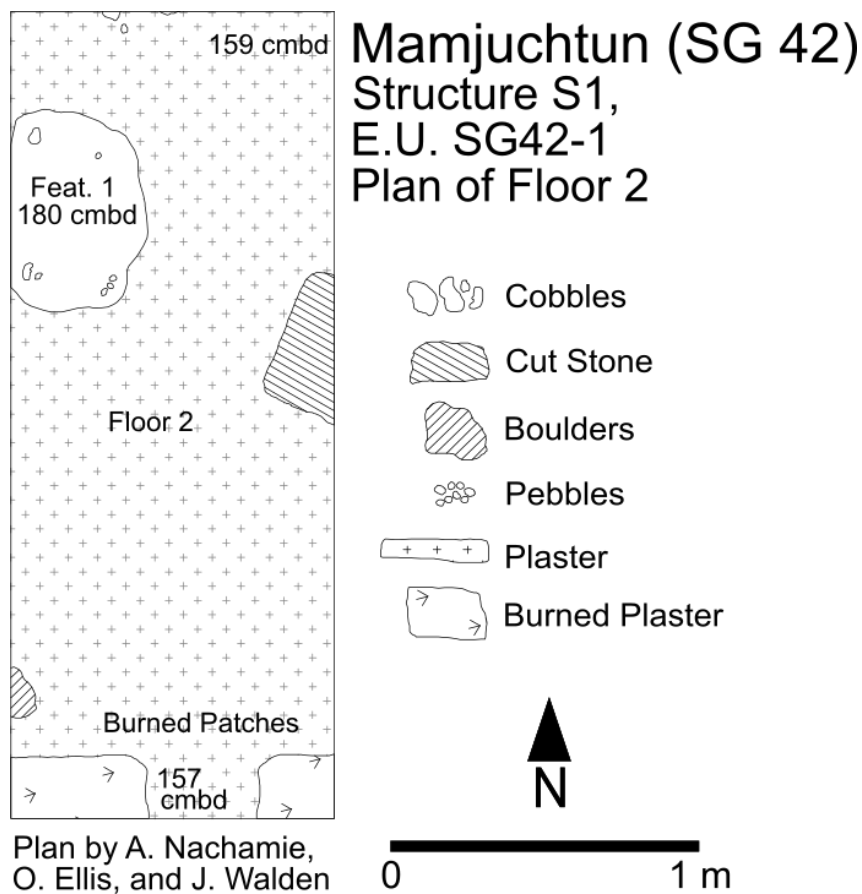


Figure 6.84 Plan of Construction Phase 2 at SG 42 Structure S1

6.3.2.5.2 SG 42: Late-Terminal Classic (AD 600-1000)

The political status (as seen in remodeling) and affluence of the household (as seen in wealth items) declined slightly in the Late Classic period. During this period only a single, albeit sizeable construction phase was evident (Figures 6.86 and 6.87). A decline in access to wealth items was also evident at this time. The Late-Terminal Classic assemblage is consistent with the household's role as a commoner neighborhood head; there are relatively high proportions of ritual items and feasting paraphernalia (faunal remains and serving vessels). Interestingly, a fragment of limestone containing fossilized *jute* covered over with limestone drip water was found in this context, likely having been removed from a cave (Sheldon Skaggs, personal communication, 2021; see Figure 6.85b). The co-occurrence of this ecofact alongside the calcite crystal uncovered in the earlier construction phases at SG 42 suggests that the household had access to a cave (Figure 6.85c), or specifically sought out such items to imbue their residence with sacred cave essence

(Brady et al. 1997: 137; Brady and Rissolo 2006: 474). The inclusion of *jute* fossils within this stone is intriguing given the importance of such shells in ritual deposits at the intermediate elite center of Tutu Uitz Na. The inclusion of fossils in architecture has been noted (Riquelme et al. 2012) and may reflect an attempt on the part of the Maya to imbue the architecture with ritual essence. The presence of such items in conjunction with the relatively high proportions of *incensario* sherds suggests that the household at SG 42 had some type of ritual importance.

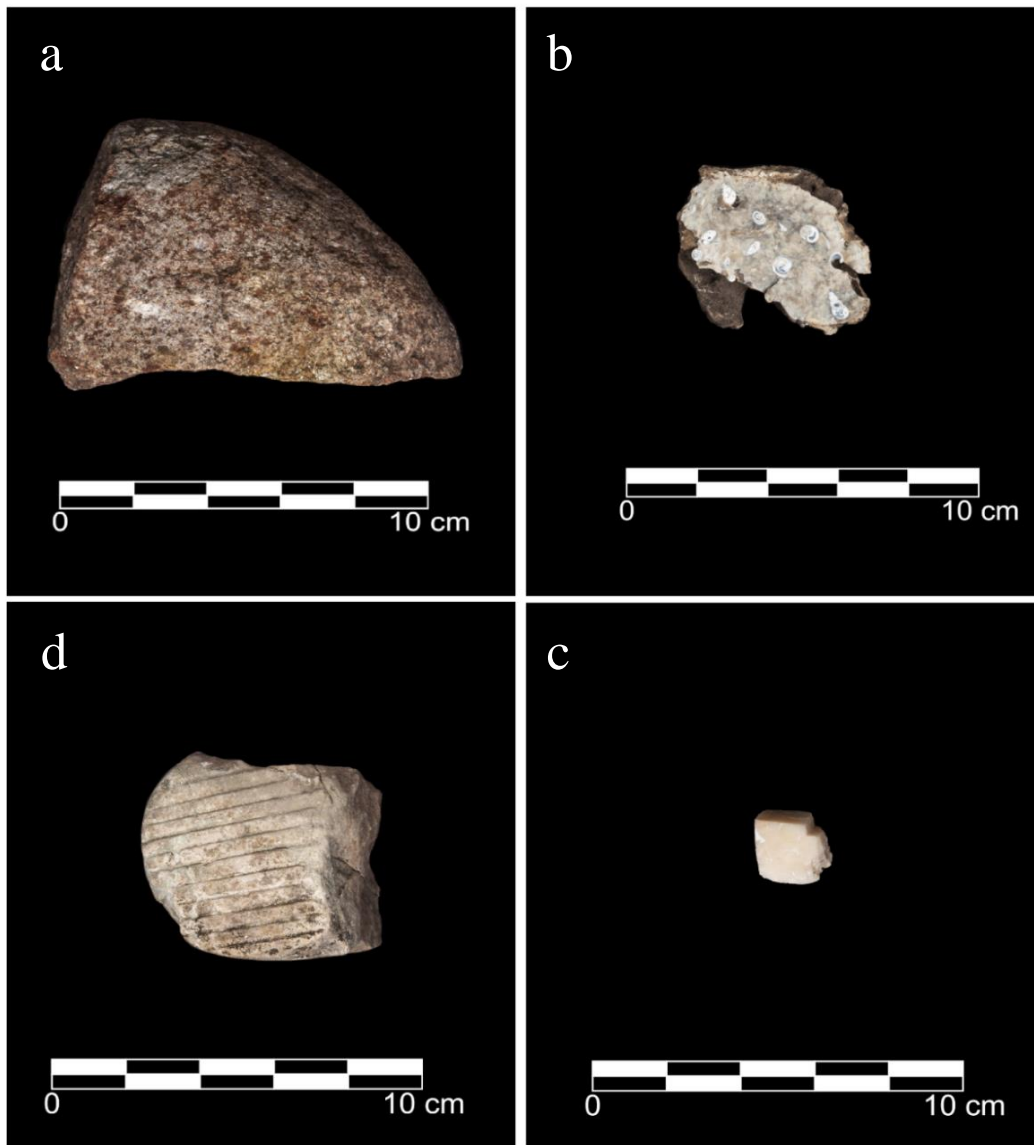


Figure 6.85 Selected small finds from SG 42 Structure S1

Clockwise from top left: (a) granite metate fragment, (b) limestone with fossilized *jute* (possibly from cave), (c) calcite crystal (likely from cave), (d) limestone bark beater

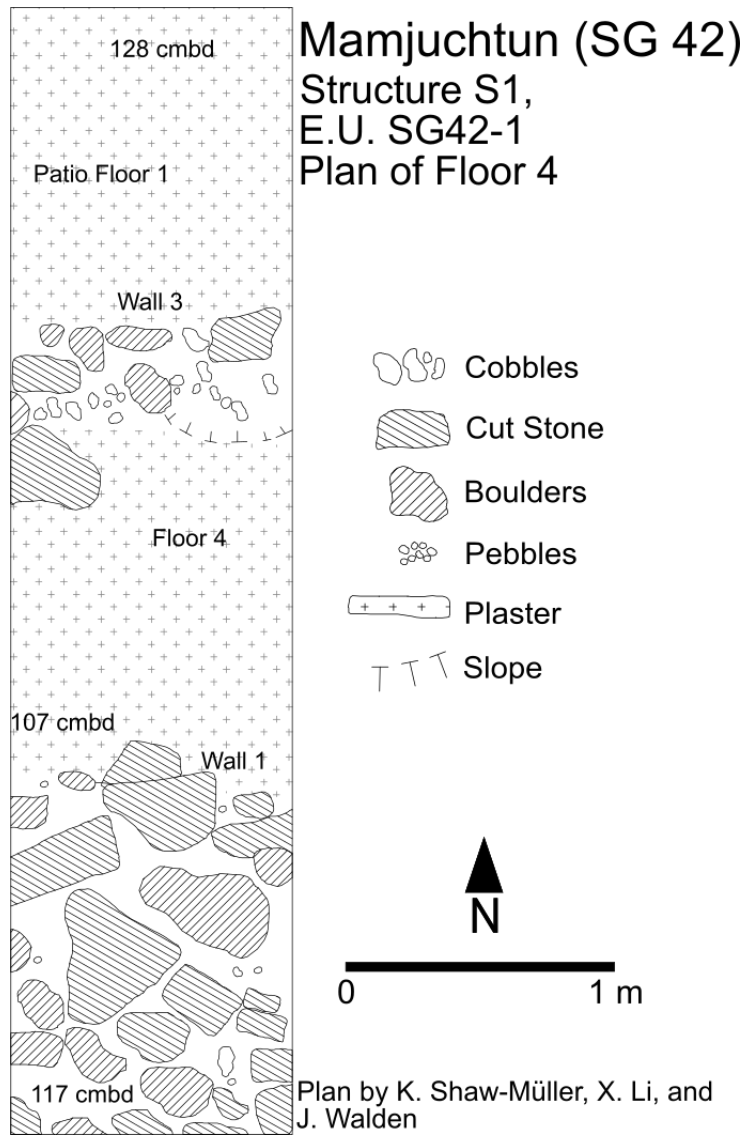


Figure 6.86 Plan of terminal architecture at SG 42 Structure S1

6.3.2.5.3 Mamjuchtun (SG 11) Summary

Mamjuchtun seems to be a fairly affluent and important high-status commoner household throughout its occupational trajectory. The household clearly could command commoner labor for construction and potentially held some ritual significance given the placement of offerings from caves in the construction fill. With the exception of a single barkbeater, there is little to suggest the household was performing any non-domestic productive activities (Figure 6.85d). While the fortunes of the SG 42 household declined slightly in this period, it was still the largest household in the Tutu Uitz Na District and probably acted as a patron to six to ten client commoner households.



Figure 6.87 Photograph of terminal architecture at SG 42 Structure S1

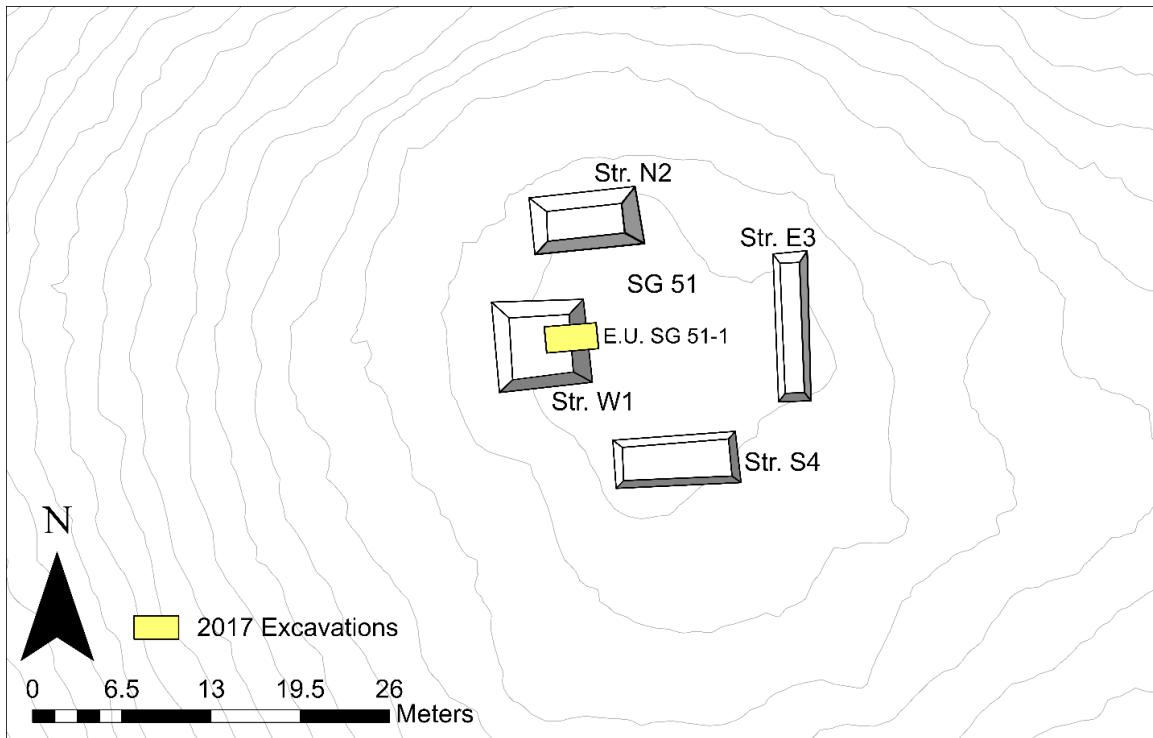
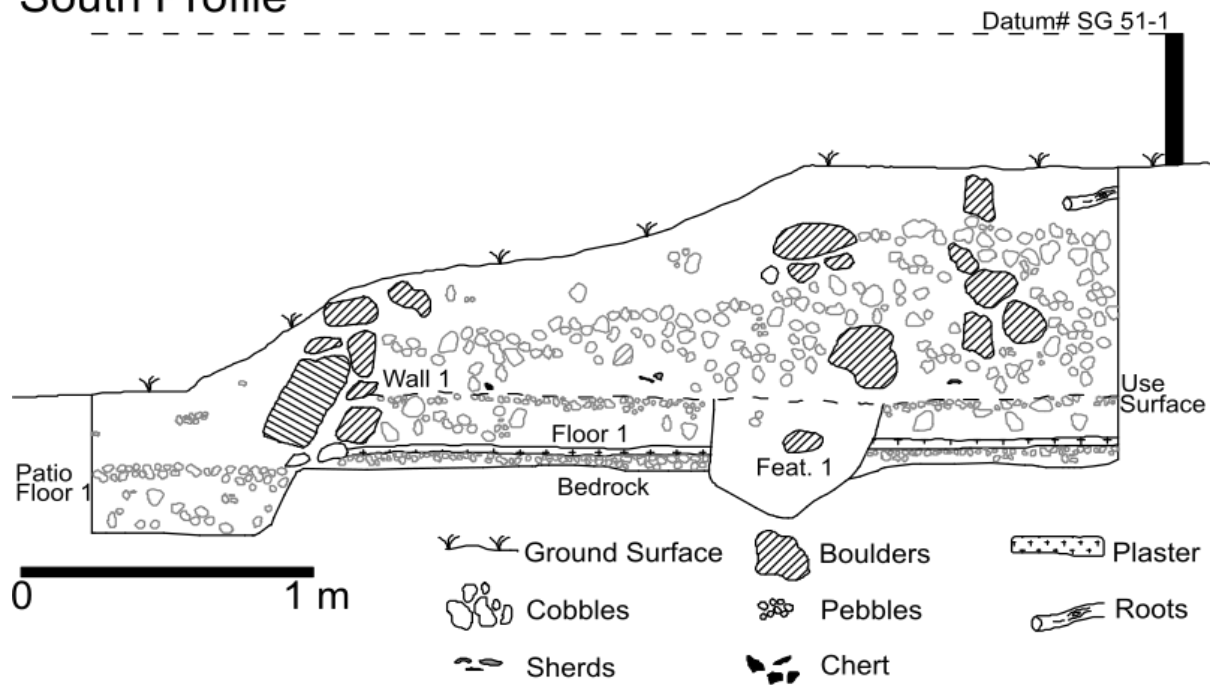


Figure 6.88 Map showing the location of E.U. SG 51-1 at Ikilna (SG 51)

6.3.2.6 Ikilna (SG 51): A High-Status Commoner Household

Initial survey identified Ikilna as an important commoner neighborhood head household (Walden, Biggie, and Ebert 2017). The settlement group was relatively large (559 m³), and had four structures (Strs. W1, N2, E3, S4; Figures 6.15 and 6.88) situated around a relatively sizeable patio (188 m²). Furthermore, SG 51 was situated on top of the highest hill south of the Belize River (500 m south of Tutu Uitz Na), north of the southern foothills. This hill offers commanding views, overlooking Tutu Uitz Na, Lower Dover, and BR-180/168 to the north and Floral Park to the west. The hill was steep enough to offer natural defense and any flat areas on its flanks were occupied by smaller lower status commoner dwellings and chultuns. SG 51 had been modified into a British Army post in the 1980s and the mounds were pitted with foxholes, artillery emplacements, and twisted metal (Petrozza 2015: 69). A small chultun just downslope of SG 51 was excavated by Perkins (2014). The assemblage contained Late Classic ceramics, chert, faunal remains, and a single *jute* shell (Perkins 2014: 208-210).

Ikilna (SG 51)
Structure W1, E.U. SG51-1
South Profile



Profile by A. Levin, A. Thompson, J. D. Baldwin, and J. Walden

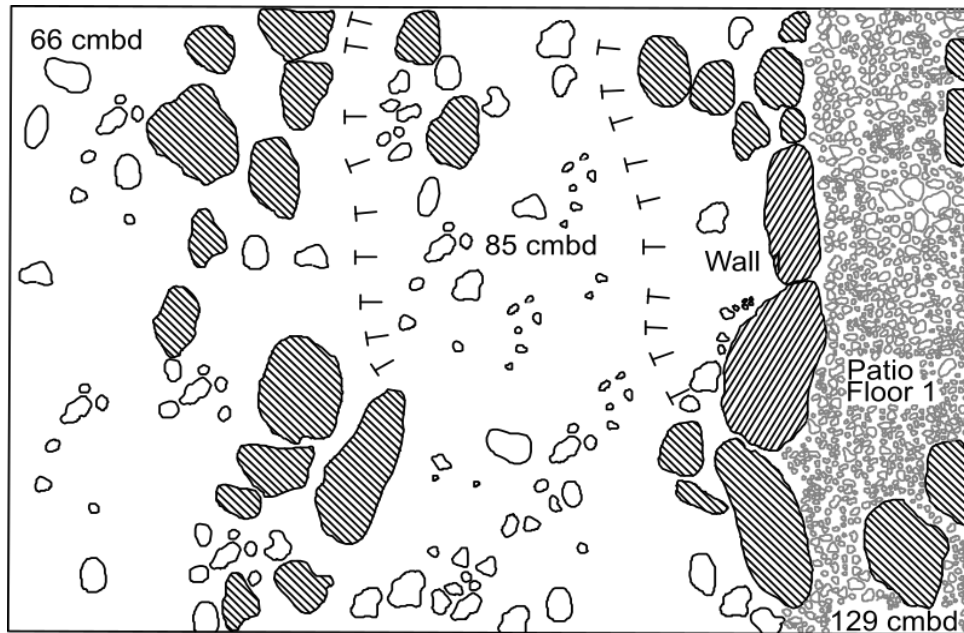
Figure 6.89 South profile of Ikilna (SG 51) Structure W1

6.3.2.6.1 SG 51: Late-Terminal Classic (AD 600-1000)




Prior to excavation, SG 51 was expected to exhibit a long developmental trajectory and clear signs of affluence. However, excavation on Structure W1 revealed three substantial construction phases limited to the Late-Terminal Classic period (see Figures 6.89, 6.90, and 6.91). Fill yielded a typical quotidian assemblage including a *metate* fragment, obsidian blade fragments, utilitarian chert tools, and ceramics. Some items associated with a ritual function were also present including a speleothem, a fossil, and several olive shell tinklers (see Figure 6.92). Generally, the proportions of feasting-related items at Ikilna were quite high compared to other commoner households. The location of SG 51 in the center of a cluster of commoners, the sizeable patio, and the ritual and feasting items present in the assemblage suggests that SG 51 functioned as the head of a small commoner neighborhood, albeit a particularly short-lived one. Following my excavation in 2018, the settlement group was completely bulldozed for road construction.



Figure 6.90 Photograph of construction phase 1 at SG 51 Structure W1



Ikilna (SG 51)
Structure W1, E.U. SG51-1
Plan of Terminal Architecture

-  Sherds
-  Cobbles
-  Boulders
-  Pebbles

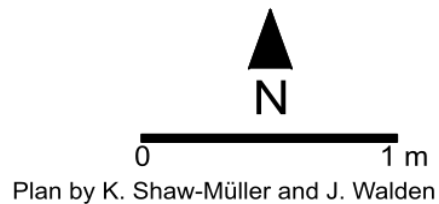


Figure 6.91 Plan of terminal architecture at SG 51 Structure W1

6.3.2.6.2 Ikilna (SG 51) Summary

Like most areas of the Belize River Valley, longer-lived commoner households at Lower Dover are generally larger (following a rough principle of first occupancy see McAnany 1995: 96; see also Yaeger and Robin 2004: 163). Ikilna proves one exception to the rule, another being M-108 at Baking Pot (Hoggarth 2012: 84-86). The M-108 household settled in a swampy part of Settlement Cluster C relatively late on in the trajectory, despite the large size of its architecture, the household was not particularly wealthy and abandoned the area not too long after initial occupation. It seems fairly clear that SG 51 followed a similar trajectory. The hilltop locale provided a commanding viewshed but was frequently buffeted by strong winds which, depending on the relative tree cover in the past, would likely have led to constant renovations on thatched structures. While the amount of labor invested in construction at Ikilna reveals the residences could command the labor from surrounding commoners, the issues associated with the locale likely underlie the reasons why the hilltop was not settled earlier in time.

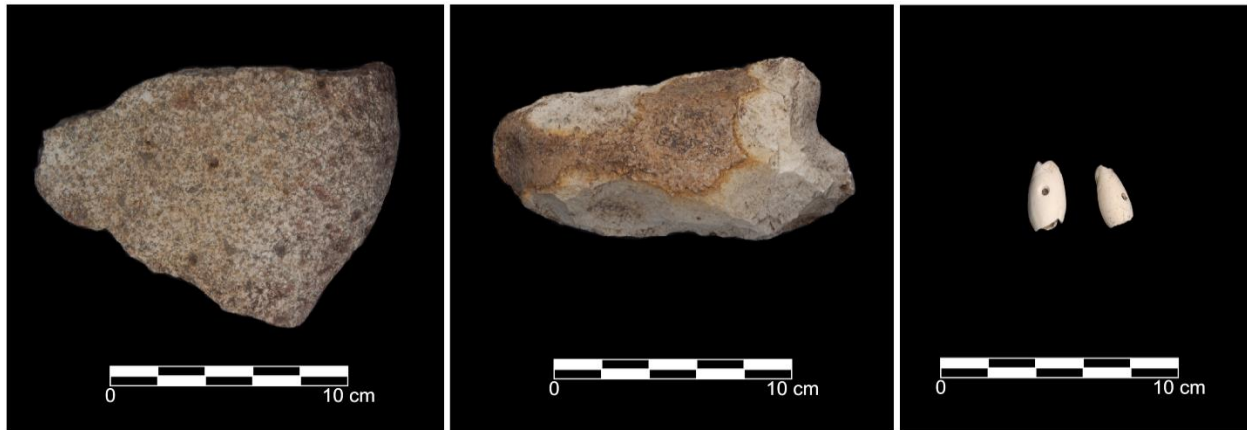


Figure 6.92 Selected small finds from SG 51 Structure W1

Granite metate fragment (left), rough limestone biface (center), pair of olive shell tinklers (right)

6.4 The Floral Park District

A large dispersed district exists around the minor center of Floral Park. The settlement clustering associated with the Floral Park District covers an area of between .6 km² and around .8 km² (if extended house lots and associated fields are included), with a Late Classic population of 200 people (~250 people per km²; Walden, Biggie, and Ebert 2017). The Floral Park District was named after the Tier 2 minor center at its center. Several commoner households extend into the floodplain to the north, towards the Western District. The vast majority of commoner households are situated on the low flanks of the southern foothills to the south while a few were located along the flanks of Upper Barton Creek (see Figure 6.93). Kirke (1980: 285) noted some form of ditched field agricultural system near Floral Park, however, this could not be verified by my survey (Walden, Biggie, and Ebert 2017). Six commoner settlement groups were sampled in the Floral Park District, these included Jolna (SG 34), Haabna (SG 35), Jayna (SG 129), Petna (SG 132), Ch'akna (SG 142), and Group 3 (SG 143; see Figure 6.93).

Identifying commoner neighborhoods in the Floral Park District is more difficult than at the other districts due to the lower settlement densities. Commoner settlement is scattered around this minor center with a small number of households in its immediate periphery. Five neighborhoods can be identified focused around high-status neighborhood heads at SG 35, SG 109, SG 129, SG 138, and the Floral Park center itself (see Figure 6.12; see also Ellis, Walden, and Rick 2020; Garcia, Walden, and Martinez 2020; Levin et al. 2020; Nachamie and Walden 2020; Walden, Biggie, and Ebert 2017). The commoner households situated in the district were affluent and successful earlier in the trajectory but became impoverished in the Late Classic (see Chapter 7). North of the Floral Park District is the Western District, a small, clustered occupation focused around the heavily plowed Group 5 high-status commoner residence of SG 60. While it is possible that this district fell under the aegis of the Floral Park elite, I treat it as a separate spatial entity (see Figure 6.11). To the west of the Floral Park District is a sizeable stretch of relatively good arable land with very low settlement densities (see Figures 6.2 and 6.5). This demographic drop-off probably constitutes the borderlands between the Lower Dover and Baking Pot polities, and a possible swathe of land reserved for out-field agriculture (see Figures 6.5 and 6.11).

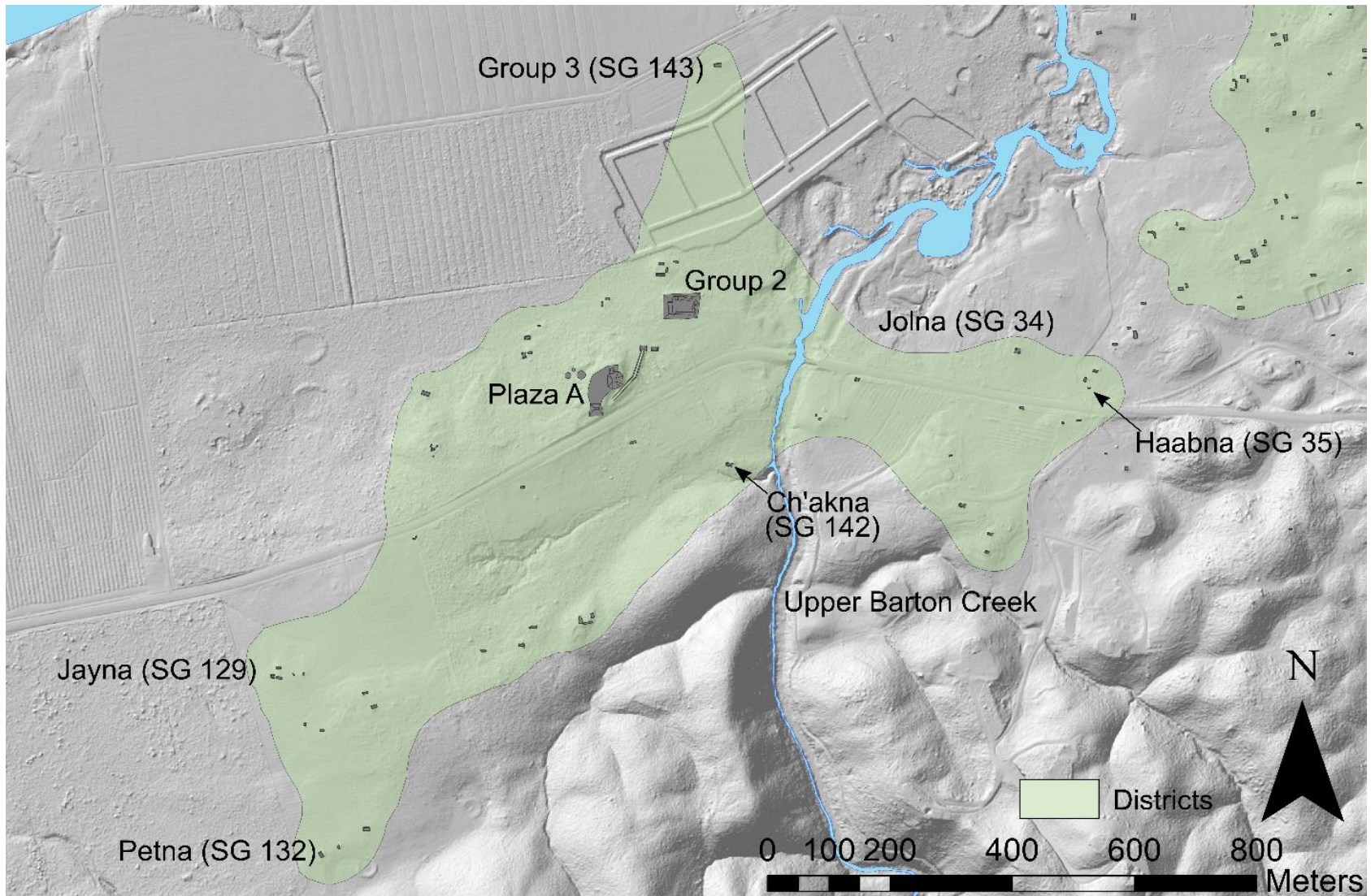


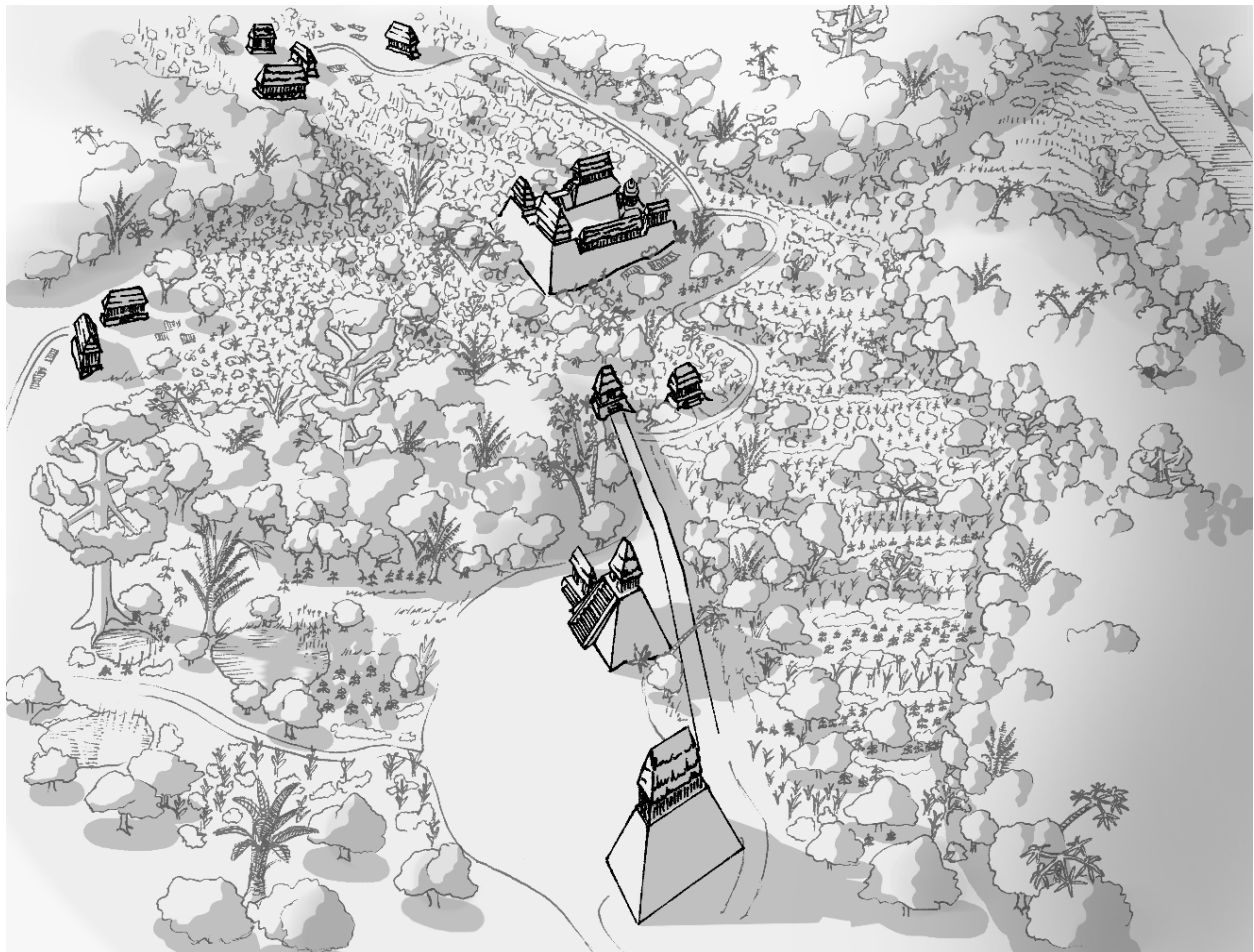
Figure 6.93 Map of the Floral Park District

The Floral Park center and excavated commoner settlement groups are shown

The Spanish Lookout minor center and its cluster of commoner dwellings lie 2.8 km northwest. To the south of the Floral Park District is the largely uninhabited southern foothills running east-west along the flanks of the river valley. This region may represent an uninhabited buffer zone between the Lower Dover polity and the Lower Barton Creek polity to the south (Kollias 2016). However, unlike the uninhabited stretch of decent arable land constituting the borderlands between Lower Dover and Baking Pot, the foothills to the south were very steep and would have constituted a poor settlement choice so people may just have avoided living there. Upper Barton Creek runs north-south through the Floral Park District (see Figure 6.93). This creek is easily fordable and probably should not be used to delimit the district boundary (Arnauld et al. 2012: 209; Hutson 2016). Floral Park is located on a fordable stretch of Upper Barton Creek, near the modern George Price Highway bridge (see Chapter 5.2.3 for a discussion of bridges). To the east of the Floral Park District lay the Tutu Uitz Na District described earlier in the chapter. The eastern flank of the Floral Park District seems to merge fairly seamlessly with the western flank of the Tutu Uitz Na District (see Figure 6.8). The demographic density drop-off between the two neighborhoods is still sufficient to appear in most of the spatial analyses I employed, and the separation between the two districts is independently corroborated through the Xtent model (which is based on the architectural volume of the Floral Park minor center/focal node; see Figure 6.9).

Estimating populations for the Middle to Late Preclassic period is somewhat problematic, but it seems that around this time a population of roughly 50-75 people was likely. Population estimates for the end of the Terminal Preclassic period are more solid and suggest a district population of ~125 people (see Table 6.10). This figure remained relatively constant throughout the Early Classic period. Population increased slightly in the Late Classic period. Based on the 0.1% growth estimate outlined in Chapter 5, the population could have grown to an estimated ~185 people by the end of the Terminal Classic, although the actual population estimate for this time was ~200 people. The close similarity between these numbers should not be taken to in-migration as such. This suggests that the district did not grow substantially from in-migration at this time, especially when compared to the Tutu Uitz Na District which grew dramatically (see Chapter 7.4 for implications of this). The Floral Park district is situated on a mixture of soils, the northern extents of the district immediately around the Floral Park center are situated on Gleyic Cambisols and Gleyic Luvisols which represent some of the most highly productive soils for hand cultivation

in the region (Class I and II soils), while the majority of the district is situated on the less productive Chromic Vertisols.



**Figure 6.94 Illustration of the Floral Park center looking north
(Illustration by Kyle Shaw-Müller; adapted from Walden et al. 2020a: Fig.3d)**



Figure 6.95 Photograph of Floral Park Plaza A from the G. Price Highway

The site is currently masked by dense vegetation. (Photograph from Gordon R. Willey, William R. Bullard, Jr., John B. Glass, and James C. Gifford, *Prehistoric Maya Settlements in the Belize Valley Papers of the Peabody Museum of Archaeology and Ethnology*, Vol. 54, Figure 178. Copyright 1965 by the President and Fellows of Harvard College. Courtesy of the Peabody Museum of Archaeology and Ethnology)

6.4.1 The Floral Park Minor Center

I begin with an overview of the Floral Park minor center drawn from information combined from various reports and chapters published by the original BVAP excavators, under James Garber (Brown et al. 1996; Driver and Garber 2004; Glassman, Conlon and Garber 1995). This minor center was first surveyed by Willey and colleagues (1965). The minor center of Floral Park is situated on the southern natural limestone terrace rising above the river valley (see Figures 6.93, 6.94, and 6.95). Like Tutu Uitz Na and BR-180/168, it is likely that the aspiring elite household chose to settle this locale in the Middle Preclassic period because it represented a high point on the bedrock with relatively good commanding views of the surrounding area. The Floral Park locale offered good opportunities for controlling a crossing point over Upper Barton Creek (300 m to the east). Upper Barton Creek is the only navigable waterway into the Belize River in the Lower Dover area, this would have connected Floral Park with the small polity capital of Lower Barton Creek situated 6 km upstream to the south (Kollias 2016). Floral Park has three architectural groups including the main ceremonial precinct replete with two temple-pyramids (Plaza A), a

small terminus group (Group 1) joined to Plaza A via a *sacbe*, and a sizeable elite residential compound (Group 2). These together add up to 13500 m³ of architecture (see Figures 6.93 and 6.94). The Floral Park ceramic assemblage was analyzed using thin-section petrography by Kay Sunahara (2003). Osteological analysis and strontium and dietary isotope analysis of the skeletal assemblage from the eastern mortuary shrine was conducted by Freiwald (2011a; see also Duffy 2005; Piehl 2005). Floral Park conforms closely to the characteristics of a tier 2 secondary minor center in the local settlement typology, in that it has a large publicly accessible ceremonial plaza, a secondary private elite residential plaza, a *sacbe* and terminus group attached to the public plaza, and a large surrounding district but with a smaller dispersed population (Walden et al. 2019). Floral Park is atypical of other tier 2 centers because it lacks a ballcourt.

6.4.1.1 Floral Park Plaza A

The main ceremonial plaza at Floral Park has an eastern pyramid that rises 7 m in height (Structure A1), overlooking a creek to the east. The smaller southern pyramid rises 5.6 m in height (Structure A2; see Figure 6.96). Collectively, the two pyramids represent ~10000 m³ of architecture. The public plaza covers 1700 m² and is the most accessible public plaza in the Lower Dover polity based on architectural accessibility analysis (see Chapter 9.1.3.2; see also Walden et al. 2020a). The plaza has three small reservoirs on its north-western side. Plaza A is joined to Group 1 (a terminus group) by a 100-meter-long *sacbe*. Willey and colleagues (1965: 310) note an excavation made into the base of Structure A2 by the landowner which exposed a *chultun* cut into bedrock below the temple. Today both the pyramidal temple structures are extensively looted, inspection of these looter's trenches informed chronological assessments made in lieu of excavation in this dissertation. To the northwest of Plaza A lie three small reservoirs which probably started life as borrow pits for construction fill.

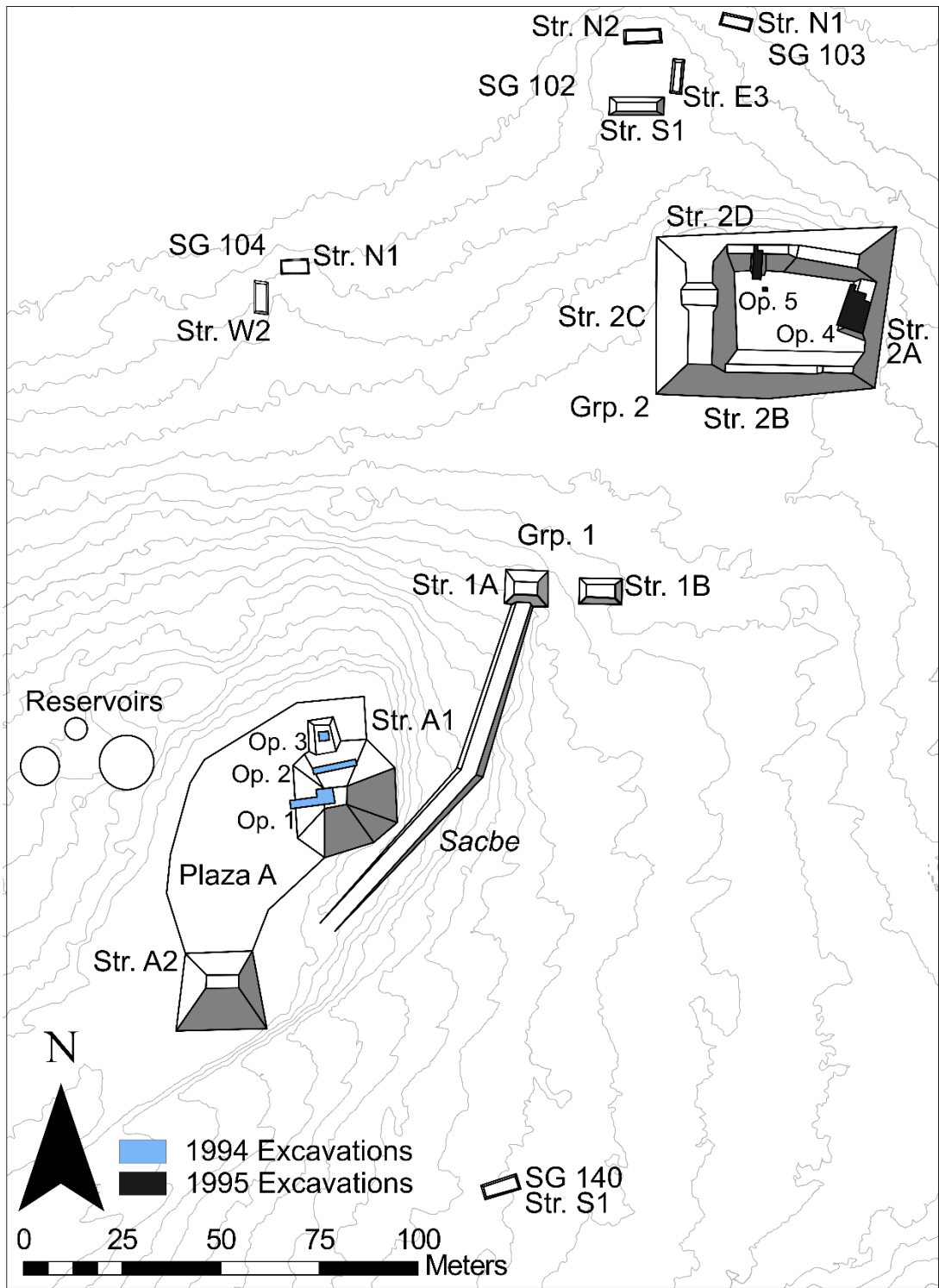


Figure 6.96 Map showing the locations of BVAP Operations 1-5 at Floral Park
 (based on Glassman, Conlon, and Garber 1995; Brown et al. 1996)

BVAP initiated three excavations on the taller eastern pyramid (Structure A1) in 1994 (Glassman Conlon, and Garber 1995). Operation 1 was two units that joined to form an axial trench running east-west running into the front of the structure (its west face), from the plaza to the top of the pyramid (see Figure 6.96). Operation 1 encountered a possible peri-abandonment deposit on the structure which consisted of a dense layer of ceramic sherds interspersed in a burnt matrix lying directly on exposed terminal architecture beneath (Glassman, Conlon, and Garber 1995: 59; for peri-abandonment deposits see Awe et al. 2020a; Hoggarth et al. 2020; see Chapter 3.4.2). The placement of a peri-abandonment deposit on Structure A1 at Floral Park might speak to the relative status of the center as these deposits are commonly associated with major centers and are rarely noted at minor centers. Operation 2 was placed on the structure's northern side, midway between the ground and the summit, to investigate exposed architecture. Operation 2 revealed a well-preserved architectural apron extending to the north (Glassman Conlon, and Garber 1995: 62).

Operation 3 was the only unit on Structure A1 to identify components predating the Late Classic period. Operation 3, a 2x2 m unit, was located on the northern base of the structure to expose a 60 cm high platform appended to the northern flank of Structure A1. Excavation of Operation 3 penetrated 2.40 m to bedrock, encountering two cached whole vessels (Glassman Conlon, and Garber 1995: 63). Ceramic and lithic analysis of the materials from these excavations was conducted in 2019. The reconstruction of the architectural sequence on Structure A relied almost completely on the stratigraphy of the northern appendage exposed in Operation 3 and involved some degree of guesswork (see Chapter 5). The excavators noted a series of architectural strata in the unit and our ceramic analysis revealed these corresponded to construction phases dating to the Late Classic, Early Classic-Late Preclassic, and Middle Preclassic. Garber and colleagues (2004a: 28) note that Cunil phase (Early Preclassic) ceramics were identified at Floral Park, although these were not found in our reanalysis of their excavated assemblage (our sample may have been somewhat incomplete). The following diachronic reconstruction of the architectural sequence at Floral Park Plaza A is based on the BVAP excavations, my analysis of their ceramics, a single radiocarbon date (from their excavations), and my ceramic analysis of looter's pits and trenches. While reconstruction of the full sequence is perhaps over-reliant on Operation 3, some solace can be taken from the fact that the northern appendage was appended to

the rest of Structure A1, and as such is unlikely to have predated it or followed a completely divergent construction sequence.

6.4.1.1.1 Floral Park Plaza A: Middle Preclassic (900-300 BC)

The initial construction episode evident in Operation 3 involved a Middle Preclassic platform that rose about 30 cm above bedrock (Glassman, Conlon, and Garber 1995). On top of this construction phase (at 210 cm below ground surface) was a smashed, cached Jocote Orange Brown vessel. The fill of this first construction phase included Jenney Creek ceramics such as Savana Orange and marine shell debris. A single charcoal sample that was collected during the 1994 excavations was radiocarbon dated for the purposes of this dissertation, revealing a Middle Preclassic date of cal 770-540 BC (PSUAMS#8097 unmodeled). Description of this architectural context suggests similarities with other Middle Preclassic contexts across the Lower Dover area (Glassman, Conlon, and Garber 1995). No Middle Preclassic contexts were immediately obvious in looter's pits in Structures A1 and A2.

6.4.1.1.2 Floral Park Plaza A: Late Preclassic-Early Classic (300 BC-AD 600)

Above the Middle Preclassic platform of the northern appendage lay a Late Preclassic/Early Classic era construction which rose 110 cm and may have been in use into the Late-Terminal Classic phase (Glassman, Conlon, and Garber 1995). This second construction episode was associated with a mixture of Barton Creek, Mount Hope, Floral Park, and Hermitage ceramic types, such as Balanza Black, Society Hall Red, and Chan Pond Unslipped. Ceramic analysis of materials encountered in the extensive looters' pits on Structures A1 and A2 both suggest sizeable Late Preclassic and Early Classic construction phases. These materials are apparent at a depth of 1.5 m in the eastern pyramid (A1), and suggest the Early Classic component of Structure A1 was around 4 m in height. This estimate based on contexts in looter's pits is corroborated by the volume of architecture associated with the Late Preclassic to Early Classic period in the northern appendage of Structure A1.

6.4.1.1.3 Floral Park Plaza A: Late-Terminal Classic (AD 600-1000)

Late Classic construction on the northern appendage saw the platform surface rise ~35 cm above the previous construction phase. This architectural phase was badly burned. A single cached Chunhuitz Orange bowl was associated with this phase. Unlike earlier phases on the central component of Structure A1 which were only accessible through looter's pits, Operations 1 and 2 revealed lots of information about construction on the main component of Structure A1. Construction on this part of the Structure A1 diverged in tempo from the northern appendage at this time; while the northern appendage saw only a minor Late Classic construction phase, the rest of Structure A1 saw two very sizeable construction episodes dating to the Late-Terminal Classic. The Late Classic penultimate phase having been excavated by Glassman, Conlon, and Garber (1995), and the terminal phase was blown out by bioturbation. Interestingly, it would appear that Late/Terminal Classic phase remodeling saw the structure reoriented along a slightly different axis. Earlier construction episodes appear to run directly north/south. Whereas the orientation of the terminal architecture ran at an obtuse angle to these earlier phases (Glassman, Conlon, and Garber 1995: 61). Operation 2, on the northern flank of the pyramid, exposed what was presumably the penultimate phase northern wall of an upper tier of the structure. The course of this wall deviated from its east-west orientation towards the western side of the structure and turned inwards, before extending out to the west. Further to the north, a lower course wall was identified with an associated apron, with at least two construction phases exposed on its eastern side (Glassman, Conlon, and Garber 1995: 62). While the architectural form of these earlier structures remains difficult to reconstruct given the nature of the architectural exposure, the structural offset in the wall and lower apron may plausibly suggest that Structure A1 formed an eastern triadic structure, like those apparent at BR-180 and Tutu Uitz Na at some point in the early Late Classic or Early Classic. The form of the structure may then have been dramatically altered in the Late Classic following the emergence of Lower Dover. If this was the case then Floral Park might have followed a roughly similar trajectory as the Stela Group at Chaa Creek, which showed evidence of intermediate elite ancestor veneration early on but then fell into disuse later (Connell 2010: 303). In this instance, however, the interpretation would suggest Structure A1 was functionally repurposed.

The creation of a substantial peri-abandonment deposit on the eastern pyramid at Plaza A speaks to the perceived function and standing of the center, however (Glassman, Conlon, and Garber 1995). The peri-abandonment deposit at Floral Park comprises a dense layer of sherds associated with a burned layer of soil lying roughly atop the terminal plaza floor and running up the front axis of the eastern pyramid (Glassman, Conlon, and Garber 1995: 60). This deposit by all accounts seems comparable in form to the more recently excavated peri-abandonment deposits located in the public and private plazas in the civic-ceremonial cores of Belize River Valley polities like Xunantunich, Baking Pot, Cahal Pech, and further afield across the Maya lowlands (Awe et al. 2020a; A.F. Chase and D.Z. Chase 2020; Hoggarth et al. 2020; Houk 2020; Lamoureux-St-Hilaire and Snetsinger 2020; Moholy-Nagy 2020; Newman 2019). At Lower Dover, smaller peri-abandonment deposits were found in the southern and southwestern courtyards (CT 3 and 4) attached to the royal palace (Kulig 2015; Romih 2019a), and in Courtyard 2, the throne room at the apex of the palace (Watkins et al. 2017; see Chapter 3.4.2). To date, no evidence of similar deposits have been encountered at lower-level intermediate elite residences (tiers 3-4) in the Belize River Valley. The occurrence of peri-abandonment deposits at polity capitals and Floral Park, but not smaller centers may suggest that Floral Park fits a certain emic criterion, which Tutu Uitz Na and other tier 3 centers in the Belize River Valley did not. The implications of this are far from clear, but potentially Floral Park was considered more alike to an apical elite polity capital than a tertiary intermediate elite center?

Much remains unknown about the construction history of the actual plaza at Plaza A. The plaza surface was raised up dramatically at some point in its construction history. This seems to have occurred in the Late Classic period, but could have happened earlier. On the eastern side of the plaza, the northern platform appended to Structure A1 was 60 cm above the Late Classic plaza floor level, and 240 cm above bedrock, suggesting that the plaza floor was raised roughly at least 180 cm above bedrock in the Late Classic period (Glassman, Conlon, and Garber 1995: 59-62). In theory, such grandiose modifications may have been part of the major remodeling of Structure A1.

6.4.1.2 Group 1 (Terminus Group and *Sacbe*)

Group 1, a small terminus group, is attached to Plaza A via the *sacbe*. Group 1 and the *sacbe* are included in the Plaza A architectural volume calculations because this group is connected

to Plaza A (see Figure 6.96). Group 1 has a 215 cm high western structure (Str. 1A) and a smaller eastern structure (Str. 1B) located across a small plaza to the east. The *sacbe* is 100 m long and curves around a terrace in the hillside on which Plaza A sits. The *sacbe* terminates into the southern side of Structure 1A. *Sacbeob* are raised masonry causeways covered in white lime plaster, ranging from between 50 cm to 1 meter in height. *Sacbeob* functioned as thoroughfares for foot traffic and served as elevated walkways for processions (Ashmore 1981: 45; Cheetham 2004; Demarest 1992: 148). *Sacbeob* show tremendous variation in their form and function across the Maya lowlands (J. Shaw 2001). Some *sacbeob* probably functioned as important thoroughfares across the Maya world. The Coba-Yaxuna *sacbe* ran 100 km across the northern lowlands and was constructed to link different polities and communities (Stanton et al. 2020). While not extending as far as the Coba-Yaxuna *sacbe*, the dendritic causeway system emanating from the epicenter of Caracol is similarly impressive (D.Z. Chase and A.F. Chase 2003). This system was designed to integrate secondary satellite centers into the city of Caracol (D.Z. Chase and A.F. Chase 2003: 114). The variability in *sacbeob* across the lowlands suggests that they were probably constructed for a range of reasons including ceremonial and economic integration, military deployment, administration, water control, and astronomical and cosmological site planning principles (Ashmore 1981: 45; A.F. Chase and D.Z. Chase 1996; Folan 1991; Keller 2010; Scarborough 1993: 29-31; Villa Rojas 1934). J. Shaw (2001) helpfully divides *sacbeob* into three categories; “local intra-site,” “core–outlier intra-site,” and “inter-site”.

Despite great variability at the pan-lowlands scale, *sacbeob* are quite homogeneous at the regional scale. The Floral Park *sacbe*, like its counterparts in the Belize River Valley, is relatively short and is classed as an intra-site *sacbe*. Of the seven *sacbeob* in the BVAR research area, four are associated with major centers (Baking Pot, Cahal Pech, and Ek Tzul), and three are associated with Group 2 secondary minor centers (Xualcanil, North Caracol Farm, and Floral Park; Walden et al. 2019; Table 6.15). Generally, major centers (tier 1) and tier 2 secondary minor centers in the region possess a single *sacbe* terminating an average distance of 390 m from the center at a ceremonial precinct. Terminus groups seem to be commissioned by apical/intermediate elites but were publicly accessible spaces (Cheetham 2004: 126).

Table 6.15 *Sacbeob* in the BVAR Study Region Area.

| <i>Associated Sites</i> | <i>Group</i> | <i>Polity</i> | <i>Length</i> | <i>Reference</i> |
|-----------------------------|--------------|---------------|---------------|---|
| Baking Pot Group A-Group B | 1 | Baking Pot | 320m | Audet 2006; Cheetham 1995 |
| Baking Pot Group B-Str. 190 | 1 | Baking Pot | 440m | Audet 2004, 2006 |
| Cahal Pech-Zopilote | 1 | Cahal Pech | 750m | Cheetham 2004, Ebert 2017, Fox 2018 |
| Ek Tzul Plaza 2-Plaza 3 | 1 | Ek Tzul | 260m | Walden et al. 2019 |
| Floral Park Plaza A-Group 1 | 2 | Lower Dover | 100m | Glassman, Conlon and Garber 1995: 63 |
| North Caracol Farm-M154/158 | 2 | Baking Pot | 500m | Conlon 1995: 96; Golden and Conlon 1996: 20 |
| Xualcanil-Te Tun Na | 2 | Cahal Pech | 363m | Schwake 2000 |

Ethnohistoric, ethnographic, and archaeological evidence suggests *sacbeob* were important processional routes (Booher and Houk 2016; Bey, Hanson, and Ringle 1997; Keller 2006, 2010). The processions staged along *sacbeob* were likely ideologically tied to institutions of kingship and the passage of time (Demarest 1992b: 148; Morton 2012). It seems unlikely that the short Belize River Valley *sacbeob* served important economic or administrative functions like the dendritic causeway system at Caracol. While the processions staged along the *sacbe* may have served to ideologically integrate the Lower Dover polity. Instead, Belize River Valley *sacbeob* and their associated terminus groups probably served as processional routes for rituals and ceremonies (Cheetham 2004; S. Fox 2018). Generally, terminus groups show elaborate evidence of different types of ritual. The Zopilote terminus group had a Preclassic stela interred in architecture alongside infant and adult sacrifices and finger bowl caches (Awe, Grube, and Cheetham 2009; Cheetham 2004). This trend is evident at the Baking Pot terminus group at Structure 190 which contained similar finger bowl caches (Audet 2006). An altar and stela are also present at the Xualcanil terminus group of Te Tun Na (Schwake 2000). Keller (2010: 197-200) reports the presence of musical instruments like drum fragments which were swept off the *sacbe* into nearby dumps at Xunantunich. This corroborates the notion that the small Belize River Valley *sacbeob* fulfilled a processional function (Cheetham 2004). This pattern seems to change further to the south at Pacbitun. Pacbitun has one causeway (Mai causeway) leading from the civic-ceremonial center to a single shrine in conformity with the Belize River Valley pattern, but then several other dendritic

causeways extending from the core in a manner more akin to Caracol (Micheletti and Powis 2020; Weber and Spennard 2020).

The Floral Park *sacbe* and its terminus at Group 1 is strikingly similar to other *sacbeob* and termini in the region. The *sacbe* is relatively short and joins a small terminus to the main plaza. The presence of a *sacbe*, and terminus group at Floral Park shows that the Floral Park intermediate elites were staging processions and fulfilling ritual duties that none of the other intermediate elites, or the apical elite at Lower Dover were capable of. Like other Belize River Valley termini, the Floral Park terminus is one of the most accessible precincts in the Lower Dover polity (Walden et al. 2020a). Based on this comparison it seems highly likely that the *sacbe* served a very specific ceremonial function that involved processions and potentially caching at the terminus group.

As noted earlier in this chapter, all the polities of the Belize River Valley contain a single Tier 2 secondary minor center like Floral Park. Unlike other Late Classic major centers, Lower Dover itself did not possess a *sacbe*. That meant that the only locale within the Lower Dover polity where *sacbe* based processional ceremonies could be staged was Floral Park. This is another reason to suspect some type of alliance between the Lower Dover apical elite and the secondary intermediate elite at Floral Park. While the dating of the *sacbe* and its termini remains unclear, surface ceramics associated with the *sacbe* and the terminus group were entirely Late Classic (Spanish Lookout I and II), suggesting that the *sacbe* was constructed in the Late Classic period following the incorporation of Floral Park into the Lower Dover polity. A Late Classic date for this major construction program would make sense given the tempo of architectural development on the Plaza A and Group 2, both of which saw major construction at this time. Moreover, the fact that each polity contained a Tier 2 center with a *sacbe* and termini, probably constructed using labor mobilized at the polity level (Walden et al. 2019), suggests that these secondary centers provided an important function in terms of polity-level integration. Therefore, the causeway arrangement would likely have been constructed following the co-option of the local elite by the apical elite of Lower Dover. The Lahkin *sacbe* at Xualcanil, a Tier 2 intermediate elite center associated with Cahal Pech has been excavated, revealing a single construction phase securely dated to the Late Classic period (Schwabe 2000: 98). North Caracol Farm, the Tier 2 intermediate elite center associated with Baking Pot has a *sacbe* that has now been heavily plowed. Analysis of

surface ceramics for plowed structures is far more reliable than unplowed ones, and suggests that this *sacbe* was likewise Late Classic in date.

It remains unclear why a *sacbe* and terminus group was not constructed at Lower Dover itself. Although these features are often construed as being associated with polity capitals in the region (Helmke and Awe 2012), only half the polity capitals possess these features (Baking Pot, Cahal Pech, and Ek Tzul), compared to all of the tier 2 secondary centers (Floral Park, North Caracol Farm, Xualcanil). The patterning of these features suggests that *sacbeob* and terminus groups served a specific function at tier 2 secondary centers.

6.4.1.3 Floral Park Group 2

Floral Park Group 2 is located 150 m to the north of Plaza A. This elite residential compound or plazuela has four structures (clockwise from the east: Str. 2A, 2B, 2C, and 2D; see Figure 6.96). Structure 2C is the largest at 210 cm high. The combined architectural volume of the compound is 3471 m³, and the plaza covers 400 m². In contrast to the accessible public ceremonial plaza, the residential compound is very spatially restricted (Walden et al. 2020a). This compound represents the private residence of the Floral Park elite household (Glassman, Conlon, and Garber 1995: 64). Initial excavation of the elite residence in 1994 involved an axial trench dug into the eastern mortuary shrine (Str. 2A; see Glassman, Conlon, and Garber 1995: 64-66). Following this, Brown and colleagues (1996) excavated Group 2 more extensively in 1995. This involved extended horizontal excavations over Structure 2A, an axial trench through the northern range structure (Str. 2D), and a smaller unit placed in the plaza in front of Structure 2D. The lithics and ceramics from these excavations were analyzed by Walden, Ellis, Messinger, Qiu, and Saldaña. Group 2, Structure 2A served as the Floral Park elite mortuary structure. While the structure is aligned on the east side of the plaza and has an eastern-central-azimuth between 83 and 96 degrees, the structure is missing northern and southern wings, so it could not have had solar alignments in the same way as the eastern triadic structures at Tutu Uitz Na and BR-180. This mortuary shrine was modified into a round platform in the Terminal Classic period.

6.4.1.3.1 Structure 2A

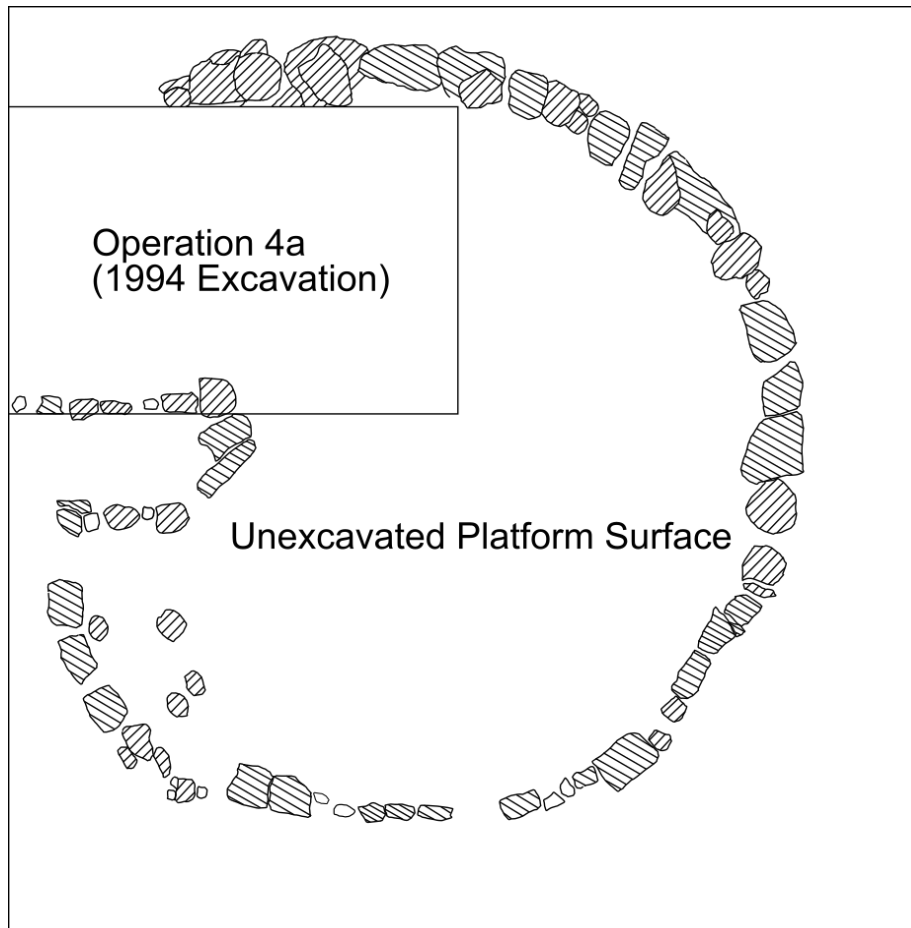
Structure 2A is a small eastern mortuary shrine of 110 cm in height. While some modern damage had been done to Structure 2A, it was in a much better state than architecture at BR-180/168 or the Tutu Uitz Na center. Excavation revealed three construction phases and encountered nine burials and 10 individuals. Seven of the nine Floral Park burials were secondary and these have not yet been AMS ¹⁴C dated (Brown et al. 1996; Glassman, Conlon, and Garber 1995: 64-65). It is possible that some of these burials were Early Classic in date and were removed from Structure A1 on the ceremonial plaza in the Late Classic period when Group 2 and its eastern mortuary structure were constructed. Alternatively, the Floral Park local elite household might have been replaced by a different intermediate elite household loyal to Lower Dover in the Late Classic period. If this was true, then the burials in the eastern mortuary shrine could have been brought from wherever that incoming family originated. Of the three burials from Floral Park subjected to strontium isotope analysis (Floral Park Burials 2, 6, and 9), Floral Park Burial 9 was non-local (from the Macal drainage; Freiwald 2011a: 203). This is interesting as both Burials 2 and 6 were secondary, yet it was the primary burial that proved to be non-local. Osteological and isotope data for Floral Park are based on Freiwald (2011a), additional information is provided by Piehl (2005: 599-602) and Duffy (2005: 62-66).

Description of the construction sequence on Structure 2A is summarized from Glassman, Conlon, and Garber (1995: 64-66) and Brown et al. (1996: 37-45). The first construction phase of Structure 2A involved the building of a low rectangular platform of several courses (~50 cm) high. The platform probably dates to the early Late Classic/Late Classic period and has a mixed assemblage of Tiger Run and Spanish Lookout I sherds. Only a small part of this structure was excavated.

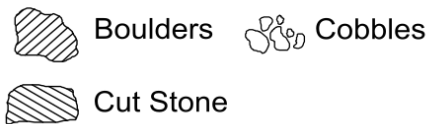
The second construction phase saw the structure rise in height to 75 cm. This structure now had two steps leading to the top. The ceramic fill of this phase places it firmly in the Late Classic period (Spanish Lookout I ceramics). Construction Phase 2 was associated with six burials (Floral Park Burials 3, 4, 5, 6, 7, and 8). Floral Park Burial 3 involved a secondary burial of an adolescent or adult placed north/south in a cache with three obsidian blades, a *metate* fragment, and ceramics. Burial 4 was a fragmentary primary burial of a supine individual, oriented north/south with the

knees flexed. The flexing of the knees is uncommon in Late Classic Belize Valley burial traditions and may have been related to an osteomyelitic reaction on one lower limb of the individual identified by Freiwald (2011a: 205). The grave goods in Burial 4 included a miniature vessel and an incised piece of slate (Brown et al. 1996: 42). Only about 5% of this individual remained intact, having been damaged by looters. Burial 5 was a single femur fragment deposited in fill during construction (Brown et al. 1996: 43). Burial 6 entailed a primary burial of long bones from a young adult (Individual 1) and a secondary burial of a second individual (Individual 2; Freiwald 2011a: 390). The dentition of the young individual exhibited substantial calculus build-up and caries. The remains were interred in an extended position north/south and included a fragmented cylinder jar and a ceramic figurine of a human nose. The burial may have been a dedication associated with the second construction phase (Brown et al. 1996: 43). Strontium isotope analysis of tooth enamel from Burial 6 Individual 1 suggests that the individual ($^{87}\text{Sr}/^{86}\text{Sr}$ value .70858) grew up locally (Freiwald 2011a: 203). Piehl (2005: 600) notes that this individual has an enriched $\delta^{15}\text{N}$ value and not statistically significantly depleted $\delta^{13}\text{C}$ collagen value from the teeth (see Figure 5.4). Burials 7 (a femur) and 8 (a crania) comprised loose remains interspersed in architectural fill

The last construction phase saw the structure rise to at least a meter or more. This terminal phase was badly eroded due to modern land-use practices. This phase saw an extension of the rectangular substructure and the addition of a six-course (1 m high) Terminal Classic circular platform with a diameter of 5.2 m, atop the rectangular substructure (see Figure 6.97; see also Brown et al. 1996: 41-42). The circular platform likely had a stairway extending to its summit. The ceramic assemblage of this construction phase included Late and Terminal Classic ceramics (Spanish Lookout II). The onset of this last construction phase saw the ritual caching of two offerings in the treads of the steps of the second construction phase (Brown et al. 1996: 45). Each offering consisted of two nested, inverted plainware bowls (Spanish Lookout I-II), each associated with a broader cluster of broken ceramic sherds.



**Floral Park Group 2, Structure 2A
Plan of Terminal Architecture**



Plan adapted from Brown et al. 1996: Fig. 2.3 by X. Li and J. Walden

Figure 6.97 Plan of Terminal Classic round platform at Group 2 Structure 2A

The fill of the staircase leading to the summit of the circular platform contained two burials (Floral Park Burials 1 and 2). Burial 1 consisted of a secondary burial represented by the disarticulated and highly fragmentary remains of an older adult individual with antemortem tooth loss. This comprised disarticulated human remains (comprising <5% of the skeleton) located under a large cut stone associated with the staircase (Freiwald 2011a: 387). Burial 2 was probably a heavily disturbed primary burial of a middle to old aged adult associated with a possible stone cist. The individual had caries and substantial calculus on the buccal surface of their molars (Freiwald

2011a: 288; see also Glassman, Conlon, and Garber 1995: 64-65). Strontium isotope analysis of the molar from this individual ($^{87}\text{Sr}/^{86}\text{Sr}$ value .70847) suggests they grew up locally (Freiwald 2011a: 203). Construction phase 3 also saw the intrusive interment of Burial 9, a probable female adult, into the summit of construction phase 2. Burial 9 was a primary burial in a cist of untrimmed limestone blocks. This individual was interred prone with their head to the south, with no grave goods (Brown et al. 1996: 44). This individual had occlusal filing on the incisors (Freiwald 2011a: 205). Strontium and oxygen isotope analysis of tooth enamel from this individual ($^{87}\text{Sr}/^{86}\text{Sr}$ value .71029; $\delta^{18}\text{O}$ -3.28) suggests they grew up somewhere along the Macal River to the southwest (Freiwald 2011a: 203). Freiwald (2011a) shows that 15% of sampled remains at Barton Ramie are non-local. Moreover, Freiwald (2011a) identified two individuals at Barton Ramie from the Macal River. The individual in Burial 9 suffered early in life from childhood health stressors. This is partly indicated by antemortem tooth loss. Despite this, they benefitted from a consistent supply of meat throughout their life and consumed less maize than average ($\delta^{13}\text{C}$ tooth enamel -8.49; $\delta^{13}\text{C}$ bone collagen -13.6; $\delta^{15}\text{N}$ bone collagen 8.9; Freiwald 2011a: 297). Piehl (2005: 600) notes that the depleted $\delta^{13}\text{C}$ bone collagen value of Burial 9 shows above-average dietary diversity.

Circular platforms are fairly common in the Terminal Classic period and are categorized into three sequential types (Harrison-Buck 2007: 160-199; see also Harrison-Buck 2012; Harrison-Buck and McAnany 2013: Fig. 1). Phase 3 of Structure 2A is a Type 1 circular platform, a simple circular platform (commonly dating to cal AD 750-900). Similar examples include Structure 1 at Caye Coco (Rosenswig and Masson 2002: 215-219; Fig. 4), Structure 3B at San Juan on Ambergris Caye (Guderjan 1995: 34-38), Structure 16 at Becán (Harrison-Buck and McAnany 2013: 300), the first phase of Structure 479 at Obispo in the Sibun Valley (Harrison-Buck and McAnany 2013: 300), Structure 4A at Pook's Hill in the Roaring Creek Valley (Helmke 2006), and Structure 12 at Nakum (Żrałka and Hermes 2012), and the first construction phase of Structure 3C15-2nd (El Caracol) at Chichen Itza (Pollock 1936a and 1936b; Ruppert 1935: 86-87, 271). Type 2 circular structures represent an extended version of Type 1 structures and seem to date to after 900 AD. Type 2 involves a circular outer stub wall set on an underlying plinth, which supported a conical pole and thatch superstructure (D.Z. Chase and A.F. Chase 1982; Harrison-Buck and McAnany 2013: 299). Examples of Type 2 circular platforms include the second phase of Structure 479 at Obispo, Structure 402 at Oshon, and Structure 100 at Pechtun Ha, all in the Sibun Valley

(Harrison-Buck and McAnany 2013: 300), Structure 9 at Nohmul (D.Z. Chase and A.F. Chase 1982), Structure RS-21 at Blue Creek (Preston 2008: 9, 29), and Huum Chaak, K'ak'nal, and Ik'nal in the Middle Belize Valley (Harrison-Buck, Murata, and Kaeding 2012: 134-139; Harrison-Buck, Kaeding, and Murata 2013: 79, 85-87). Lastly, the final form these structures took around the end of the Terminal Classic/early Postclassic (AD 900-1000) is classified as Type 3 (Harrison-Buck 2012: Fig. 6). This involved the infilling of the interior room with boulder fill to transform them into a basal platform, with another structure with circular stub walls set atop. Examples include the final forms of Structure 402 at Oshon, Structure 479 at Obispo, Structure 100 at Pechtun (Harrison-Buck and McAnany 2013), Structure 9 at Nohmul (D.Z. Chase and A.F. Chase 1982), and the second phase of El Caracol at Chichen Itza (Ruppert (1935), and the round structure at Uxmal (Kowalski et al. 1994: 281-285).

Two stranger examples that might relate to this broader architectural phenomenon come from Ka'Kabish in northern Belize and Baking Pot. Structure FA-8 at Ka'Kabish represents a traditional temple pyramid with a Terminal Classic round platform appended to the front (Haines, Sagebiel, and Belanger 2017). Structure 209, an elliptical "ticket-booth" structure situated at the end of the *sacbe* leading from Group B to Group A at Baking Pot shares many similarities with the round platforms. This Terminal Classic structure had multiple elliptical terraces set upon one another and contained four burials (Audet and Awe 2003: 1-24). While neither of these structures fit neatly into Harrison-Buck's typology, the coeval dating, mortuary function, and rough similarities in form suggest this structure is likely an expression of the same tradition as the other Terminal Classic circular structures.

Structure 2A at Floral Park bears many similarities with its closest analog, Structure 4A at Pook's Hill, just 12 km to the southeast. Structure 2A and Structure 4A share a position on the eastern side of the plaza, served a mortuary function, and have adjoining rectangular platforms to the north (Helmke 2006: 188-190; Fig. 7). However, Structure 2A differs from Structure 4A at Pook's Hill, because it is itself set upon a rectangular platform. Structure 1 at Caye Coco served a mortuary function, but was situated on the southwest side of the plaza, and lacked a rectangular substructural platform (Rosenswig and Masson 2002: 217). Another example with close similarities is Structure 3B at San Juan on Ambergris Caye which also represents a Type 1 circular platform set on a rectangular substructure, and has a mortuary function, but is situated on the

southern side of the plaza (Guderjan 1995: 34-38). The geographically closest example of a similar structure is Structure 209 at Baking Pot, this differs from Structure 2A in that it is elliptical and the fact it comprises multiple elliptical terraces, and is a “ticket-booth” on a *sacbe*, however it shares a mortuary function, and is an eastern structure which faces west. The ceramic assemblage of phase 3 of Structure 2A was similar to that found in the platform at Ik’nal (Harrison-Buck, Kaeding, and Murata 2013: 86), and contained multiple Spanish Lookout II types including Alexander’s Unslipped, Achote Black, Daylight Orange, and two Roaring Creek dish sherds with highly everted rims.

Terminal Classic circular platforms have been considered to represent local emulation of emergent architectural styles at Chichen Itza and the Northern Yucatan (D.Z. Chase and A.F. Chase 1982; Harrison-Buck and Pugh 2020; for Northern Yucatec examples see Freidel and Sabloff 1984; Kowalski et al. 1994). As such these structures have been construed as a materialization of ideologies relating to the Feathered Serpent at Epiclassic/Terminal Classic centers across Mesoamerica (Ringle, Negrón, and Bey 1998: 221-222). The extent to which the Floral Park elite decided to emulate the rulers of Chichen Itza is unclear. However, the construction of the circular platform on Structure 2A at Floral Park suggests that the elite household had connections with elites of a similar hierarchical position at fairly large minor centers downriver at Huum Chaak, K’ak’nal, and Ik’nal. Furthermore, the similarities with the circular structures at Pook’s Hill and San Juan may suggest links with the Roaring Creek and Ambergris Caye. It also remains plausible that connections extended to the west to actors situated in the Peten (Sabloff 1973: 111, 128; Żrałka and Hermes 2012).

It remains unclear how exactly Structure 209 at Baking Pot fits into the picture as it differs dramatically from many of the other Terminal Classic circular platforms, but it remains highly possible that the round structure at Floral Park reflects close association with Baking Pot, which is only 5 km to the west. The fact that one individual (Burial 9) interred in Structure 2A was originally from the Macal River Valley is intriguing, but no known Terminal Classic circular structures exist in this region. One possible link between these contexts lies in waterways and emergent Terminal Classic trade and exchange networks. Floral Park was situated on Upper Barton Creek, one of the few navigable waterways to the south (the others being the Macal River and the Roaring Creek). Close geographical proximity to rivers would likely have tied these minor centers

together, ultimately tying them into a circum-peninsular long-distance trade network around the Yucatan (see Cobos 2016; Harrison-Buck and McAnany 2013).

Another, albeit less likely possibility is that the circular platform was somehow tied to the Preclassic circular platform situated at Petna (SG 132), just 800 m to the southwest (Nachamie and Walden 2020; see Chapter 6.4.2.4), or BR-1 and BR-44 at Barton Ramie (Willey et al. 1965: 51-59). The fact three Preclassic round structures exist within a 2 km radius of Structure 2A at Floral Park is assumed to be a coincidence as they represent two temporally isolated traditions. However, evidence for the construction of Preclassic round platforms extends into the Early Classic at both Barton Ramie (Willey et al. 1965: 51-59), and Bedran (Conlon and Powis 2004: 74; Powis 1993: 214), suggesting a temporal gap of just several hundred years between the construction of “Preclassic” and Terminal Classic round platforms. This shorter time period between the two seemingly isolated traditions in the region could be inferred to suggest some type of connection although this remains speculative.

6.4.1.3.2 Structure 2D

Structure 2D on the northern side of the plaza represents a Late to Terminal Classic range structure with an outset staircase (Glassman, Conlon, and Garber 1995: 64). The structure may have served as a residence. Structure 2D was trenched with a 3x8 m axial unit on the central staircase, perpendicular to the structure (Figure 6.98). This excavation revealed four construction phases, all of which involved extensions of a rectangular structure and dated to the early Late Classic through to the Terminal Classic periods. The earliest construction phase comprised an 85 cm high platform with a four-course cut stone wall (Brown et al. 1996: 47). The platform contained wet-laid fill mixed with river cobbles. Overall, this construction episode contained few ceramics, but those identified were of the Tiger Run and Spanish Lookout I complexes, placing initial construction towards the end of the early Late Classic period. Brown and colleagues (1996: 47) suggest that the absence of artifacts in structural fill was related to the paucity of existing midden material in the surrounding area when construction began. A low platform extended 1 m from the front of the structure. This was probably added in a separate event towards the end of this initial construction phase.

Floral Park, Group 2

Structure 2D, Ops. 5a, 5b, and 5d
West Profile

-  Ground Surface
-  Boulders
-  Plaster
-  Cobbles
-  Pebbles
-  Cut Stone

0 1m

Profile adapted from Brown et al. 1995: Figs.2.7, 2.8 and 2.9 by T. Watkins and J. Walden

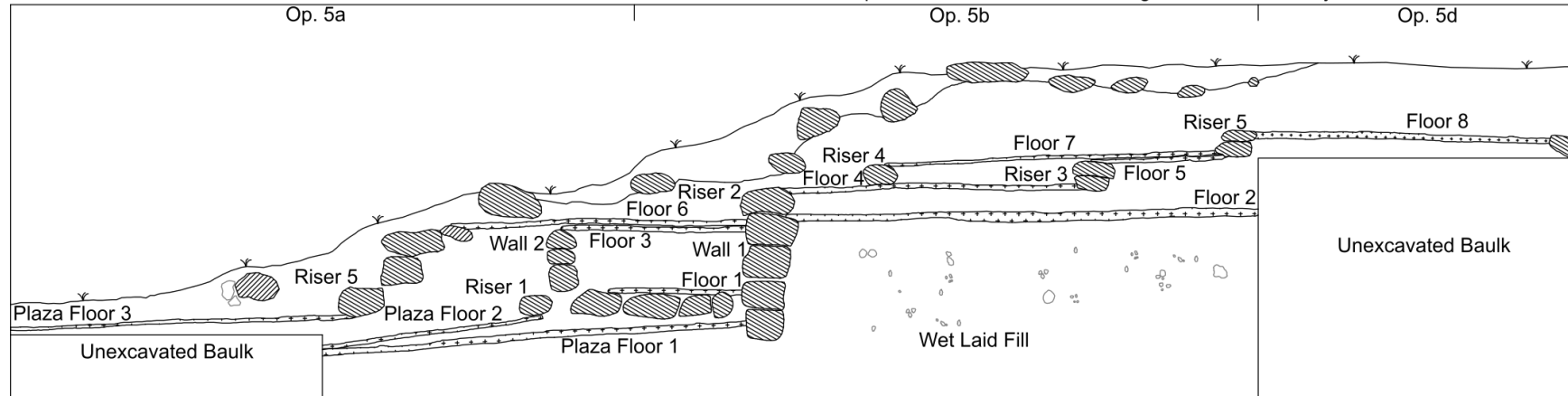


Figure 6.98 West profile of Floral Park Group 2 Structure 2D

Construction phase 2 represented a 110 cm high platform with two tiers running on its southern façade. The structure has three steps reaching from its base. The first step is a single course in height, the second step is of three courses, while the third step comprised the wall of the earlier construction phase. A fourth step was located on a new platform added to the top of the structure which effectively raised it another 20 cm in height. In the fill of this new platform, at the apex of the substructure, was a single large oval biface which Brown et al. (1996: 50) interpreted as a ritual offering to dedicate the construction phase. The fill of this episode contained boulders associated with primarily Spanish Lookout I ceramics.

Construction phase 3 on Structure 2D extended the earlier Late Classic structure. The fill contained high proportions of Spanish Lookout I ceramics and seven obsidian blades. The structure had five courses of steps running to its apex which had been raised a further 20 cm, raising it to a height of 130 cm above the associated Plaza Floor 2. The steps leading up to the structure had two oval bifaces placed upon them, which the excavators interpret as evidence of termination ritual. The plaster floor located on the uppermost platform was grey from burning (Brown et al. 1996: 55).

Construction phase 4 on Structure 2D consisted of badly preserved terminal architecture which had been extensively damaged by cattle. The presence of coarse, irregularly cut, or uncut limestone boulders suggests that this phase was probably more poorly constructed than earlier construction episodes. Another chert biface, interpreted as a dedication cache to this final construction phase, was present in the fill of the fourth step (Brown et al. 1996: 55). The fill of this phase contained high proportions of Spanish Lookout I ceramics, but also Spanish Lookout II types like Alexander's Unslipped and a Daylight Orange bowl.

6.4.1.3.3 Floral Park Group 2 Plaza

An additional unit was placed in the plaza to the south of Structure 2D. This unit exposed two badly preserved Late Classic plaza floor surfaces (Brown et al 1996: 46). Plaza Floor 1 was located 15 cm below the current ground surface and was associated with construction phase 2 on Structure 2D. Plaza Floor 2 was encountered 10 cm below Plaza Floor 1 and was associated with Construction Phase 1. At 35 cm below the ground surface, a single course stone alignment that

represented a construction pen (a square enclosure with walls to retain fill) was identified running north/south. Associated artifacts include Tiger Run and Spanish Lookout phase ceramics, a chert core, a chert blade and borer, four obsidian blades, and a small jade bead. Below this level, at around 1.20 m below ground surface, lay architectural fill containing Late Preclassic (Barton Creek phase) materials including Hillbank Red, Monkey Falls Striated, and Savana Orange (Jenney Creek phase) ceramics, two chert blades, two chert cores, and another obsidian blade. A further 1.10 m of sterile fill was removed below this material. These limited Preclassic ceramics were not associated with a clear construction phase and could have come from an earlier occupation in the general area, or one of the surrounding commoner settlement groups with a Preclassic component. The Group 2 Plaza excavation unit provides a better understanding of the developmental trajectory of Group 2 and corroborates an early Late Classic date for the initial construction of the elite residential compound. Although earlier Preclassic construction could have existed at the site, this did not represent a sizeable elite residence like the Late Classic component. The construction pen and 1 m of fill speaks to the scale of the architectural remodeling on the compound in the Late Classic period and the overall abundance of commoner labor made available to the Floral Park elite following the rise of Lower Dover.

6.4.1.4 Floral Park Center Summary

The reconstructed sequence for the Floral Park center based on BVAP excavations and my radiocarbon dating and ceramic analysis suggests the relatively slow development of Plaza A from the Middle Preclassic to the early Late Classic. During this time Plaza A was probably the sole component of the Floral Park center. It seems likely that an elite residence was probably situated at Plaza A at this time but was likely buried during the expansion of the plaza in the early Late Classic (Tiger Run phase) and a new residence was constructed at Group 2. Ceramic analysis clearly shows that a single major construction phase occurred in the early Late Classic period which saw a sizeable construction episode at Plaza A. During this phase the plaza was raised and substantial construction occurred on Structure A1. The initial construction of Group 2 also occurred at this time. It seems likely that Group 1 and the *sacbe*, based on analysis of surface ceramics and regional trends, were both added during this extensive early Late Classic phase. Later construction on Structure A1 saw the pyramid reorientated and remodeled. These changes seem

quite substantial based on the excavation report and it seems likely that this remodeling may have involved the modification of a pre-existing eastern triadic structure into a larger pyramid.

Comparative discussion of grave wealth and skeletal wellbeing are included in Chapter 7. In general, the burial assemblage of Floral Park is impoverished in comparison to smaller minor centers in the Lower Dover polity like BR-180/168 and Tutu Uitz Na (see Chapter 7). This may corroborate Sunahara's (2003) thin-section petrographic analysis of Late Classic ceramics, which revealed that many common tempers found elsewhere in the valley were not found at Floral Park (or Blackman Eddy). This was interpreted as indicative of the center being economically peripheral. Although this remains somewhat tangential to arguments about the lack of burial wealth. In general, the polities of the east-central Belize River Valley (Camelote, Blackman Eddy, and Lower Dover) do seem to lack access to such high proportions of wealth items compared to their peers further west however. The lack of overt wealth items in elite funerary deposits might seem to contradict the colossal increase in the ability of the Floral Park intermediate elite to command commoner labor for monumental construction. This pattern however is analogous to trends evident at Xunantunich following its co-option by Naranjo (LeCount and Yaeger 2010b). The Xunantunich rulers lost access to wealth items, and shifted residence from the large ceremonial area of the center surrounding El Castillo to a separate residential plaza (Plaza A-3). These changes seem like a step-down for the Xunantunich elite, but this period saw a distinct rise in the amount of commoner labor invested in ceremonial architecture at the center, clearly suggestive of the fact that either the center was administered in a direct top-down fashion by Naranjo, or that the Xunantunich rulers could now draw upon the coercive power of their suzerains to extract more labor from their subjects (LeCount and Yaeger 2010b; Yaeger 2010a).

6.4.2 The Commoner Households of the Floral Park District

A total of six commoner households were sampled from the Floral Park District, five of these were excavated (SG 34, SG 35, SG 129, SG 132, SG 142), and one was sampled using pre-existing materials (Group 3- SG 143; Brown et al. 1996; see Figure 6.93). Following the sampling strategy laid out in Chapter 5.3.1, a stratified random sample of settlement groups were selected with several criteria in mind. Sampling in the Floral Park District was more complicated than at

Tutu Uitz Na because correspondence between the length of occupation and status did not correlate so neatly. For instance, Jolna (SG 34 Str. S1) was occupied for the whole trajectory (Middle Preclassic through to Terminal Classic) yet this was a single mound with no clear surrounding neighborhood of commoner subordinates. Haabna (SG 35) and Jayna (SG 129) were both founded in the Terminal Preclassic/Early Classic period and likely functioned as neighborhood head households for the surrounding clusters of commoners. Petna (SG 132) seemed a fairly diminutive double mound group on the surface, but excavation revealed a complex construction history dating back to the Late Preclassic period when the structure began its life as a round platform, before being modified into a traditional rectangular house platform. Ch'akna (SG 142) was a fairly small and impoverished single component Late Classic residence. Group 3 (SG 143) proved to be a fairly affluent single component Late Classic commoner residence. Four charcoal samples were radiocarbon dated with the primary goal of distinguishing between Early and Late Classic contexts within commoner households in the Floral Park District (see Table 6.16).

Table 6.16 AMS Radiocarbon Dates from the Floral Park District Commoners.

| <i>Lab ID#</i> | <i>Location</i> | <i>Context</i> | <i>Conventional ¹⁴C yr (BP)</i> | <i>2σ Calibrated Range</i> | <i>Modeled 2σ cal range</i> |
|----------------|-----------------|----------------|--|--------------------------------|---------------------------------|
| PSU-8104 | SG 34 Str. N1 | Behind Wall 2 | 1875 ± 15 | AD 120-220 | N/A |
| PSU-8102 | SG 35 Str. W1 | Floor 1 Fill | 1665 ± 15 | AD 265-425 | N/A |
| PSU-8103 | SG 129 Str. SW1 | Behind Wall 1 | 1450 ± 15 | AD 590-650 | N/A |
| PSU-8101 | SG 132 Str. W1 | Behind Wall 2 | 1835 ± 15 | AD 130-245 | N/A |

6.4.2.1 Jolna (SG 34)

Jolna is a large (200 m³), high-status commoner settlement group consisting of a single mound (Str. S1), located 650 m east of the Floral Park minor center (see Figure 6.93). Str. S1 is just over a meter in height. Based on the size and age of SG 34 Str. S1, it is highly likely that a patio with at least one smaller structure once existed on the northern side of the mound where modern construction is now apparent (see Figure 6.99; Levin et al. 2020). SG 34 is located in a sparsely populated area just east of Upper Barton Creek, nearby commoner residences include SG 35 to the east and SG 118 to the south. The paucity of surrounding settlement suggests that SG 34, unlike other high-status commoner households, may not have served as a neighborhood head, although proportions of feasting-related paraphernalia were relatively high. Jolna was exceptional

for its longevity (being founded in the Middle Preclassic period), and its role in production of an array of items. SG 34 Str. S1 had four phases of construction, dating to the Middle Preclassic, the Late to Terminal Preclassic, the Early Classic, and the Late Classic periods (Levin et al 2020).

6.4.2.1.1 SG 34: Middle Preclassic (900-300 BC)

The initial construction phase consisted of a dense layer of basal fill rising ~40 cm above bedrock (see Figure 6.100). No associated architectural elements (walls or floors were removed as part of Construction Phase 2). The fill contained Jenney Creek ceramic types such as Savana Orange, Jocote Orange Brown, and Sampoppero Red, an obsidian blade fragment, a piece of slate, 16 faunal remains, and 12 pieces of conch and queen conch shell (*Lobatus gigas* spp.) intermixed in a clay matrix with 1749 freshwater shells. The freshwater shell layer was similar to Middle Preclassic *jute* deposits uncovered at Tutu Uitz Na (SG 1; Walden and Biggie 2017) and SG 3 (Walden et al. 2018)

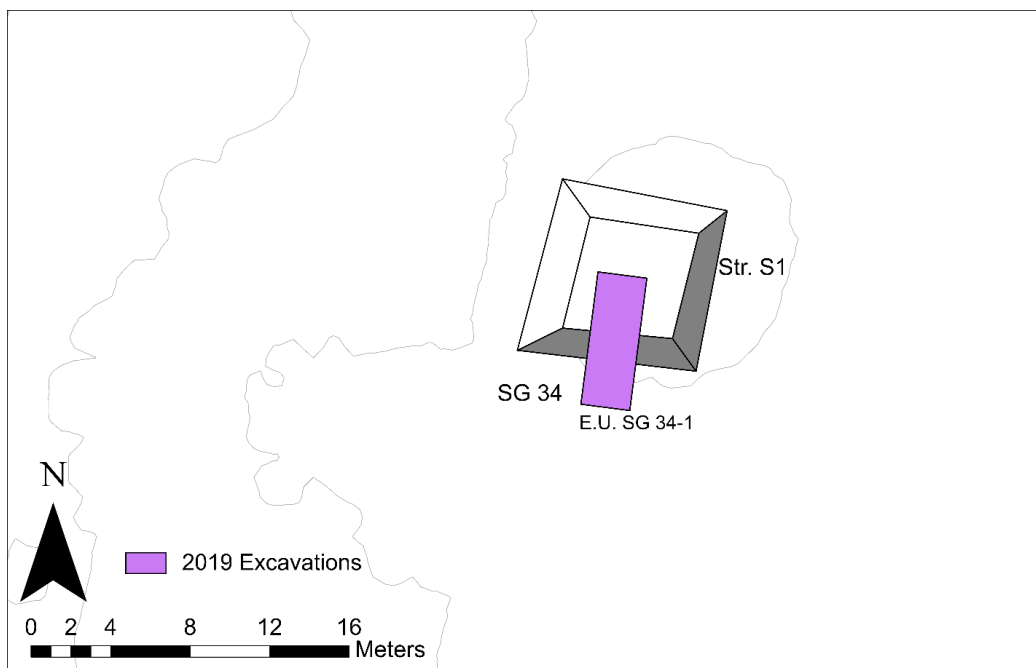


Figure 6.99 Map showing the location of E.U. SG 34-1 at Jolna (SG 34)

Jolna (SG 34) Structure S1, E.U. SG34-1 East Profile

0 1 m

Profile by A. Levin, T. Hardinger, B. DeGennaro, and N. Mendez

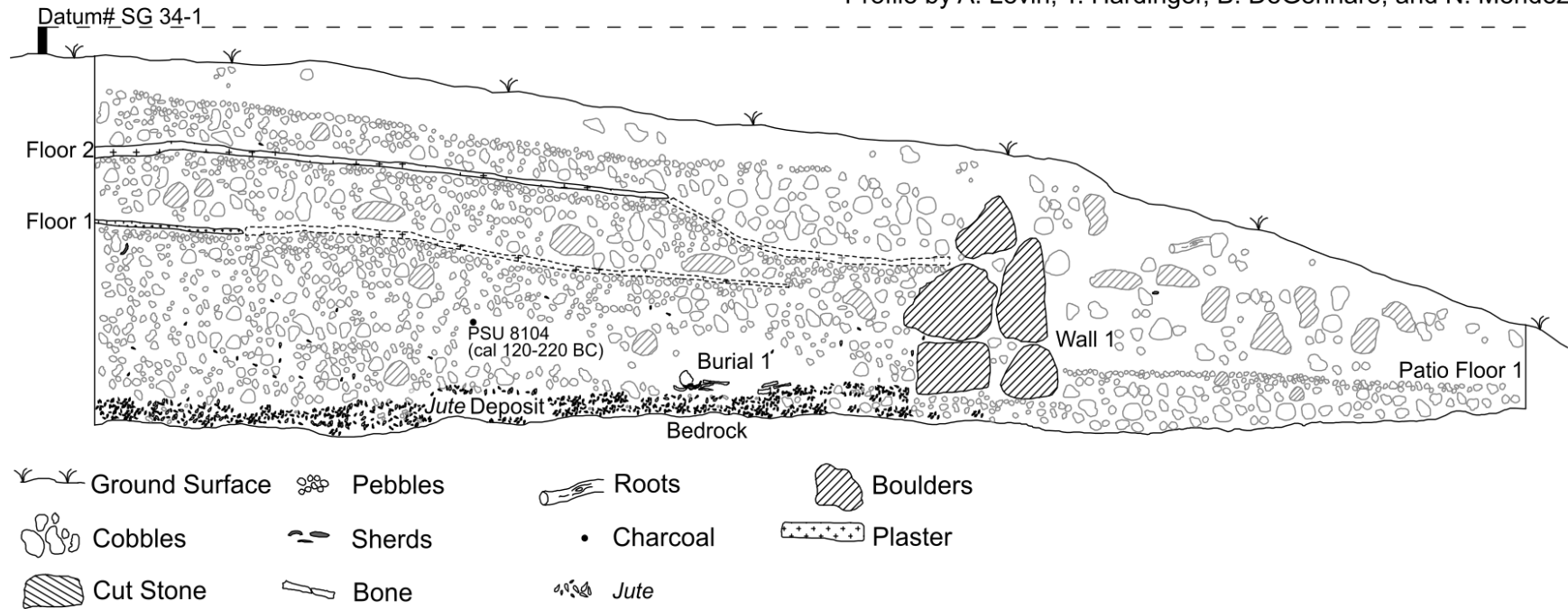
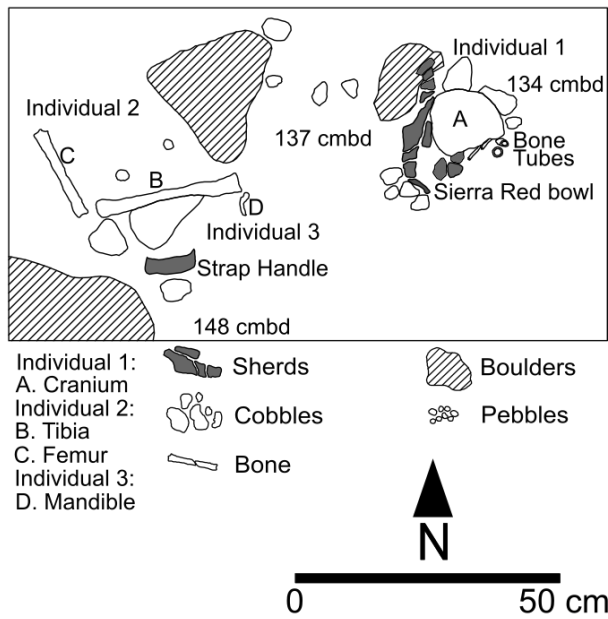


Figure 6.100 East profile of Jolna (SG 34) Structure S1

Jolna (SG 34)
 Structure S1, E.U. SG34-1
 Plan of Burial 1



Plan by R. Bongiovanni, J. Walden, and M. Biggie

Figure 6.101 Plan and photograph of SG 34 Burial 1



Figure 6.102 Carved white-tailed deer bone tubes from SG 34 Burial 1

6.4.2.1.2 SG 34: Late-Terminal Preclassic Classic (300 BC-AD 300)

The second construction phase of Str. S1 consisted of a low Late-Terminal Preclassic platform mound rising ~50 cm above the associated patio floor. This second construction episode contained a mixture of Barton Creek, Mount Hope, and Floral Park ceramics, providing a *terminus post quem* of around AD 150-300. The general construction technique was reminiscent of Late Preclassic construction across the region. The structure contained a dense river cobble fill capped with a relatively well-made plaster floor. A single charcoal sample retrieved from this fill provided a date of cal AD 120-220 (PSUAMS#8104 unmodeled). A scattered secondary burial was interred in the initial fill of this construction episode (see Figure 6.101). SG 34 Burial 1 consisted of at least two individuals, an adult (35-45 years) male crania in a fragmentary Sierra Red bowl (Individual 1), and a cache of bones to the southwest of the skull (other individual(s)). Individual 1 shows cementosis on nearly all their teeth, together with carious lesions. Three fragmentary bone tubes fashioned from white-tailed deer bones (Cf. *Odocoileus Virginianus*) were placed next to the remains (see Figure 6.102). These bone tubes were similar to those interred in Burial 3 at BR-260 (Willey et al. 1965; see also Weller 2009: 241). A scatter of remains next to the crania includes adult long bones of unknown sex and an older adult mandible of a largely indentulous male. The deposit consisted of fragments from the mandible, and shaft fragments from the humerus, ulna, radius, femur, and tibia (see Levin et al. 2020). Architectural fill associated with the Late Preclassic construction phase included ceramic types such as Polvero Black, Sierra Red, Gavilan Black-on-Orange, and Aguacate Orange, chert, freshwater shells, a chert biface, obsidian blade fragments, and a basalt burnisher (see Figure 104c).

6.4.2.1.3 SG 34: Early Classic (AD 300-600)

The Early Classic construction episode at SG 34 saw the substructure rise to about 110 cm in height (see Figures 6.100 and 6.103). Construction generally consisted of sizeable limestone boulders. A poorly constructed back wall of the platform mound was added as part of this construction phase. Fill associated with this phase included Mount Hope/Floral Park and Hermitage ceramic types such as Balanza Black, Society Hall Red, and Chan Pond Unslipped. A sizeable piece of conch shell debris was present in this construction phase, alongside 19 pieces of burned daub (see Figure 6.104b). A fire may have occurred at or near SG 34 at some point in its

development as much higher proportions of burned daub were present than in other excavated residences.



Figure 6.103 Photograph of Phases 3 and 4 SG 34 Structure S1

Terminal phase architecture on the left and Early Classic construction on the right

6.4.2.1.4 SG 34: Late-Terminal Classic (AD 600-1000)

By the Late Classic period, the structure rose ~1 meter above the surrounding patio floor. The Late Classic terminal construction phase was hard to define as it was severely bioturbated and the architecture was particularly poor. Greater quantities of burned daub were found in the third and fourth construction phases of this structure suggesting that it might have burned at some point in the Early Classic period. Artifacts found in this phase included chert, Tiger Run and Spanish Lookout ceramics, freshwater shell, two spindle whorls, a hammer-stone, chert bifaces, daub, and faunal remains (see Figures 6.104a and d).



Figure 6.104 Selected small finds from SG 34

Clockwise from top left: (a) chert hammerstone, (b) large conch spiral fragment, (c) basalt burnisher, (d) stemmed thin chert biface fragment

6.4.2.1.5 Jolna (SG 34) Summary

Overall, SG 34 exhibited relatively high proportions of chert tools and debitage throughout the occupational sequence, and an artifact assemblage indicative of a range of crafting activities. SG 34 displays higher proportions of slate and marine shell than generally found in most

commoner dwellings. In addition to several obsidian blades, a sizeable obsidian flake was found in the Late Classic construction phase. Obsidian flakes are very rare in the Belize River Valley in the Late Classic period (Awe and Healy 1994; Willey et al. 1965: 444). After the Terminal Preclassic, almost all obsidian consisted of blades knapped from polyhedral cores. Generally, the tools and debris suggest that the household pursued some low-level multi-crafting strategy which involved the production of a range of different items (Hirth 2009b; see also McKillop 2018). The status of the occupations of Jolna is confusing, the house platform is large and shows evidence of occupation for a protracted duration. Yet it comprises a single mound, which is uncommon for high-status commoner neighborhood head type households at Lower Dover. It does however seem clear that the household fell on hard times in the Late Classic due to the paucity of wealth items and structural modifications and improvements. In theory, this dearth of Late Classic investment at the household might be partly responsible for the truncated development of the household in comparison to other residences of similar size and antiquity at SG 3, SG 42, and SG 129.

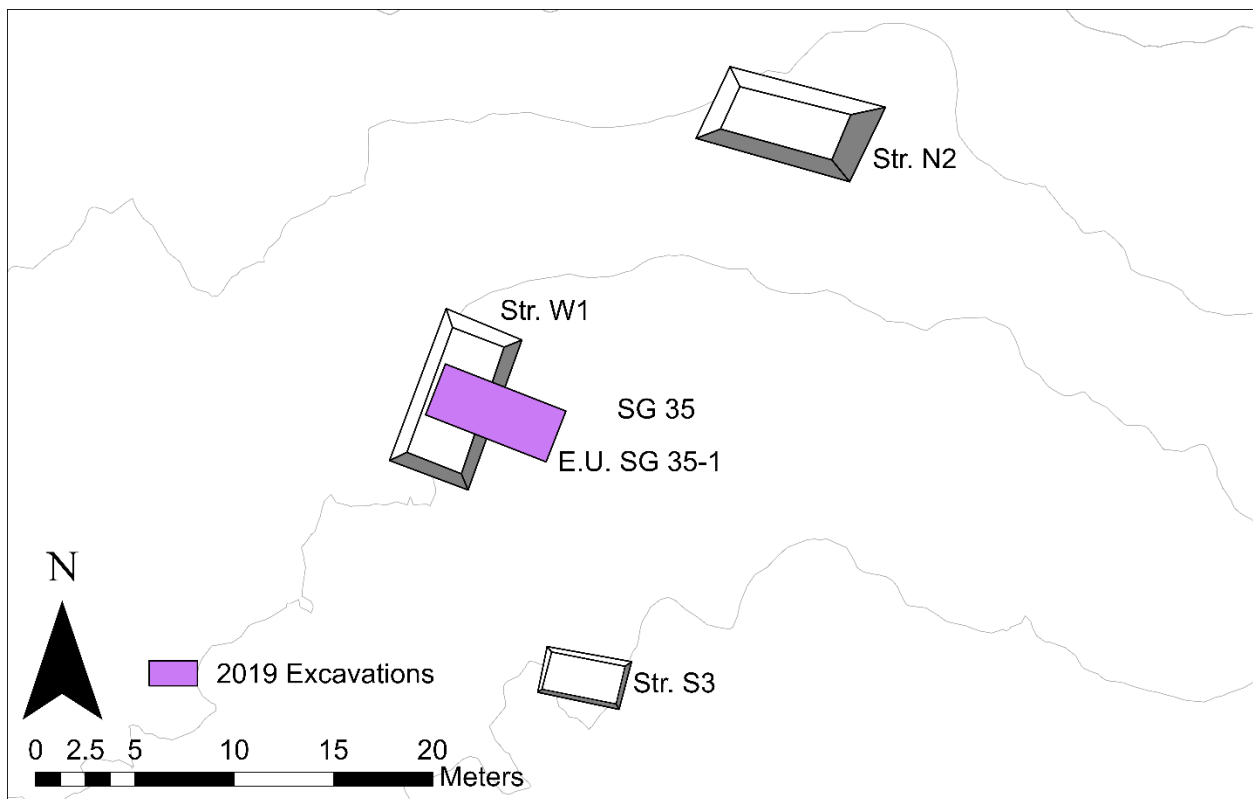


Figure 6.105 Map showing the location of E.U. SG 35-1 at Haabna (SG 35)

6.4.2.2 Haabna (SG 35)

Haabna is situated to the east of SG 34, on the far eastern side of the Floral Park District (730 m east of the Floral Park minor center; see Figures 6.92 and 6.105). SG 35 Str. W1 was constructed in four phases dating from the Terminal Preclassic through Terminal Classic periods. SG 35 has three structures (W1, N2, and S3) situated around a low patio (see Figure 6.105). The group has a combined architectural volume of 210 m³. Str. W1 is the highest on the settlement group at 120 cm in height (Figure 6.106). SG 35 is a middle-status commoner neighborhood head household, which may have housed a ritual practitioner (Garcia, Walden, and Martinez 2020). This is inferred from the presence of a tooth cache in the initial construction phase in the Terminal Preclassic-Early Classic period, the generally high proportions of *incensario* sherds, and the relatively low proportions of quotidian items such as chert tools and debitage, and grinding stones.

Haabna (SG 35) Structure W1, E.U. SG35-1 North Profile

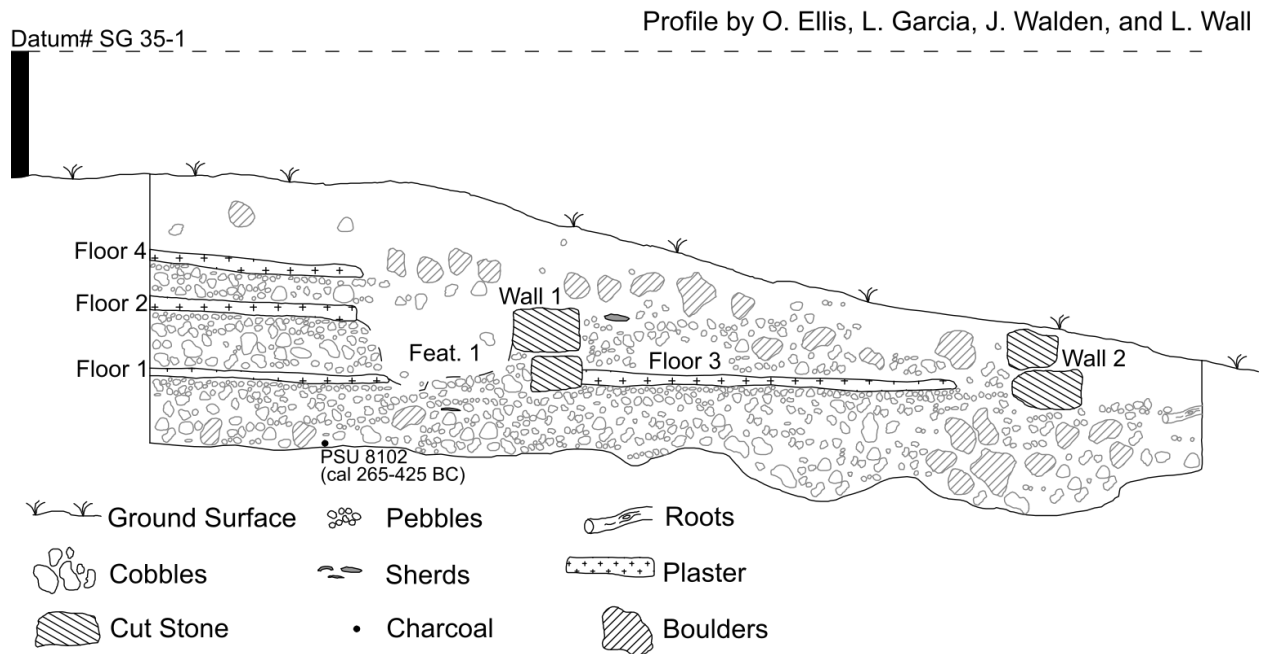


Figure 6.106 North profile of Haabna (SG 35) Structure W1

6.4.2.2.1 SG 35: Terminal Preclassic (AD 150-300)

The initial phase involved the construction of a low platform rising ~40 cm above bedrock and capped by a relatively well-constructed plaster floor. This platform contained 15 human teeth interspersed in the fill. These teeth came from at least two individuals, one being an adult and the other a sub-adult. Garcia, Walden, and Martinez (2020) propose that these teeth might represent a dedicatory offering to the structure (see also Saul and Hammond 1974). Three pieces of worked river clam were also present (see Figure 6.107b). The ceramic assemblage spoke to a relatively high level of affluence and included an Ixcario Orange Polychrome fragment. A single charcoal sample was retrieved from the fill of this platform dating it to the Terminal Preclassic/Early Classic transition, around cal AD 265-430 (PSUAMS#8102 unmodeled).

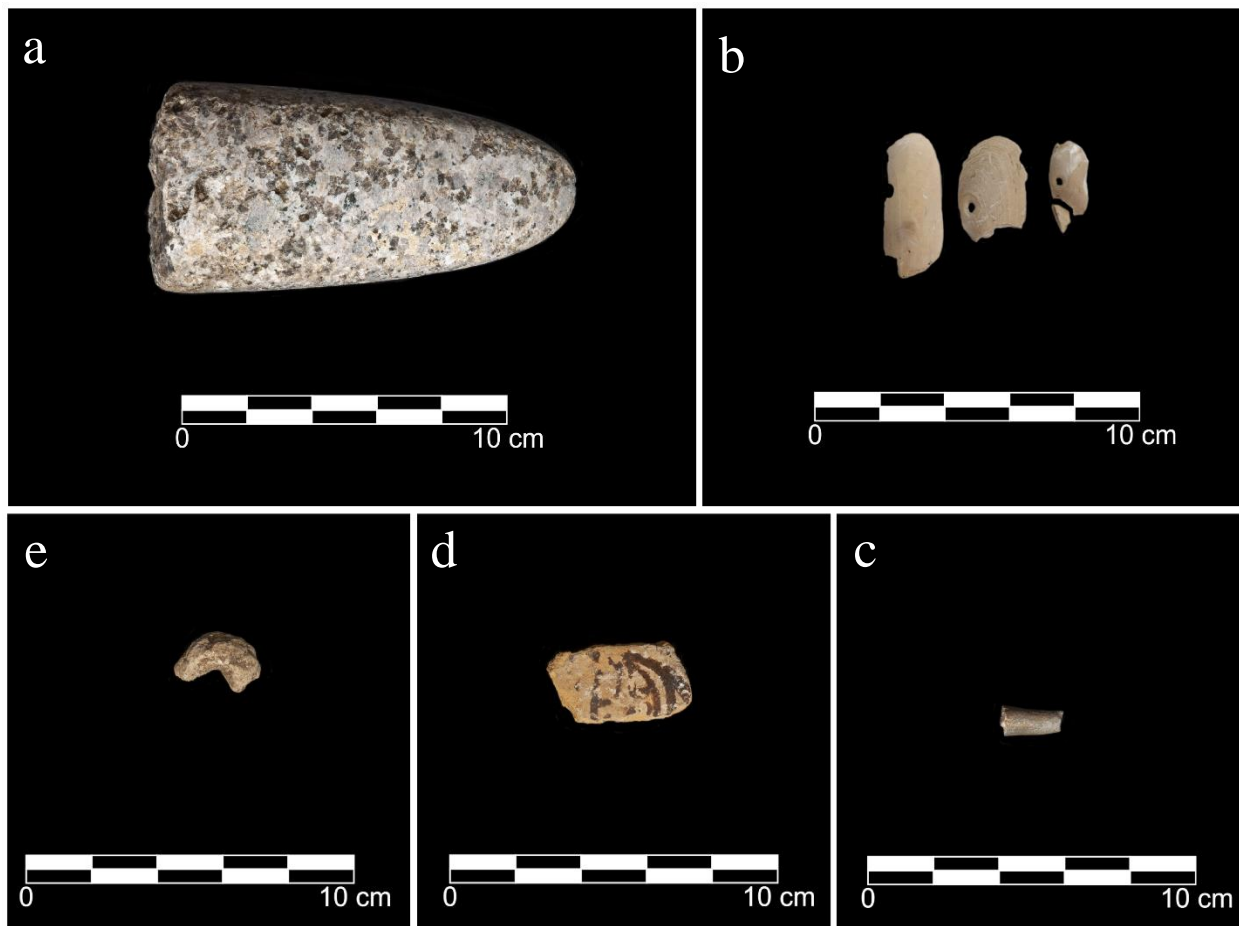


Figure 6.107 Selected small finds from SG 35 Structure W1

Clockwise from top left: (a) Granite mano with quartzite inclusions (b) drilled river clams, (c) burned faunal bone, (d) Benque Viejo Polychrome sherd with possible glyph, (e) limestone net sinker

6.4.2.2.2 SG 35: Early Classic (300 BC-AD 600)

The second construction phase included the placement of a dense amount of dry core fill to the east to extend the platform into the patio and the subsequent construction of another tier in the center of the structure (see Figure 6.106). The placement of this fill probably occurred in the Early Classic as Hermitage phase ceramics were present throughout the fill. Types included Pucte Brown and Balanza Black. The fill from this phase contained two faunal bones, one piece of slate, three obsidian blades, and a limestone net sinker (see Figure 6.107c and e).



Figure 6.108 Photograph of terminal architecture at SG 35 Structure W1

6.4.2.2.3 SG 35: Late-Terminal Classic (AD 600-1000)

The third and fourth phases of construction at SG 35-1 saw the structure rise to ~60 cm above bedrock (see Figures 6.106 and 6.108). The structural platform contained predominantly Spanish Lookout types such as Dolphin Head Red and Cayo Unslipped. The fill contained an array of artifacts including 10 pieces of chert, 14 freshwater shells, a censer fragment, a granite mano fragment with quartzite inclusions, and a Benque Viejo Polychrome sherd bearing an eroded painted glyph (see Figure 6.107a and d). The lower proportions of chert debitage at Haabna, suggests it was obtaining its stone tools from elsewhere, probably reflecting either district or neighborhood-level production of chert tools (see Sheets 2000; Hearth 2012: 195). The presence of higher proportions of slate and obsidian blades in later fill deposits indicate the household may have fulfilled some type of craft production role, much like its nearby counterpart SG 34 (Levin et al. 2020). Like other commoner households in the Floral Park District, SG 35 appears to have been comparatively affluent before the Late Classic period.

6.4.2.2.4 Haabna (SG 35) Summary

Haabna is situated at the center of a cluster of surrounding commoner households, but unlike other neighborhood heads, this settlement group is only marginally larger than those surrounding it. This observation is reflected in the general levels of wealth items, especially in the Late Classic period. A general paucity of economic/crafting and some quotidian items is noticeable, as are slightly higher proportions of ritual items possibly suggestive of Haabna being the residence of a low-level ritual practitioner.

6.4.2.3 Jayna (SG 129)

Jayna (SG 129) is a large high-status commoner settlement group situated on a low hilltop in a fairly dense cluster of commoner residences 600 meters to the southwest of the Floral Park minor center (see Figure 6.93; Ellis, Walden, and Rick 2020). Like SG 42 and SG 3, SG 129 is a good candidate for a commoner neighborhood head household, especially in the Early Classic period. The settlement group has five structures (Str. SW1, N2, E3, W4, S5) totaling a substantial 1216 m³ of architecture, and a sizeable patio (328 m²; see Figure 6.109). Excavations on Str. SW1

revealed four phases of construction, two substantial phases dating to the Early Classic periods and then two relatively small Late Classic structural additions. SG 129 was an affluent high-status commoner household that hosted large feasts in the Early Classic, however, its fortunes strongly declined in the Late Classic period.

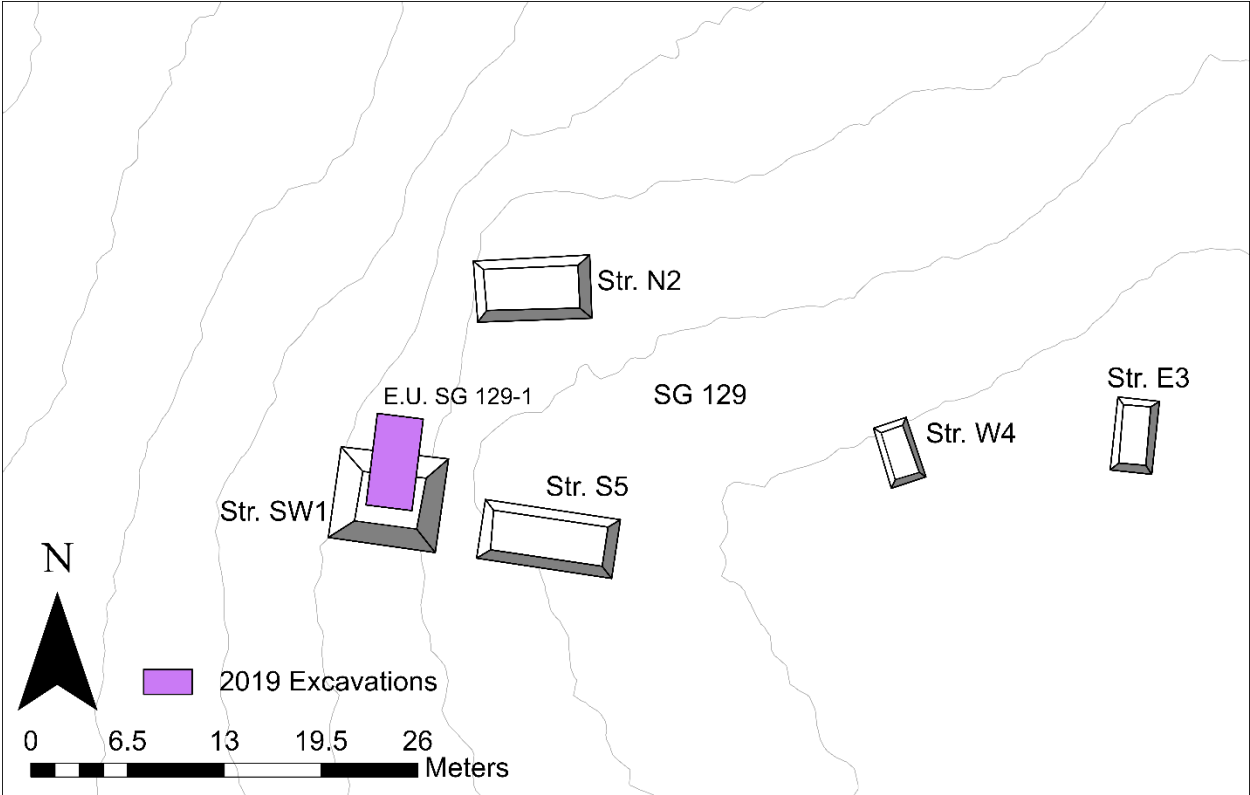
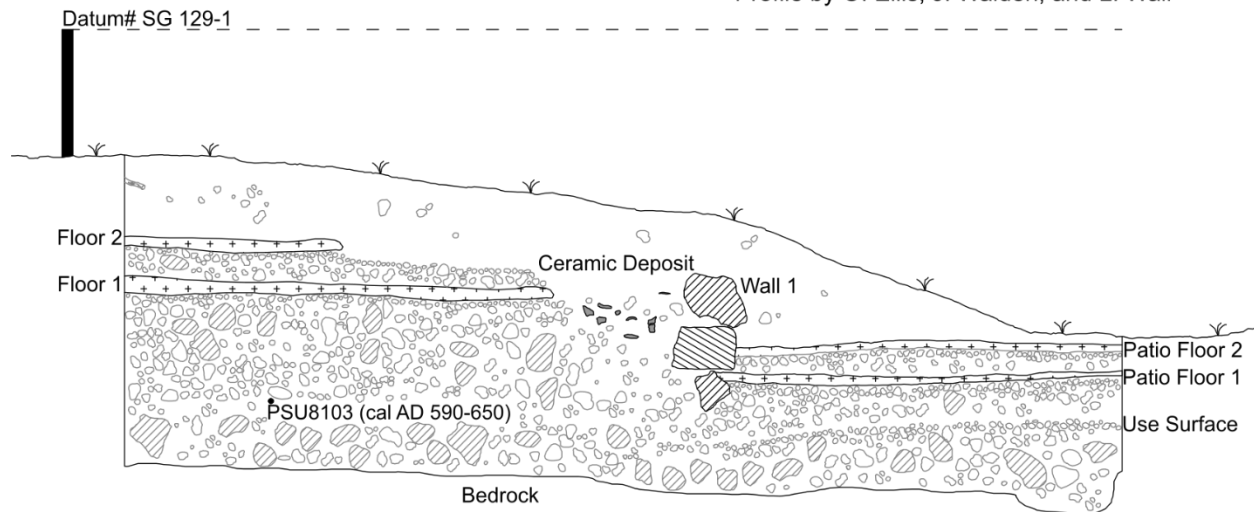


Figure 6.109 Map showing the location of E.U. SG 129-1 at Jayna (SG 129)

Jayna (SG 129)
Structure SW1, E.U. SG129-1
West Profile



Profile by O. Ellis, J. Walden, and L. Wall



- | | | |
|----------------|----------|----------|
| Ground Surface | Pebbles | Roots |
| Cobbles | Sherds | Plaster |
| Cut Stone | Charcoal | Boulders |

Figure 6.110 West profile of Jayna (SG 129) Structure SW1

6.4.2.3.1 SG 129: Early Classic (AD 300-600)

Initial construction on Jayna began in the Early Classic and was relatively substantial. It is unclear how large the platform was at this time exactly because the floor capping this structure was removed in the subsequent Early Classic construction phase, but it probably stood at least 50 cm in height above bedrock (see Figure 6.110). The assemblage reflects a relatively high level of affluence at this time and included several polychromes. Despite this, the associated patio floor was just a simple layer of tamped earth. The latter part of the Early Classic period saw Jayna transform into a much larger residence. Much of the smaller commoner dwellings surrounding Jayna were established at this point. The structure rose in height about ~40 cm above the patio floor, but over 1 m above bedrock. The front of the structure included a sizeable cut stone wall (see Figure 6.111). The ceramic assemblage represents the highest level of affluence found among commoner households at Lower Dover. Very high proportions of polychrome sherds including

Actuncan Orange Polychrome, Ixcantio Orange Polychrome, and Dos Arroyos Orange Polychrome were identified in fill (see Chapter 7).



Figure 6.111 Photograph of Construction Phase 2 at SG 129 Structure SW1

These ceramics vessels were likely used in integrative feasts and ceremonies involving the surrounding commoner households in the neighborhood. A charcoal sample associated with this construction phase provided a date of cal AD 590-650 (PSUAMS#8103 unmodeled). The ceramics associated with this radiocarbon sample were almost all Hermitage and Floral Park phase materials. Other artifacts in fill included lithic tools and debitage, a spindle whorl, obsidian blades, three *incensario* sherds, and freshwater shell (see Figure 6.113).

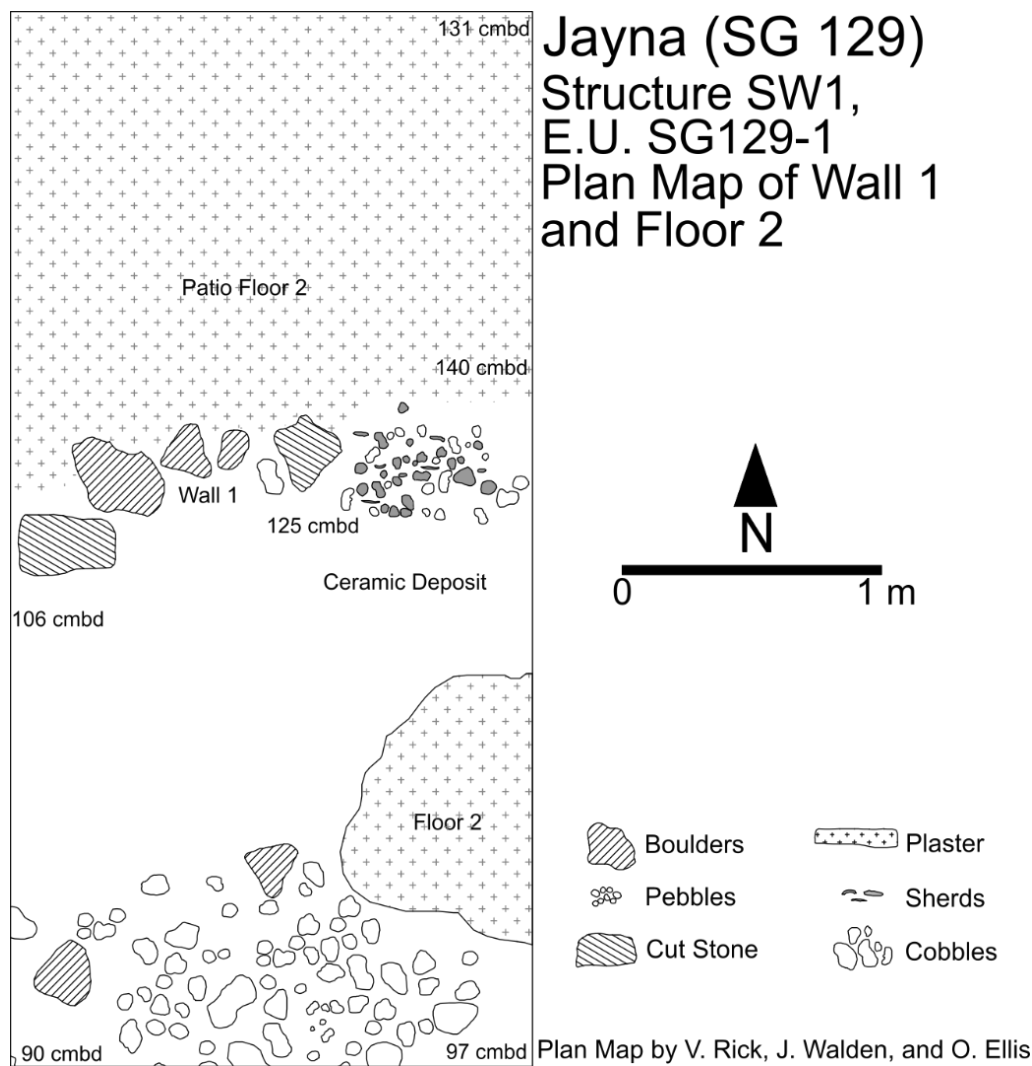


Figure 6.112 Plan of terminal architecture at SG 129 Structure SW1

6.4.2.3.2 SG 129: Late-Terminal Classic (AD 600-1000)

The fortunes of SG 129 waned dramatically in the Late Classic period. Structure SW1 saw limited construction in this period. Two construction phases were apparent, although only one of these was readily recognizable (Figures 6.110, 6.111, and 6.112). The former consisted of a low platform added to the apex of the Early Classic structure. The fill of this structure completely lacked wealth items and there was a clear reduction in the proportions of feasting-related paraphernalia. This architectural context included Spanish Lookout phase ceramic sherds including Belize Red and Cayo Unslipped types, a unifacially worked chert point, chert scrapers, debitage, and cores, freshwater shells, obsidian blades, two spindle whorls, and a green basalt adze (see Figure 6.113a, b, and c). A ceramic deposit found within Wall 1 may be associated with this

phase or may have been excavated at some point following the Terminal Classic abandonment of the household



Figure 6.113 Selected small finds from SG 129 Structure SW1

A perforated ceramic disk/spindle whorl (left), unifacially worked chert point (center), and a green basalt adze fragment (right)

6.4.2.3.3 Jayna (SG 129) Summary

Excavations show that Str. SW1 at SG 129 was first constructed in the Early Classic, with occupation reaching into the Late Classic period. The residents of this household initially had access to ostentatious wealth items, as evident by the large number of polychrome ceramics. These items are primarily concentrated in the Early Classic construction phases. There was a steep drop-off in the number of polychrome sherds found in the terminal phase, likely showing a drop-off in overall household wealth. This would suggest that this group was relatively wealthy during the first two construction phases of the structure, but lost access to nice polychrome ceramics during the Late Classic. The presence of these finer serving vessels in the earlier period may indicate that the household was hosting gatherings or feasts in which such vessels were employed, although this is not corroborated by an abundance of faunal remains. Collectively, the assemblage is quotidian in nature, containing many of the utilitarian items commonly uncovered in house mounds.

6.4.2.4 Petna (SG 132)

Petna (SG 132) is a small double mound settlement group located 850 m southwest of the Floral Park minor center and 300 m south of Jayna (SG 129 see Figure 6.93). The settlement group has two structures (Strs. W1 and E2) separated by a sizeable patio cut into a natural rise in limestone bedrock (see Figure 6.114; see also Nachamie and Walden 2020). The group was probably part of a small commoner neighborhood headed by the nearby high-status commoner household at Jayna (SG 129). Excavation of the rectangular house mound at Petna revealed a Late Preclassic circular structure (with two construction phases). The group appears to have been constructed on a flattened bedrock escarpment running east-west from Str. W1 to Str. E2.

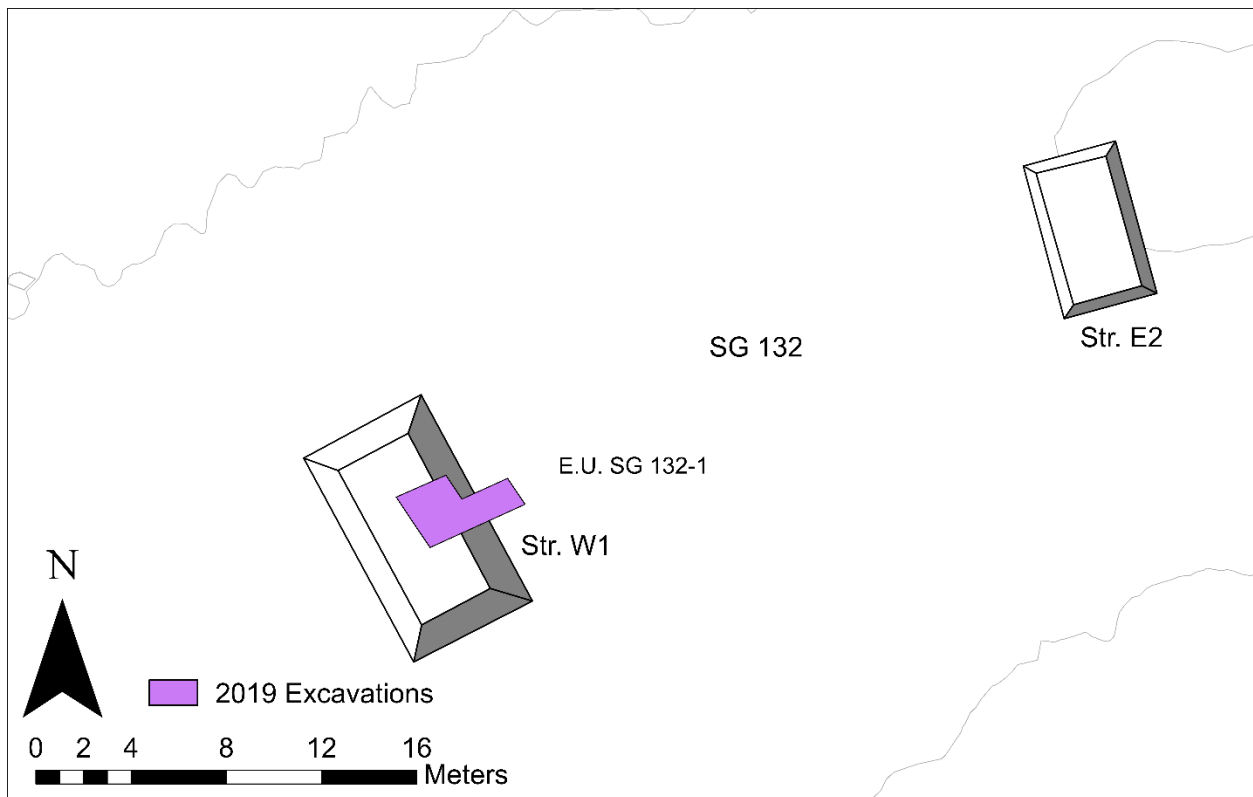
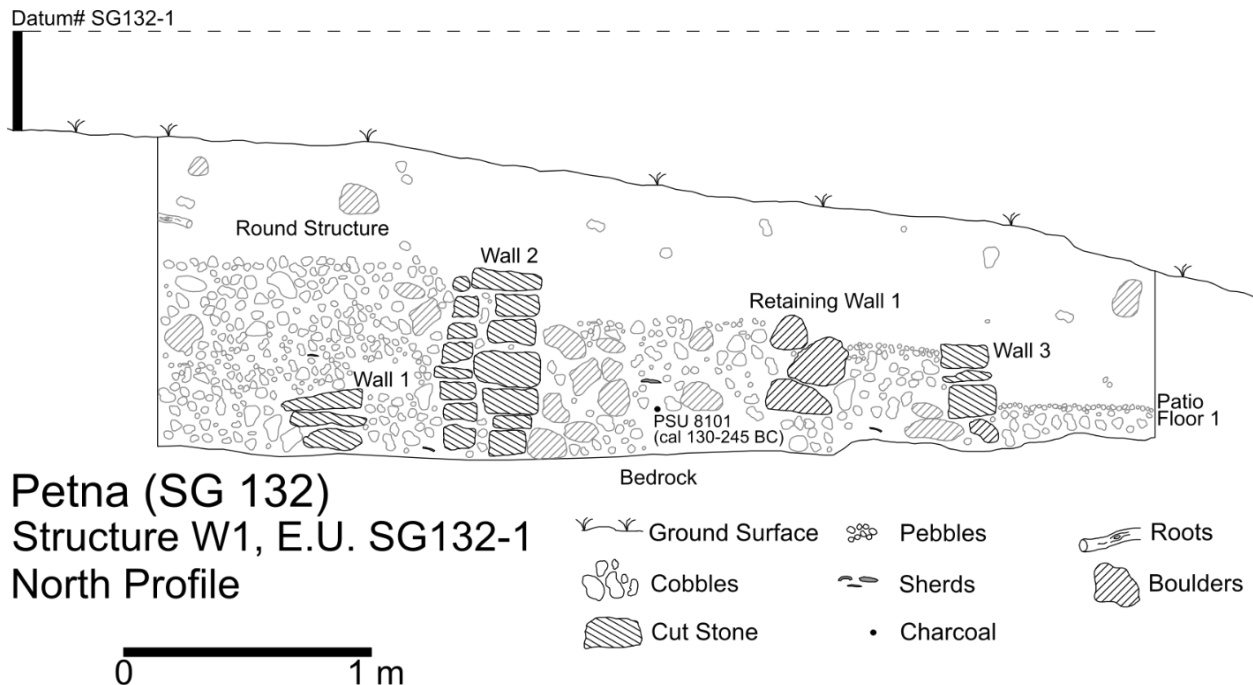


Figure 6.114 Map showing the location of E.U. SG 132-1 at Petna (SG 132)



**Petna (SG 132)
Structure W1, E.U. SG132-1
North Profile**

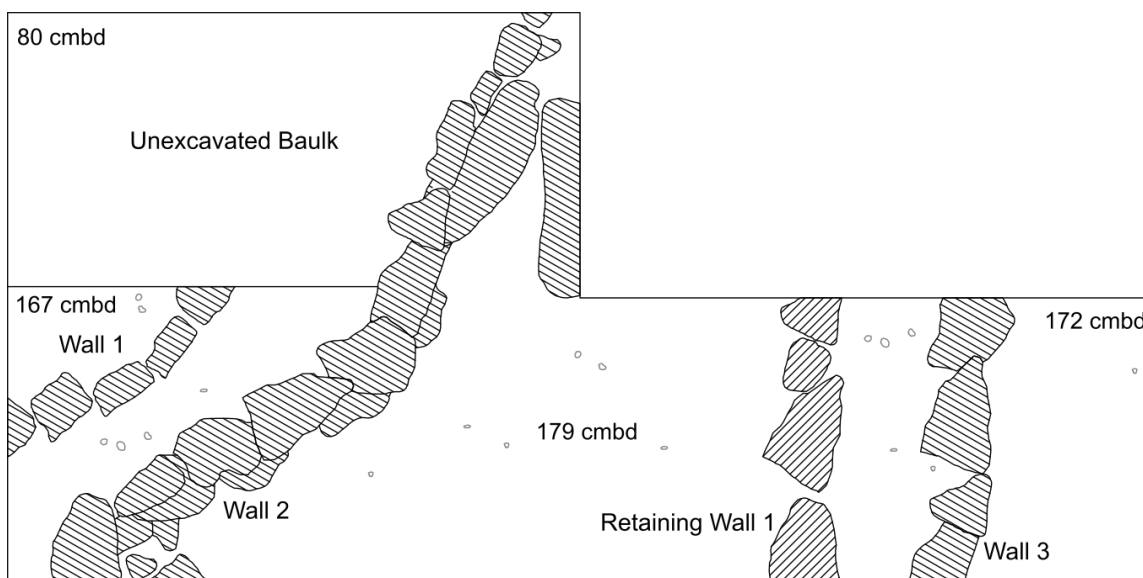
Profile by A. Nachamie, K. Gregersen, C. Mendez, T. Rick and J. Walden

Figure 6.115 North profile of Petna (SG 132) Structure W1




6.4.2.4.1 SG 132: Late Preclassic (300 BC-AD 150)

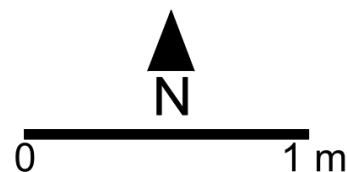
The Late Preclassic period saw two major construction phases at Structure W1. Little is known about the first construction phase due to the severity of remodeling during the second construction phase. Phase 1 saw Structure W1 first constructed as a small circular platform. The initial phase of construction saw the clearing of topsoil from the natural limestone rise and the placement of at least three courses of cut stones, to a height of approximately 30 cm above the bedrock. The estimated circumference of this structure was 12.5 m (see Figures 6.115 and 6.116). The structure was then expanded into a larger platform during construction phase 2. Based on estimates of the wall circumference (25 m), this construction phase was roughly twice the volume of the original structure, assuming a similar height. The platform wall was seven courses tall and would have stood at least one meter high (Figures 6.117). This expansion of the platform saw the initial platform wall buried in cobble fill. A charcoal sample retrieved from later fill placed immediately in front of the front wall of this latter round platform provided a *terminus ante quem* of cal AD 130-250 (PSUAMS#8101 unmodeled). This indicates that the round platform was modified into a rectangular structure at the onset of the Terminal Preclassic period. Architectural fill of the round platforms contained quotidian refuse such as Barton Creek phase ceramics, ground

stone *manos* and *metates*, and *incensario* sherds. Fill contained fairly high proportions of chert debitage relative to the proportions of chert tools, suggesting that chert tools were produced in the vicinity and then removed for use elsewhere (see Chapter 8.1.2). Rarely have the artifact assemblages of Preclassic round platforms been analyzed in their entirety, so it remains unclear whether stone tool production is associated with such structures elsewhere.



Petna (SG 132)
Structure W1, E.U. SG132-1
Plan of Round Structure

 Boulders  Pebbles  Cut Stone



Plan by A. Nachamie, C. Mendez, V. Rick, and K. Gregersen

Figure 6.116 Plan of SG 132 Structure W1

Structure W1 at Petna is one of several early round platforms in the Belize River Valley (not to be confused with Terminal Classic circular platforms/structures like that at Floral Park Group 2; see Chapter 6.4.1.3). Similar round structures dating to the Middle/Late Preclassic include Structure 7 (SL-13) at San Lorenzo, near Xunantunich (Yaeger and Villamil 1997: 143-144; see also Brown et al. 2017: 60-61), Structure EP-9 at El Pilar (Ford et al. 1995: 9), Feature 12 and Structure B -4/7th in the Cahal Pech core, Structure 2/2nd at the Zotz Group, and Structures 14 and 15 at the Tolok Group near the Cahal Pech core (Aimers, Powis, and Awe 2000: 73-76; Peniche May 2014: 208). The only other Late Preclassic round platform in the Lower Dover area

is at BR-144 (Willey et al. 1965: 179-183). Two later Early Classic round platforms are known in the region, these include Structure 2/1st at Bedran (Conlon and Powis 2004: 74; Powis 1993: 214) and Structure F/BR-1 at Barton Ramie (Willey et al. 1965: 51-59). Aimers, Powis, and Awe (2000: Table 1) provide an overview of the geographic spread of Preclassic round platforms in the broader Maya lowlands. Early Classic round platforms exist in several other sub-regions of the lowlands (Hendon 1989; Ricketson and Ricketson 1937; see also Weller 2009: 66).



Figure 6.117 Photograph of the round structure at SG 132 Structure W1

Whether these structures supported pole and thatch superstructures has been debated. There is no evidence of pole and thatch superstructure at SG 132, although only a small portion was exposed. The fact that the circular structure lacked a floor atop its wall suggests the upper courses were dismantled, like the superstructures of Structure F at BR-1 (Willey et al. 1965: 51-52), or Structure B-4/7th at Cahal Pech (Awe 1992: 211-212). Structure 2/2nd at the Zotz Group and Structure 14 at the Tolok Group had not been dismantled but showed no evidence for superstructures (Aimers, Powis, and Awe 2000: 75; Powis 1996). Many round structures have an appended platform giving them a key-hole-shaped appearance from above (Willey et al. 1965: 51-52, 56-59). Again, limited exposure makes it impossible to determine if this was the case at SG 132, but the possibility that a staircase was placed on its western side seems likely given that is where the staircase is commonly found (Awe 1992: 215). The almost complete burial of intact round structures is common in the Belize River Valley, and might suggest ritual significance or some sort of veneration (Aimers, Powis, and Awe 2000; Willey et al. 1965: 59-62; for the significance of the burial of structures see Chapter 3.4.2). Aimers, Powis, and Awe (2000: 71, 83) suggest that the late Middle Preclassic round platforms at Cahal Pech had a ceremonial function tied to a mortuary function. Unlike the other round platforms in the Belize River Valley, no burials were found associated with SG 132 (although again only a small portion of the structure was sampled). Some ritual items were apparent, as were high proportions of feasting-related paraphernalia suggestive of aggregations. SG 132 yielded relatively high proportions of lithic debitage but an almost complete lack of any type of tools (either formal or expedient). This would suggest that the commoner household at SG 132 was invested in the production of utilitarian stone tools for redistribution from the Late Preclassic through to Late Classic periods. The chert debitage present does not speak to a high degree of specialization but is probably reflective of local level production for redistribution at the neighborhood level (Sheets 2000; Hearsh 2012).

While originally considered rare (Pasztor 1978: 110; Pollock 1983), round platforms are relatively common in the Maya lowlands and Belize River Valley (Awe 1992: 215; Sidrys and Andresen 1978: 649). At least three round platforms existed in the Lower Dover area based on the excavation sample in the region. A total of 22 settlement groups (24%) were occupied in the Late Preclassic period in the Lower Dover area, two of which had circular platforms (9% of the overall Preclassic settlement). Similarly, at Cahal Pech, a total of four late Middle Preclassic circular

platforms have been identified (Aimers, Powis, and Awe 2000; Powis 1996; see also Pollock 1936). The co-occurrence of two roughly co-eval round platforms at Tolok suggests these structures might not have served a function at the neighborhood or district levels. While it is conceivable that each district possessed a single circular platform for a specific function, the sample currently points towards these structures representing a common Preclassic architectural form which occurred in civic-ceremonial and domestic contexts (MacLellan 2019b).

6.4.2.4.2 SG 132: Terminal Preclassic- Early Classic (AD 150-600)

The Terminal Preclassic/Early Classic phase saw the modification of Structure W2 into a more regular rectangular house platform, this construction event occurred around cal AD 130-250 (PSUAMS#8101 unmodeled), based on the aforementioned charcoal sample retrieved from the construction fill deposited against the front of Wall 2. This fairly sizeable remodeling that saw the intact circular platform entirely encased in architecture. Architectural fill associated with the remodeling of the platform includes Mount Hope, Floral Park, and Hermitage phase ceramics, lithic debitage, *incensario* sherds, and slate debris.

6.4.2.4.3 SG 132: Late-Terminal Classic (AD 600-1000)

The last construction phase saw the addition of a lower, rectangular apron consisting of four courses of cut stone built around the western structure with a retaining wall to support the higher platform from collapsing. Like other commoner households at Floral Park, Petna exhibits access to wealth items in the Late Preclassic and Early Classic periods but this is greatly reduced in the Late Classic period. Architecture fill from this context including Tiger Run and Spanish Lookout phase ceramics, *incensario* sherds, and a figurine foot.

6.4.2.4.4 Petna (SG 132) Summary

The structural assemblage at SG 132 seems reflective of a general residential function throughout the trajectory. The relatively high proportions of chert debitage in relation to tools is certainly noteworthy and is discussed along with the statistics in Chapter 8.1.2. The lack of chert tools is also interesting, as generally, most households contain much higher proportions of chert tools, especially considering the high proportions of chert debitage present at SG 132. The

presence of a figurine foot might allude to a ritual function although this was found in the Late Classic component following the transformation of the structure into a generic house platform. Overall, the residents of SG 132 were somewhat different from their peers at other commoner households in the Lower Dover polity. This was especially true during the Late Preclassic period when the structure probably fulfilled a relatively specialized ritual role. Interestingly, Petna was one of only two households in the excavation sample which lacked all access to obsidian throughout the trajectory (the other being Ch'akna SG 142).

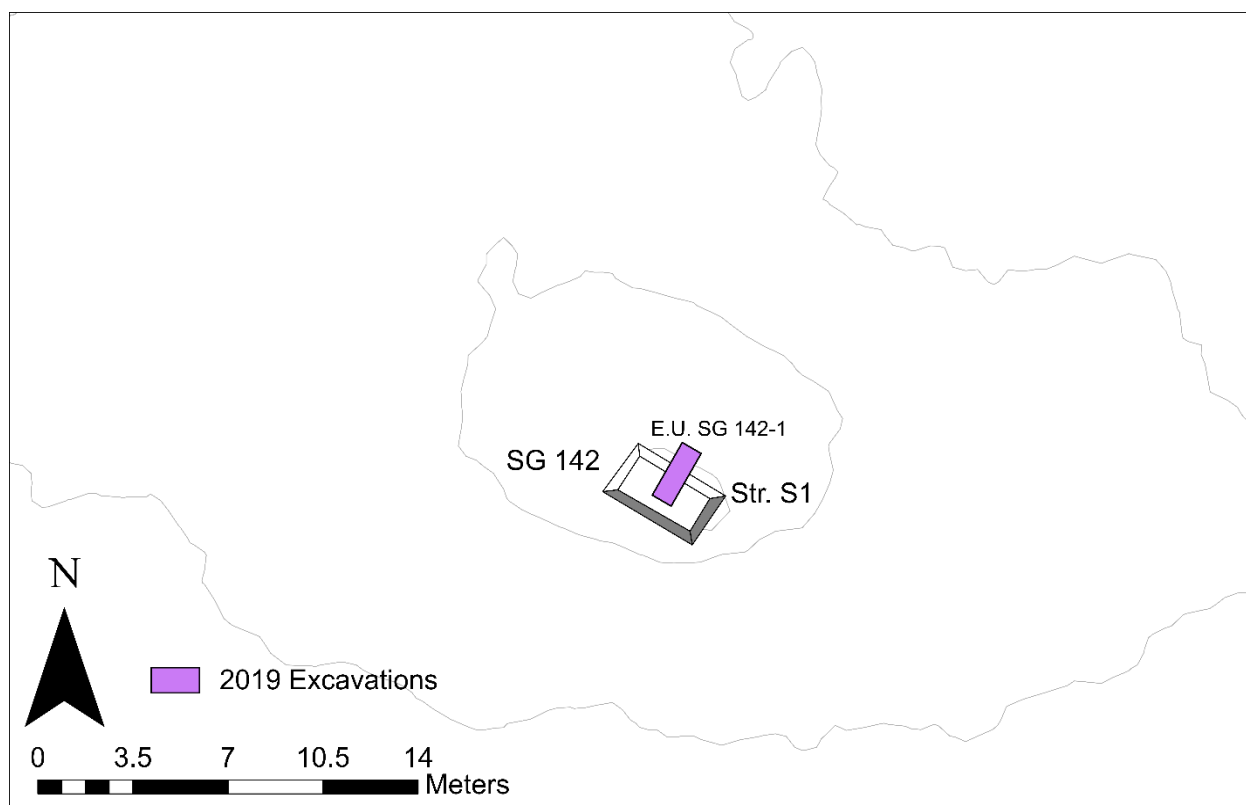


Figure 6.118 Map showing the location of E.U. SG 142-1 at Ch'akna (SG 142)

6.4.2.5 Ch'akna (SG 142)

Ch'akna is a small, Late Classic low-status commoner settlement group comprising a single structure (Str. S1), located 250 m south of the Floral Park minor center and 60 m west of Upper Barton Creek (Shaw-Muller, Walden, and Nachamie 2020; see Figures 6.93 and 6.118). Excavation involved a 3.5x1 m unit placed perpendicular to Str. S1. Despite its appearance of being relatively sizeable, the platform was situated on a natural rise in bedrock. The residential

platform was constructed in a single phase dating to the Spanish Lookout I period and was probably abandoned in the Terminal Classic period (Figures 6.119 and 6.120).

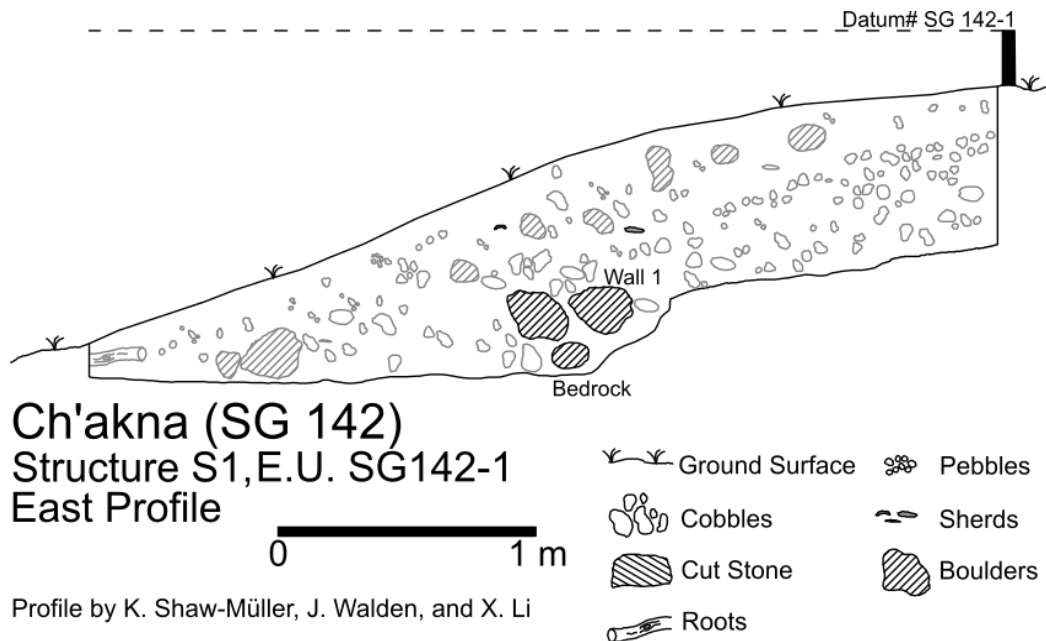


Figure 6.119 East profile of Ch'akna (SG 142) Structure S1

6.4.2.5.1 SG 142: Late-Terminal Classic (AD 600-1000)

The architecture associated with this single component structure was of poor quality and comprised a crude uncut boulder wall. All evidence of internal plaster floors and a patio floor had long since disappeared if they were ever present. The assemblage contained Tiger Run and Spanish Lookout I ceramics, lithic debitage, and several tools. No evidence of Spanish Lookout II ceramics were uncovered, suggestive of abandonment prior to the Terminal Classic period.

6.4.2.5.2 Ch'akna (SG 142) Summary

Ch'akna represents possibly the most impoverished residence excavated in the entire sample. The absence of even utilitarian items in fill is perhaps suggestive that the dwelling may simply have represented a field house. However, this interpretation is undermined by the fact that the construction while poor is somewhat substantial, and the fact that it is located in the epicenter of the Floral Park District (not on the periphery near outfield plots). Perhaps the inhabitants lacked the necessary social connections in the area to recruit construction labor from surrounding

households. SG 142 seems somewhat comparable to other single component Late Classic households at Lower Dover, such as SG 9 at Tutu Uitz Na and other smaller single mound groups (Walden, Guerra, and Qiu 2019), but was notably less wealthy.



Figure 6.120 Photograph of terminal architecture at SG 142 Structure S1

6.4.2.6 Group 3 (SG 143)

Brown et al. (1996: 58) excavated Group 3 (SG 143) during the 1995 field season. This was located northeast of the Floral Park center on the floodplain. Excavation units comprised a 2x6 m trench through the axis of the structure, and two additional units in the patio that yielded no evidence of floor surfaces. The structure possessed two construction phases. Based on the description of the location of Group 3, it seems likely that Group 3 is SG 143 (based on my 2016 survey).

6.4.2.6.1 SG 143: Late-Terminal Classic (AD 600-1000)

Construction phase 1 involved a low rectangular platform with an appended low platform at its base (Brown et al. 1996: 58). We were unable to ascertain the size of this structure and it was not included in assessments of architectural investment. Dense scatters of charcoal were apparent on the surface of this structure indicating that it had burned at some point. The platform was filled with pebble-sized stones in a clay matrix. The structural assemblage contained Spanish Lookout I phase ceramics, two rough chert bifaces two scrapers, three borers, two choppers, 10 obsidian blades, and 20 chert cores. Construction phase 2 saw the expansion of the structure. This involved raising the platform slightly. This addition contained a dense cobble fill (Brown et al. 1996: 59). A cache containing a bowl placed over a plate with a greenstone pendant within was present in this construction phase. This find was surprising considering the fact that jade and greenstone was not apparent in commoner contexts elsewhere on the south side of the Belize River (Walden and Biggie 2017; Walden et al. 2018). Artifacts in the construction fill included Spanish Lookout I and II ceramics, five chert cores, a scraper, two *mano* fragments, four *metate* fragments, and a broken obsidian blade (Brown et al. 1996: 59).

6.4.2.6.2 Group 3 (SG 143) Summary

Group 3 represents a generally unexceptional single component Late Classic commoner household. The artifact assemblage is more affluent than those of many of the other commoner households at Late Classic Floral Park. This is evident in the presence of the greenstone pendant in the ritual cache and sherds from a Puhui-zibal Composite vessel (for the high proportions of such items see Chapter 7). Unlike most households in the Floral Park District, Group 3 had a single More Force jar rim in the humic level, indicative of Postclassic revisitation. The general affluence of Group 3, and its Postclassic revisitation make sense considering its location to the north of Floral Park on the fertile alluvial soils of the southern bank of the Belize River. Settlement groups immediately north of Group 3, in the Western District exhibit greater evidence of Postclassic reoccupation and generally higher levels of affluence, potentially associated with their position on more productive Class I soils.

6.5 The Texas District

The Texas District comprises the original Texas cluster identified by Willey and colleagues (1965) together with seven newly surveyed settlement groups located to the immediate north and east of that cluster (SG 153, SG 166, SG 167, SG 168, SG 169, SG 170, and SG 171). The district is focused on the BR-180/168 minor center. Excavation revealed a small Middle Preclassic occupation at BR-174 and BR-180 (Willey et al. 1965: 248-251). More recent excavation has corroborated this. Analysis of surface ceramics strongly indicates that BR-168 began life during this phase. While this area was away from the optimal river terrace ridges (Weller 2009: 299), the area immediately surrounding the BR-180/168 minor center represents a natural rise in bedrock ideal for siting civic-ceremonial architecture. Generally, the commoner residences situated in the Texas District were architecturally more substantial, comprising cut stone masonry and solid cobble/clay fill, than many of their counterparts across Barton Ramie (Weller 2009: 371).

The excavation sample from the Texas District largely came from excavations conducted by Willey and colleagues (1965) between 1954-1956. The materials from these excavations have been meticulously curated by the Harvard Peabody Museum of Archaeology and Ethnology. All the ceramics from across the Barton Ramie settlement are curated based on type according to Gifford (1976). In order to make statements about the relative wealth, status, and activities of the households, the ceramics associated with lot numbers from the settlement groups in question were retrieved from the Peabody collection and analyzed to allow diachronic comparison. Some issues could not be resolved, the original excavators discarded much of the original lithic assemblages, along with other artifacts employed to make inferences about the wealth, ritual, and economic behavior of the occupants of households at Tutu Uitz Na and Floral Park (see Weller 2009: 134; see Chapter 5.5.2). Regardless, the remaining assemblages represent an incredibly useful collection for archaeologists. In addition to these existing museum collections, a major trench excavation was undertaken at BR-180 to expose the early construction phases of the eastern triadic structure (Figure 6.121). Moreover, surface collections were made on many of the commoner households in the district. The scale of plowing has reduced much of these mounds to their Preclassic phases.

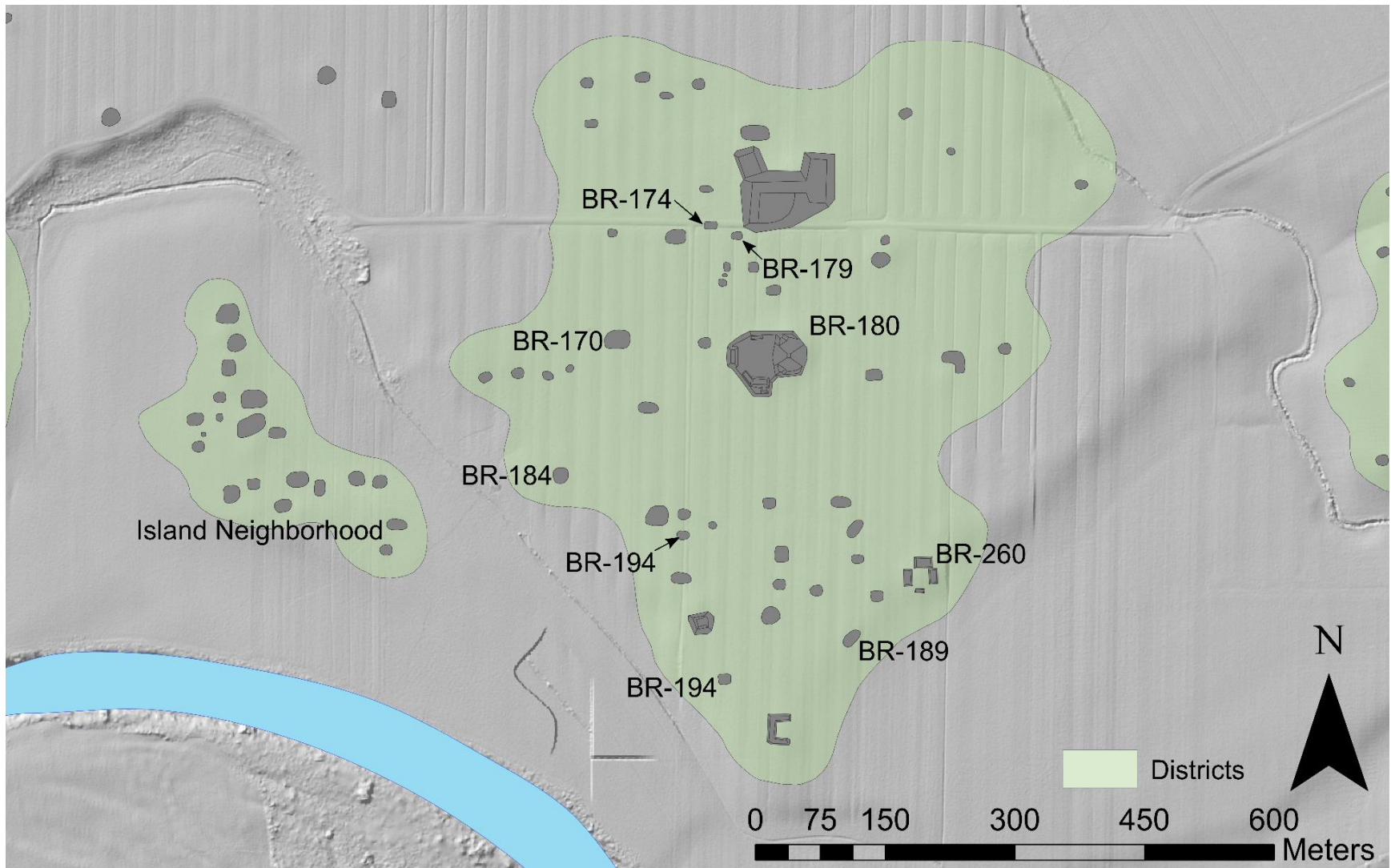


Figure 6.121 Map of the Texas District

BR-180 and BR-168 (intermediate elite center), and the eight excavated commoner settlement groups are shown

Estimating populations for the Middle to Late Preclassic period was somewhat problematic, but the population based on sampled households suggests the district was home to around 50 people (see Table 6.10). More secure estimates are available for the Terminal Preclassic/Early Classic period when around ~ 185 people lived in the district. Like the Tutu Uitz Na and Floral Park Districts, the population of the Texas District remained stable throughout the Early Classic period. Based on the 0.1% growth estimate outlined in Chapter 5, the population could have grown to an estimated ~280 people by the end of the Terminal Classic, although the actual population estimate for this time is ~240. These numbers suggest that the district did not grow from in-migration at this time.

The commoner households situated in the district were relatively affluent throughout their history. The entirety of the Texas District, and most of Barton Ramie, is situated on alluvial Gleyic Cambisol and Haplic Phaeozem soils, the most productive soils in the region (see Figure 6.2; see also Willey et al. 1965: 30). The well-drained alluvial soils situated in the valley bottom around Barton Ramie would have allowed for the growth of cacao or cotton in antiquity (Willey et al 1965: 24; Wright et al. 1959: 249-250; see also Bletter and Daly 2006; Muhs, Kautz, and MacKinnon 1985). Although if they were growing cotton, the relative dearth of spindle whorls encountered at Barton Ramie undermines the notion that residents were spinning (Weller 2009: 171, 378). Cacao is a more likely possibility, and the impression of a possible cacao bean is visible on a Jenney Creek daub fragment from BR-225 (Weller 2009: 365; Willey et al. 1965: 529, 574).

The potential for the cultivation of cacao at Barton Ramie, and other areas of the Belize River Valley means that these areas could have been elite estates managed in a top-down fashion by external suzerains (Garrison, Houston, and Alcover Firpi 2019: 234; McAnany et al. 2002). Such top-down management of cacao crops was common in the Postclassic period (Roys, 1957: 8; Tozzer, 1941: 96–97). Parts of the Belize River Valley functioned as cacao estates associated with the polity of Noh Peten (Jones 1982, 1989: 102-105; 1998). The non-local burials accompanied by material culture from the Peten Lakes suggest that the Postclassic settlement on the alluvial plain may reflect these estates (Audet 2006; Hoggarth et al. 2014; Hoggarth, Freiwald, and Awe 2021). Unlike the earlier Classic period settlement, these Postclassic residential contexts

comprise incredibly meager architecture, potentially more reflective of impoverished workers dispatched to cultivate cacao through top-down policies from the Noh Peten polity.

Following correlates set out by McAnany (2002), in contrast to the Postclassic period, the Classic period archaeological evidence does not support the idea that these were managed estates. The sheer affluence of some Classic period commoner households situated on the alluvium suggests the growth of cacao was more of a local-level enterprise involving economically independent commoner households situated beneath local intermediate elites. This is perhaps most apparent in terms of the downward flow of ostentatious wealth items which normally are relatively geographically prescribed due to presumed sumptuary rules (see Horowitz 2015: 51). Examples of incredibly wealthy commoner households in the Belize River Valley could be attributed to sampling biases associated with having a larger excavated commoner sample than most regions of the Maya lowlands. This seems unlikely given the fact that an association between cacao production and possession of sumptuary items has been illustrated in other areas of the Maya lowlands. A very good example being Blue Creek in Northern Belize, which despite being a relatively small polity capital in terms of civic-ceremonial architecture, had some of the highest proportions of jade documented in the Classic Maya lowlands (Guderjan 2007: 102-118).

Good examples of surprisingly affluent burials within architecturally lackluster commoner residential architecture on the Belize River Valley alluvium include BR-1 Burial 6 which contained 20 ceramic vessels, a turtle carapace drum, seven ceremonial chert and obsidian blades and bifaces, an eccentric, four bone tubes, a bone needle case, three bone needles, a marine shell ear ornament, and two perforated *Nephronaias* shells (Willey et al. 1965: 546). BR-260 Burial 2 contained a carved jade jaguar pendant, three ceremonial obsidian blades, a monolithic axe with a pseudoglyphic inscription incised on both sides (possibly an *ajaw* glyph), a ceremonial slate “monkey wrench” mace, a long ceremonial serpentine celt, and three carved bone tubes (Willey 1956: 779; Willey et al. 1965: 557). Likewise, a test unit at M-112, a small commoner mound in Settlement Cluster C at Baking Pot, uncovered an incredibly wealthy Early Classic burial with three complete vessels, two limestone spindle whorls, two obsidian adornos, two marine shell adornos, 20 marine shell carved teeth pendants/beads, and a necklace of 589 greenstone and marine shell beads (Hoggarth 2012: 226-228; Lamb 2009: 66). These examples seem to suggest that either cacao represented a cash crop which commoners could exchange for incredibly lavish wealth items

through commercial exchange, or the commoners were well rewarded with sumptuary items for passing such high-value crops up regional tributary networks (see Guderjan 2007: 107).

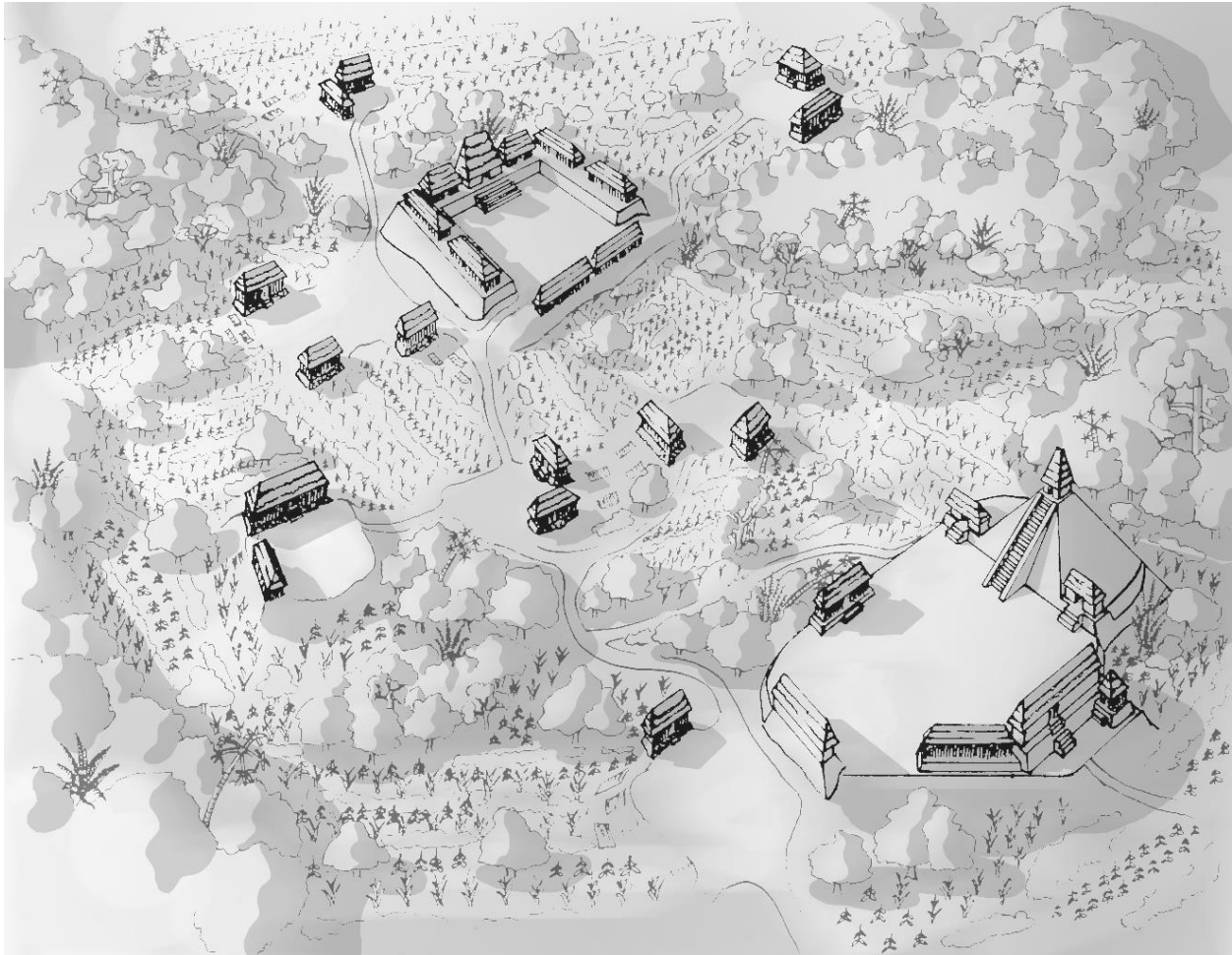


Figure 6.122 Illustration of BR-180/168 center

Note that while BR-180 (lower right) is based on sound archaeological data, the reconstruction of BR-168 (upper central) is more speculative (drawn by Kyle Shaw-Müller, adapted from Walden et al. 2020a: Fig.3b)

6.5.1 The BR-180/168 Minor Center

BR-180/168 is located in the Texas District on the eastern flank of the Barton Ramie settlement, one kilometer north of the Lower Dover civic-ceremonial center. BR-180 represents a ceremonial precinct and is associated with a separate residential compound (BR-168) located 100 meters to its north (see Figures 6.122, and 6.123; see also Willey et al. 1965: 249, 293). These components of the minor center total 17600 m³ of architecture. BR-180 has three structures and a

plaza that covers 1850 m². The most prominent structure is the eastern triadic structure. BR-180/168 falls into Tier 3 (tertiary minor centers) because it has a high surrounding commoner density, an eastern triadic structure, and a large, fairly inaccessible plaza (Walden et al. 2019). BR-180/168 is an atypical Tier 3 in that it had two separate components, a ceremonial compound and a residential compound, which is more common at larger Tier 2 secondary centers. However, the separation of centers into residential and ceremonial components occurs at Baking Pot, Blackman Eddy, and Floral Park (Weller 2009: 120).

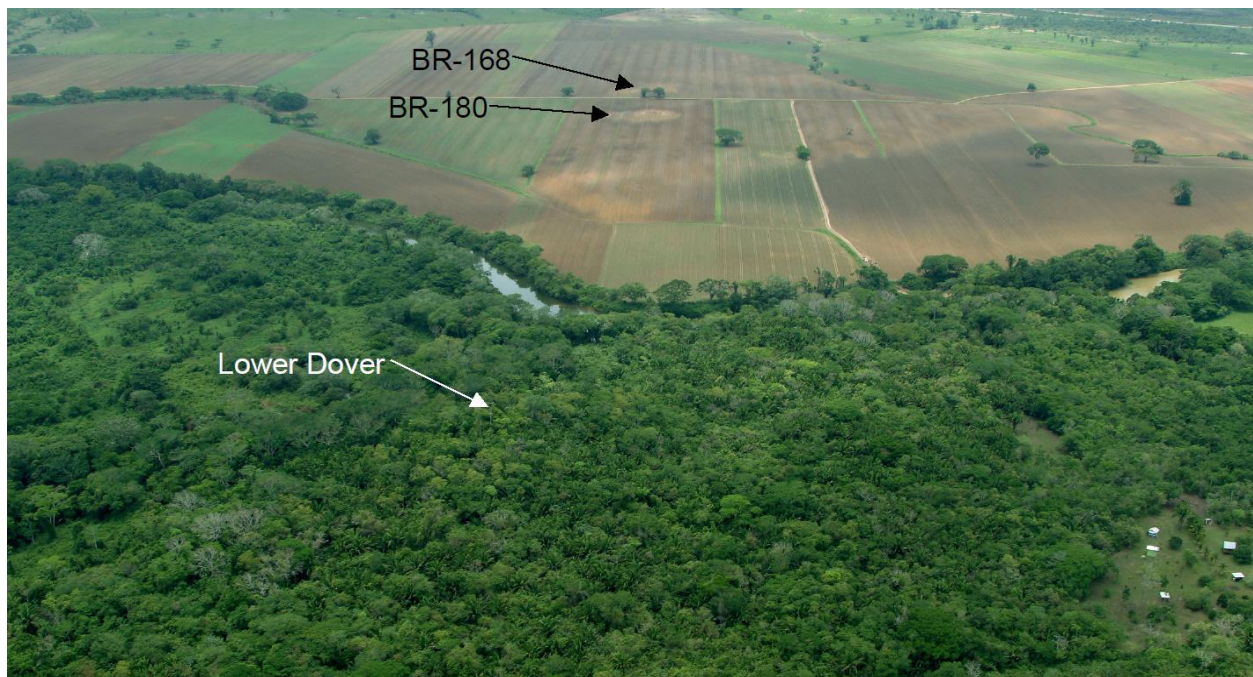


Figure 6.123 Aerial photograph of the Texas District
Courtesy of Bill Reynolds

6.5.1.1 BR-168

Excavation focused solely on the BR-180 ceremonial group because the residential component at BR-168 was bulldozed beyond recognition in 1952-3, and more recent plowing had greatly diminished the scale of the architecture (Walden et al. 2020c; Willey et al. 1965: 243). A rough understanding of the temporal sequence at BR-168 was however pieced together using ceramic analysis of surface materials as part of this dissertation and collections made by Willey and colleagues (1965: 155, 245) from bulldozer cuts made into BR-168. The materials collected

from the bulldozer cuts gave the impression the earliest occupations of BR-168 dated to the Floral Park phase (Willey et al. 1965: 245). Plowing has subsequently whittled down the mound and revealed an abundance of Middle and Late Preclassic ceramics, indicating that the initial construction phases on BR-168 were likely contemporaneous with those at BR-180. This finding indicates that the BR-180/168 minor center likely began as two separate compounds which grew gradually alongside one another. This developmental trajectory differs from that presented above at Floral Park which only saw the construction of separate elite residential structures in the Late Classic period following the rise of Lower Dover. The surface assemblages present at BR-168 speak to a general elite residential function and include obsidian blades, ground stone, utilitarian and high-value ceramics, a well-made lanceolate ceremonial biface, and chert tools and debitage. The surface ceramics indicate that the group offers huge potential for investigating the residence of a Middle Preclassic emergent elite household. Despite the long occupational sequence, there is an abundance of Late Classic ceramics which corroborate Willey and colleagues' (1965: 289) suggestion that a sizeable Late Classic construction episode occurred at BR-168.

6.5.1.2 BR-180

The BR-180 precinct is situated on the eastern side of a large ceremonial compound with BR-181 to the east, BR-182 to the south, and a small unnumbered range structure running along its northern side. Today, BR-181 and the northern structure have been eradicated by plowing while the southern structure forms a small linear hump. The BR-180 eastern triadic structure was originally reported as being 12 meters in height, although this was likely measured from the surrounding valley floor, not from the plaza itself (see Figure 6.124). The pyramid at BR-180 was standing until 1986 when sadly it was bulldozed to expedite agricultural plowing (Anabel Ford personal communication, 2019). Today the structure rises about 3 meters in height and the northern and southern wings of the eastern triadic structure are much diminished (Willey et al. 1965: 249). Extensive excavation of the remaining mound revealed Middle, Late, and Terminal Preclassic components. Surface analysis of ceramics from across the precinct corroborated the idea that much of the destroyed monumental architecture was Late Classic in date.

The BR-180 eastern triadic structure seems to have rough solar alignments on the equinoxes and solstices. The eastern-central azimuths are between 83 and 96 degrees, suggesting

that BR-180, like Structure E2 at Tutu Uitz Na possibly functioned in a similar way to an E group. This analysis relied on the original map of the structure which Willey and colleagues (1965) produced due to the extensiveness of modern bulldozing and plowing. Walden et al. (2020a) show that the public compound at BR-180 was relatively spatially inaccessible compared to other architectural complexes in the Lower Dover polity (see Chapter 8 for a discussion of the implications of this). The lack of overt residential architecture at the BR-180 group is suggestive of the fact that this component played purely a civic-ceremonial role.

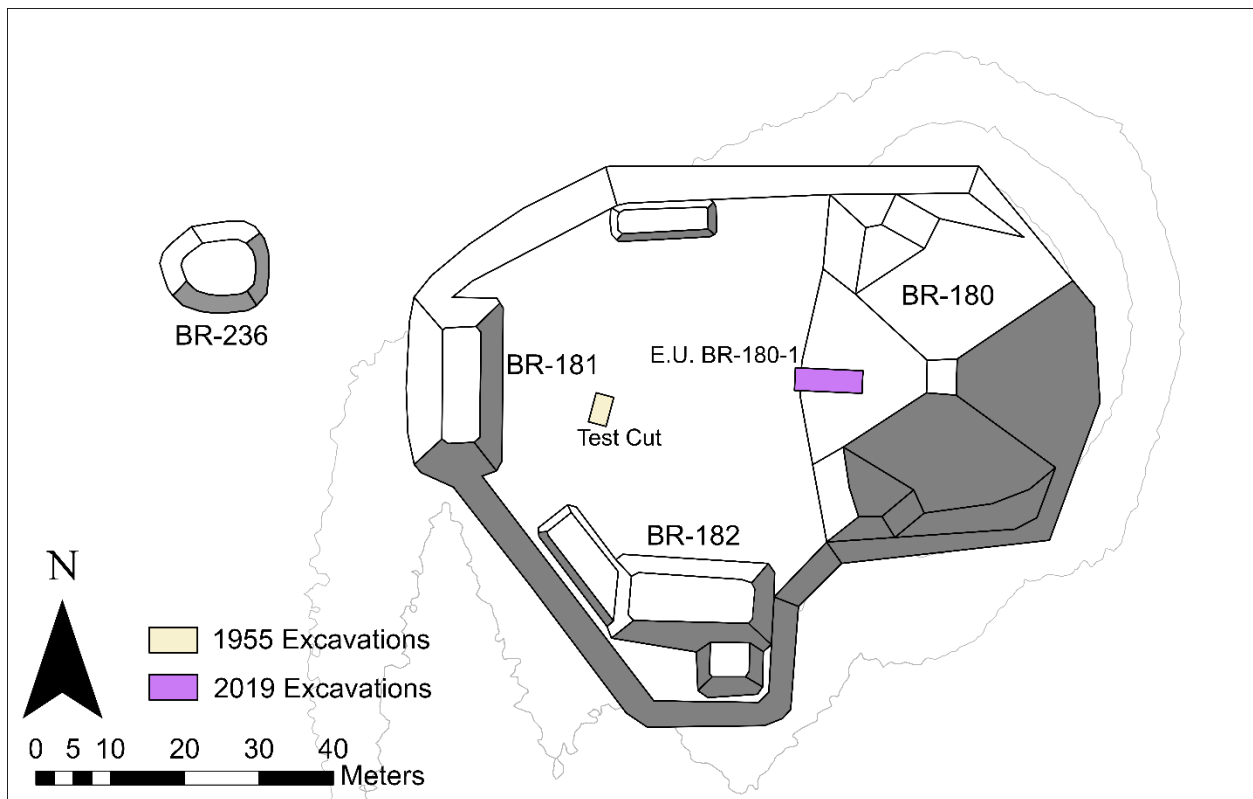


Figure 6.124 Map showing the locations of test cut and E.U. BR-180-1 at BR-180

6.5.1.2.1 BR-180 Plaza

Prior excavation at BR-180 consisted of a 3x2 m unit placed in the plaza (Willey et al. 1965: 249-251; Figure 6.125). The earliest construction phase evident on the plaza was Plaza Floor 1 (1st P-G Floor) which was situated at 1.25 m below the ground surface and dated to the Middle Preclassic period, as represented by such types as Jocote Orange Brown and Sayab Daub Striated (Figure 6.126). Above this, at 1 m below the ground surface was the Late Preclassic/Terminal Preclassic Plaza Floor 2. The fill of this floor yielded types like Sierra Red, Aguacate Orange,

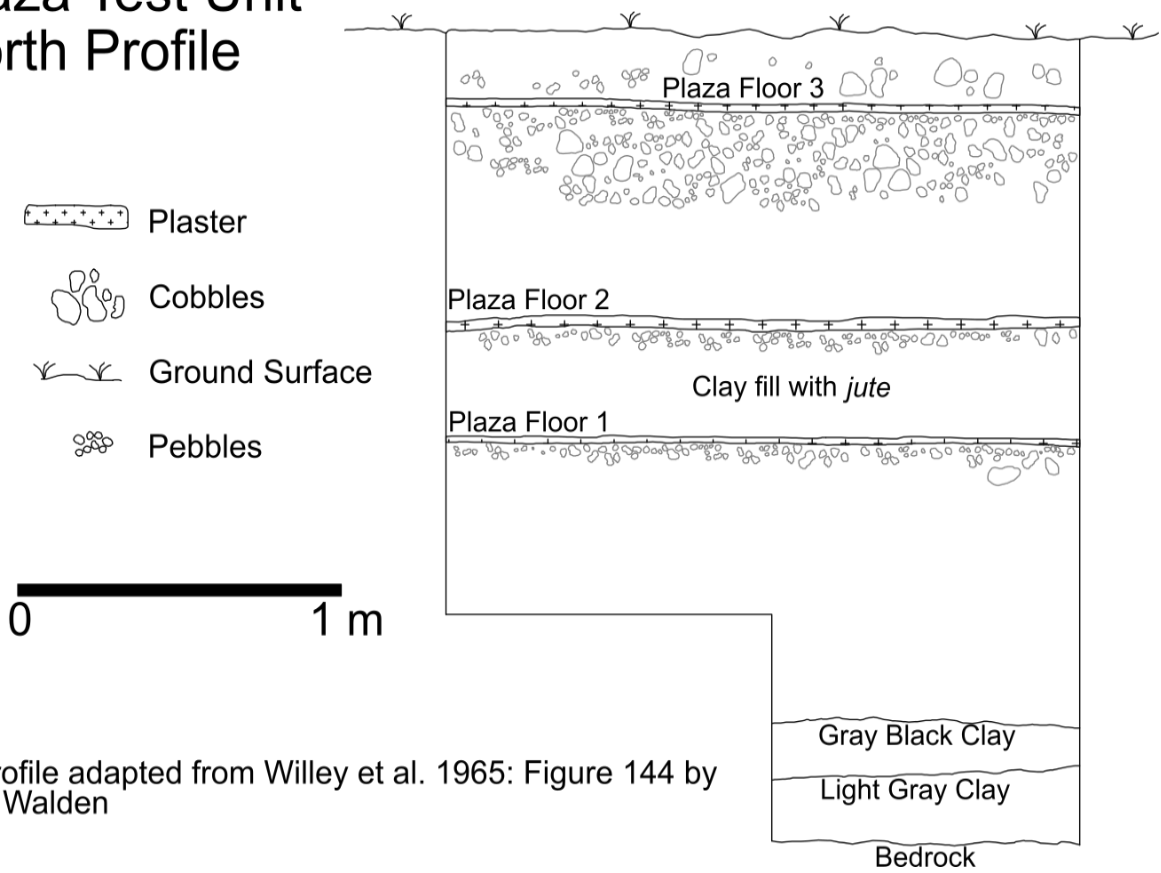
Paila Unslipped, and Monkey Falls Striated. This Late-Terminal Preclassic component on the plaza contained sizeable amounts of *jute* (Willey et al. 1965: 251, 527). It is unclear whether this Late Preclassic *jute* layer was dense enough to be considered comparable to Middle Preclassic *jute* deposits at the Tutu Uitz Na center, SG 3 and SG 34. The fact it was considered worthy of mention would suggest it was fairly dense. A Late Classic period plaza floor (Plaza Floor 3) lay 20 cm below the ground surface. This construction fill included types like Belize Red, Macal Orange-red, and Garbutt Creek Red. No obvious Early Classic construction episode was apparent in the plaza although Hermitage phase ceramics were apparent in the fill of the Late Classic component.



Figure 6.125 Photograph of BR-180 from the west

From Gordon R. Willey, William R. Bullard, Jr., John B. Glass, and James C. Gifford, *Prehistoric Maya Settlements in the Belize Valley Papers of the Peabody Museum of Archaeology and Ethnology*, Vol. 54, Figure 40. Copyright 1965 by the President and Fellows of Harvard College. Courtesy of the Peabody Museum of Archaeology and Ethnology

Plaza Test Unit North Profile



Profile adapted from Willey et al. 1965: Figure 144 by J. Walden

Figure 6.126 North profile of the 1955 test cut in the BR-180 Plaza

6.5.1.2.2 BR-180 Eastern Structure/Eastern Triadic Structure

A 3x8 m trench was positioned on the western flank of the remnants of the eastern triadic structure, running east/west, perpendicular to the structure (E.U. BR-180-1). The placement of this unit was difficult due to the extensive damage wrought on the architecture by bulldozing and plowing. This excavation exposed three early phases of construction dating to the Middle Preclassic, Late to Terminal Preclassic, and the Terminal Preclassic periods (Walden et al. 2020b). Radiocarbon dates from three charcoal samples and two collagen samples from human remains provide clues about the temporal sequence associated with the initial stages of construction at BR-180. Bayesian modeling was employed to constrain the error ranges on these dates (Figure 6.127; Table 6.17).

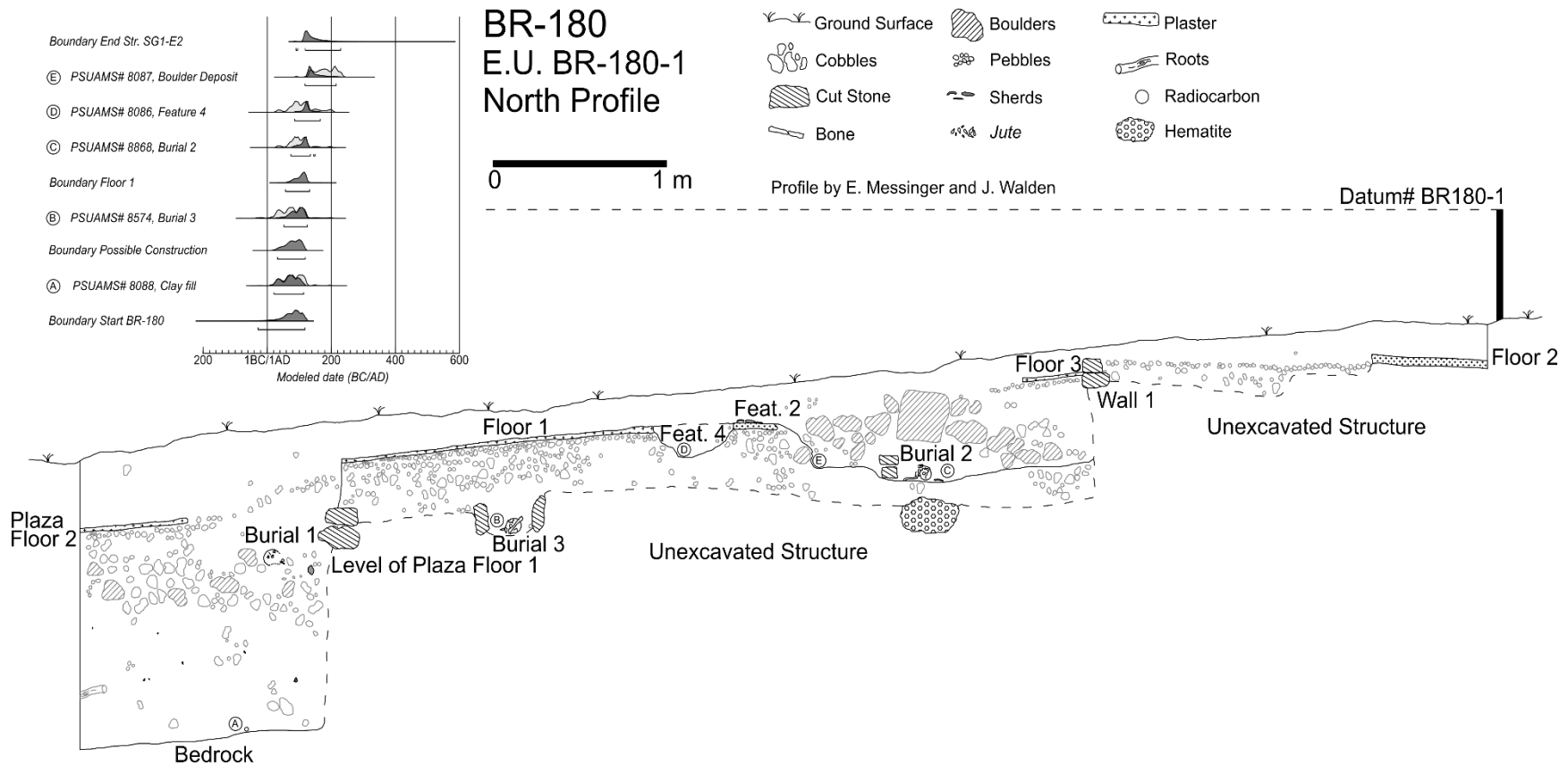


Figure 6.127 North profile of BR-180

Table 6.17 AMS Radiocarbon Dates from BR-180.

| <i>Lab ID#</i> | <i>Location</i> | <i>Context</i> | <i>Conventional ¹⁴C yr (BP)</i> | <i>2σ Calibrated Range</i> | <i>Modeled 2σ cal range</i> |
|----------------|-----------------|-----------------|--|----------------------------|-----------------------------|
| PSU-8088 | BR-180 | Fill on bedrock | 1945 ± 20 | AD 10-130 | AD 20-115 |
| PSU-8574 | BR-180 | BR-180 Burial 3 | 1950 ± 20 | AD 15-130 | AD 50-125 |
| PSU-8086 | BR-180 | Feature 4 | 1925 ± 20 | AD 25-205 | AD 80-165 |
| PSU-8868 | BR-180 | BR-180 Burial 2 | 1930 ± 15 | AD 25-250 | AD 70-150 |
| PSU-8087 | BR-180 | Boulder Fill | 1860 ± 15 | AD 125-230 | AD 115-215 |

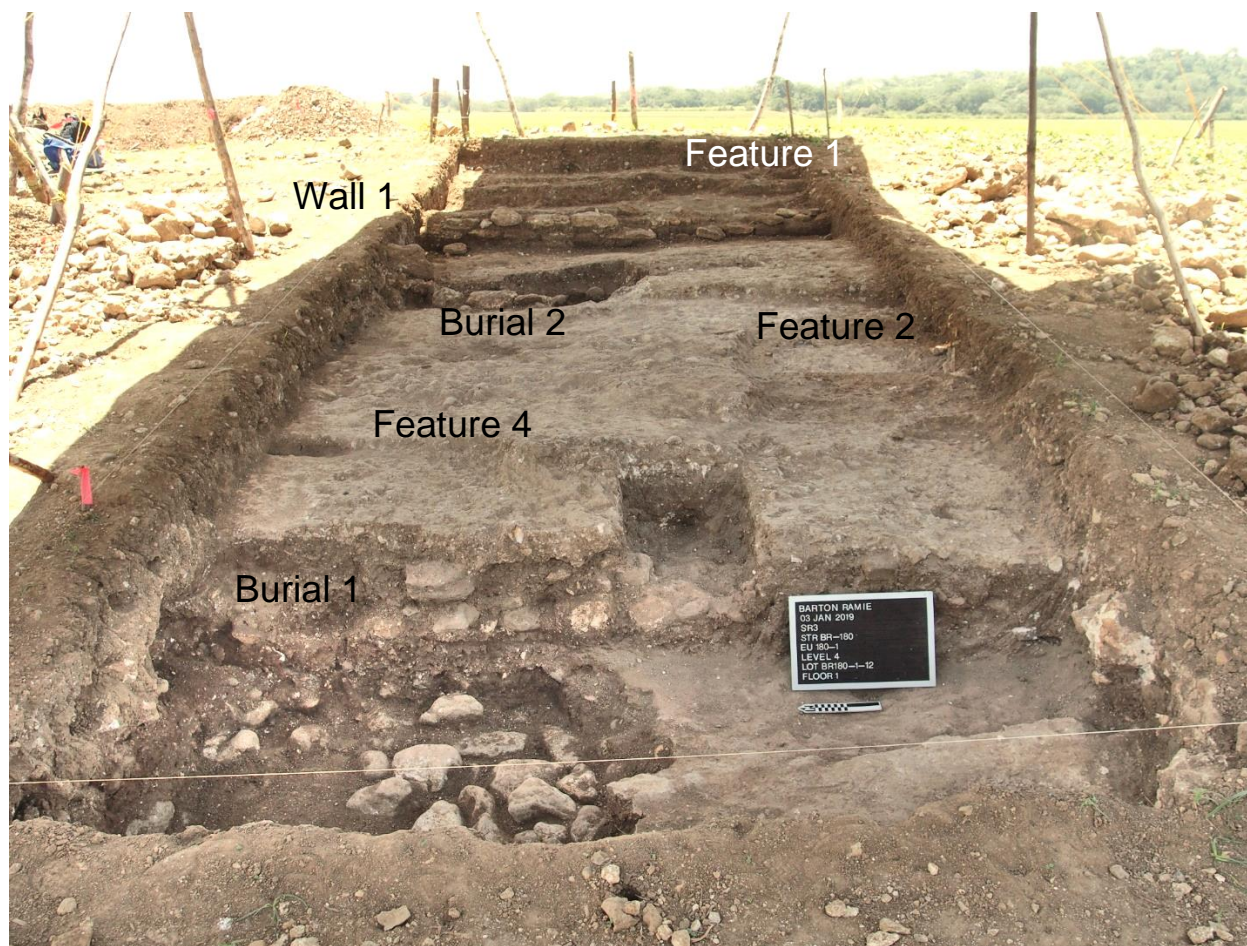
6.5.1.2.3 BR-180: Middle Preclassic (900-300 BC)

Fill from a possible Middle Preclassic platform at least one meter high was identified, with no discernable floors or walls. This building episode comprised a dark clay matrix placed on bedrock, similar to that identified at the base of the plaza test unit (Willey et al. 1965: 251). The aforementioned issues associated with unit placement means that this fill could have been associated with a structure or Plaza Floor 1. This fill likely extends under the entire structure and was probably once capped by Plaza Floor 1. However, Plaza Floor 1, or any other architecture, was likely torn up in the extensive Late Preclassic remodeling. The Preclassic remodeling event seems to have dated to around cal AD 20-115 (PSUAMS#8088 modeled). Despite lacking a clear architectural definition, the extent of the fill extending under the plaza (based on both excavation units) shows significantly more labor was invested in BR-180 than in the average Middle Preclassic commoner household. Materials from this component consisted of Jenney Creek ceramics such as Sayab Daub Striated, Chunchinta Black, and Savana Orange, 81 pieces of chert debitage, three cores, two worked flakes, a scraper, two figurines, a worked conch spiral, six fragments of faunal bone (including a fragmented mustelid cranium) and 170 freshwater shells. While the materials redeposited in the fill were likely from a residential midden, the size and scale of the architecture speak to a ceremonial function, especially when compared to other Middle Preclassic ceremonial structures in the Belize River Valley (Walden et al. 2020b; see also Awe 1992; Garber et al. 2004a; Powis et al. 2020).

6.5.1.2.4 BR-180: Late Preclassic (300 BC-AD 150)

The second clear construction phase involved the creation of a sizeable Late Preclassic-ceremonial structure. The presence of an elite burial (BR-180 Burial 3) in this phase suggests that

BR-180 served an elite funerary function like other eastern mortuary structures in the Belize River Valley by at least the Late Preclassic period (Awe, Hoggarth, and Aimers 2017). This structure had three tiers rising 2 m above bedrock, and had cut stone walls and well-made plaster floors. Understanding this structure is difficult because of substantial intrusive pitting and burial interments in the subsequent phase (Figures 6.128 and 6.129; see also Walden et al. 2020c).



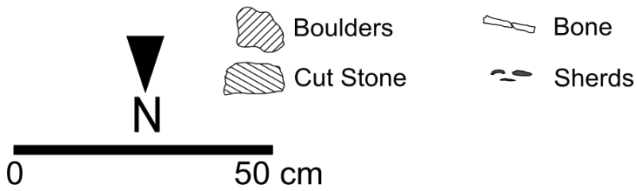
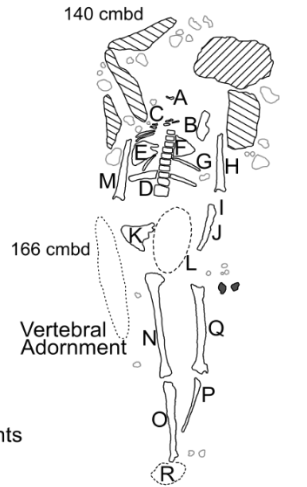
**Figure 6.128 Photograph of Late Preclassic construction at BR-180
(note Terminal Preclassic pitting and intrusive burials)**

An adult male individual was interred in a “half crypt” running 30 cm below the lower tier of this structure (BR-180-Burial 3). AMS radiocarbon dating of bone collagen produced a date of cal AD 50-125 (PSUAMS#8574 modeled). The individual was extended, prone with their head to the south. The remains were in a fragmentary state (Figure 6.129). Cut limestone capstones covered the head and upper torso, and a Gavilan Black-on-Orange dish with a mammiform base was placed inverted over the upper back of the individual (Figure 6.129 and 6.130a and b). In the

left hand of the individual was an adornment made of 166 snake vertebrae strung together (Figure 6.130c and d). The vertebrae are consistently the same size, which would suggest that multiple snakes were processed to create the adornment (Roa et al. 2020).

**BR-180
E.U. BR-180-1
Plan of Burial 3**

- A. Mandible Fragments
- B. Right Scapula
- C. Cervical Vertebrae
- D. Vertebral Column
- E. Left Scapula
- F. Right Superior Rib Cluster
- G. Right Inferior Rib Cluster
- H. Right Humerus
- I. Right Ulna
- J. Right Radius
- K. Left Ilium
- L. Pelvis Fragments
- M. Left Humerus
- N. Left Femur
- O. Left Tibia and Fibula
- P. Right Tibia and Fibula Fragments
- Q. Right Femur
- R. Foot Fragments



Plan by V. Izzo and J. Walden



Figure 6.129 Photograph and plan of BR-180 Burial 3

The cranium of this individual had been removed in antiquity based on the presence of remnant maxillary fragments adhering to the surrounding matrix, together with fragments of the anterior maxillary teeth. It seems likely that the cranium was removed for curation associated with ancestor veneration (McAnany 1995). The dentition of this individual was almost complete, except for the anterior teeth, and was characterized by significant wear. Strontium and oxygen isotope analysis of dentition indicated a local origin for this individual (UM469 $^{87}\text{Sr}/^{86}\text{Sr}$ value .708267, $\delta^{18}\text{O}$ value -3.10). The carbon isotope value ($\delta^{13}\text{C}$ value -5.87) from tooth enamel suggests a typical diet for the region during the earlier stages of life. This is corroborated by dietary isotopes from bone collagen which suggest this pattern continued during the individual's later years ($\delta^{13}\text{C}$ value -10.4, $\delta^{15}\text{N}$ value 8.6). Additional items encountered in the fill of the burial include Barton Creek, Mount Hope, and Floral Park ceramics including Aguacate Orange, San Antonio Golden Brown,

and Sierra Red. The lithic assemblage in what was seemingly the fill (not grave goods) included two chert cores, a rough biface, a worked flake, a scraper, a blade, and 40 pieces of debitage.

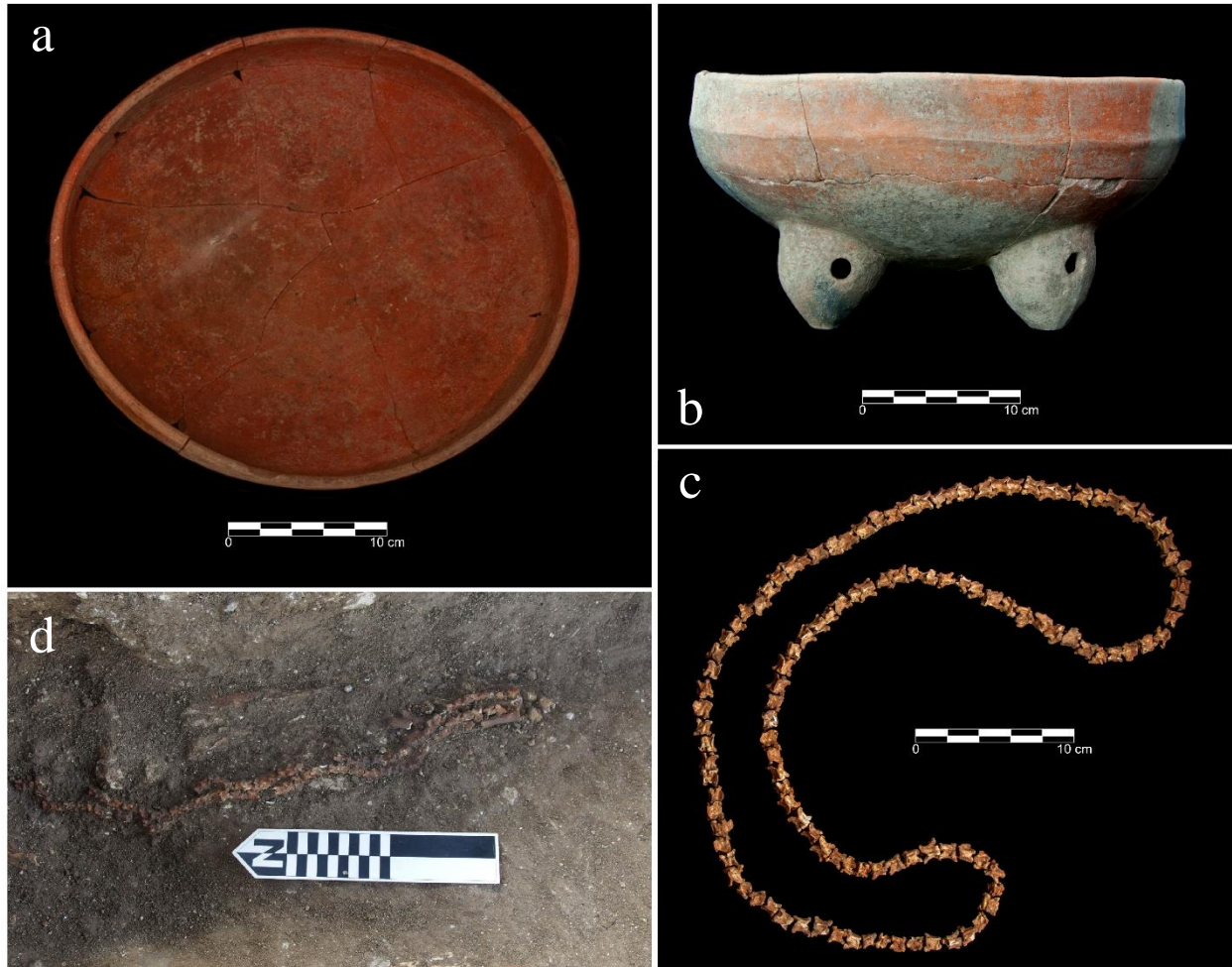


Figure 6.130 Grave goods from BR-180 Burial 3

Clockwise from top: (a) Gavilan Black-on-Orange bowl (top down), (b) Gavilan Black-on-Orange bowl (side view), (c) faunal vertebral adornment, and (d) position of faunal adornment in left hand

The architectural fill of this construction consisted of a ~30 cm layer compact, dark brown heavy clay with limited cobble and pebble inclusions laid homogeneously throughout the structure. The artifact assemblage contained an assortment of Jenney Creek, Barton Creek, and Mount Hope/Floral Park ceramics including Aguacate Orange, Cabro Red, Polvero Black, Monkey Falls Striated, Lechugal Incised, Jocote Orange Brown, Reforma Incised, Hillbank Red, and Sierra Red. The lithic assemblage included two chert blades, a blade fragment, 13 scrapers (two of which were fashioned from material from the NBCBZ), a borer, three drills, a single rough biface, and an

obsidian blade fragment, and 33 cores. The faunal assemblage comprised 53 freshwater shells, two pieces of a polished incised tube fashioned from deer bone, 29 faunal fragments (including a dog tooth), a queen conch shell fragment, and a conch shell bead. Four greenstone bead fragments were encountered as were some jade fragments. A charcoal sample from the fill of this platform dated cal AD 115-215 (PSUAMS#8087 modeled).

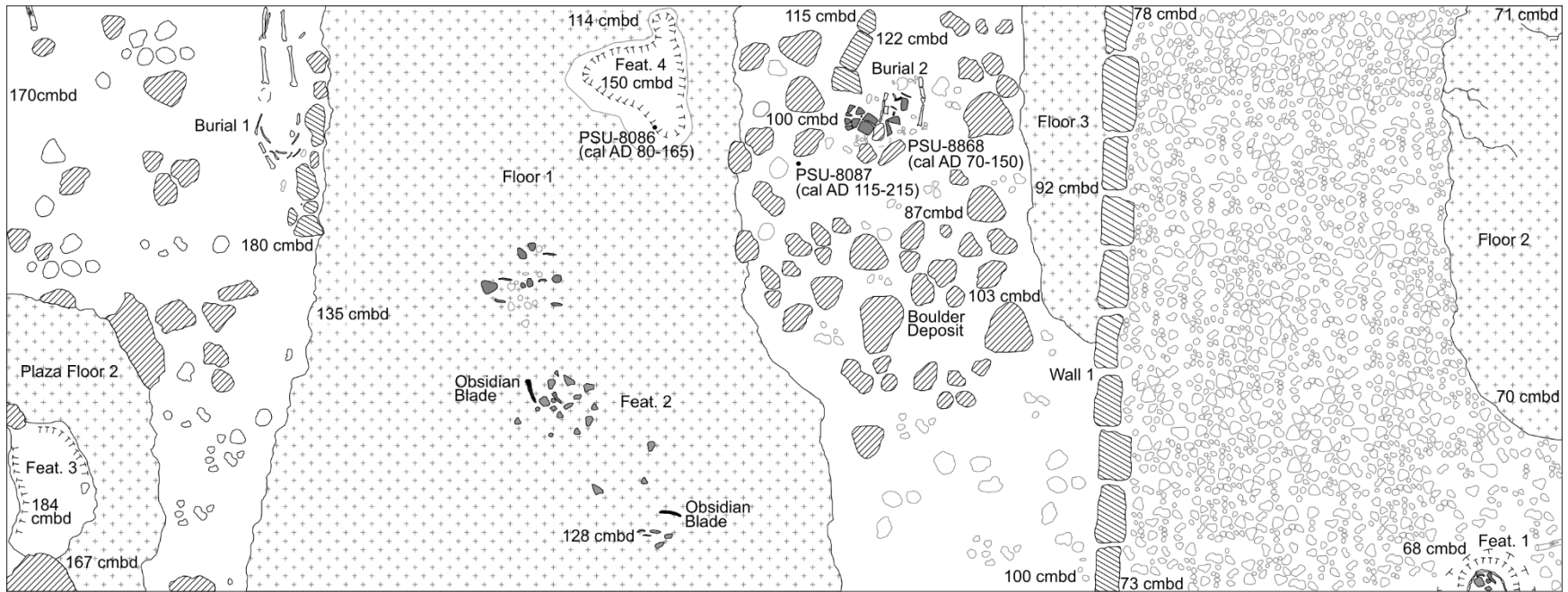


Figure 6.131 Hematite boulder in architectural fill at BR-180

The most notable find was a sizeable 40x30 cm hematite boulder (Fe_2O_3) in the center of the unit (Figure 6.131). The elemental composition of the boulder was analyzed by Qiu Yijia using the Niton XL3t Gold+ portable X-ray fluorescence machine and was identified as hematite by Sheldon Skaggs (personal communication, 2019; see Chapter 5.4.3.6). This hematite boulder was placed ~15 cm below a later intrusive burial (BR-180 Burial 2). Unlike cinnabar which remains red, hematite will often turn a yellow color after placement on human remains (Batta et al. 2013). None of the three burials encountered on BR-180 showed signs of discoloration however. The hematite may have been imported from Southern Guatemala or Honduras (Blainey 2007: 168–

175). Unprocessed hematite has been found in ritual caches, sometimes alongside mercury (Pendergast 1982). Hematite was also used to produce mosaic mirrors, (Healy and Blainey 2011), inlay teeth (Gwinnett and Gorelick 1979; Geller 2009), and to create pigment to color ceramics, walls, and burials (Backes, Cheetham, and Neff 2012; Batta et al. 2013; Sánchez del Río et al. 2005). Considering that the hematite was placed in an eastern mortuary shrine, and there is a dearth of evidence for dental work, or production of mosaic mirrors and ceramics in the vicinity, the most likely interpretation involves a mortuary or ritual function.

This phase coincided with substantial construction on the Plaza. Plaza Floor 2 was placed atop 40 cm of dense dark brown clay fill and large limestone slabs. This episode probably saw the removal of the Middle Preclassic phase Plaza Floor 1 encountered in the western plaza by Willey and colleagues (1965: 249-251). The rough suspected level of this earlier plaza floor is marked on the profile (Figure 6.126). Artifacts included in this fill include Barton Creek, Mount Hope, and Floral Park types such as Aguacate Orange, Sierra Red, Society Hall Red, Ixcantio Orange Polychrome, Chan Pond Unslipped, Polvero Black, and Lechugal Incised. The lithic assemblage included two chert scrapers, a worked flake, six cores, an obsidian blade, and 106 pieces of chert debitage. In addition, 191 freshwater shells were encountered in the fill of the plaza floor and maybe have represented the *jute* deposit evident in the Plaza Floor 2 fill on the western side of the plaza (Willey et al. 1965: 249-251). Other artifacts included eight pieces of daub, and five fragmentary mammal bones, and a dog (*Canis lupus familiaris*) mandibular canine. Dog remains are frequently found in burial contexts in the Belize River Valley (Stanchly and Awe 2015).



BR-180
E.U. BR-180-1
Plan of Terminal Preclassic Structure

Plan by J. Walden, M. Biggie, V. Izzo, and E. Messinger

- | | | |
|-----------|----------------|----------|
| Boulders | Obsidian Blade | Roots |
| Cobbles | Pebbles | Charcoal |
| Cut Stone | Sherds | Plaster |
| Bone | Slope | |



Figure 6.132 Plan of Terminal Preclassic occupation/activity at BR-180

BR-180 E.U. BR-180-1 Plan of Burial 1

- A. Cranial Fragments
- B. Left Clavicle
- C. Right Clavicle
- D. Cervical Vertebrae
- E. Right Scapula
- F. Right Superior Rib Cluster
- G. Left Superior Rib Cluster
- H. Left Inferior Rib Cluster
- I. Left Humerus
- J. Left Radius
- K. Left Hand Cluster
- L. Left Femur
- M. Right Femur
- N. Left Tibia and Fibula
- O. Right Tibia and Fibula Fragments

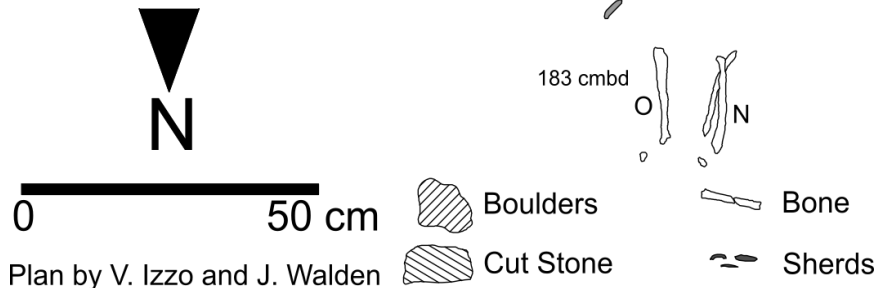


Figure 6.133 Plan of BR-180 Burial 1

6.5.1.2.5 BR-180: Terminal Preclassic (150 BC-AD 300)

Construction Phase 3 on BR-180 involved a series of activities conducted during the Terminal Preclassic period, prior to the construction of a larger Early Classic structure which was removed by plowing/bulldozing. In the Terminal Preclassic period, the structure stood about 1.5 meters above the level of Plaza Floor 2 (Figures 6.126 and 6.132). It remains unclear whether BR-180 was an eastern triadic structure in the Late/Terminal Preclassic period, but this seems unlikely. Terminal Preclassic activity at BR-180 largely comprised extensive intrusive pitting into the surface of the Late Preclassic structure outlined above. This involved the interment of two intrusive burials (Burials 1 and 2), and the excavation of three pits (Features 1, 3, and 4), and the deposition of artifacts on the Late Preclassic floor of the lower tier of the structure (Feature 2).

A significant portion of the front wall of the structure and parts of Plaza Floor 2 were removed to construct a crypt and inter a poorly preserved adult individual (probably male) in BR-

180 Burial 1 (Figures 6.133 and 6.134). The lower course of the front wall was repurposed into the easternmost crypt wall. The individual was placed supine in a north-south orientation with the head to the south. The burial was a “half crypt” with capstones covering the upper torso and crania in a similar manner to BR-180 Burial 3. The weight of agricultural machinery or possibly the bulldozer compressed the capstones and heavy clay fill beneath. Subsequently, much of the upper skeleton was stuck firmly to the underside of the capstones. The skull of this individual was poorly preserved and fragmentary. The teeth of this individual exhibit extreme calculus build-up on the anterior mandibular dentition. Calculus was observed to be continuously covering the surface of the anterior teeth, with the concentration of extreme calculus thickest on the lingual and buccal surfaces, and thinnest on the mesial and distal inter-proximal surfaces. The individual did appear to be relatively robust, specifically at the interosseous crest of the left radial diaphysis. Six river clam shells (*Nephronaias* sp.) were found beneath the skeleton. The placement of these shells in burials is fairly common at Barton Ramie (Willey et al. 1965: 504). A perfectly smooth cave pearl was identified near the cranium.

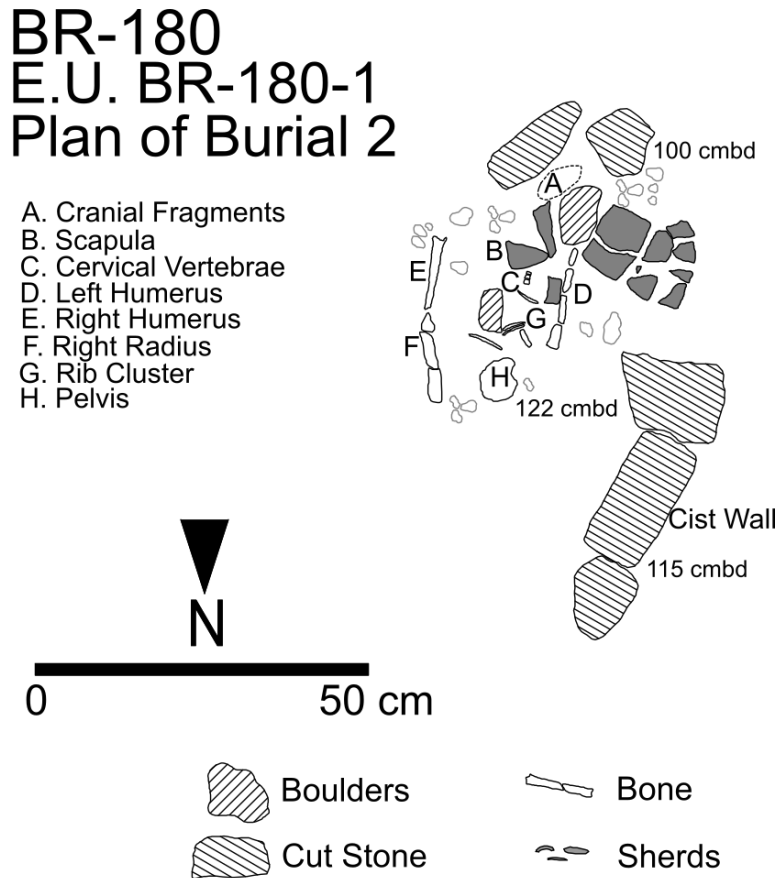
The fill beneath the burial also yielded a granite *metate* fragment and a piece of painted plaster. The fill around the burial included Jenney Creek, Barton Creek, and Mount Hope/Floral Park types including Flor Cream, Sierra Red, San Felipe Brown, Chan Pond Unslipped, Aguacate Orange Monkey Falls Striated, and a Savana Orange chocolate pot spout. Other artifacts included a rough chert biface, a blade, a prismatic blade, two drills, nine scrapers, seven cores, two obsidian blade fragments, 269 freshwater shells, and two unclassifiable faunal fragments.



Figure 6.134 Photograph of BR-180 Burial 1

Sizeable modifications were made when BR-180 Burial 2, an adult individual, was interred in a cist of cut limestone blocks that intruded through the lower tier of the structure. No evidence for capstones was found, but a sizeable boulder deposit (40 cm thick) was placed above the burial. Unfortunately, these boulders were pushed down into the cist, severely damaging the burial. A single, fragmentary adult individual was placed extended prone in a north-south orientation with the head towards the south (Figures 6.135 and 6.136). The burial contained a relatively rich grave assemblage which included a complete Gavilan Black-on-Orange vessel with a mammiform base (Figure 6.137a), similar to the one uncovered in BR-180-Burial 3, a complete Aguacate Orange: Privaccion Variety basin with a pedestal base, a sizeable polished jade bead fragment, and a carved piece of jade jewelry. The fill around the burial contained two chert scrapers, a core, three

fragments of daub and 37 freshwater shells. AMS radiocarbon dating of bone collagen produced a date of cal AD 70-150 (PSUAMS#8868 modeled).



Plan by V. Izzo, O. Ellis, and J. Walden
Figure 6.135 Plan of BR-180 Burial 2

The 40 cm boulder layer placed atop the burial contained rocks ranging in size from large cobbles to a few large 30x40 cm boulders interspersed in a light greyish brown clay matrix. This boulder layer contained a charcoal sample dating to cal AD 115-215 (PSUAMS#8087 modeled). The assemblage associated with this fill yielded 76 sherds although few were diagnostic. Diagnostics included several Sierra Red sherds and a Chacchinic Red-on-Orange brown dating from the Barton Creek and Jenney Creek phases. The architectural stratigraphy provides a firm *terminus post quem* of the Terminal Preclassic however. The paucity of Terminal Preclassic sherds in the deposit could be because the boulder fill was removed from an adjacent part of the unit. Potentially this fill was the Late Preclassic fill of Plaza Floor 2 removed during the construction of the BR-180 Burial 1 crypt. The lithic assemblage included a single chert scraper, two chert

cores, and 43 pieces of chert debitage. In terms of the faunal assemblage, two small mammal bones were identified and 16 pieces of freshwater shell. The most notable find was a jade bead.



Figure 6.136 Photograph of BR-180 Burial 2

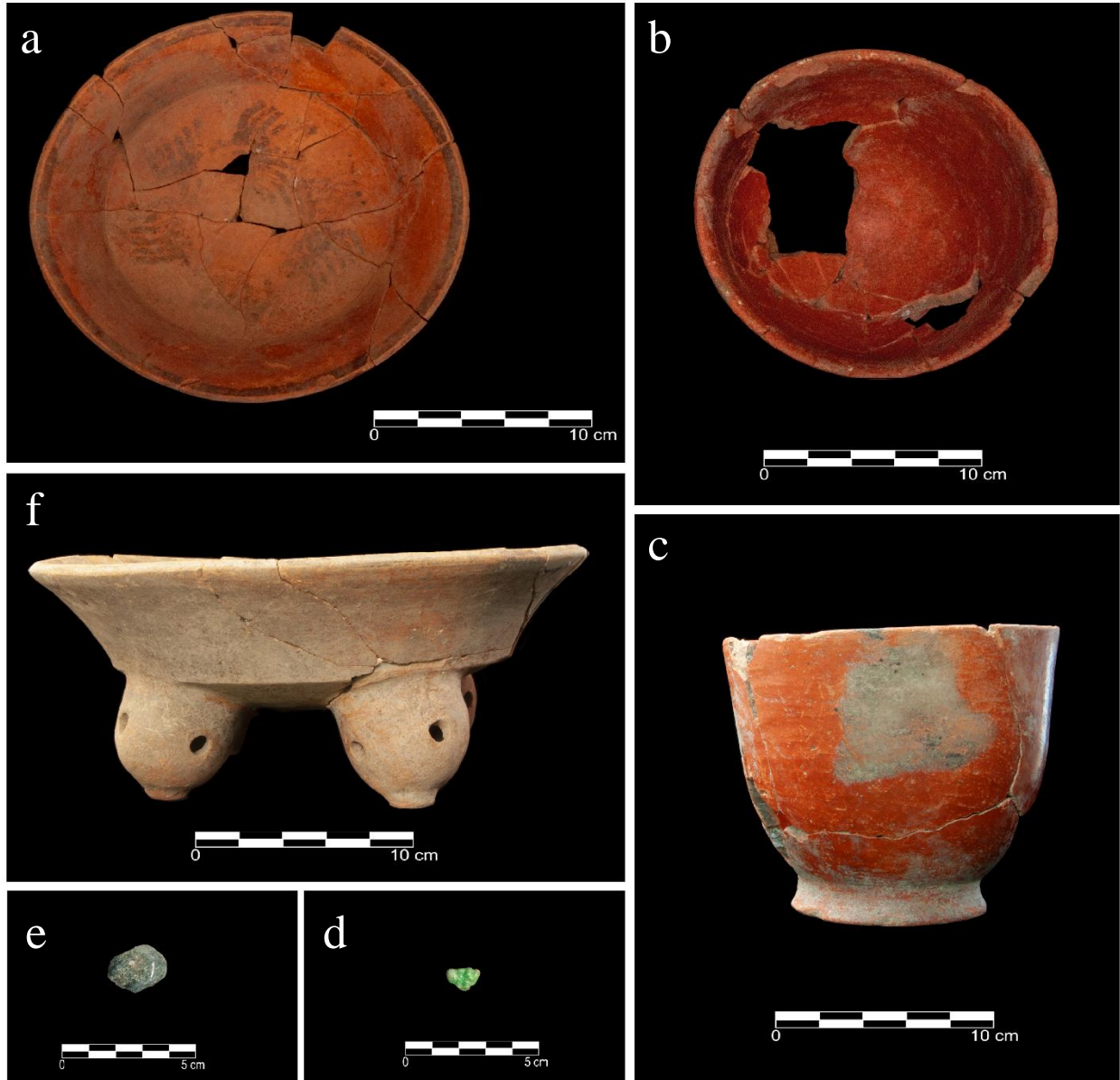


Figure 6.137 Grave goods from BR-180-BU2

Clockwise from top left: (a) Gavilan Black-on-Orange bowl (top down), (b) Aguacate Orange Privaccion Variety (top down), (c) Aguacate Orange Privaccion Variety (side view), (d) jade pendant, (e) large jade bead fragment, and (f) Gavilan Black-on-Orange bowl (side view)

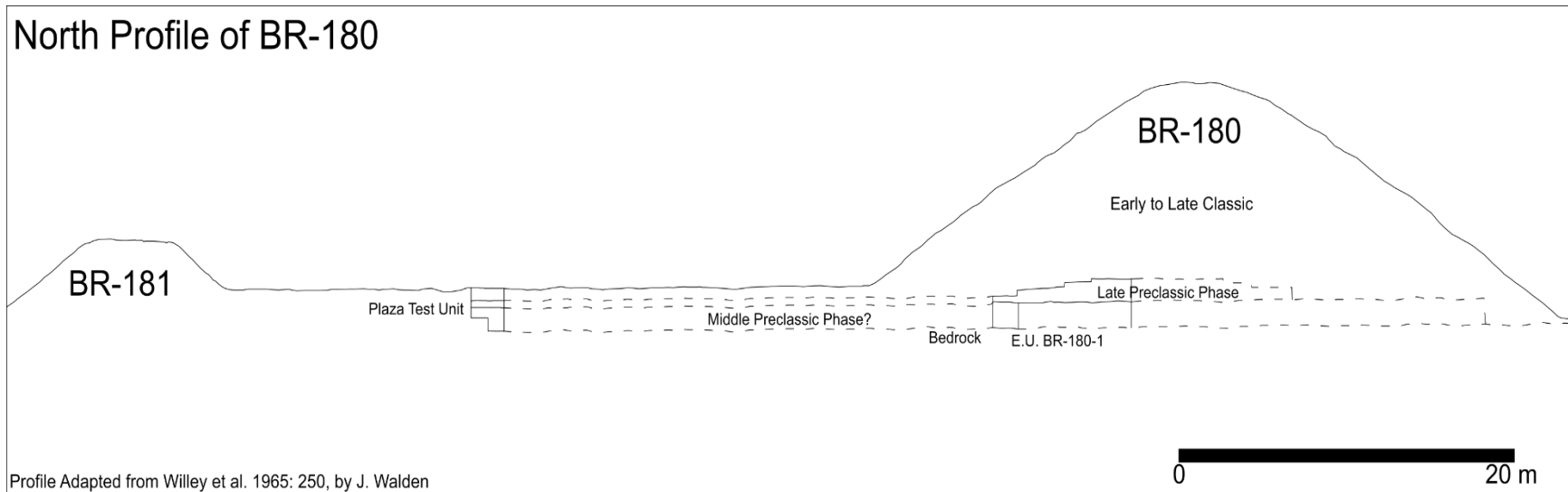
6.5.1.2.6 BR-180: Early Classic (AD 300-600)

Ford conducted salvage excavations at BR-180 in 1988 after the eastern triadic structure was bulldozed. These excavations identified exposed Late Preclassic and Early Classic construction phases on the eastern side of the structure (Anabel Ford, personal communication,

2019). Excavation and surface collections suggest that the pyramid was bulldozed from the west, and the upper eight meters of the structure were pushed over the eastern edge of the platform. High densities of Early to Late Classic materials were identified in the area immediately to the east of the structure. A 20-40 cm layer of heavily disturbed construction fill represents all that is left of construction phase 4. Associated ceramics churned up by plowing included some Tiger Run, but mostly Spanish Lookout types. A range of artifacts was recovered from this context including a granite barkbeater, a carved deer bone tube, a granite *mano* fragment, a fragment of greenstone, a quartzite grinding implement fragment, a chert biface fragment from the NBCBZ, and a granite grinding stone fragment. However, because of taphonomic disturbances associated with bulldozing and plowing, we cannot securely attribute these artifacts to this construction phase.

6.5.1.2.7 BR-180: Late-Terminal Classic (AD 600-1000)

BR-180 was an important elite eastern mortuary shrine from at least the Late Preclassic period onwards. The associated burials contained bichrome ceramics and jade, bone, and marine shell jewelry making them some of the wealthiest in the area at this time. Despite this affluence, the scale of architecture at BR-180 was small in relation to what it would eventually become in the Late Classic period. Phase 4 reflected an Early Classic phase structure. However, based on the proportions of Early Classic materials relative to other periods on the ground surface, it seems highly unlikely that a significant remodeling occurred at BR-180 during the Early Classic. This is paralleled by the lack of an Early Classic component on the plaza (Willey et al. 1965: 249-251). Therefore, the vast amount of construction on BR-180 and the addition of the northern and southern wings can tentatively be attributed to the early Late Classic period, like at Tutu Uitz Na. At least seven meters of this Late Classic structure had been bulldozed eastwards, off the back of the structural platform (Figure 6.138).



Profile Adapted from Willey et al. 1965: 250, by J. Walden

Figure 6.138 North profile of the BR-180 group showing architectural stratigraphy

Profile based on the plaza test cut and E.U. BR-180-1 (note the substantial scale of Early and Late Classic architecture relative to the excavated Preclassic contexts)

Further evidence for a Late Classic date for the majority of the structure comes from the density of Tiger Run and Spanish Lookout ceramics in the bulldozed fill which was pushed to the east of the structure. Previously, much has been made of the absence of Tiger Run phase ceramics in Willey and colleague's (1965) plaza test unit (see Weller 2009: 303; Yaeger 2003a: 53). Yet, as Willey and colleagues (1965: 289) acknowledge, we should not overinterpret the lack of Tiger Run phase construction in the plaza given the small test unit and the 75-100 year duration of this ceramic phase. Tiger Run and later Spanish Lookout I ceramics are ubiquitous across the mound surface. The northern and southern wings of the eastern triadic structure were also fairly small relative to the height of the central pyramid. This differential in size tentatively supports a later date for the addition of these components. This observation is further corroborated by the dense distributions of Late Classic ceramics in the areas immediately to the south and north of the central structure. While it is possible that BR-180 represented an early E group that was transformed into an eastern triadic structure, it seems more likely that the structure followed a similar trajectory to its smaller counterpart at Tutu Uitz Na, and was a simple eastern mortuary shrine that was remodeled into an eastern triadic structure in the Late Classic following the rise of Lower Dover. Our surface collections and excavations support the initial dating of the BR-180 group by Willey et al. (1965), including the complete absence of New Town ceramics. BR-180/168 remains the only context at Barton Ramie which lacks Postclassic materials, suggesting that Late Postclassic re-occupants of the region purposefully avoided BR-180 (Hoggarth et al. 2014).

6.5.2 The Commoner Households of the Texas District

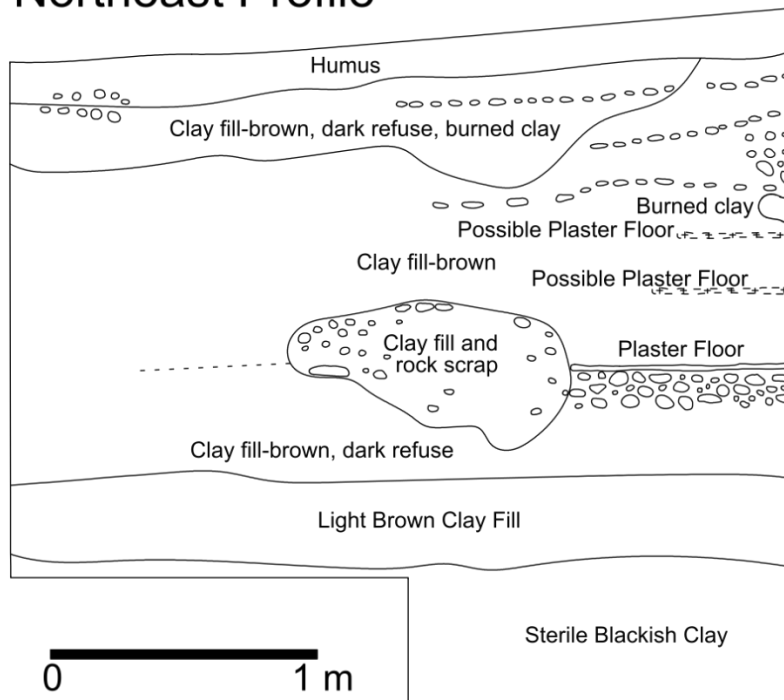
A total of eight commoner households from the Texas District were sampled as part of this dissertation (see Figure 6.121). This sample was more opportunistic than the sampling strategy employed at Tutu Uitz Na and Floral Park as it was based on the sample excavated by Willey and colleagues (1965). Fortunately, their sample was roughly comparable to the stratified random sampling technique employed at the other two districts. Unlike the other two districts, there were fewer low-status commoner residences included in the sample but this seems to have been more a product of the fact most commoner households at Barton Ramie were more successful than their peers on the southern side of the Belize River. Portable item wealth and architectural volume did

not correlate in such a similar manner to households in the Tutu Uitz Na and Floral Park Districts, although this is partly due to issues with the use of overall mound volumes at Barton Ramie (see Chapter 5.5.2). The Texas District sample contained three high-status commoner neighborhood head households with Early and Late Classic components (BR-170, BR-194, and BR-260), a commoner household of middling status with a long development trajectory (BR-174), three commoner households of middling status with Early and Late Classic components (BR-184, and BR-189), and two single component Late Classic households (BR-169 and BR-179). Dating of household contexts was based on re-analysis of ceramic materials and analysis of surface materials present on the ground surface today. This did not radically change the dating of contexts originally proposed by Willey and colleagues (1965).

6.5.2.1 BR-169

BR-169 was a small, single-component Late Classic commoner household associated with what was likely a larger patio group comprising either BR-237 or BR-173. The mound is relatively small (265 m³). The first construction and occupation dates to the early Late Classic period (Tiger Run phase). The structure appears to have had three clear construction phases associated with three floors (Figure 6.139). Some ephemeral cobble layers were evident closer to the ground surface and these probably represent the ballast of at least two more construction phases which may have been associated with Postclassic reoccupation (Willey et al. 1965: 245). The household was relatively wealthy compared to other households and contained relatively high proportions of feasting-related paraphernalia.

BR-169 Test Cut Northeast Profile



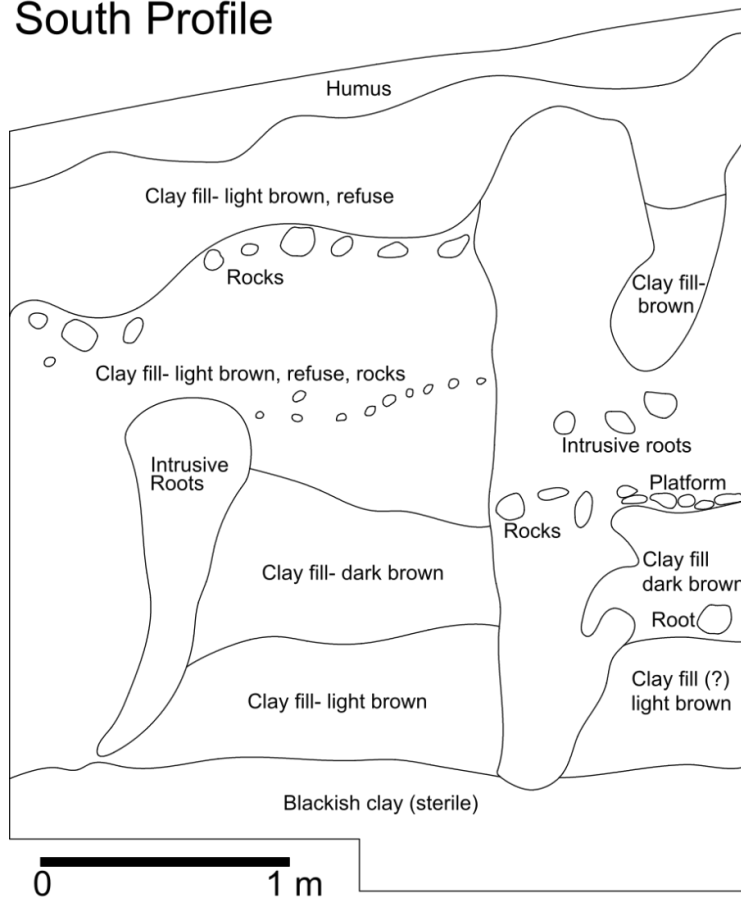
Profile adapted from Willey et al. 1965: Figure 139 by T. Watkins and J. Walden

Figure 6.139 Northeast profile of BR-169

6.5.2.2 BR-170

BR-170 is a large mound (1739 m³) that probably contained a small patio group comprising eastern and western structures (Willey et al. 1965: 245). BR-170 was assigned a population estimate of 10 people. The mound is located 110 m west of BR-180. An excavation unit placed on the east slope of the mound probably exposed the back wall of the eastern structure. The construction sequence was heavily bioturbated by roots, but a low platform is evident which probably was the eastern edge of an Early Classic house platform (Figure 6.140). Willey and colleagues (1965: 247) note the possibility of an earlier construction episode on this structure, a finding which was corroborated by my ceramic analysis. BR-170 yielded some decorated ceramics, but generally, wealth items were rare. The household contained some evidence of hosting feasts throughout both periods although the proportions of ritual items were generally low.

BR-170 Test Cut South Profile



Profile adapted from Willey et al. 1965: Figure 141 by T. Watkins and J. Walden

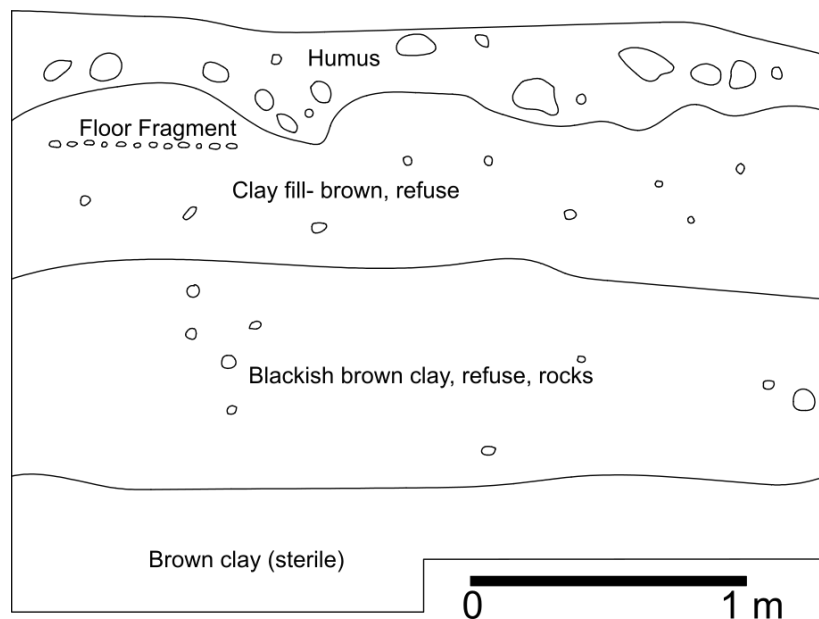
Figure 6.140 South profile of BR-170

6.5.2.3 BR-174

BR-174 is a small (118 m³) commoner household situated immediately southwest of the elite residential compound at BR-168. BR-174 probably formed a sizeable patio group alongside BR-179 and BR-175 (Willey et al. 1965: 247). Given its location, BR-174 and BR-179 may have housed commoner retainers associated with the intermediate elite family. Willey and colleagues put a 3x2 m unit just north of the center of this mound. Only a single poorly preserved floor was evident in the unit, but, based on buried fill strata, multiple construction episodes were apparent (Figure 6.141). Analysis of ceramics from BR-174 revealed that the lowest of these phases was a single-component consisting entirely of Jenney Creek ceramics. It is the only known Middle

Preclassic commoner context in the Texas District. Above this lay a sizeable Terminal Preclassic component. It seems likely that BR-174 was uninhabited for a portion of the Early Classic period because there is a dearth of Hermitage phase ceramics. Despite its longevity, BR-174 was not particularly affluent and showed no evidence of functioning as the head household of a commoner neighborhood. Ritual items and feasting-related paraphernalia were found in relatively low proportions regardless of phase.

BR-174 Test Cut West Profile



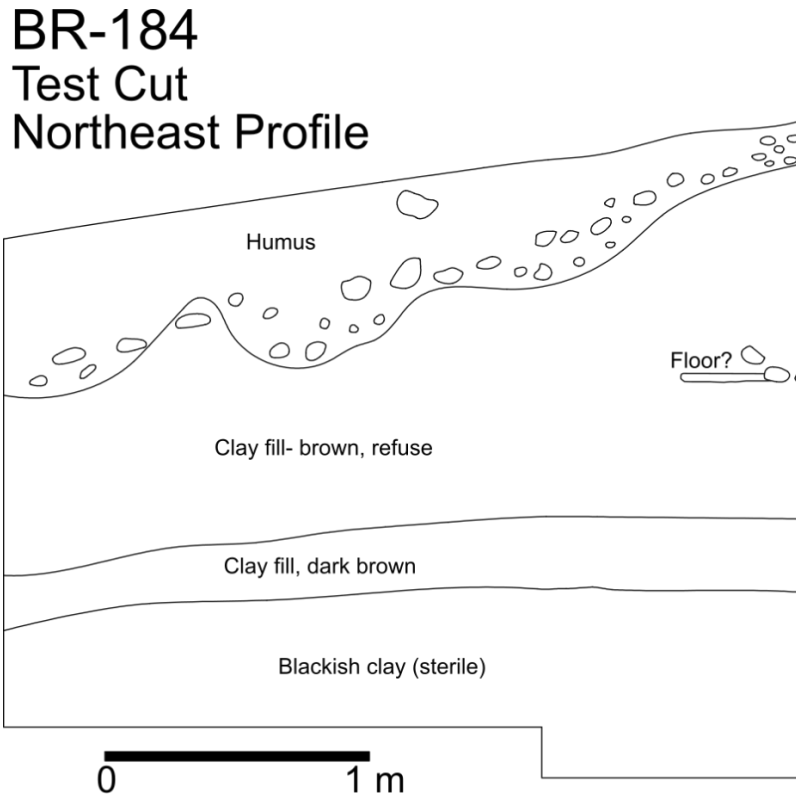
Profile adapted from Willey et al. 1965: Figure 142 by T. Watkins and J. Walden

Figure 6.141 West profile of BR-174

6.5.2.4 BR-179

BR-179, like BR-174 is another small (110 m^3) commoner household near BR-168. BR-179 is situated immediately south of BR-168 and was probably part of the patio group associated with BR-174 and BR-175. Despite constituting two structures of the same settlement group, these mounds were treated individually in the analysis due to their original division into separate household units by Willey and colleagues (1965). The settlement group may also have housed

commoner retainers associated with the intermediate elite household. Excavation involved a 2x3 m unit excavated into the northern side of the mound. No profile was provided for this household because there was no discernable stratigraphy. Ceramic analysis placed occupation firmly in the Late Classic period. Some Floral Park and Jenney Creek ceramics were present at deeper depths but these were intermixed with Spanish Lookout types (Willey et al. 1965: 249). The assemblage contained no items indicative of wealth, feasting, or ritual.



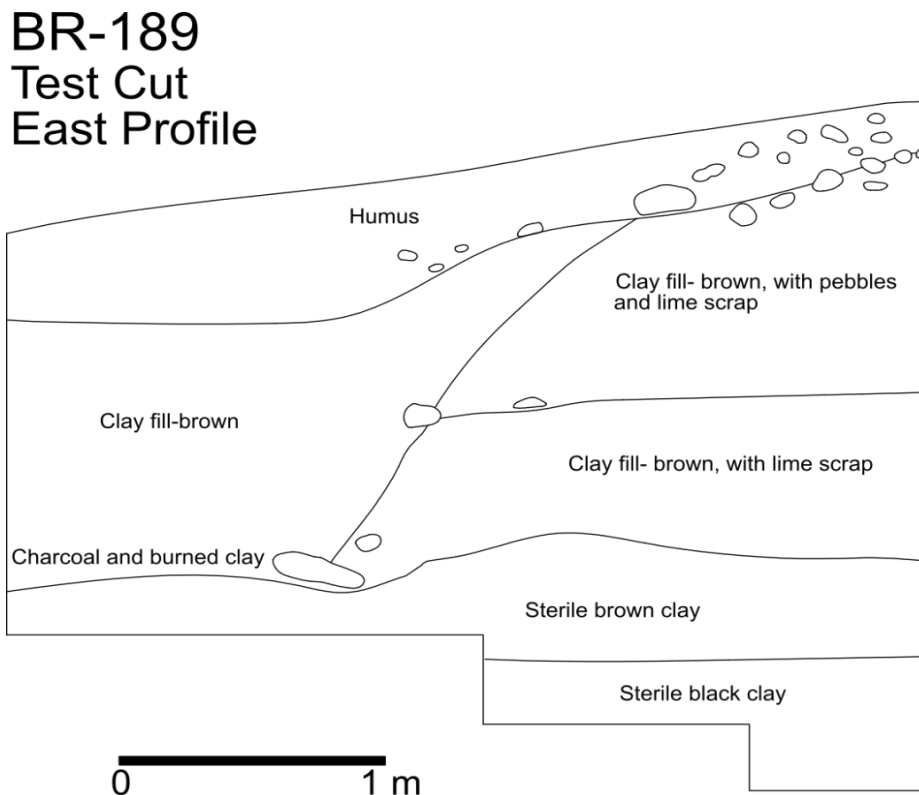
Profile adapted from Willey et al. 1965: Figure 146 by T. Watkins and J. Walden

Figure 6.142 Northeast profile of BR-184

6.5.2.5 BR-184

BR-184 is a large (636 m³) solitary commoner house platform situated on the western flank of the Texas District, overlooking the stream channel running between the Texas District and Island Neighborhood. Due to its size, BR-184 is speculated to have contained two small residential platforms situated around a central patio and was given a population estimate of 10 people. Willey and colleagues (1965: 250-252) excavated a 3x2 m unit into the top of the northern side of the

mound. Two floors were apparent on this mound, an upper one associated with the Spanish Lookout phase and a lower one associated with Tiger Run (Figure 6.142). Beneath this was dark brown clay fill which dated to the Early Classic period (containing both Floral Park and Hermitage ceramics). Generally, the proportions of artifacts were low in this early phase, but the two Late Classic components show high proportions of ritual and feasting related items, suggesting that despite being further from neighboring households than most, BR-184 may have served as the head of a small neighborhood.



Profile adapted from Willey et al. 1965: Figure 147 by T. Watkins and J. Walden

Figure 6.143 East profile of BR-189

6.5.2.6 BR-189

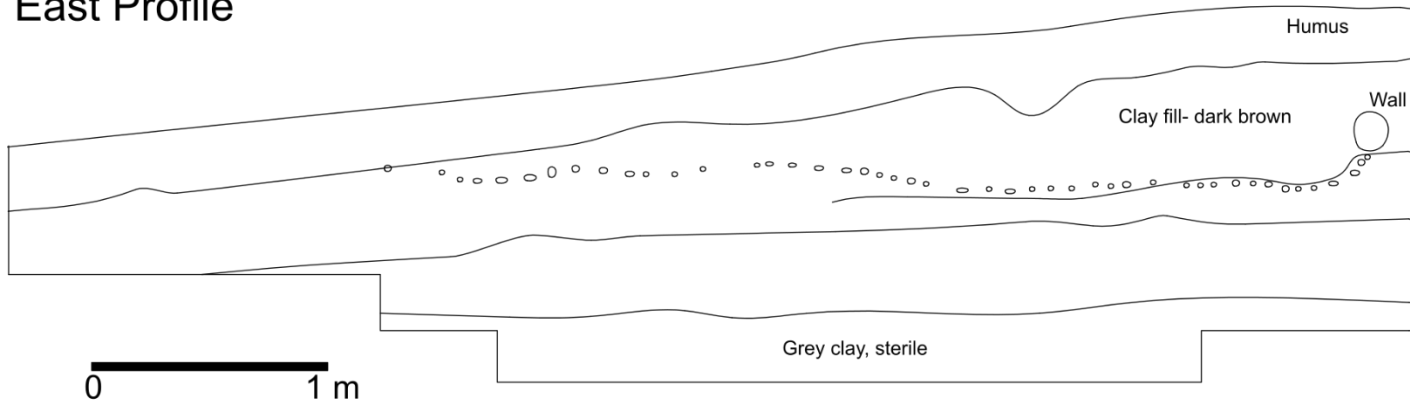
BR-189 is a sizeable (433 m³) elongated mound situated just southwest of BR-260 on the southern side of the Texas District. The settlement group is situated immediately north of the steep terrace leading down to the alluvial plain north of the river. BR-189 probably contains two separate residential platforms on its eastern and western sides (Willey et al. 1965: 252-253). Excavation

consisted of a 3x2 m unit placed on the northwest slope of the structure. One floor was evident but three construction phases seem clear, including a substantial Early Classic phase at the base of the structure, and two later Late Classic additions (Figure 6.143). BR-189 contained some evidence of a relatively high level of affluence in the Late Classic period including Saturday Creek and Benque Viejo polychrome sherds. However, issues excavating these contexts led to materials becoming mixed (Willey et al. 1965: 254). Therefore, my analysis of the initial construction episode relied solely on sherds which diagnostically dated to the Terminal Preclassic/Early Classic period (and not the Late Classic sherds which were erroneously introduced into the context).

6.5.2.7 BR-194

BR-194 was a sizeable (260 m³) southern structure in a large, fairly high-status commoner patio group also made up of BR-195, 197, and 198. Sampling from BR-194 is inconsistent with the overall sampling strategy as BR-198 appears to be the largest structure on this patio group. However, issues such as this one could not be avoided when working with pre-existing data. This settlement group is situated on the southwestern side of the Texas District. An elongated cross trench (14x2 m) was excavated north/south through the mound (Willey et al. 1965: 151). The structure appears to have had five or six construction phases associated with at least four floors. All of the floors identified dated to the Late Classic period (Figure 6.144). Limited evidence of Middle Preclassic occupation was apparent at the earliest levels, although these materials were omitted from analysis as there did not appear to be any associated Middle or Late Preclassic architecture (Willey et al. 1965: 154). The earliest clear construction phase dated to the Terminal Preclassic/Early Classic, and was present in the lower levels of the structure but this had no associated architectural features in terms of walls or floors and was represented only by fill. It is possible that conch shell placed on sterile soil prior to construction represented a dedicatory offering prior to construction (Weller 2009: 322). The ceramic assemblage associated with this fill episode contained some later Spanish Lookout types which were likely introduced to the context when Late Classic intrusive burials were interred. The uppermost construction phases contained five burials which all dated to the Spanish Lookout I phase (described by Willey et al. 1965: 153).

BR-194
Test Cut
East Profile



Profile adapted from Willey et al. 1965: Fig. 68 by T. Watkins and J. Walden

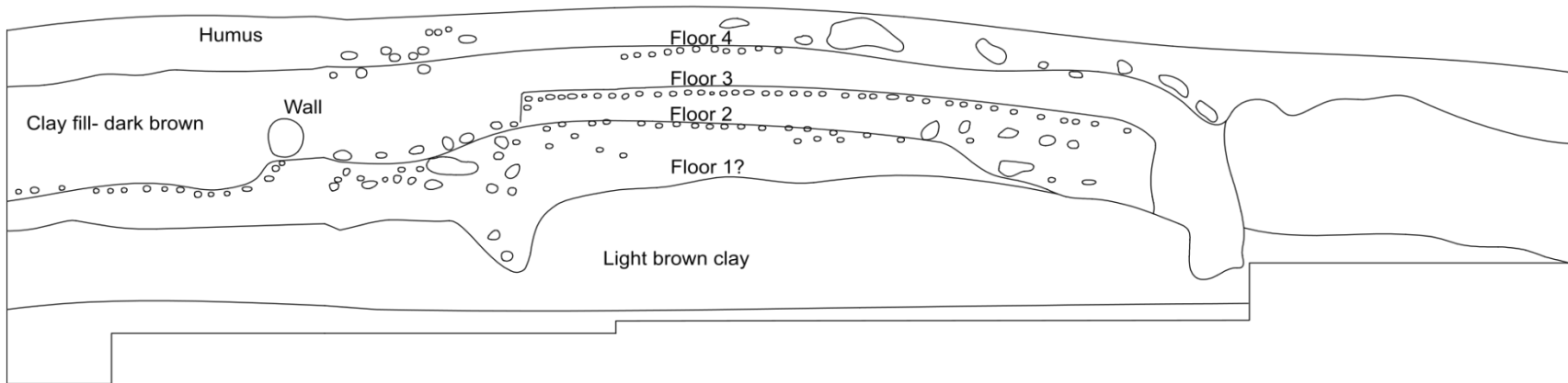


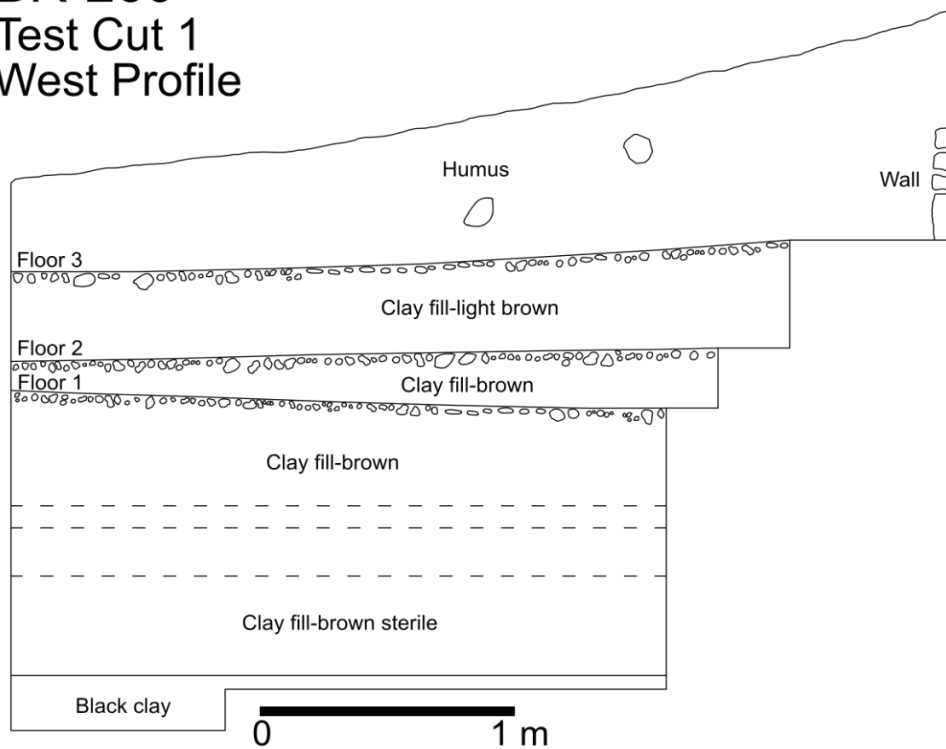
Figure 6.144 East profiles of BR-194

Southern part of east profile of BR-194 (top), northern part of east profile of BR-194 (bottom)

BR-194 Burial 1 contained an adult interred extended, prone with the head to the south. The burial was likely intrusively cut into the sterile grey matrix under the Early Classic fill. The Late Classic burial date was ascertained from the presence of Spanish Lookout II ceramics. The individual was missing their feet and several vertebrae according to field notes (see Weller 2009: 337). The burial contained six vessels, a Vaca Falls Red bowl placed inverted over the tibia, and a Yalbac Smudged-brown inverted over the back and shoulders. Placed under this Yalbac Smudged-brown bowl were two small miniature vessels (one being a Dolphin Head Red). The head was turned to the west to directly look at two small miniature vessels (one being Macal Orange-red) placed immediately in front of the crania. Other grave goods included five shell beads, a jadeite bead, and two serpentine beads. BR-194 Burials 2 and 3 were both interred together in the gray clay fill at the base of the structure. Both were extended, prone (sub)adults with their heads facing south. Both were in a very fragmentary condition. Grave goods included a Chunhuitz Orange vessel, a rosette shell adorno fashioned from thorny oyster (*Spondylus* spp.), and a bone awl (see Weller 2009: Fig. 4.178). *Spondylus* is fairly rare in the Belize River Valley, probably due to its position at the end of exchange networks reaching from the Pacific Coast (Keller 2012: 254). BR-194 Burial 4 was likewise located in the same layer as Burials 1-3. This burial comprised an adult placed extended, prone with their head to the south. This individual was not accompanied by any grave goods. BR-194 Burial 5 included a younger individual (6+ years), placed prone, extended with the head placed southwest. This burial was at a slightly higher elevation than the other four but it still seems to be intrusive based on the ceramics in the associated lots.

Collectively, BR-194 had a long construction history. The earlier phase(s) were heavily modified when the five intrusive burials were interred in the gray fill beneath the initial platform. The household (including BR-195, 197, and 198) probably functioned as the head of a commoner neighborhood. These structures are situated around a fairly sizeable central patio and the assemblages show high proportions of feasting-related paraphernalia and ritual items, especially for the Late Classic period.

BR-260 Test Cut 1 West Profile



Profile adapted from Willey et al. 1965: Figure 158 by J. Walden

Figure 6.145 West profile of BR-260

6.5.2.8 BR-260

BR-260 is located on the southern side of the Texas District and is one of the larger (880 m³) settlement groups in the district. Unlike other settlement groups at Barton Ramie, BR-260 was not plowed, and thus was excavated and mapped as a patio group (with four structures in the cardinal directions). The northern and western structures were both over two meters in height. Willey and colleagues (1965: 267) placed one excavation unit on the large northern structure, and a second on the smaller southern structure. The 3x2 m unit placed in the northern structure revealed three clear construction phases (with associated floors), although these had four intrusive burials cut through them. Floor 1 (and the fill beneath) dated firmly to the Early Classic period (Hermitage and Floral Park ceramics). Floor 2 dated to the early-middle Late Classic (Tiger Run and some Spanish Lookout I ceramics). Finally, Floor 3 (and the fill beneath) was laid in the Late Classic (Spanish Lookout I). Burials 2, 3, and 4 were deposited in the easternmost pit at some point after the laying of this floor, the latter being cut through, and only a light pebble matrix was apparent

in the cut (the floor was not replastered). Conversely, the second pit on the western side of the unit, which contained Burial 1 was cut through Floor 2 at some point in the Late Classic period prior to the construction of Floor 3 (Figure 6.145). The occupants of BR-260 were very wealthy and had access to well-made “feathered” obsidian blades and jade jewelry (Weller 2009: 205). Much of the obsidian showed little in the way of use-wear suggestive of easy access to material. Other high-status items included an elongated greenstone celt (see Willey et al. 1965: 472-476; see Weller 216-220 for celts).

BR-260 Burial 1 was interred in the western cut evident in Floor 2. This burial dated to the Late Classic period (Spanish Lookout I). An adult was interred 40 cm below the course of Floor 1. The individual was prone, with the head to the south. The arms were bent over the back and appeared tied. Grave goods were minimal comprising a single bone spatulate implement (Willey et al. 1965: 269). BR-260 Burial 2 was one of three burials interred in an eastern pit excavated in the Late-Terminal Classic (Spanish Lookout I-II) period, through Floors 1-3. Burial 2 was the uppermost of the three burials. This contained an adult individual interred prone with the head to the south. Willey and colleagues (1965: 269) note that the ankles were crossed, and speculate they had been tied. The hands were placed under the hips. A waterworn cobble was placed next to the cranium. A Vaca Falls Red bowl was placed inverted over the individual’s left shoulder and a Benque Viejo tripod bowl was placed inverted over the right shoulder of the individual and the bowl. This practice is highly analogous to the placement of Gavilan Black-on-Orange bowls over the upper torsos of individuals in Burials 2 and 3 at BR-180. The continuation of this localized mortuary practice is particularly fascinating considering that the Burial 2 at BR-260 was likely interred ~500 years after Burials 2 and 3 at BR-180. A Sotero Red-brown miniature jar was also included near the other two vessels. This vessel is similar to a miniature Belize Red jar found in SG 1 Burial 1 in the southern wing of the eastern triadic structure (Petrozza 2015; see Chapter 6.3.1.3.4).

BR-260 Burial 3 was situated under Burial 2 and also involved an adult individual placed prone, head to the south. The left leg was entirely missing, possibly from secondary mortuary practices involving curation and ancestor veneration (Weller 2009: 337-338; Willey et al. 1965: 269; see also Welsh 1988: 171; see Chapter 2.10.6). A carved jade jaguar pendant was placed near the cervical vertebrae. Other grave goods included two ceremonial obsidian blades (next to the left

elbow), a monolithic axe with a (pseudo)glyphic inscription incised on both sides (possibly an *ajaw* glyph), a ceremonial slate “monkey wrench” mace, and a long ceremonial serpentine celt (Willey 1956: 779). Ground stone “monkey wrenches” are relatively common in the Belize River Valley and are generally considered wealth items associated with elites, but are often found in common residential contexts (J. Braswell 2010: 178; Connell 2000: 219; Ebert and Fox 2016: 99; Peuramaki-Brown 2012: 300; Willey et al. 1965: 479-483). Monolithic axes remain relatively uncommon (Willey et al. 1994: 258-259; Thompson 1939: 171). The discovery of these artifacts in unison at BR-260 may suggest they were employed in the same activity (Halperin et al. 2020: 479), which Taube and Zender (2009: 207) believe to have been courtly gladiatorial duels. Furthermore, two bone tubes were placed parallel to the extended left forearm and a third obsidian blade was located by the left hand. Three Macal Orange-red drums were placed running parallel to the individual on the left side.

BR-260 Burial 4 was very similar in layout to Burials 1-3, comprising an adult individual interred extended, prone, head to the south. This individual had the hands placed beneath the hips and five obsidian ceremonial blades placed next to the left humerus. A bone awl was placed next to the right humerus. Two badly damaged vessels were included; fragments of a Dolphin Head Red next to the left elbow and a large Zibal Unslipped jar sherd was placed near the scapulae (Willey et al. 1965: 270). It remains unclear if the placement of this jar sherd represents the same tradition apparent in BR-260 Burial 2 and BR-180 Burials 2 and 3.

The second excavation was a 2x 3.15m unit, placed on the north side of the small southern structure. Excavation revealed five floors, two walls, and another burial. The earliest strata of fill dated solely to the Late-Terminal Preclassic period (containing Barton Creek, Floral Park, and Mount Hope ceramics). This was associated with a brown clay fill at the base of the structure. The second phase dates to the Early Classic and involved a low platform mound associated with Floor 1 and Wall 1. This context also contained ceramics from the subsequent early Late Classic phase which saw the encasement of this earlier phase in architecture and the construction of a new floor, Floor 2. The final three construction phases involving Floors 3-5 and Walls 2 and 4 all date to the Late Classic period. It is possible that Wall 3 and the final small portion of floor atop the apex of the platform was associated with Postclassic reoccupation. BR-260 Burial 5 was a Late Classic intrusive burial cut through Floors 1-3. This contained a young-adult interred prone with the head

to the south. The left hand was placed along the side and the right hand was placed under the hip. No grave goods were found. BR-260 reflects the residence of very high-status commoner neighborhood heads. Excavations revealed high proportions of wealth and ritual items and feasting-related paraphernalia in the Early Classic contexts. The proportions of these items increase dramatically across both structures in the Late Classic period.

6.6 Summary of Excavations and Analysis

Chapter 6 has provided an overview of the results of the settlement pattern analysis and the reconstructed districts and neighborhoods of the Lower Dover polity. Data obtained through excavation and analysis of pre-existing museum collections was presented for three of these districts. Investigation at the Tutu Uitz Na district focused on the Tutu Uitz Na center (SG 1), and six commoner households (SGs 3, 9, 11, 28, 41, and 51). Investigation at the Floral Park district focused on the Floral Park center (FPK Plaza A and Group 2), and six commoner households (SGs 34, 35, 129, 132, 142, and Group 3). Investigation at the Texas District focused on the BR-180/168 center, and eight commoner households (BRs 169, 170, 174, 179, 184, 189, 194, and 260). Data from the Tutu Uitz Na District was entirely derived from excavations conducted as part of this dissertation research. The commoner sample from Floral Park was largely derived from excavations conducted as part of this dissertation research, the commoner household Group 3 (SG 143) and data from the Floral Park center were gathered through ceramic, lithic and faunal analysis of materials excavated by James Garber and M. Kathryn Brown between 1994-1995 (as part of BVAP). The elite sample from Barton Ramie was obtained through a combination of excavation associated with this dissertation project and analysis of materials from Willey and colleagues' (1965) excavations. The Texas district commoner sample was entirely derived from analysis of materials from Willey and colleagues' (1965) excavations.

7.0 CHANGES IN WEALTH, WELLBEING, AND POWER AND AUTHORITY

The ways in which the rise of Lower Dover impacted levels of inequality among the surrounding population is fundamental to understanding how intermediate elite political power was affected by this rise. Investigating the extent to which centralized apical policies affected hinterland commoners in comparison to decentralized intermediate elite policies, will tease apart the political relationships underscoring the rise of Lower Dover.

Firstly, charting how the wealth, power and authority, and wellbeing of intermediate elites changed following the rise of Lower Dover helps address the larger questions about intermediate elite agency, the nature of apical elite co-option, and allows an understanding of the efficacy of the different strategies intermediate elites pursued. The rise of Lower Dover could have affected intermediate elites in a variety of ways. For instance, their wealth, wellbeing, and political power and authority could have increased, been undercut, gone unchanged. Alternatively, one of the above dimensions may have suffered but not the others. Further patterned variability could exist between the Tutu Uitz Na, Floral Park, and BR-180/168 intermediate elites.

Secondly, understanding patterned differences in commoner wealth and wellbeing between districts within the polity provides a broader picture of how the rise of the apical regime affected the general quality of life of the populace as a whole (M. Smith 2015). Understanding patterned variation in commoner wealth and wellbeing between the districts offers scope for distinguishing between apical elite or intermediate elite policies in shaping commoner life experiences. Hypothetically, the rise of Lower Dover might have dramatically changed the quality of life of intermediate elites and commoners alike (positively or negatively) or had little effect on commoner life. To simplify, a dramatic change would suggest that the Lower Dover apical regime was probably politically centralized and pursued internal policies, which had similar implications for households regardless of status. Likewise, no change generally in the wealth of the households (elite or commoner) would indicate that the Lower Dover polity was: **(a)** relatively decentralized; **(b)** did not or could not engage in economic policies that affected household wealth to a significant degree, or **(c)** sought to maintain the status quo (J. Marcus 1989). Examining the differences

between commoners and elites provides an idea of the extent to which centralized policies might involve, or be exacted through intermediate elites. For instance, changes in the wealth, or power and authority of intermediate elites may result from their co-option by apical elites, them taking advantage of a new economic situation, or their attempts to buffer their commoner retainues from top-down processes associated with the rise of the polity. Changes among intermediate elites and not commoners would suggest a general degree of political decentralization at the polity level, with the apical elite managing populations through intermediate elite brokers. Alternatively, variability between districts could take an array of forms, but would probably indicate that the intermediate elites were co-opted, but retained their ability to extract tribute and labor from commoners. As noted in Chapter 2, these elite practices could vary along the network/corporate dichotomy (Blanton et al. 1996). Another possibility involves commoners being affected in ways in which intermediate elites were not; this might speak to the apical elite sidestepping intermediate elite brokers and interacting directly with the commoner masses. A distinct increase in the wealth of commoners but not intermediate elites would suggest that the rise of Lower Dover offered commoners newfound economic opportunities and the potential for upward social mobility. Conversely, if commoner wealth and wellbeing decrease dramatically, but little change is evident among intermediate elites this would speak to commoners being hit asymmetrically by the economic and labor burdens associated with the rise of the polity.

Thirdly, the issue of whether the Lower Dover polity represents an external intrusion of a non-local apical elite, the ascendancy of a single intermediate elite household, or a confederacy of multiple local elite households is evident in the wealth, wellbeing, and political power and authority of intermediate elites following the emergence of Lower Dover. Hypothetically, if all the intermediate elites suffer a reduction in wealth and status then this would likely reflect Lower Dover being an external imposition that did not benefit any of the local elites. Conversely, if Lower Dover represents the autochthonous paramountcy of a local elite, then I expect either the abandonment of one of the intermediate elite centers (if the elite household relocated to Lower Dover and became the apical elite), or a dramatic rise in wealth and status at a single intermediate elite center (reflecting some household members staying put but being rewarded due to their close relationship with the apical elite). Lastly, if Lower Dover represented a local confederacy of intermediate elite households, then a general rise in wealth and status across all three

intermediate elites is expected as a result of their collective investment in the center. These possibilities can be compared with the findings of ongoing doctoral dissertation research at the Lower Dover core by Guerra (n.d.).

7.1 Diachronic Shifts in Elite Wealth, Wellbeing, and Power and Authority

In this chapter, I first discuss shifts in intermediate elite wealth, wellbeing, and political power and authority. Next, I examine the changes in commoner wealth and wellbeing within and between districts. Then I put the two together to examine variability across the polity and what this variability suggests about apical elite policies, and intermediate elite and commoner responses to the rise of the Lower Dover polity.

7.1.1 Reconstructing Elite Wealth, Wellbeing, and Power and Authority

There are many ways to conceptually parse wealth, wellbeing, and political power and authority, but as noted in Chapters 2 and 4, I am using specific, narrow definitions for the purposes of my analysis. Following on from Chapter Two, power and authority are seen as the capacity to control and organize people, resources, and territories (Mann 1986). The scale of elite architecture provides a reasonable relative gauge of the ability of the elite to control and organize commoner labor (Abrams 1994; Arnold and Ford 1980; McCurdy 2019). Deliberating between whether this control of labor is reflective of power (coercive), or authority (publicly mandated) requires an understanding of the function of the structures being built, the number of laborers involved, the wealth and wellbeing of the laborers, and strategies of feasting and ritualization on the part of the intermediate elite (see Chapter 10). Intermediate elite wealth is approached through the proportions of high-value items in architectural fill in intermediate elite contexts, and the relative value of items placed in burials and caches (M. Smith 1987, 2015). Intermediate elite wellbeing is assessed through their quality of life derived from bioarchaeological data from elite burials. Common indicators of poor quality of life include trauma and pathologies. Limited sample size means this line of inquiry remains largely qualitative and descriptive in nature in this dissertation.

7.1.2 Patterned Variability in Elite Political Power and Authority

Clear patterns emerge in terms of access to labor for construction. Figure 7.1a shows the proportion of structural increase from the Middle Preclassic to the Terminal Classic. These graphs represent the proportion of total labor invested in a structure during each period. All three intermediate elite households see a proportional increase in construction in the Late Classic period following the rise of Lower Dover. These increases show that despite the construction of the sizeable civic-ceremonial and palatial architecture at the Lower Dover center (158000 m³), intermediate elites could draw on greater commoner labor for their own constructions than ever before. The Floral Park center saw the greatest proportional increase in labor investment in the Late Classic period. This increase in labor was invested in remodeling the eastern pyramidal structure on the main ceremonial plaza, and the construction of a new elite residence at Group 2 (Brown et al. 1996; Walden et al. 2020b). In contrast to Floral Park, Tutu Uitz Na sees a less dramatic but still sizeable proportional architectural increase. At Tutu Uitz Na this labor was invested into the northern residential structure, the expansion of the plaza, and the addition of northern and southern wings on the eastern mortuary structure to remodel it into an eastern triadic structure (Biggie et al. 2019; Walden and Biggie 2017; Walden et al. 2018; Walden et al. 2020a, 2020c). Labor investment increased at the BR-180/168 center also, but not as significantly as at Tutu Uitz Na or Floral Park. This labor was invested in a major remodeling at the BR-180 ceremonial precinct which probably also involved the addition of northern and southern wings to the eastern mortuary structure to modify it into an ancestral eastern triadic structure (Walden et al. 2020c).

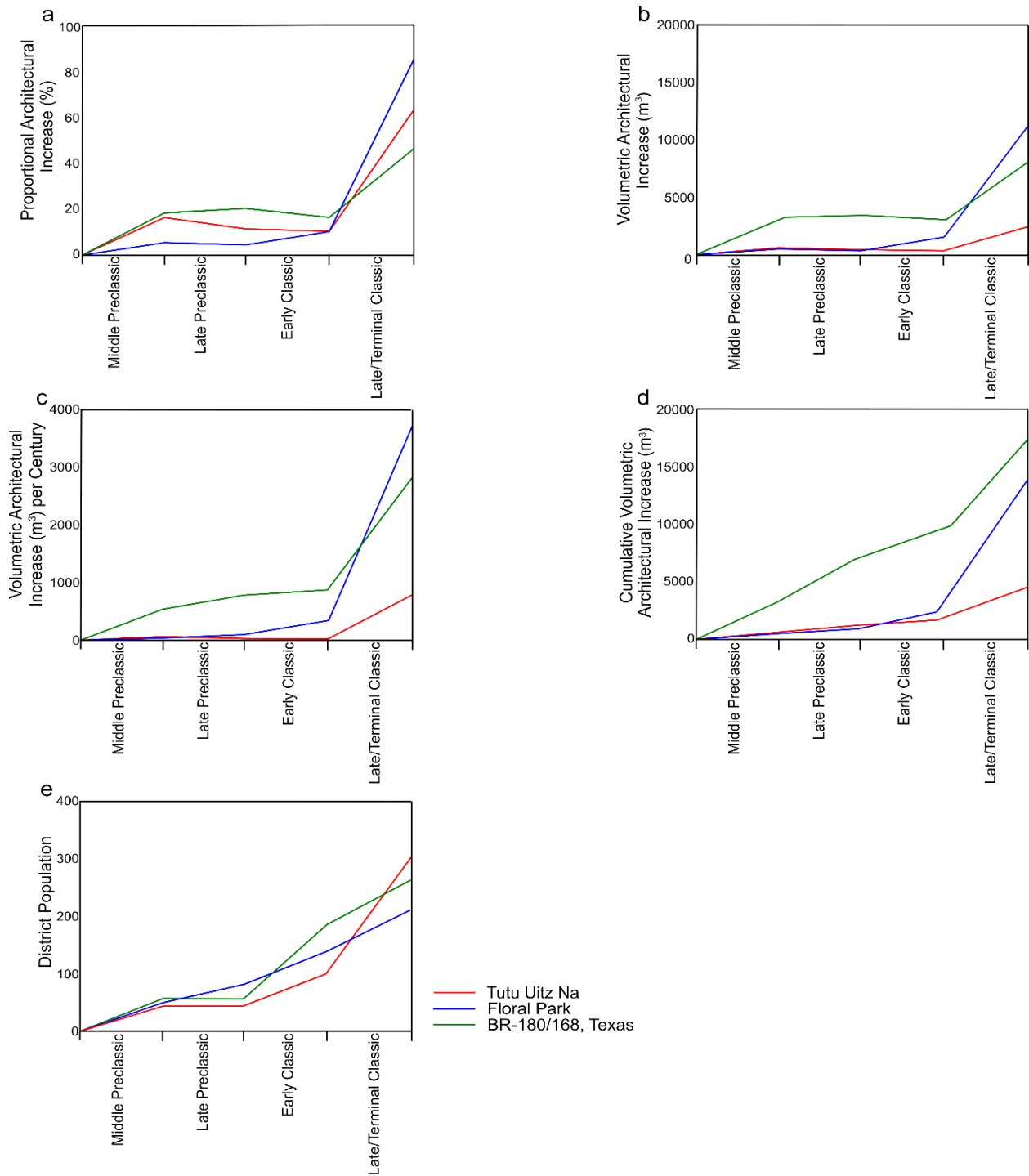


Figure 7.1 Line graphs of intermediate elite architecture

Graphs show: (a) Proportional increase in architecture, (b) Cumulative volumetric increase in architecture (m³), (c) Volumetric architectural increase (m³) per year, (d) Cumulative volumetric architectural increase (m³), (e) District populations over time

Figure 7.1b shows the volumetric increase in cubic volume of architecture at the intermediate elite centers from the Middle Preclassic through to the Terminal Classic. In contrast to the proportional investment in architecture (Figure 7.1a), using the actual volume invested during each phase allows a quantifiable comparison of how much architectural volume was constructed. The important difference here being the smaller size of Tutu Uitz Na in comparison to the other centers, while the amount of architecture constructed at Tutu Uitz Na in the Late Classic was proportionally high, the actual volume of this architecture was pretty small in comparison to Floral Park and BR-180/168.

Figure 7.1c shows the same volumetric increases associated with each phase, but in this graph, they are normalized by the length of the construction time periods to show the cubic volumetric increase per century. Once the duration of different periods is taken into account, the Late Classic architectural increase is shown to be even more substantial, as this time period was shorter than some of the earlier phases.

Figure 7.1d shows the cumulative volumetric architectural increase over time, including investment in previous periods. This cumulative graph provides a different, but complementary perspective by taking into account labor investment during previous periods, providing a good idea of the total impressiveness of architecture through time, but misrepresenting the amount of commoner labor invested in a specific period. The important finding in this instance being the larger size of BR-180/168 than Floral Park and Tutu Uitz Na. This difference was masked in the earlier graphs, which focused on the relative construction investment per phase because these graphs underrepresent slow and steady accretional construction growth, as is the case at BR-180/168, and inflates massive short-term increases like those apparent at Floral Park. This graph is important because the cumulative architectural volume, regardless of when it was constructed, would have conferred prestige on its inhabitants and improved their quality of life (less susceptible to floods or pests; see Abrams 1994: 32-36). While the pole and thatch structures constructed atop the large masonry platforms could still harbor many of the parasites present in commoner housing, the elevation of the platform probably kept a variety of creatures out, provided access to cool breezes, and dramatically reduced flood risk, which was especially important if people were fertilizing surrounding agricultural plots with night soils (Abrams 1994: 32-36; A.F. Chase and D.Z. Chase 2014: 11). Subsequently, a higher quality of life can be ascribed to housing. In contrast

to the intermediate elites, the apical elites living in the corbelled vaulted palace at Lower Dover would have experienced even greater benefits in terms of quality of life.

These patterns in architectural construction can be contextualized through comparison with the district populations shown in Figure 7.1e (see Chapter 5.2.2 for population estimates, see Chapter 6.2.10 for results). The Tutu Uitz Na District is the least populous district from the Middle Preclassic through to the Early Classic periods, but grows dramatically in the Late Classic, becoming larger than the other two districts. Generally, architectural increases over time seem tied to population at Tutu Uitz Na. For instance, construction rates are low during periods in which district population is low and vice versa. In contrast, the Floral Park District is the most populous district in the Preclassic and shows gradual increases in population over time, but this slows in the Late Classic period, leaving it the least populous district. The relationship between population and architectural growth at Floral Park differs from that at Tutu Uitz Na. At Floral Park construction is low earlier on when population is fairly low, however in the Late Classic when construction increases dramatically, population declines. Lastly, the Texas District is the most populous in the Middle Preclassic period, sees a slight population decline in the Late Preclassic before increasing dramatically in the Early Classic period, becoming the largest district at this time. Population growth however slows substantially in the Late Classic period. The relationship between district population and architectural scale is more complicated at the Texas District. The initial Preclassic construction program, which is fairly substantial, occurs at a time of decreasing district population. In contrast, in the Early Classic when population rises, construction slows. However, in the Late Classic period, when construction increases, population falls. Collectively, the picture which emerges when architectural construction and population are compared suggests that periods in which intermediate elites required higher levels of commoner labor investment potentially saw out-migration and/or a suppressed birth rate. This may represent the type of scenario Brumfiel (1983) envisions where commoners are sufficiently mobile and can choose between intermediate elite patrons. Ultimately, the differential relationships between intermediate elite architectural scale and population are confounded by the fact the data are not temporally precise enough to understand the degree to which increased labor burdens may have led to the out-migration of commoners.

To summarize, Figure 7.1a reveals that Floral Park and Tutu Uitz Na proportionally invested more labor in architecture than BR-180/168 in the Late Classic period. In contrast, Figure 7.1b shows the actual amount of cubic volume constructed during each phase, showing that Tutu Uitz Na despite having a high proportional construction increase in the Late Classic was smaller than the other two intermediate elite centers. Figure 7.1c shows the volumetric increases associated with each phase normalized by the length of the time periods, revealing that the Late Classic increase in architectural volume at the three centers was more pronounced. Figure 7.1d shows the cumulative volumetric architectural increase over time, emphasizing the larger size of BR-180/168 than Floral Park and Tutu Uitz Na. At the end of the Early Classic period BR-180/168 (9060 m³) was almost seven times larger than Tutu Uitz Na (1386 m³) and four times larger than Floral Park (2245 m³). The high proportional increase in architectural investment noted at Floral Park (Figure 7.1a) saw the cumulative architectural volume of Floral Park increase from 2245 m³ to 13471 m³. The architectural increase at Floral Park propelled it into the same league as BR-180/168 (17643 m³) in terms of architectural scale. BR-180/168 controlled greater commoner labor during the Middle Preclassic to Early Classic periods than their peers at Tutu Uitz Na and Floral Park. However, with the ascendancy of Lower Dover, things changed. While Tutu Uitz Na saw a similar large proportional increase in architecture as Floral Park in the Late Classic, when the cumulative architectural volume is taken into account this seems more meager. Tutu Uitz Na remains a relatively modest-sized center in the Late Classic (3726 m³). District-level populations seem intertwined with labor estimates in interesting ways which may suggest commoners possessed sufficient residential mobility to move when intermediate elite labor tax rates became too high.

Figure 7.1 reveals divergent elite strategies relating to the amount of labor they could control. Architecture at Tutu Uitz Na increases roughly proportionally with district population in the Late Classic period, while the volumetric increase shows that the actual volume of the architecture was relatively modest (Figure 7.1b). This suggests that the Tutu Uitz Na intermediate elite architectural expansion probably did not greatly impact the workload of the local district populace. In contrast, the opposite dynamic is apparent at Floral Park. Here, the proportional increase in architecture was only slightly higher than Tutu Uitz Na, yet this would have translated into more work in terms of the architecture volumetric increase especially given the relatively small workforce of commoners. Some commoners may have

chosen to leave Floral Park and move elsewhere (potentially Tutu Uitz Na) due to the onerous labor burdens. Lastly, while the proportional increase in architecture at BR-180/168 seems relatively modest, this is because the architectural investment was always very high (Figure 7.1b). While population at BR-180/168 only increased slightly in the Late Classic period, it is unclear whether the increased labor demand would have been viewed as heavy by the surrounding commoners because the BR-180/168 elite had established a long precedent of substantial labor investment in construction dating back to the Middle Preclassic period (Figure 7.1b).

An architectural energetics approach allows a much finer-grained understanding of the person-days invested in construction, and the relationship between labor organization and population (Abrams 1994; McCurdy 2016a). The methods involved in this approach are outlined in Chapter 5.6.2. This approach is advantageous because it also takes into account the labor involved in extracting and moving construction materials. While the extraction of materials yielded similar rates at the three intermediate elite centers, the costs associated with moving limestone and river cobble fill to BR-180/168 was substantially higher than the costs of moving such materials to Tutu Uitz Na and Floral Park. The approach also provides a good understanding of annual labor tax at the district scales allowing a better understanding of the dynamics outlined in Figures 7.1a-e above. The findings of the architectural energetics analysis suggest different systems of labor organization potentially underpinned construction in the different districts (see Abrams 1994). Figure 7.2a shows labor tax rates per person per year in each district based on a 60% dependency ratio suggested by Wood (1998). Analysis using these rates suggests construction labor rates were generally low, the only notable exception being Floral Park in the early Late Classic period (Tiger Run phase) which was when most of the elite architecture was constructed and Plaza A was remodeled. Labor organization at the Texas District varies over time, whereas Tutu Uitz Na shows an increase in labor tax in the early Late Classic period (Tiger Run phase) but this tapers off as the Late Classic progresses. Figure 7.2b shows labor tax rates per person per year in each district based on the 20% dependency ratio used by McCurdy (2016a, 2016b). This lower dependency ratio inflates the annual person-days associated with construction, but the same pattern appears. Using this 20% dependency ratio, Floral Park had a labor tax rate of 13 days a year in the early Late Classic period (Tiger Run phase).

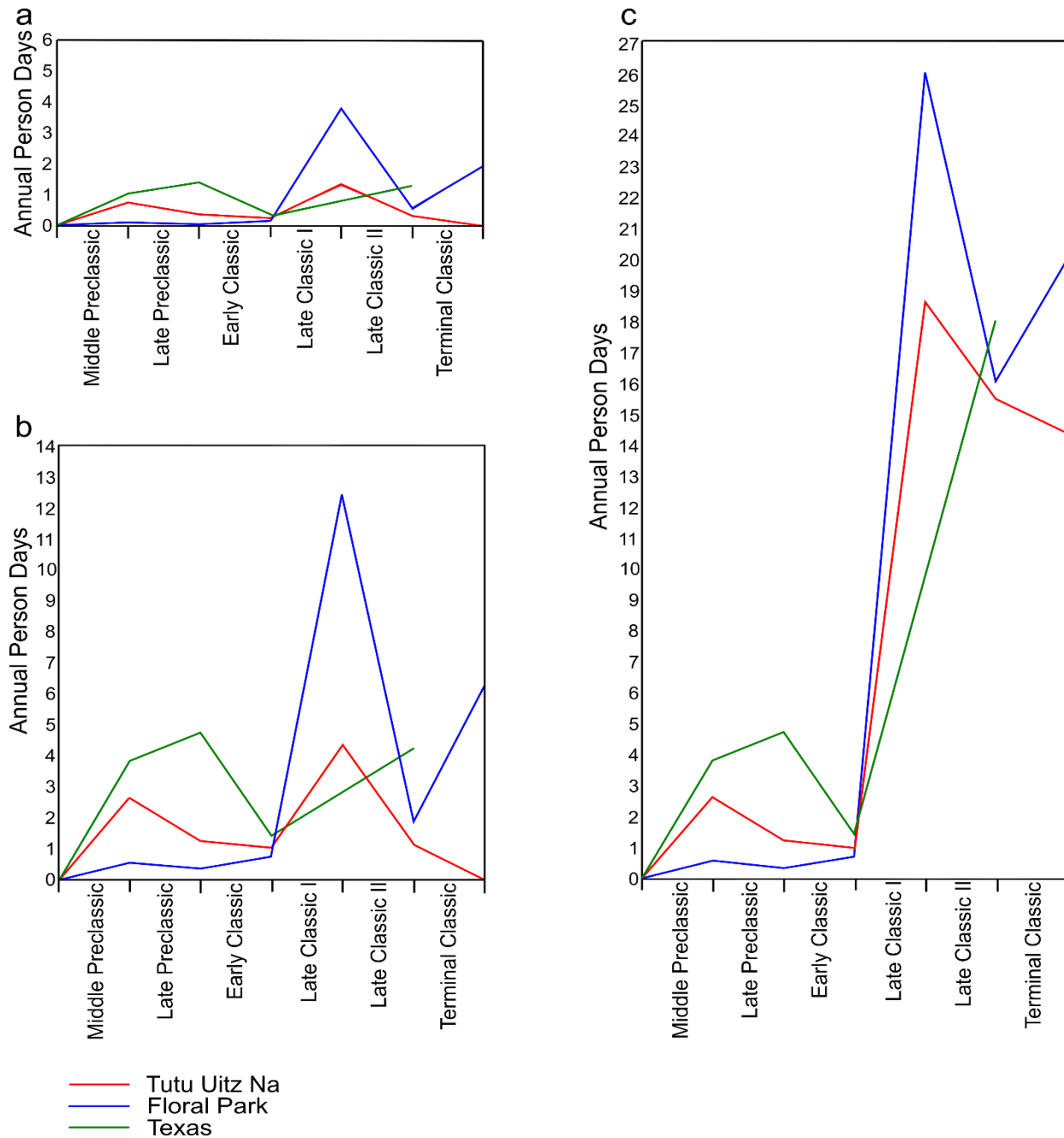


Figure 7.2 Line graphs showing intermediate elite architectural energetics

(a) Annual person-days invested in the construction of intermediate elite architecture based on a 60% dependency ratio. **(b)** Annual person-days invested in the construction of intermediate elite architecture based on a 20% dependency ratio. **(c)** Annual person-days invested in the construction of intermediate elite architecture based on a 20% dependency ratio, including labor costs of the Lower Dover civic-ceremonial center

Lastly, Figure 7.2c includes the labor estimate for the construction of the civic-ceremonial center at Lower Dover with the 20% dependency ratio (divided equally among the entire Late Classic population). This estimate likely reflects the most accurate construction labor costs for the Late Classic period. The energetics estimate for Late Classic Lower Dover is somewhat problematic as data at the necessary resolution were not available (see Chapter 5.6.2). Unlike numerous types of ancient monumental earthworks which could be constructed gradually over time, Classic Maya constructions had to be finished to function effectively. The time-sensitive nature of construction is difficult to incorporate into this model as it stands, but it is important to note that actual construction almost certainly occurred in shorter, sharper bursts than can be modeled given the nature of ceramic phases and radiocarbon date ranges. This means that labor costs were likely substantially higher for certain years than others. It remains likely that these different construction projects were organized so they did not coincide however. For instance, construction at Tutu Uitz Na likely occurred during years when major construction programs were not occurring at Lower Dover.

The process of calculating architectural energetics is fraught with difficulties. Rather than attempting to arrive at a completely accurate understanding of construction costs, the approach is more useful as a comparative endeavor to understand variability in construction costs between contexts. I employed a method based closely on the work of Abrams (1994) and McCurdy (2016a), and while this was biased in some ways, it provided consistent and comparable findings. The original method outlined by Abrams (1994) was developed to compare residential architecture not monumental architecture, hence the labor costs of building at height were never calculated. This is important when dealing with the pyramid at Floral Park, the eastern triadic at BR-180, and the palaces and temples at Lower Dover. Following the original approach outlined by Abrams (1994), maintenance costs are also not taken into account in this application of the model. Maintenance costs would however be disproportionately higher for larger monumental architecture. One of the most labor-intensive tasks involved in construction is the preparation of lime plaster. While all the structural platforms would require regular replastering, the costs of this maintenance would be especially high for the *sacbe* at Floral Park. For these two reasons, the analysis underestimates the labor tax rates of the Floral Park and BR-180/168 elites.

Labor estimates for the Middle Preclassic are consistently fairly high among all contexts. Multiple scholars have noted a Middle Preclassic propensity for leveling hilltops and building out, not up, resulting in large architectural plateaus (Brown and Yaeger 2020; Powis et al. 2020; Rawski 2020). This dynamic is apparent among the emerging elites of the Lower Dover area, although the structures are in no way comparable in scale to some of the large platforms encountered elsewhere in Mesoamerica (R. Hansen et al. 2020; Inomata et al. 2020). Labor estimates for the Late Preclassic deviate in that BR-180/168 continued to see increases in labor extraction while the Tutu Uitz Na and Floral Park elites' ability to command labor decreased slightly. This variability is noted in the following Early Classic period, when the ability of the BR-180/168 elite decreased dramatically, whereas the Tutu Uitz Na elite only saw their labor drop slightly. Floral Park in contrast saw a slight increase in the ability to control labor. Lastly, the early Late Classic period saw a dramatic increase in the ability of all three intermediate elite households to command labor. This is most dramatic at Floral Park but is also relatively high at Tutu Uitz Na. The temporal resolution at BR-180/168 is more problematic due to the bulldozing of the center, but it seems a similar pattern occurred. The Late Classic II saw a sizeable decrease in elite labor control at Tutu Uitz Na and Floral Park. The Terminal Classic saw the collapse and abandonment of Tutu Uitz Na and cessation of all construction by AD 850. In contrast, the Terminal Classic Floral Park elite could command more person power. While the large terminal remodeling of Group 2 is only dated using ceramics, these findings are corroborated by the fact that this involved the construction of a Terminal Classic round structure, a type of structure that only became common in the region post AD 800/850 (Harrison-Buck and McAnany 2013; Helmke 2006).

When placed in comparative contexts these labor rates do not seem particularly high. For instance, at the village of Chan Kom, adult males invested 15% of their time in communal labor, resulting in ~50 days of annual labor (Redfield and Villa Rojas 1943: 80). This finding roughly corroborates Erasmus (1956: 280) who suggests around 45 days a year (albeit only 25 “productive days”). These estimates involve a range of tasks however, not just construction of elite architecture but also pooled labor for agricultural tasks. If in fact, pooled labor may have been invested in various types of archaeologically less visible pursuits like landscape modifications, agriculture, and military duties, then the labor costs at some districts, like Floral Park would be quite high. Abrams (1994: 101) however notes that anything above 20 days a year is high. For instance, Han

Dynasty China set *corvée* labor tax rates of around one month a year for adult males (Loewe 1968 175). While attempting to understand how the intermediate elites compare with those in other regions at other times is interesting, the important implication of the energetics approach is the regional variability between districts at Lower Dover. Lastly, it is also worth noting the fact that the labor estimates associated with construction seem “reasonable” serves to corroborate the district and polity catchments reconstructed in Chapters 6.2.5 and 6.2.10.

To summarize the trends, all the intermediate elites show an increase in their power and authority in the Late Classic period. However, when one takes a closer look there are important differences. Despite having the largest district population, Tutu Uitz Na remains the smallest center. Furthermore, a sizeable proportion of architectural investment is invested in the expansion of the plaza to incorporate more commoners into ceremonies. This might speak more to the elite possession of publicly mandated authority instead of coercive power. Floral Park on the other hand potentially wielded more coercive power than publicly mandated authority. The architectural increase among the intermediate elites is dramatic, especially given the fact the workforce was smaller than Tutu Uitz Na or BR-180/168. Moreover, a significant portion of this labor investment went into the construction of a sizeable private elite residence (Group 2). The relationship between power and authority is further unpacked in terms of commoner wealth and wellbeing (see Chapter 7.2. and Chapter 9). Lastly, the BR-180/168 elite had long possessed access to a large commoner workforce, and possessed sufficient power and authority to mobilize this labor in monumental construction. The proportional increase in monumental architecture seems minor during the Early to Late Classic transition at BR-180/168, although this involved far more cubic meters of fill than Tutu Uitz Na for example. It remains possible given the scale of BR-180/168 that labor was coming from the adjacent Island Neighborhood and Northeast Neighborhood.

7.1.3 Intermediate Elite Wealth

The increased ability of the Late Classic intermediate elites to draw upon commoner labor juxtaposes with a general decline in intermediate elite wealth during this period. The Tutu Uitz Na and BR-180/168 intermediate elites experienced a sharp decline in wealth in the Late Classic period (both evident at the 99% confidence level; Figure 7.3). This decline seems to be

a continuation of a mild decrease in wealth during the Middle to Late Preclassic transition at Tutu Uitz Na. The mildest Late Classic period decrease occurs at Floral Park (only statistically significant at the 80% confidence interval). The initial decline in wealth during the Middle to Late Preclassic transition at the Tutu Uitz Na center which is so notable in Figure 7.3 was probably more related to changing economic and ritual roles and was not related to the rise of Lower Dover. A sizeable amount of Middle Preclassic wealth items at Tutu Uitz Na are marine shell beads and pendants, which were ritually interred in the vast *jute* deposit in the plaza. The marine shell beads likely indicate that the Middle Preclassic local elites, like their peers at other Belize Valley settlements at this time, were engaged in the production of such items (Biggie et al. 2018; Hohmann 2002; Keller 2010; see also Chapter 8.1.1). Hence this apparent Late Preclassic decline in wealth is likely associated with a valley-wide decline in elite crafting of marine shell beads. The decline in wealth evident during the Early to Late Classic transition was likely tied to the rise of Lower Dover. The rise of Lower Dover can be construed as having something of a leveling effect, bringing Floral Park and Tutu Uitz Na elite wealth down to the same level. While a similar dynamic played out at BR-180/168, the proportions of wealth items in Late Classic fill were very low.

The weaker decline in wealth at Floral Park compared with Tutu Uitz Na and BR-180/168 noteworthy, but could be indicative of several possibilities. One interpretation for this milder reduction in wealth may be that the Floral Park regime rose to paramouncy as the Lower Dover apical elite (see Chapter Nine for the ceremonial data associated with this hypothesis). Yet this explanation is unconvincing since if it were true, we would expect the Floral Park elite to increase in wealth or abandon Floral Park and relocate to the Lower Dover palace. Instead, it would seem that the greater Early Classic wealth of the Floral Park regime allowed the elites to negotiate a better position in the emergent polity (Figure 7.1b). The general decline at all three centers seems to corroborate the idea that Classic period elite centers could often have surprisingly quotidian ceramic assemblages, and that ceramic types may not be ideal wealth indicators (see Powis 2004: 67; Reents-Budet et al. 2000).

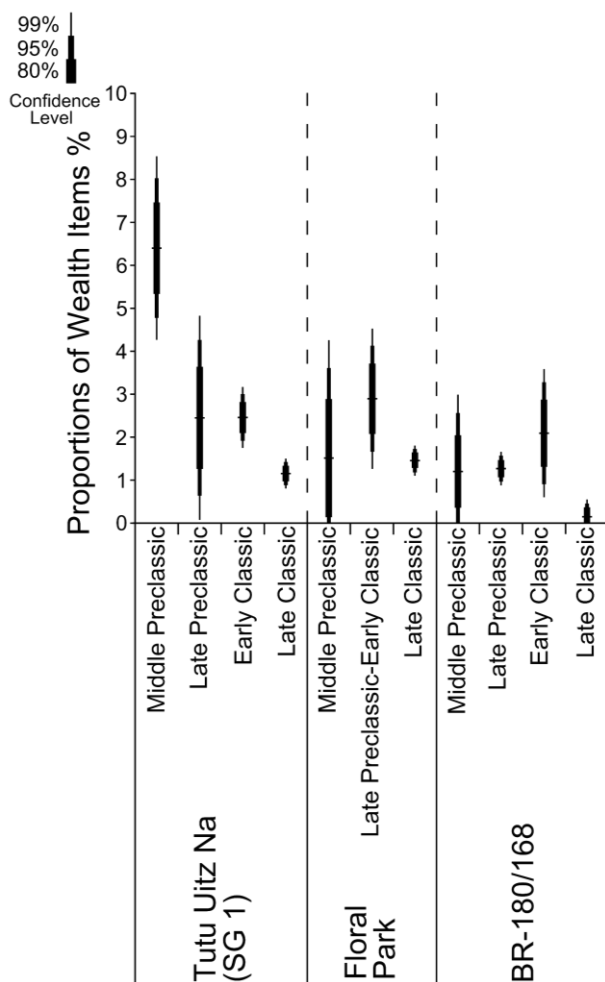


Figure 7.3 Bullet graphs showing intermediate elite wealth

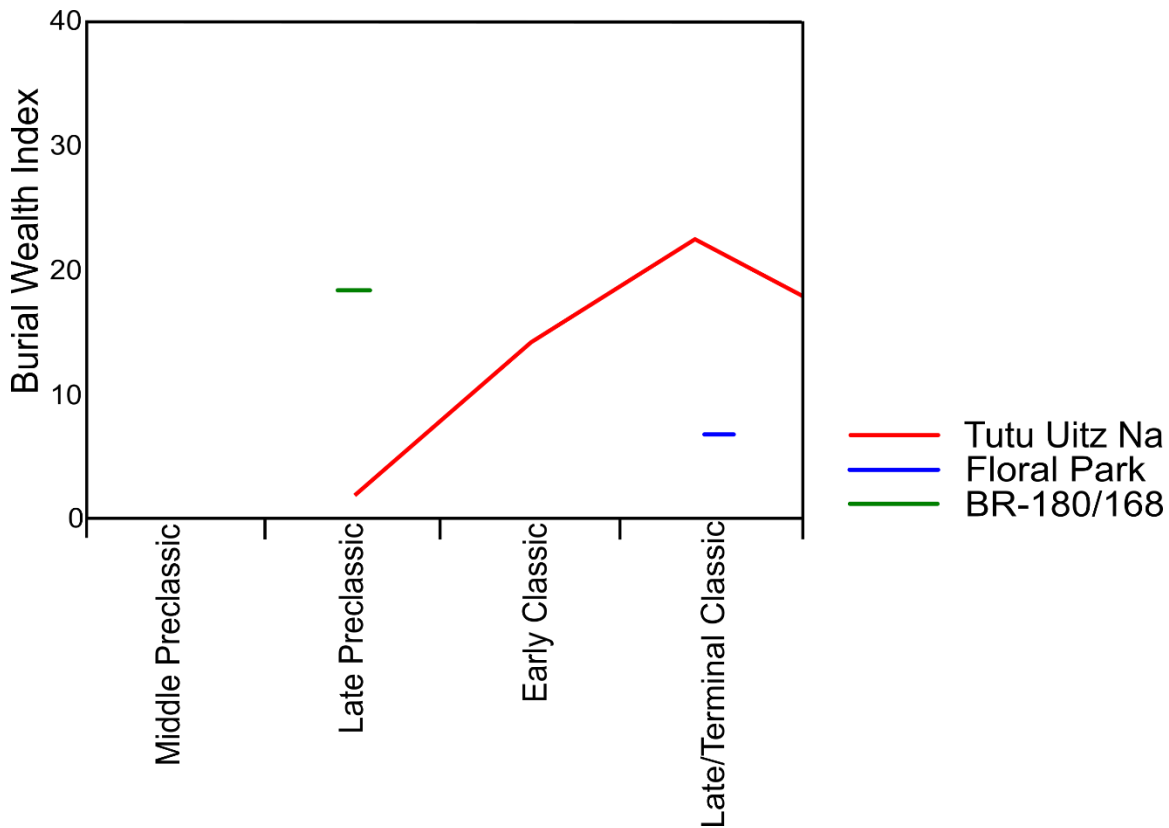
These show the proportions of wealth items to total artifacts at the Tutu Uitz Na, Floral Park and BR-180/168 centers

A more problematic dynamic underlying these patterns of wealth item consumption might relate to the scale of architecture. BR-180/168 was much larger than Tutu Uitz Na and Floral Park in the Late Preclassic-Early Classic periods, subsequently, the materials deposited in structural fill may represent refuse from surrounding commoner household middens (see Chapter 5.3.3). The placement of commoner refuse in elite architecture may be responsible for the apparent sharp decline in wealth at all three centers in the Late Classic when the architecture grew dramatically. This explanation is discounted at Tutu Uitz Na through comparison with the proportions of wealth items in burials and caches, which serves to corroborate the wealth metric based on the proportions of items in architectural fill. This remains problematic at Floral Park and BR-180/168 where

comparisons of burials between phases are limited due to a lack of data. The relative lack of ostentatious wealth items in mortuary contexts at Late Classic Floral Park seems to corroborate the decline in elite wealth. Subsequently, the simplest explanation is probably the likeliest. The Floral Park elite saw less reduction in wealth than the other intermediate elites. While the BR-180/168 elite were less wealthy than their peers in the Late Classic period. The large scale of monumental architecture at BR-180/168 might have only been possible through concessions such as the redistribution of wealth items to commoners in exchange for labor investment (See 7.2 below; see Thompson and Prufer 2021).

7.1.4 Wealth Items Placed in Burials and Caches

The relative proportions of wealth items placed in burials and caches and the formality of construction type (simple, pit, cist, crypt, tomb) offer an independent metric of wealth. Sampling issues and taphonomic biases hamper systematic comparison of these variables but the patterns generated are sufficient to corroborate the wealth metrics based on material from architectural fill (sampling issues are outlined in Chapter 6). The burial sample consisted of three Late-Terminal Preclassic individuals from Barton Ramie; nine Late Classic individuals from Floral Park; and one Late Preclassic individual, an Early Classic individual, and five Late Classic individuals from Tutu Uitz Na. No caches were encountered at Tutu Uitz Na, five caches were found at Floral Park, and one cache was present at BR-180 (Brown et al. 1996; Glassman, Conlon, and Garber 1995; Walden et al. 2020c).



**Figure 7.4 Line graph showing intermediate elite burial wealth
Burial wealth is based on an grave good wealth index**

Figure 7.4 shows burial wealth index score (wealth items in burials and grave type) for each intermediate elite center. The only context in which burial wealth could be reconstructed in a diachronic fashion was Tutu Uitz Na. The trend noted there saw increasingly lavish elite interments over time, culminating in the interment of Burials 1 and 4 in the early Late Classic. This was followed by a dramatic reduction in wealth in the Terminal Classic period with the interment of Burials 2, 3, and 6. The disparity in Late Classic burial wealth between the eastern ancestral triadic structure at Tutu Uitz Na and the eastern mortuary structure at Floral Park is noteworthy. Unlike burials at BR-180 and Tutu Uitz Na, which contained marine shell jewelry, greenstone, jade, and polychromes, the Floral Park burials and caches contained plainware vessels, obsidian blades, ground stone implements, and chert bifaces (Brown et al. 1996; the ritual implications of this are discussed in Chapter 9). The Late Classic Floral Park intermediate elite had surprisingly little access to wealth evident in both burials and caches, and architectural fill, especially relative to the colossal amount of commoner labor they could control. While it is

difficult to make solid comparisons between different lines of information, the burial wealth roughly follows patterns in terms of the artifacts in construction fill although some discrepancies arise. Late Preclassic Tutu Uitz Na for instance is wealthier in terms of portable items in fill than BR-180, yet the burial wealth at BR-180 is dramatically higher than at Tutu Uitz Na at this time. Floral Park sees a less dramatic reduction in wealth (based on artifacts in fill) in the Late Classic period compared to other centers, however burial wealth is lower at Floral Park than Tutu Uitz Na. Despite these discrepancies, the general trends seem to make some logical sense in that they do not dramatically depart from expectations. These discrepancies can be attributed to sampling issues to some degree. Many contexts lack burials for key periods, and other contexts have a sample of one or two burials for important periods. Sampling aside, the relative wealth in terms of the items interred in graves and the labor invested in grave construction may reflect variability in the elaborateness and theatricality of death-ways at a particular context, which may or may not be expected to correlate with overall wealth. For instance, less wealthy intermediate elites may seek to stage more elaborate funerary rituals in an attempt to disguise their relative poverty.

7.1.5 Variability in Intermediate Elite Wellbeing

The osteological data pertaining to intermediate elite wellbeing is not particularly representative due to the burial sampling issues outlined above. Furthermore, the poor state of preservation of many burials prevents an understanding of general health. The eastern triadic structure at Tutu Uitz Na contained seven burials and 10 individuals. Two Late Preclassic-Early Classic individuals were interred in the eastern triadic structure at Tutu Uitz Na (SG 1 Burial 5, SG 1 Burial 7). Generally, preservation was poor and prevented detection of pathologies or trauma (Biggie et al. 2019: 193-196). Four Late Classic burials were apparent, with a total of six individuals (SG 1 Burial 1, SG 1 Burial 2: Individuals 1-3, SG 1 Burial 4, SG 1 Burial 6). Of these, the three individuals interred in SG 1 Burial 2, and the individuals in SG 1 Burial 3 and SG 1 Burial 6 did not exhibit evidence of pathologies or trauma, however, this was limited by preservation (Biggie et al. 2019: 209; Green Mink and Bye 2020). That said, the possibility that the two VPLF (SG 1 Burial 2 Individual 1 and SG 1 Burial 3) were possibly bound might suggest an unpleasant death. Despite poor preservation, SG 1 Burial 4 exhibits signs of infection in the vertebrae, the temporal bone, the frontal bone, the maxillary bone (which may be evidence of an

abscessed tooth and not the same infection in the other elements), the pubis, and the humerus. Widespread infection of this type could be caused by osteomyelitis or tuberculosis. Perimortem fractures are apparent on the vertebrae, ribs, right zygomatic, and left ulna. It is unclear whether these injuries or the infection were the primary cause of death, although no obvious healing was apparent, which is suggestive of the injuries occurring not long prior to death (see Chapter 6). Regardless, the individual interred in SG 1 Burial 4 had a poor quality of life, especially in their later years, and possibly a highly unpleasant death.

Ten individuals from nine burials were interred in the eastern mortuary structure in the elite residential compound (Group 2) at Floral Park (Floral Park Burial 1, Floral Park Burial 2, Floral Park Burial 3, Floral Park Burial 4, Floral Park Burial 5, Floral Park Burial 6: Individuals 1 and 2, Floral Park Burial 7, Floral Park Burial 8). These remains have not been radiocarbon dated and it remains possible that some of these secondary burials dated to earlier periods and were moved from Structure A1 on Plaza A (which contained no evidence of Late Classic interments). Aside from instances of antemortem tooth loss, only one individual from Floral Park showed evidence of ill health. Floral Park Burial 4 shows evidence of an osteomyelitic reaction in one of the lower limbs, and two lower limb other fragments suggest a systemic infection (Freiwald 2011a: 389). One Late Preclassic individual (BR-180 Burial 3), and two Terminal Preclassic individuals were excavated from the eastern triadic structure at BR-180 (BR-180 Burials 1 and 2). Initial osteological analysis was once again hampered by preservation. Either way, no evidence of pathology or trauma was evident (Walden et al. 2020c). To summarize, the state of preservation and sampling issues largely prohibits an understanding of how general wellbeing changed at the intermediate elite level before and after the rise of Lower Dover. However, it would seem that at least some of the Late Classic intermediate elites at Tutu Uitz Na and Floral Park probably lived relatively difficult lives despite their status.

Stable carbon ($\delta^{13}\text{C}$) and nitrogen ($\delta^{15}\text{N}$) isotope measurements from human bone collagen from a sample of seven elite individuals (SG 1 Burial 1, SG 1 Burial 2 Individuals 1 and 2, SG 1 Burial 3, SG 1 Burial 4, BR-180 Burial 3, and FPK Burial 9) and stable carbon ($\delta^{13}\text{C}$) measurements from tooth enamel samples from four elite individuals (SG 1 Burial 1, SG 1 Burial 4, BR-180 Burial 3, and FPK Burial 9) were compiled to reconstruct diet during people's early and later years (see Freiwald 2011a: 205; Piehl 2005: 600). Generally, the reconstructed dietary

data suggested that intermediate elites and commoners both consumed a similar diet broadly comparable to the diet consumed by Preclassic/Classic period agriculturalists (irrespective of status) in the Belize River Valley (Ebert et al. 2019).

7.2 Diachronic Shifts in Commoner Wealth and Wellbeing

Having discerned the shifts in wealth and power among elites, I now turn to determining if there were congruent shifts among the commoners residing in the districts associated with these elites. These data from commoner households will contextualize broader shifts within each district and allow an understanding of how intermediate elites articulated their downward face.

7.2.1 Reconstructing Commoner Wealth and Wellbeing

As outlined in Chapter Four, assessing commoner wealth and wellbeing required a different approach from that used for intermediate elites. Commoners largely seem to have constructed their residences themselves or relied on surrounding kin, although some of the high-status commoner neighborhood heads (such as SG 3, SG 42, SG 51, SG 129, and BR-260) probably relied on the labor of five or six surrounding households (based on the scale of architecture). Despite this, all commoner architecture was relatively modest (~30-1000 m³), and it seemed more logical to use architecture as a metric of wealth than the political power and authority of commoners (see Chapter 4.1.). This simpler approach is preferable because commoners were not drawing on large amounts of labor to construct their houses like intermediate elites (Abrams 1994: 42, 97-98). Commoner architecture falls in the range of 100-150 person-days associated with house construction by Abrams (1994). This finding meant the energetics approach used to calculate intermediate elite architectural labor loads was less useful for commoners who exhibited less variability in this respect and because commoner dwellings would have required a smaller array of skills to produce than intermediate elite architecture (see R. Hansen 2016: 366). Commoner wealth was calculated using the same metrics as intermediate elites (high-value items in construction fill). Sampling issues prevented commoner burial wealth from being used to corroborate the wealth patterns

based on fill, although most commoners seem to have been redepositing their own middens in their residences (see Chapter 5.3.3). Commoner wellbeing was assessed through examination of patterns of skeletal trauma and pathology in the burial record, although again sampling issues prevent solid conclusions from being drawn.

7.2.2 Patterned Variability in Commoner Wealth and Wellbeing

Clear patterns emerge in terms of commoner architectural construction and these seem to relate directly to patterns evident among intermediate elites. Two approaches are used to chart variability in the growth of commoner households over time. These are the proportional increase in architecture and the volumetric increase (m^3) in architecture per century. Figure 7.5 shows the proportional increase in architectural volume at each of the districts. These graphs allow the contextualization of the proportional increase in architecture at the intermediate elite level with that apparent among their commoner subordinates. Single component Late Classic households are omitted from this because all their architecture is attributable to that phase. Figure 7.5a shows that the rather dramatic proportional increase at the Tutu Uitz Na center in the Late Classic period is part of a district-level trend. The only commoner household which does not show a proportional increase in architecture at this time is SG 42. Figure 7.5b shows a contrasting pattern to Tutu Uitz Na. The rapid increase in intermediate elite construction at Floral Park is concomitant with a massive decrease in commoner labor investment in their own homes. This suggests that following Lower Dover's rise, the intermediate elite at Floral Park could extract significantly more labor from their commoner subordinates than previously, and this had some impact on everyday life at the commoner level.

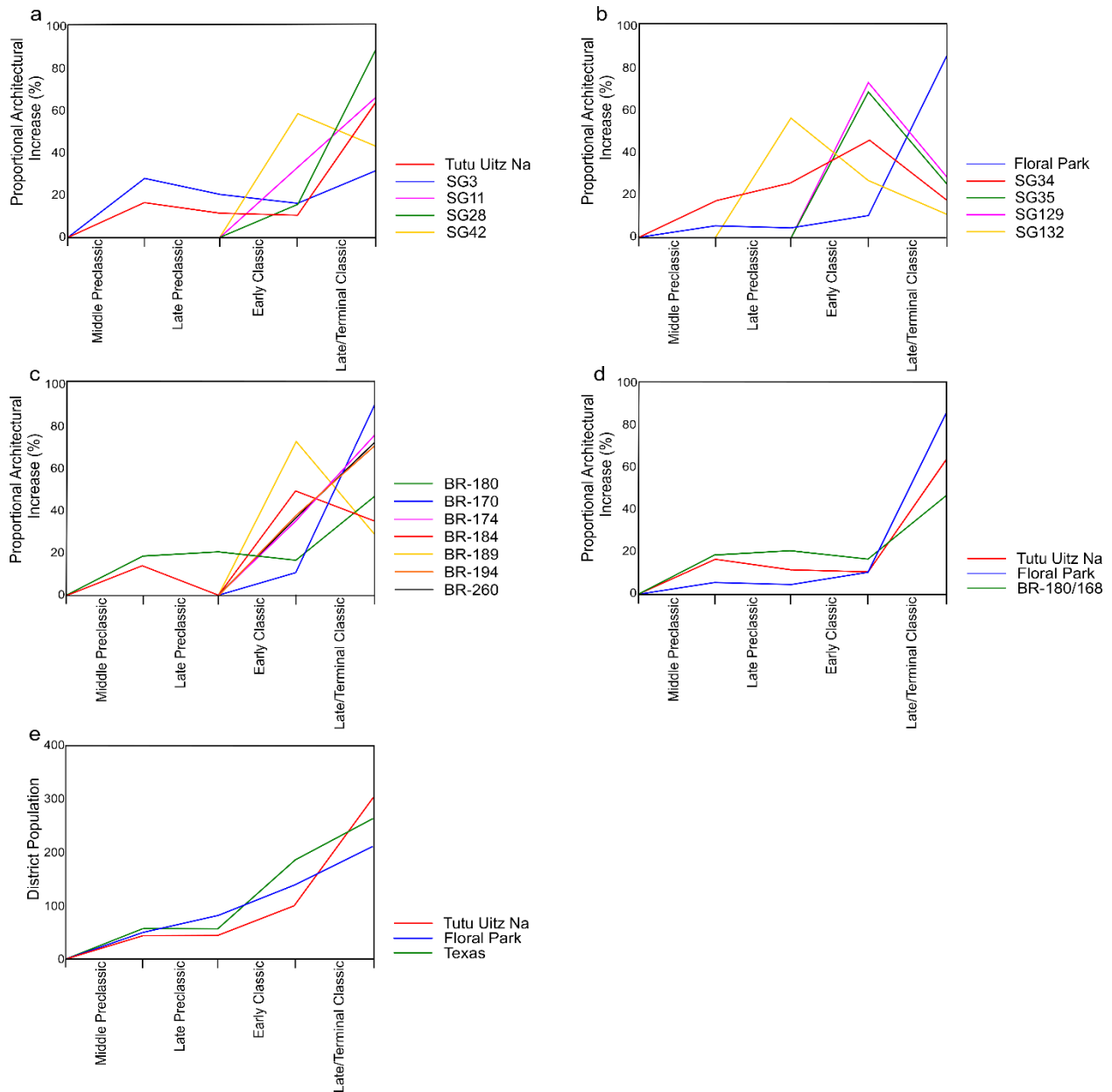


Figure 7.5 Line graphs showing district-level proportional increase in architecture

(a) Proportional increase in architecture at the Tutu Uitz Na District. (b) Proportional increase in architecture at the Floral Park District. (c) Proportional increase in architecture across the Texas district. (d) Proportional increase in intermediate elite architecture. (e) District populations over time. Single component Late Classic households are omitted from the graphs because 100% of their architecture is associated with a single period

In contrast to the relatively clear pattern at the Floral Park and Tutu Uitz Na Districts, variability in commoner residential construction is apparent at the Texas Districts (Figure 7.5c).

The proportional increase in architecture at BR-180/168 appears not to have had much impact on the ability of commoner households to command labor. Most increase in size, although a proportional decrease is noted at BR-184 and BR-189. Figure 7.5d and e provide contextual information about the proportional increase in architecture at the intermediate elite centers and the overall district populations. Comparison between intermediate elite construction and population reveals that the district with the greatest proportional increase in intermediate elite architecture (Floral Park) saw a substantial decrease in commoner construction, and much slower population growth, albeit within the limits of internal growth (see Chapter 6.2.10). The intermediate elite with the lowest proportional increase in architecture (Tutu Uitz Na) almost certainly saw an influx of population from elsewhere (see Chapter 6.2.10), and substantial remodeling and expansion at most commoner households.

The calculation of the volumetric (m^3) increase per century in architecture again puts a finer point on the proportional increases in commoner dwelling size described above. This line graph includes single component Late Classic households. Figure 7.6a shows the volumetric increase among the commoner households of the Tutu Uitz Na district. The larger neighborhood head household of SG 42 struggled somewhat in this regard, but generally, it would seem that most commoners expanded their residences. This line graph reveals the size disparity in the larger high-status commoner neighborhood head households of SG 42 and SG 51. It seems that SG 3 was likely fulfilling a similar role but was smaller in scale. The decrease in the ability of the SG 42 neighborhood heads to command low-status commoner labor might be related to the rise of the large single component Late Classic neighborhood head household of SG 51 just 250 meters to the southeast. SG 51 provides a particularly good example of a single component household that was founded in the Late Classic and increased dramatically in size (Walden et al. 2018; Walden, Guerra, and Qiu 2019). Generally, it would seem that the Tutu Uitz Na commoners were doing fairly well in the Late Classic period when it came to household expansion and improvements.

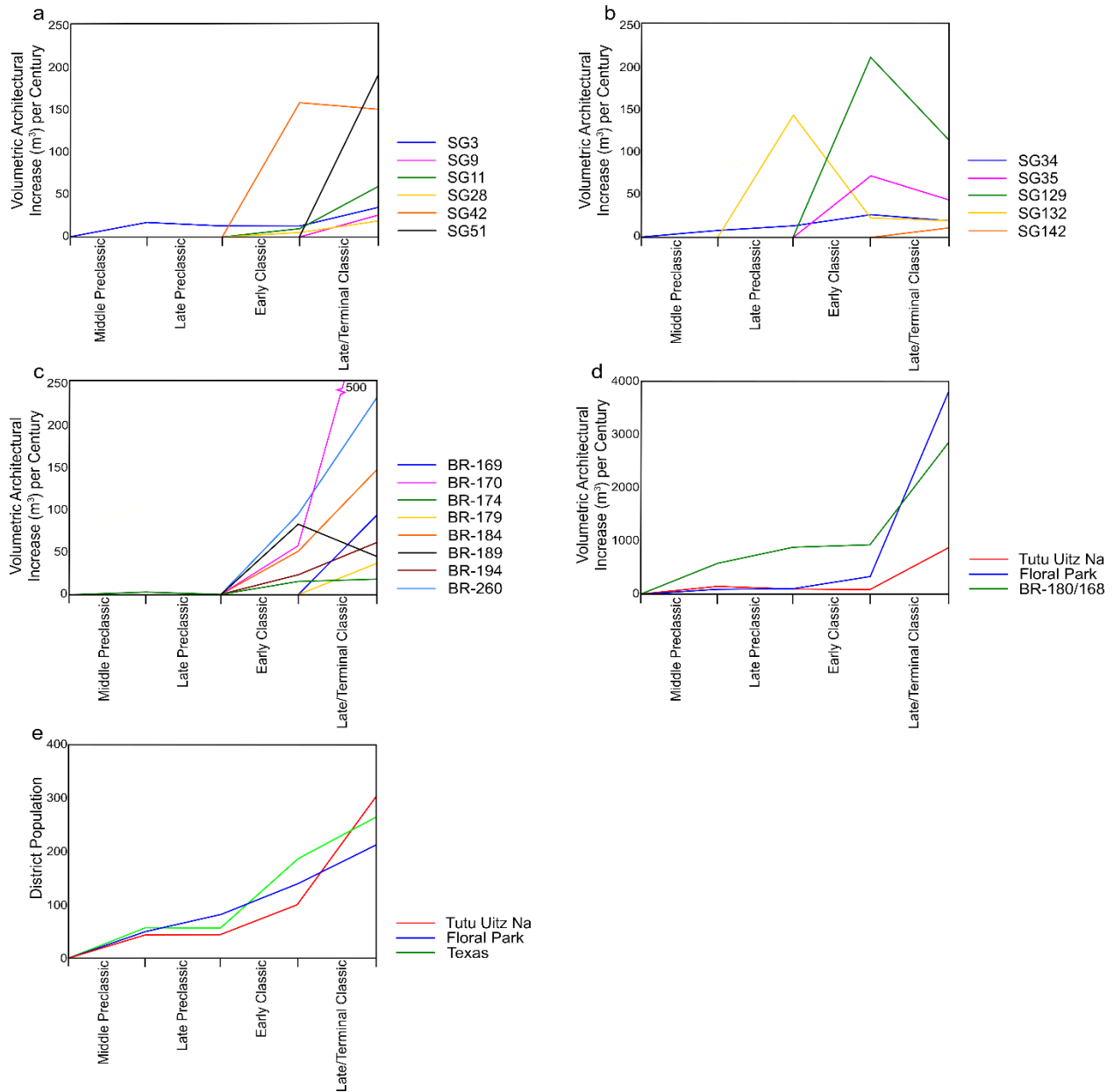


Figure 7.6 Line graphs showing district-level changes in architectural volume

(a) Volumetric (m^3) increase per century in architecture among the Tutu Uitz Na District commoners, (b) Volumetric (m^3) increase per century in architecture among the Floral Park District commoners, (c) Volumetric (m^3) increase per century in architecture among the Texas District commoners, Single component Late Classic households are included in the graphs but intermediate elites are not, (d) Volumetric (m^3) increase per century in architecture among the intermediate elites, (e) District populations over time

The dramatic decrease in proportional architectural increase among the commoners of the Floral Park District is corroborated by Figure 7.6b. The Floral Park commoners were adding very little to their house structures in the Late Classic period, especially when compared to the earlier periods in which many commoners were making steady improvements and modifications much like their counterparts at the Tutu Uitz Na and Texas districts. Despite the proportional decrease, the neighborhood head household at SG 129 was still able to muster a fairly impressive amount of labor.

In the Texas District, some commoners managed to construct sizeable residences. For instance, BR-170 represents the largest sampled commoner household in the Late Classic period across the whole polity. Other examples of volumetrically large residential groups include BR-260 and BR-184. One reason why these residences were large may be due to the nature of construction fill. Unlike on the southern bank of the Belize River where commoners had good access to limestone and river cobbles for construction, most of the fill at Barton Ramie was river clay and soil fill, which could not be repurposed for the construction of new platforms as easily as limestone boulders. The “tell-like” accretional growth of the mounds at Barton Ramie may explain their comparatively larger size relative to their counterparts at the Tutu Uitz Na and Floral Park Districts.

The difference between commoner and intermediate elite volumetric increase (m^3) per century in architecture for each district is dramatic (Figures 7.7a-c). Throughout most of the trajectory, the Tutu Uitz Na elite is only able to command fractionally more labor than their commoner subordinates, this changes in the Late Classic period, when Tutu Uitz Na is commanding much more labor than any of the commoner households. Floral Park follows a similar trend, during the Early Classic period, the Floral Park elite was only able to muster slightly more labor for construction than high-status commoner neighborhood heads like SG 129. However, the massive increase in architecture in the Late Classic period dramatically varies from that shown at Tutu Uitz Na. In contrast to both Tutu Uitz Na and Floral Park, there was always a distinct gulf between the BR-180/168 elites and their commoner subordinates in terms of construction labor (Figure 7.7b). Despite the proportional increase in architecture at Tutu Uitz Na in the Late Classic, there is less of a gulf between the ability of elites and commoners to deploy labor.

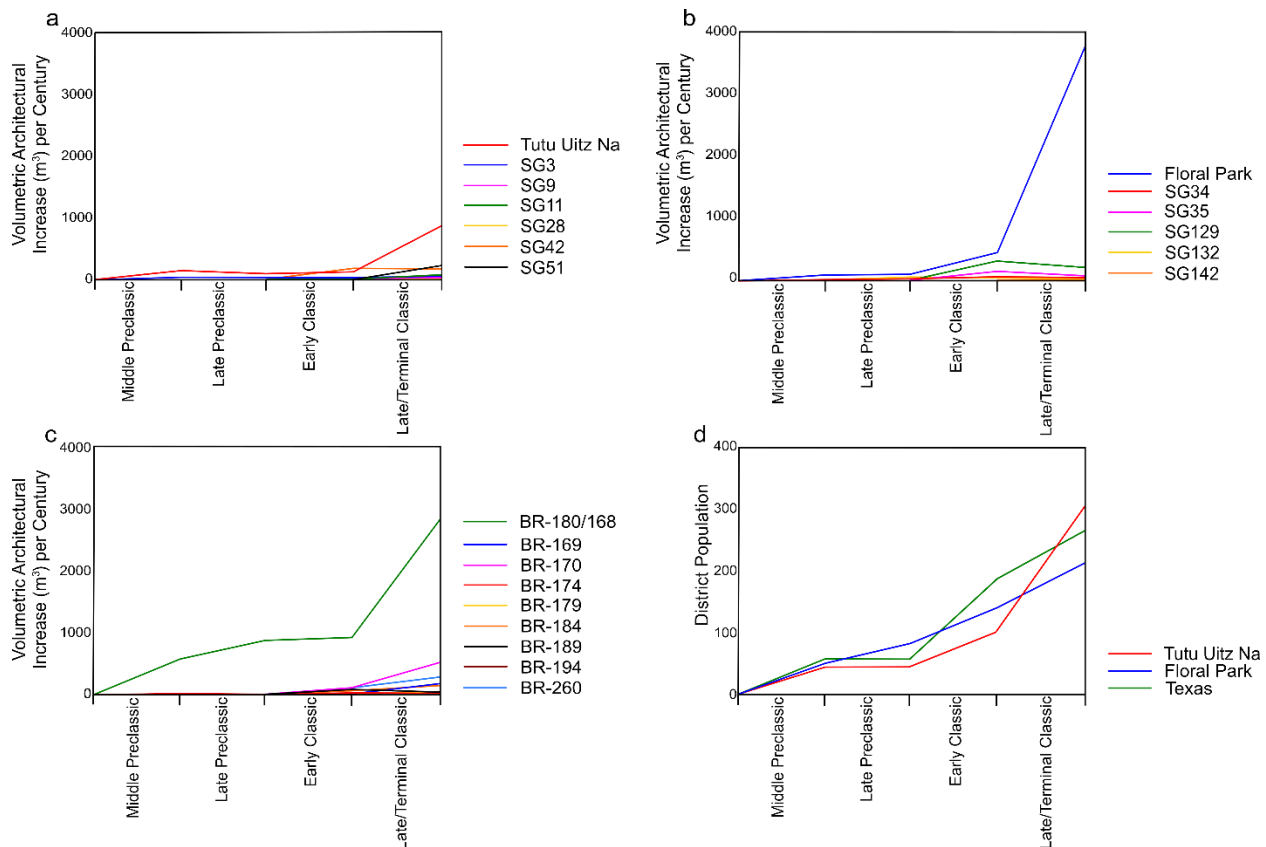


Figure 7.7 Line graphs showing district-level architectural changes per century

(a) Volumetric (m³) increase per century in architecture at the Tutu Uitz Na District, **(b)** Volumetric (m³) increase per century in architecture at the Floral Park District, **(c)** Volumetric (m³) increase per century in architecture at the Texas District commoners. Single component Late Classic households and intermediate elites are included in the graphs, **(d)** District populations over time

Commoner wealth as measured in construction volume and access to portable wealth items did not diverge in the manner evident among intermediate elites (Figure 7.8). Generally, the Middle Preclassic households at Tutu Uitz Na and across the polity are relatively wealthy, and have access to a range of imported wealth items (this corroborates regional trends; see Garber et al. 2004a: 33, 46). Tutu Uitz Na commoners show some variability in terms of the proportions of wealth items in the Late Classic period. Most commoner households saw little change in wealth throughout the transition. Some such as SG 42 saw a slight decrease in wealth but nowhere was this statistically significant at the 80% confidence level. At first glance, it would seem that these commoner households were equally as wealthy as the Late Classic Tutu Uitz Na elite. The bullet graphs are based on counts of wealth items, and there is much variability within this category. For

instance, the Tutu Uitz Na intermediate elite had access to jade items and finely painted polychrome vessels (some with Maya blue pigment), whereas the surrounding commoners generally seem to have less exotic high-value ceramics. The biggest difference between the Tutu Uitz Na intermediate elite and commoners involves the distribution of jade and greenstone jewelry. Jade and greenstone form a small but substantial part of the intermediate elite wealth assemblage but are not found at any of the commoner households. This is relatively uncommon among the districts of the Belize River Valley; for instance, at Baking Pot Settlement Cluster C and Chan, elites had quantitatively more access to wealth items than commoners, but not access to qualitatively different wealth items (Hoggarth 2012; Robin, Meierhoff, and Kosakowsky 2012: 135; see also Kovacevich and Callaghan 2019: 469).

The decline in wealth items in domestic platform fill at Floral Park parallels the decline in commoner architectural investment noted above. Access to high-values items declines dramatically across all Floral Park households in the Late Classic period. The decline in wealth at well-established commoner households like SG 34 and SG 129 is the most severe, and statistically significant (at the 99% confidence level). SG 35 and SG 132 show similar declines in wealth but these are only statistically significant at the 80% confidence level. Despite the decline in wealth at the Floral Park center, the intermediate elite exhibit greater access to wealth items than some commoner households which were previously relatively affluent like SG 34 and SG 132. Yet, other high-status commoner households like SG 129, despite displaying a significant reduction in wealth, had comparable access to wealth items as the Floral Park elite. While the elites and commoners at Tutu Uitz Na had access to similar numbers of wealth items, as mentioned above the elites had access to higher amounts of very high-value items (like exquisite polychrome vessels and jade), which the commoners did not. This was not the case at Floral Park though, where the elite assemblage was surprisingly quotidian in terms of the proportions of jade, greenstone, and very high-value ceramics.

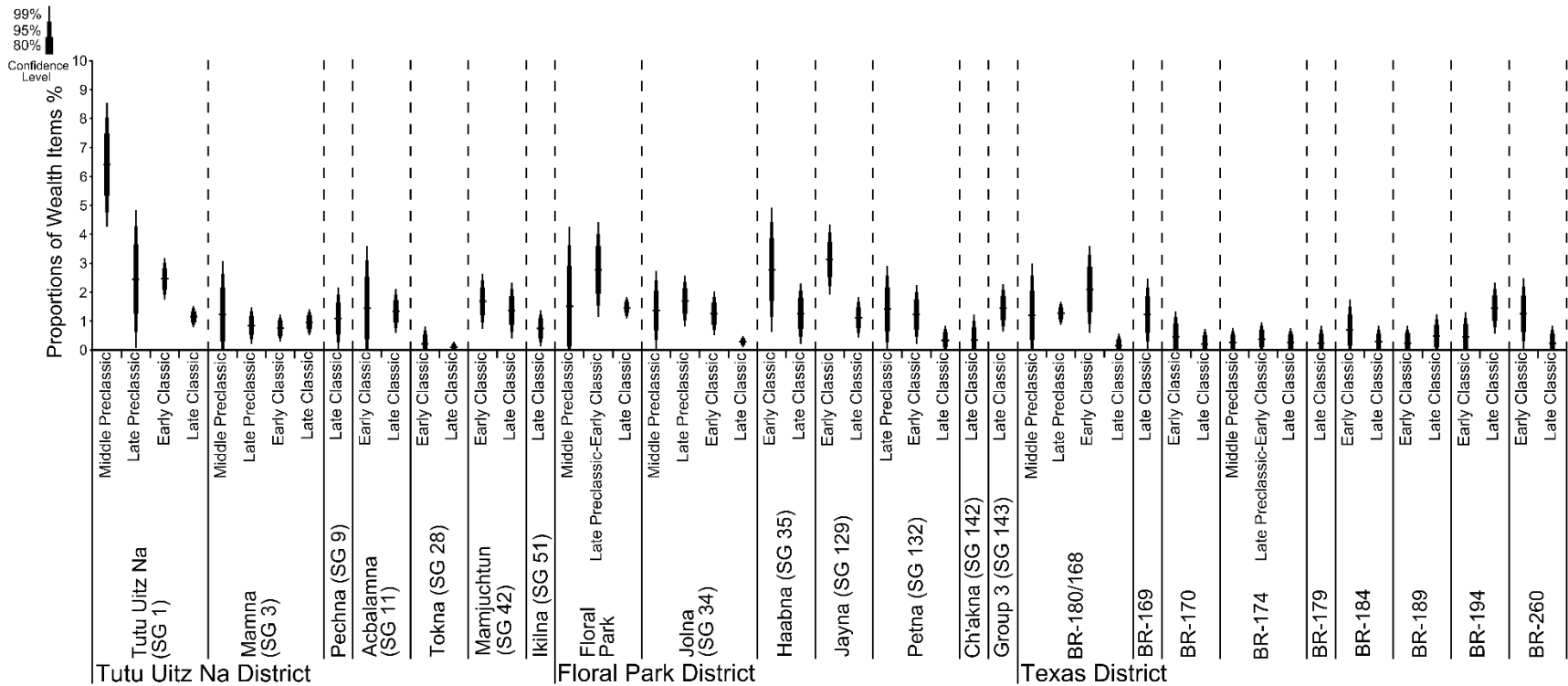


Figure 7.8 Bullet graphs showing wealth at each household

The proportions of wealth items relative to total artifacts per period in each household

The Texas district commoners and intermediate elites exhibit a similar divergence between household architectural increase and access to wealth items. For instance, BR-260 grew dramatically in size but saw a decline in access to wealth items. BR-184 saw a slight proportional decline in household construction, which correlated with a decline in household wealth. Households that declined in architectural investment like BR-174 saw stasis in terms of access to wealth items. The only change in wealth at the Texas District was BR-194, which showed an increase in wealth (at the 80% confidence level). Sampling issues with domestic assemblages among the Texas District commoners (see Chapter 5.5.2) mean that the proportions of wealth items are likely be skewed downwards, impeding accurate comparison between these contexts and their peers at Tutu Uitz Na and Floral Park. The Late Preclassic and Terminal Preclassic components at BR-180 revealed a lavish array of wealth items including jade jewelry and fine bichrome ceramics, which were not as prevalent in the assemblages of commoner households at the Texas District.

Overall, even when the variability in different wealth items (jade and polychromes versus less exotic ceramics) at intermediate elite and commoner levels is taken into account, and the relative wealth of intermediate elites is compared to commoners, the differences between the two are far from clear cut. It would seem that during the Late Classic period, the general level of access to wealth items was more or less the same, likely resulting from similar processes of procurement and no privileged access to items on the part of intermediate elites, or intermediate elites redistributing wealth items through patron/client relationships (LeCount 1999; but see Hutson 2020a). This latter explanation seems logical given the fact that some degree of reciprocity probably underpinned the commoner labor investment in intermediate elite architecture (Abrams 1994: 97-99). Wealth items or certain types of wealth items were not becoming more available in the Late Classic, like the increase in access to marine shell jewelry at Chan and other districts associated with Late Classic Xunantunich (see Keller 2012: 264 see also Emery 2012: 310).

The commoner burial record faces more severe sampling issues than the intermediate elite burial record. A total of 14 commoner burials were recovered. Three burials were encountered at the Tutu Uitz Na District. These include two Late Preclassic burials from SG 3, and an Early Classic secondary burial from SG 11. SG 3 Burial 1 was relatively well preserved. Osteological analysis indicates that the individual was relatively healthy and lived into old age (Walden et al.

2018: 184-186). The mandible and teeth exhibited habitual use of dentition for a specific activity, potentially masticating some foodstuff for regurgitation like *chicha*. Similarly, SG 3 Burial 2 was also fairly well preserved. The individual lived to a relatively old age and revealed no evidence of pathologies or trauma except for antemortem tooth loss (Walden et al. 2018: 181-183). SG 11-Burial 1 was a secondary burial placed in the initial fill of the residential platform, directly on bedrock. The burial had subsequently fused to the bedrock in such a way that precluded most osteological analysis. Dentition however revealed the individual to be a young adult, with a deep groove or band occurring around the crown on the premolars, molars, and canines which could be similar to enamel hypoplasia, where a time of stress during development of these adult teeth causes stasis in the growth pattern for that period of time (Walden et al. 2018: 203-204; Wright 1997).

Only a single commoner burial was uncovered in the six households at Floral Park. This was a Late Preclassic secondary burial with at least two individuals in SG 34. The poor state of preservation of these remains prevented the types of analysis necessary to determine pathologies and trauma (Levin et al. 2020: 187-189).

At the Texas District, Willey and colleagues (1965) encountered ten Late Classic burials in the eight commoner house groups they excavated, however, five came from BR-260 and the other five came from BR-194. However, no osteological analysis of these remains appears to have been conducted to date. That said, Danforth (1994: 208) does report an increase in stature diachronically over time among the Barton Ramie burials, but it is unclear which burials were included in this study.

Diachronic analysis of the burials from each district is however not possible because none of the districts have commoner burials dating to before and after the rise of Lower Dover. The only conclusion which can be drawn is that commoner health at Late Preclassic and Early Classic Tutu Uitz Na District was variable. One low-status commoner individual (SG 11 Burial 1) might have suffered nutritional stress as a child, whereas two older individuals (SG 3 Burials 1 and 2) lived long and relatively pleasant lives (although one may have suffered from the excessive use of dentition for mastication). A general decline in health has been noted from the Preclassic to Classic periods at Tikal (Haviland 1967), and in the Belize River Valley (Healy 2006). This decrease in quality of life is not present at Chan based on a sample of commoners and the intermediate elite

district heads (see also Danforth 1994; Novotny 2012: 251). The only trend evident in the unrepresentative Lower Dover hinterland burial sample of intermediate elites and commoners is possibly a very slight decline in health over time. This probably has nothing to do with the rise of Lower Dover but is more tied to general patterns apparent across the Maya region, and the Belize River Valley (see Healy et al. 2004: 120; Wright 1990).

Stable carbon ($\delta^{13}\text{C}$) and nitrogen ($\delta^{15}\text{N}$) isotope measurements from human bone collagen from one commoner individual (SG 3 Burial 1) and stable carbon ($\delta^{13}\text{C}$) measurements from one tooth enamel sample from a commoner individual (SG 3 Burial 2) revealed that the commoners living at SG 3 consumed a similar diet characteristic of Preclassic/Classic period Maya agriculturalists in the Belize River Valley (Ebert et al. 2019). These were the only commoners sampled for dietary isotope analyses.

7.3 Comparative Perspectives: Shifting Inequalities at Baking Pot

Household data from Settlement Cluster C at Baking Pot is used to assess the degree to which the changes evident at the Tutu Uitz Na, Floral Park, and Texas districts resulted from the rise of Lower Dover (see Hoggarth 2012). Settlement Cluster C is associated with the Ixim Group (M-99), a lower-level intermediate elite (tier 5) center in the periphery of Baking Pot (Hoggarth 2012; Walden et al. 2019). Unlike Lower Dover, Baking Pot emerged in tandem with its surrounding population. As political hierarchy and population increased at Baking Pot, the Ixim elite show a slight reduction in wealth in the Late Classic period, although this is only statistically significant at the 80% confidence interval (Figure 7.9). This might suggest that the Baking Pot regime was extracting higher amounts of wealth items from surrounding intermediate elites in the Late Classic. In contrast to the Ixim elite, commoners in Settlement Cluster C do not see a reduction in wealth at this time. The commoner household based at M-184 saw a dramatic increase in access to wealth items, while the M-90 commoners underwent little change in access to wealth items (Figure 7.9). A broader dataset of multiple districts at Baking Pot would be necessary to understand whether or not the shifts at Settlement Cluster C during the Early to Late Classic periods were characteristic of broader changes associated with apical elite policies at Baking Pot.

Tentatively, these data suggest that the Late Classic decline in intermediate elite wealth at Lower Dover, may be part of a broader valley-wide trend at this time, or that similar policies were being pursued by both the Lower Dover and Baking Pot apical elites.

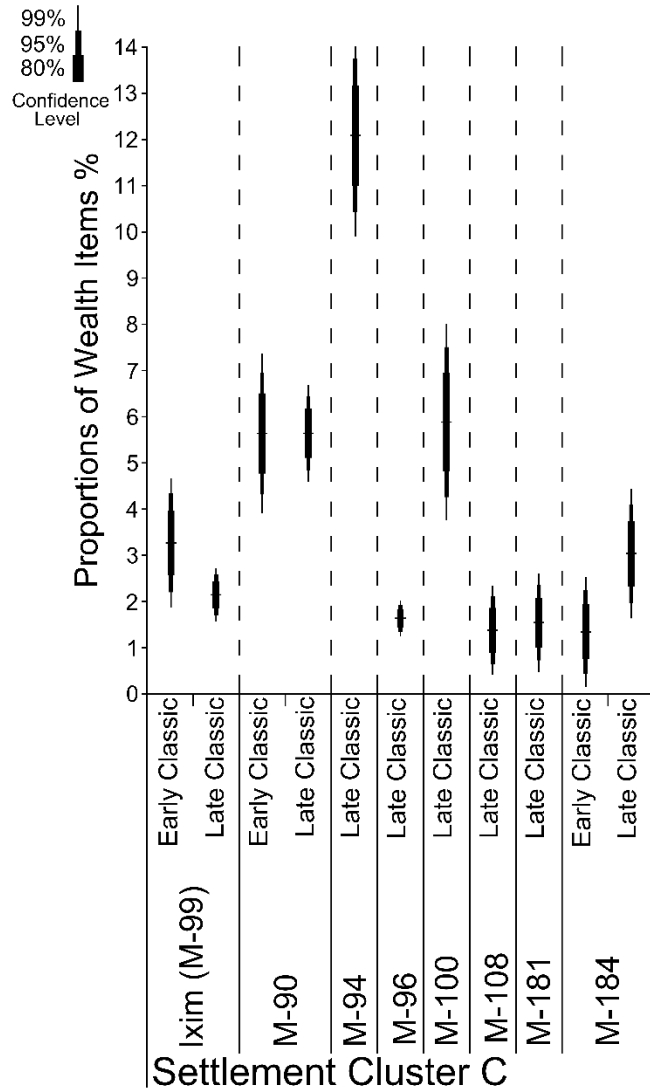


Figure 7.9 Bullet graphs showing wealth at Settlement Cluster C
Proportions of wealth items to total artifacts in households at Baking Pot

7.4 Modeling the Ramifications of the Rise of Lower Dover

There were significant differences in power and wealth among the three local elites prior to the rise of Lower Dover. Intermediate elite wealth, wellbeing, and power and authority changed in different ways for these households, as they became intermediate elites in the Lower Dover polity. From these changes, we can distinguish three important patterns in how the rise of Lower Dover impacted the surrounding region. These patterns reveal variability in political status, wealth, and wellbeing between the intermediate elite households before and after the rise of Lower Dover.

7.4.1 Intermediate Elite Variability in Wealth at Lower Dover

Significant variability is apparent between the intermediate elites. BR-180/168 were well established, politically powerful/authoritative local elites from the onset of the Late Preclassic, through the Terminal Preclassic, and into the Early Classic. This prior level of established political power and authority over a sizeable retinue of commoner subordinates and fertile land potentially insulated them to some degree from the immediate effects of the rise of Lower Dover, however a fairly noteworthy decline in wealth is still apparent. That said, the BR-180/168 elite were only very slightly less wealthy than their counterparts at Floral Park and Tutu Uitz Na prior to the rise of Lower Dover. The Preclassic/Early Classic BR-180/168 elite were possibly pursuing a strategy that involved the redistribution of wealth items to surrounding commoner households in exchange for labor for monumental construction. The Tutu Uitz Na elite saw their wealth diminish and their access to labor increase. The Floral Park elite also had their wealth undermined but less so than their peers at Tutu Uitz Na and BR-180/168. The complete decline in wealth among the Floral Park commoners clearly shows that the Floral Park elite were not redistributing wealth items to subordinates in exchange for labor. As the most geographically distant center from Lower Dover, the less dramatic decline in wealth at Floral Park indicates that distance may have insulated these elites from Lower Dover-centered processes. Another explanation is that the apical elite co-opted the Floral Park intermediate elites in a different manner due to their position on an important border with Baking Pot.

7.4.2 Shifting Expressions of Wealth, Power, and Authority

The divergence between the increased political power and authority of intermediate elites (as seen in their ability to mobilize labor for construction), and their access to wealth items is one of the major trends of the Late Classic period (see Table 7.1). From a top-down perspective, this divergence could indicate that the rise of Lower Dover undercut the ability of intermediate elites to obtain wealth items. However, from a local perspective, the Tutu Uitz Na, Floral Park, and BR-180/168 intermediate elites may have shifted focus from conspicuous consumption of wealth items to control of labor to produce monumental architecture. Such a transition is possible as elites could simply shift from accumulating wealth to dispersing it in exchange for commoner labor. In contrast to Tutu Uitz Na and Floral Park, the BR-180/168 elite seem to have prioritized control of people and their labor over access to wealth items from their inception in the Middle Preclassic. As such, the BR-180/168 elite household potentially offered an alternative model, which the Tutu Uitz Na elites adopted in the Late Classic. In some respects, this might have represented a shift in the dimensions of peer competition between the intermediate elites (Renfrew 1986). This transition may have been in some respects comparable to the broader trend in the Terminal Classic period, which saw apical elites shift from using wealth items, which required specialist producers, to the construction of large architecture to convey political power (LeCount and Yaeger 2010). These findings are not at odds with other studies, which have comparatively investigated both access to labor for construction and access to portable wealth items (Conlon and Moore 2003; Schortman and Urban 2003: 134).

Table 7.1 Summary of the Changes at each District.

| <i>Dimension</i> | <i>Tutu Uitz Na</i> | <i>Floral Park</i> | <i>BR-180/168/Texas</i> |
|------------------------------------|---------------------|--------------------|-------------------------|
| Intermediate elite power/authority | Increase | Major increase | Slight increase |
| Intermediate elite wealth | Major decline | Slight decline | Major decline |
| Commoner wealth | Slight increase | Major decline | Variability |

7.4.3 Reconciling Variability in Wealth, Power and Authority

Increases in architectural construction occurred at all the intermediate elite centers during the Late Classic period. The most dramatic proportional increase in architectural volume was

apparent at Floral Park, but similar trends were apparent at BR-180/168 and Tutu Uitz Na. Collectively, this trend indicates that the sizeable investment of labor at the Lower Dover civic-ceremonial center did not undermine the ability of intermediate elites to draw upon commoner labor. The dramatic increase in the commoner population in the Tutu Uitz Na District eased the labor burdens associated with elite construction. In contrast, the slight increase in population at Floral Park, coupled with the colossal investment in labor, indicates that the Floral Park elite were placing more onerous construction burdens on their subjects. The shift in distributions of wealth items at the household level at the Tutu Uitz Na District may reflect an intermediate elite strategy of gift-giving and the redistribution of wealth items to commoners in exchange for commoner labor (Abrams 1994: 97-101; Keller 2012; LeCount 1999; see also Porter 2004: 388). It seems particularly clear that all three intermediate elite regimes were accumulating substantially fewer wealth items during the Late Classic period, the differences being that at the Texas and Tutu Uitz Na Districts, this wealth was potentially being redistributed to commoner households. Conversely, at Floral Park the flow of wealth into the district seems to have ceased for the commoners, but less so for the intermediate elite. The Tutu Uitz Na elite may have emulated the Preclassic/Early Classic BR-180/168 elite who were potentially employing a strategy of wealth item redistribution for labor prior to the rise of Lower Dover. This would explain the general prevalence of wealth items in commoner contexts at the Texas District in the Late Preclassic to Early Classic periods and Tutu Uitz Na in the Late Classic. Direct evidence of intermediate elite patronage comes from SG 9, a small household located just 70 m west of Tutu Uitz Na. Alongside unexpectedly high proportions of wealth items for a small house group, SG 9 also contained an Ahk'utu' Molded-carved sherd. Molded-carved ceramics have long been associated with elite patron-client relationships with commoners (Helmke 2001; Helmke and Reents-Budet 2008; LeCount 1999; Ting et al. 2014: 54).

Whatever underlay this transition, it seems clear that all the three intermediate elites at Lower Dover retained substantial control of labor in the Late Classic and this probably reflects substantial political power or authority. In this way, the rise of Lower Dover probably did not simply undercut local power, but in some ways augmented the solidity of the pre-existing districts. The decline in intermediate elite wealth does not support a scenario in which the Lower Dover elite actively rewarded any local elite by bestowing luxury wealth items upon them. More generally, the rise of Lower Dover did not increase intermediate elites access to wealth objects,

nor was it associated with an increase in wealth accumulation strategies on the part of intermediate elites. In fact, to varying degrees, the rise of Lower Dover had the opposite effect. While the comparative data from the Ixim center at Baking Pot suggests that the decline in wealth items could be tied to regional trends as opposed to the development of Lower Dover, this seems unlikely considering the flow of luxury goods to client intermediate elites in other parts of the Belize River Valley (LeCount 2001). That said, in Chapter Nine, I argue for a political alliance between the Lower Dover apical elite and Floral Park based on patterns in ceremonial architecture. This argument may be corroborated by the fact the Floral Park elite saw the least abrupt decline in wealth relative to the other two intermediate elite households.

7.4.4 The Role of the Elites in the Rise of Lower Dover

Changing diachronic patterns in the distribution of wealth items have the potential to inform us on the processes underscoring the rise of Lower Dover. For instance, did the polity represent the ascendancy of a single intermediate elite regime to paramountcy or a confederacy of all the intermediate elites? The patterns evident in wealth, wellbeing and power and authority do not indicate that the various intermediate elites benefitted in uniform ways from the rise of Lower Dover. Neither was their political power and authority, nor wealth undercut in uniform ways. This type of analysis does not allow a clear understanding of the forces behind the emergence of Lower Dover, but the tentative patterns indicate that Lower Dover probably does not represent a confederacy as both the Tutu Uitz Na and BR-180/168 intermediate elites suffered a dramatic reduction in wealth, and the Floral Park elites saw a slight decline in wealth. This decline in wealth across all three intermediate elite households, coupled with strong evidence of their continued residency and construction at their respective centers, indicates that none of them rose to paramountcy and became the apical elite. Subsequently, the patterns documented in the settlement data suggest that the apical elite was an external imposition.

7.4.5 Benevolent and Exploitative Relationships

The variability in commoner wealth and wellbeing at the district level indicates that intermediate elites likely played a pivotal intermediary role in district-level governance. The only

common pattern evident across the polity during the Late Classic period, which could be attributable to the Lower Dover apical elite, was the reduced access to wealth items on the part of the intermediate elites. In contrast, wealth changes at the commoner households vary, depending largely on district membership. Overall, this variability indicates a relatively decentralized strategy of intermediate elite co-option on the part of the Lower Dover apical elite. The fact that commoner wealth patterns vary at the district level strongly suggests intermediate elites possessed the agency to create and articulate their downward face towards their commoner subordinates. In Chapter 2, I suggested that intermediate elites could employ more communally beneficial political strategies, which involved ensuring onerous burdens were not placed on their subordinates. In fact intermediate elites may themselves may have acted as a shield to prevent top-down exploitation of their retinue. Such a strategy would be grounded in legitimate public authority. In contrast, a more exploitative strategy would involve intermediate elites manipulating commoner subordinates to extract greater tribute yields or labor tax. This strategy is more synonymous with elite possession of coercive political power. Greater coercive power may easily be accessed by passing the fruits of commoner labor up to more politically powerful suzerains.

At the level of the individual district, the clearest pattern which emerges is the distinct decline in commoner access to wealth items and labor investment in their house structures at Floral Park. This decline is concomitant with the overt increase in construction at the intermediate elite center. In agency terms, this disjunction suggests that the Floral Park intermediate elite pursued a more exploitative or coercive strategy in the articulation of their “downward face” with their commoner subordinates. Interestingly, Floral Park elite wealth declined to a lesser extent than the other intermediate elites. This dynamic might represent the distinct co-option of the Floral Park intermediate elite by the Lower Dover apical elite and is corroborated by ceremonial architectural data presented in Chapter Nine. Little is known about the Floral Park local elite prior to the rise of Lower Dover, but it is likely that their residence was situated on the main ceremonial plaza (Plaza A), as their separate elite residential compound to the north was not constructed until the Late Classic period (Walden et al. 2020b).

In contrast, it seems highly likely that the Tutu Uitz Na elite pursued a more benevolent, or mutually beneficial approach in their dealings with their commoners. While the architectural proportional increase at Tutu Uitz Na in the Late Classic period is relatively high, this does not

represent much of a burden on the district of commoners due to the comparatively lower architectural volume of this proportional increase and the dramatic increase in surrounding district population during this time. If the reduced wealth at intermediate elite centers in relation to their commoner subordinates is indeed indicative of patron/client relations and the redistribution of wealth items to commoners, then it seems that the Tutu Uitz Na and Texas commoners were reimbursed for their labor in ways which many of the Floral Park commoners were not.

7.4.6 Summary of Wealth, Wellbeing, Power, and Authority

To summarize the findings, the Late Classic Tutu Uitz Na and BR-180/168 elite both saw their wealth decrease, but their ability to command commoner labor increase. The Floral Park elites in contrast saw an even more sizeable increase in access to commoner labor and a less overt decline in wealth. The BR-180/168 elite was always less wealthy, but more access to commoner labor. The Tutu Uitz Na and Texas commoners saw no major change, but the Floral Park commoners saw a distinct decrease in both access to wealth items, and their ability to construct their residences. The Tutu Uitz Na and BR-180/168 regimes were likely redistributing wealth to commoners in exchange for construction labor, whereas the general flow of wealth into the Floral Park district seems to stop at the intermediate elite level with no clear trickle-down effect. Uniform patterns across the whole Late Classic polity are few, except for the fact that all three intermediate elites were not particularly wealthy, but had access to sizeable amounts of commoner labor that was invested in monumental construction.

The distribution of jade at Lower Dover potentially suggests it may have been a sumptuary or restricted good distributed through elite patron-client relationships, not exchanged commercially (see Guderjan 2007: 117; for a contrasting example see A.F. Chase et al. 2015). This is evident in the fact that only a single commoner household at Floral Park and one at Tutu Uitz Na contained jade (for similar local patterns see Yaeger 2003a: 47). The picture is slightly more complicated at the Texas District, where jade items are present at both BR-194 and BR-260, reflecting a broader pattern of jade availability at Barton Ramie (Willey et al. 1965). It seems plausible that such wealth items could have flowed downward from patrons in exchange for cacao or other crops grown on the alluvial soils. Some of this reduction in intermediate elite wealth might

be associated with a regional decline in the availability of jade or other exotics in the Late Classic period (Guderjan 2007: 109; Moholy-Nagy 1994). However, these types of high-value wealth items make up only a small sample of the overall pool of wealth items, so these types of regional trends in availability likely would not skew the data in such an overt way.

These patterns suggest that the rise of Lower Dover did not undermine the political power and authority of intermediate elites, who retained control of their commoner subordinates. However, the rise of Lower Dover did induce a leveling effect on intermediate elite wealth. The relative Late Classic wealth of intermediate elites is comparable to that of wealthier commoners. The Tutu Uitz Na and BR-180/168 elite operationalized a downward benevolent face which buffered any deleterious effects on commoners associated with the rise of the polity. Commoner labor expended in monumental construction at both centers was probably reciprocated with a downward flow of wealth items (Abrams 1994: 97-99; LeCount 1999). There is no sign that the commoners of the Tutu Uitz Na and Texas districts were impacted by the labor demands of their intermediate elite patrons. Potentially, the Tutu Uitz Na elite were emulating policies that the BR-180/168 elite had employed since the onset of the Middle Preclassic period. In Chapters 9 and 10, I develop the argument that the Tutu Uitz Na and BR-180/168 intermediate elites were regarded as legitimate leaders in their respective districts, and the labor they drew upon was representative of publicly mandated authority. In contrast, at Floral Park, the intermediate elite secured substantial amounts of commoner labor and offered nothing tangible in return. This finding is corroborated by the fact that intermediate elite labor burdens appear to have had a noticeably negative effect on the small commoner populace of the Floral Park District. Unlike the Tutu Uitz Na and Texas Districts, it seems very clear that the construction burdens the Floral Park elite placed on their subordinates all but precluded them from performing limited maintenance on their residences.

In further contrast with Tutu Uitz Na and BR-180/168, I combine multiple lines of evidence to argue that the Floral Park elite pursued more exploitative policies, which were born of coercive power they garnered through top-down relationships with the Lower Dover apical elite (see Chapter 10). Despite the changes at the intermediate elite scale, most commoner households (Tutu Uitz Na and Texas) saw little change over the transition, suggesting that the rise of Lower Dover did not cause much disruption “at the grassroots” level of the commoner households. The patterns

in labor mobilization strongly suggest that the period from AD 600-800 (Tiger Run and Spanish Lookout I) phases saw the highest labor burdens evident throughout the whole trajectory. The fact that these are tied to the establishment of a new polity is not surprising, as scholars have often commented on the particularly labor-intensive nature of monumental construction associated with the emergence of new polities (Adams 1992: 216; J. Marcus 2003b).

In some respects, the lack of a sheer discrepancy in wealth does not come as a surprise. There is a growing realization that high-value wealth items do occur in Classic period commoner households in the Maya lowlands with some regularity (Hutson 2020a). Moreover, the seemingly “elite” assemblages of regular commoner households at Barton Ramie have attracted much debate (A.F. Chase and Garber 2004). The presence of not only wealth items, but sumptuary items such as those present at BR-260 is particularly illustrative of this dynamic (see Chapter 6.5.2.8). Numerous scholars have recently investigated the degree to which commoner and elite categories overlap and merge (Hutson 2020a; Inomata 2006). Gerry (1993: 104) noted that burial wealth and architecture at Barton Ramie suggested that status hierarchies were less apparent at rural sites than larger civic-ceremonial centers. While this is true when one views inequality through the lens of construction labor a very different picture emerges. Even low-level intermediate elites in the Belize River Valley could command roughly 10 times more labor than the largest commoner households in their respective districts. Larger elite centers could command well over 20 times as much labor. When differences in access to construction labor are taken into account then a very clear dichotomy between elite and commoner emerges at Lower Dover, and more broadly in the Belize River Valley. This discrepancy began in the Middle Preclassic period, when divergent levels of investment in the construction of commoner households like SG 3 (87 m³), SG 34 (48 m³) and BR-174 (19 m³), and Tutu Uitz Na (~600 m³), Floral Park (~400 m³) or BR-180 (~2000 m³) suggests unequal access to labor for construction (see Powis et al. 2020: 281).

The notion of a “founder effect” has been popular in Maya archaeology (McAnany 1995). At Lower Dover, the elites exhibit evidence of starting early but they did not start as average households at this time. Initial Middle Preclassic constructions at Tutu Uitz Na, Floral Park, and BR-180 are substantial enough to suggest some control of labor. That said, evidence of earlier occupations at these elite centers could be missing currently due to sampling coverage. It remains plausible that all three sites had small Early Preclassic components. Some high-status commoner

households show some degree of “founder effect” (SG 3 and SG 34), whereas other larger households do not. For instance, as late forming successful households SG 51 and BR-260 do not fit the mold. While the principle of first occupancy is one mechanism underlying the accumulation of wealth over time, other mechanisms existed for these other commoner households corroborating patterns at Chan (Robin et al. 2012a: 38).

A general trend which is only partly emphasized by the statistical analysis here relates to the comparison of broader trends in residential architecture and household assemblages between the settlement investigated as part of this dissertation, and that of Barton Ramie excavated by Willey and colleagues (1965). The abundance of wealth items and sumptuary goods in relatively small commoner households at Barton Ramie has long been something of an enigma (A.F. Chase and Garber 2004). It would seem however that two different factors underly this dynamic. The first being that these small commoner households are situated on Class I soils, which were likely used for cacao production. It seems likely that cacao acted as a form of currency and thus may have represented a “cash crop” which could potentially be directly exchangeable with wealth items in a commercialized system (Baron 2018a; Friedel et al. 2002; see also Hoggarth 2012: 141).

Another possibility, following McAnany (2002), involves commoner farmers benefitting directly from the patronage of elites who provided them with wealth items. This may be reflected in the proportions of wealth items among high-status commoner households like BR-194, and BR-260 in the Texas District. This logic holds at Settlement Cluster C, which is also situated on Class I soils. The sample of households excavated by Hoggarth (2012) reveals higher proportions of wealth items than similarly sized households at Tutu Uitz Na and Floral Park. Numerous instances of ostentatiously wealthy commoner households exist in regions that potentially supported the cultivation of cacao (Guderjan 2007: 61, 64, 93-94, 104-105). The aforementioned wealthy Early Classic crypt burial within the commoner household at M-112 in Settlement Cluster C fits this pattern (Hoggarth 2012: 226-228; Hoggarth et al. 2014: 1066; see also Chapter 6.5). The other component of this overarching enigma is residence size. The commoner households situated on alluvial soils at both Barton Ramie, Baking Pot, and Spanish Lookout form large tell-like entities. While part of their amorphous appearance is no doubt due to extensive plowing, unlike many commoner households in the region, these were all situated comparatively far from limestone sources and are largely filled with dense clay either from the river or local creeks. These limitations

on construction at Barton Ramie when compared to Tutu Uitz Na and Floral Park likely made it easier for commoners situated on the south bank of the river to build more extensive homes. Despite these inherent limitations, the Barton Ramie commoner households still reached a substantial size.

8.0 CHANGES IN THE ECONOMIC REALM

Important questions revolve around the economic roles of Classic Maya intermediate elites. Following Potter and King (1995), Maya archaeologists have characterized systems of resource extraction, production, and redistribution as essentially heterarchical in nature, often operating in the hands of independently acting elites and corporate groups. It seems likely that intermediate elites may have been responsible for managing commoner agriculture and resource extraction (Walden et al. 2019). Substantial evidence indicates that the Classic Maya, and more broadly Mesoamerican elites frequently engaged in the production of high-value items (Hirth 1992; Inomata 2001; Kovacevich 2015; Foias 2002). A substantial body of literature also indicates elites played a redistributive role by gifting wealth items down to clients (LeCount 2001; Pohl and Pohl 1994). Recent realizations about the possible extent of commercial exchange in the Maya lowlands means we need to examine the extent to which intermediate elites may have patronized marketplaces and served as loci of exchange (A.F. Chase et al. Chase 2015; Dahlin et al. 2007; King 2015; Shaw 2012; see also M. Smith 2004). This chapter examines diachronic changes in productive differentiation and exchange patterns at the intermediate elite and commoner levels.

8.1 Diachronic Shifts in Productive Differentiation

Following Drennan and Peterson (2012: 78), the concept of productive differentiation is employed to understand variability in involvement in the production of quotidian and luxury items at the household level. This concept avoids some of the problematical issues in defining craft specialization in terms of what was being produced, and issues of scale (see Costin 1991; M. Smith 2004). For the purposes of this dissertation, production is split into the manufacture of quotidian stone tools, and the production of higher value wealth items.

8.1.1 Productive Differentiation in Chert Tools among Elites

Chert cores and debitage from different stages of the production sequence reflect the production of stone tools. The majority of tools were utilitarian agricultural implements like stone bifaces for felling trees and tilling the land. The proportions of these artifacts reflect the degree to which intermediate elites were involved in the manufacture of relatively low-status quotidian items. Generally, the production of stone tools is surprisingly high at Tutu Uitz Na throughout its sequence (Figure 8.1). The proportions of cores and debitage fluctuate (in a statistically significant fashion at the 99% confidence level) throughout the trajectory at Tutu Uitz Na. Stone tool production reduces dramatically in the Late Classic period (in a statistically significant fashion at the 99% confidence level).

This pattern of decreased production of stone tools is repeated even more dramatically at Floral Park, where the proportions of stone tool production debris are relatively high in the Middle Preclassic, then decrease in the Late Preclassic-Early Classic (in a statistically significant fashion at the 80% confidence level). In the Late Classic period, the proportions of stone tool production items drop in a dramatic and statistically significant fashion at the 99% confidence level. Like the reduction in stone tool production at Tutu Uitz Na, the massive reduction at Floral Park may go hand in hand with substantial increases in the political power of the Floral Park elite in the Late Classic period (outlined in Chapter 7). Lastly, no significant change is apparent in the proportions of cores and debitage at BR-180/168 during the Middle/Late Preclassic transition. No chert cores or debitage were available from stratigraphic contexts dating to the Early and Late Classic period. The general decline in stone tool production over time at Tutu Uitz Na and Floral Park might reflect a shift in production locales away from intermediate elite centers. This decline in chert tool production may relate to a shift from an intermediate elite reliance on agriculture and quotidian item production early on, to being provisioned by subordinates. Thus, as elite political authority increased over time (as discussed in Chapter 7) their direct involvement in stone tool manufacture decreased (Levin 2019).

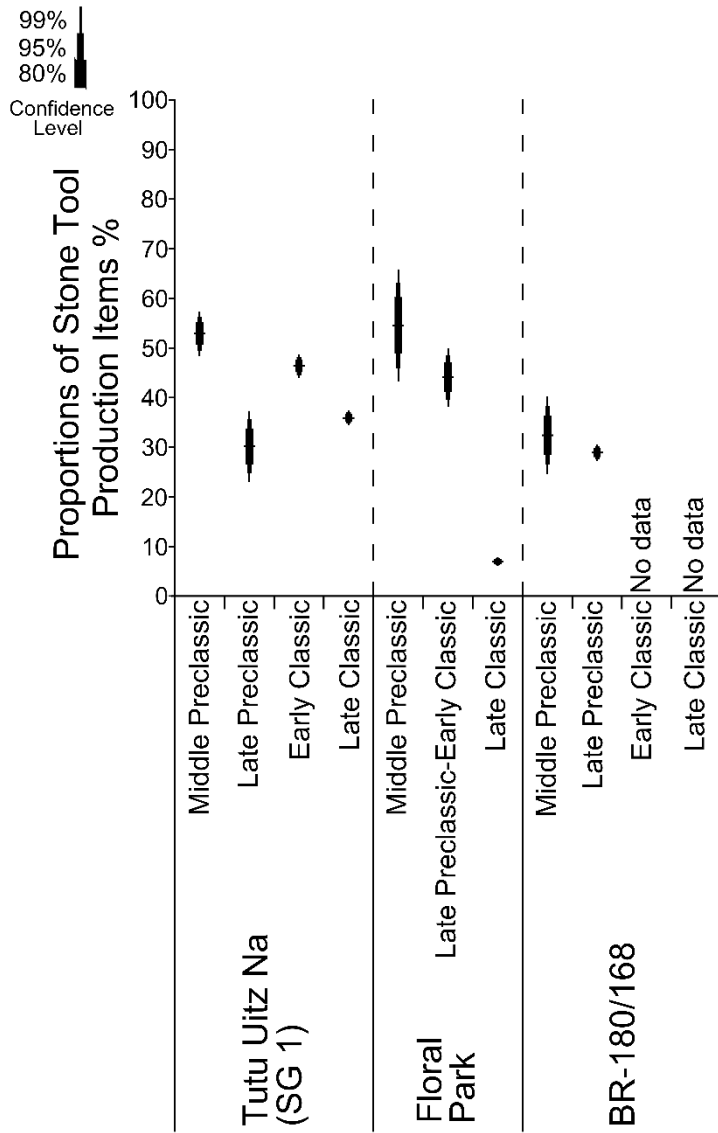


Figure 8.1 Bullet graphs showing intermediate elite stone tool production
Proportions of stone tool production items to total artifacts at the intermediate elite centers

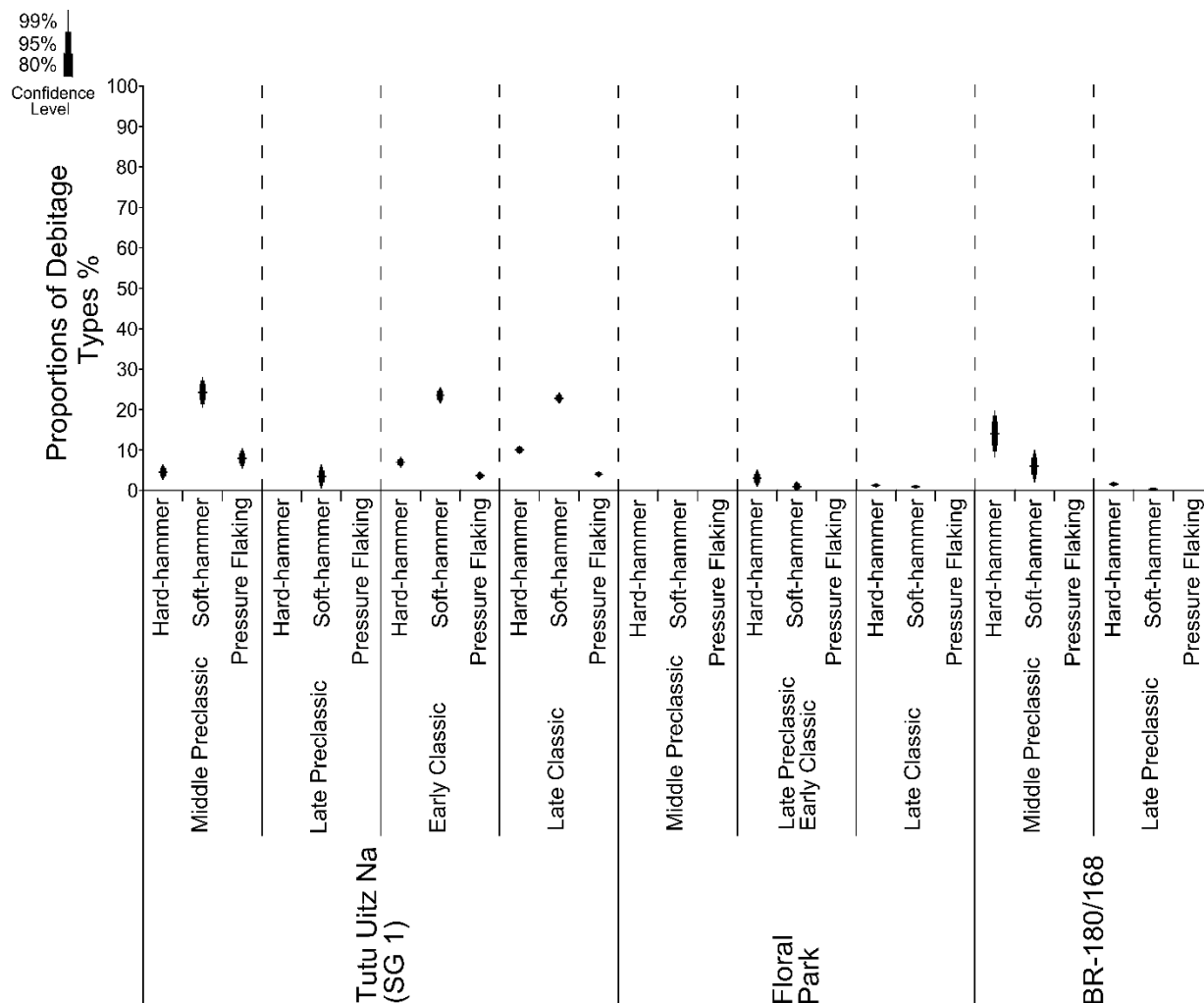


Figure 8.2 Bullet graphs showing intermediate elite lithic debitage

Proportions of primary, secondary and pressure flaking debitage to total artifacts at the three intermediate elite centers (note no debitage was available from Early and Late Classic contexts from BR-180/168)

The proportions of chert tool production debitage put a finer point on the types of stone tool production activities occurring at the intermediate elite centers (Figure 8.2). A generic pattern of quotidian stone tool production is apparent among most commoner households comprising roughly similar amounts of hard-hammer and pressure flaking debitage, and roughly three times as much soft-hammer debitage (see Chapter 8.1.2). The lower proportions of hard-hammer debitage reflect raw material being brought to the households partially reduced (Stemp and Helmke 2008). This pattern is evident during most periods at Tutu Uitz Na but is less apparent at Floral Park and BR-180/168. The lack of correspondence between Floral Park in Figures 8.1 and 8.2 is due to having counts of debitage from earlier contexts but no physical chert to analyze. Analysis

of the available debitage suggests the proportions of hard-hammer, soft-hammer, and pressure flaking debitage diverge dramatically from the standard pattern, but this is likely due to issues inherent in these data. In contrast, the data from BR-180/168 is solid for the Middle and Late Preclassic periods, and seems to suggest a different pattern in which primary decortification was occurring at this center. This pattern is consistent with the idea that chert nodules were being reduced in the vicinity of the center and then redistributed elsewhere.

To summarize, stone tools were produced at, or in the vicinity of local elite households prior to the rise of Lower Dover. Stone tool production could have been carried out by local elite actors, but it seems more likely that commoners acting under the patronage of intermediate elites were knapping tools in and around the different intermediate elite centers. Generally, the quality of the chert being used was low and probably did not travel great distances to Lower Dover. Chert was readily available at various points on banks of the Belize River (Yaeger 2003a: 44). Still, no known chert sources are apparent in the immediate hinterlands of the polity, meaning that some local elites may have been responsible for the importation of chert, which was then worked in situ at their respective residences. This production pattern is relatively consistent with that evident at plaza-based marketplaces, where experienced tool manufacturers put the final touches on preforms at lithic production stalls (Cap 2015, 2020; Keller 2010). It seems plausible that such patterns reflect marketplace activities in the intermediate elite plazas, although we might expect to see slightly higher proportions of soft-hammer and pressure flaking activities at the intermediate elite centers. Regardless of the specific dynamics underlying the pattern, it becomes abundantly clear that this activity diminished quite dramatically following the rise of Lower Dover. It remains plausible that a small proportion of finished stone tools were imported (McAnany 1989). However, these examples seem few and far between, an example being the fine ceremonial biface in SG 1 Burial 4 (see Chapter 6.3.1.3.).

8.1.2 Productive Differentiation in Chert Tools among Commoners

The patterns identified at the intermediate elite level can be contextualized by comparison with commoner households in their surrounding districts. Commoner household stone tool production varied over time in the Tutu Uitz Na District (Figure 8.3). In the Middle Preclassic

period, stone tool production was relatively intense at SG 3, but we lack assemblages from other Middle Preclassic commoner households for comparison. Production of stone tools decreases in the Late Preclassic-Early Classic period at SG 3 (statistically significant fashion at the 99% confidence level). The chert tool production site and carpentry workshop of SG 28 show incredibly high proportions of stone tool production debris. The majority of this is not associated with the production of agricultural tools, but specialist carpentry implements like borers which were then discarded in situ (Levin 2019; Walden et al. 2018; see Chapter 6.3.2.4).

In the Late Classic period, the high-status commoner neighborhood head households of SG 3 and 42 see moderate increases in chert tool production (statistically significant fashion at the 99% and 95% confidence levels respectively). Although, it is worth noting that with the exception of SG 28, the Late Classic Tutu Uitz Na elite are still more involved in stone tool production than commoners. The presence of high proportions of stone tool production debris at high-status commoner neighborhood head households like SG 42 suggests that commoners may have been gaining access to chert resources. To summarize, patterns across the Tutu Uitz Na District suggest commoners were variably invested in chert tool production prior to the rise of Lower Dover, but the intermediate elite were heavily involved. Despite a decline in tool production, the intermediate elite still produced a high number of chert tools.

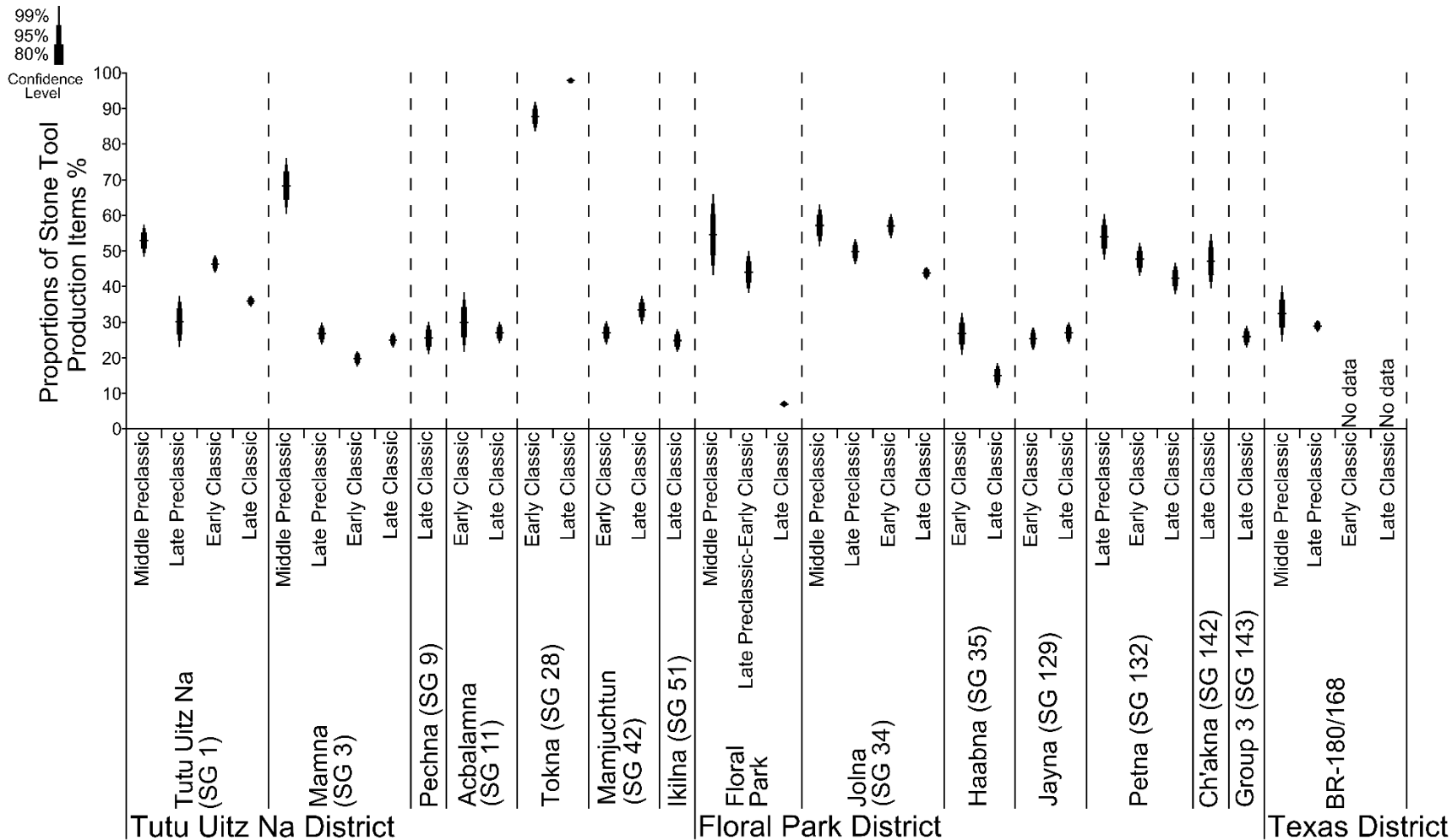


Figure 8.3 Bullet graphs showing stone tool production at all households

The proportions of stone tool production items to total artifacts at the three intermediate elite centers and their respective districts (debitage was not available from Early and Late Classic BR-180/168, and the commoner households of the Texas District)

In contrast to Tutu Uitz Na, different patterns are apparent at Floral Park. SG 34 was producing very high proportions of stone tools in the Middle Preclassic, Late Preclassic, and Early Classic periods. In the Late Preclassic and Early Classic periods, households were differentially involved in stone tool production, with SG 34 and SG 132 showing markedly more involvement than SG 129 or SG 35 (statistically significant at the 99% confidence interval). The proportions of stone tool debris associated with the Late Preclassic round platform at SG 132 is especially interesting as this is unexpected in a ritual context. However, it seems clear that this could have originated from the broader household group, who were undertaking day to day tasks despite controlling a specialist ritual area. The proportion of stone tool production debitage is comparatively low at SG 129, which was an affluent high-status commoner neighborhood head household, and SG 35, which seems to have housed a specialist ritual practitioner. Generally, patterns suggest some degree of interdependence between households as some are differentially involved in tool production. If houses were economically self-sufficient then we would expect the entire quotidian tool kit replicated at each household (Parry 1987).

The Late Classic period saw a decline in stone tool production at SG 34 and SG 35 in a statistically significant fashion at the 99% confidence level. SG 132 saw a less dramatic decline in stone tool production (statistically significant fashion at the 80% confidence level). SG 129 exhibited no change. Generally, stone tool production was high among emergent households like SG 142 and SG 143 (Group 3). Unlike the pattern evident at Tutu Uitz Na, the Late Classic Floral Park District commoners were more involved in stone tool production than the elite. Some households were producing more tools than the other households, potentially speaking to higher degrees of interdependence between the households. Unfortunately, the majority of the chert from the households excavated at Barton Ramie was not available so we cannot assess productive differentiation within the Texas District. The decline in the proportions of chert tool production debris and cores in intermediate elite architecture at Tutu Uitz Na and Floral Park assuages taphonomic concerns about the redeposition of commoner middens in elite monumental architecture, as these items are regularly occurred in commoner middens and fill (see Chapter 5.3.3).

Analysis of a sample of debitage from the excavated contexts generally corroborates the patterns outlined above. The proportions of hard-hammer, soft-hammer, and pressure flaking debitage for the vast majority of households show a clear and consistent pattern of chert tool production. This pattern involves nodules brought in partially reduced due to the limited proportions of hard-hammer percussion debitage in fill (Figures 8.4 and 8.5). The majority of chert tool production occurring at the household level involved soft-hammer percussion, and smaller proportions of pressure flaking. These patterns seem to corroborate patterns noted by Stemp and Helmke (2008: Figs. 4 and 5) at nearby Pook's Hill. The smaller proportions of pressure flaking debitage at most households may be reflective of biases resulting from the redeposition of middens in fill, although this may simply reflect the fact tools were sharpened in the field away from the house. The only contexts which deviate from this pattern are those which had a specialized function (e.g. Tokna) or ones in which there were underlying issues with the representativeness of the chert debitage sample (e.g. Floral Park center). Tokna (SG 28) had much higher proportions of pressure-flaking debitage due to intensified borer production. A decrease in the amount of primary decortification at the carpentry workshop over time likely suggests intensification of production.



Figure 8.4 Bullet graphs showing debitage at the Tutu Uitz Na District households

The proportions of hard-hammer, soft-hammer, and pressure flaking debitage to total artifacts in households the intermediate elite center and commoner households at the Tutu Uitz Na District

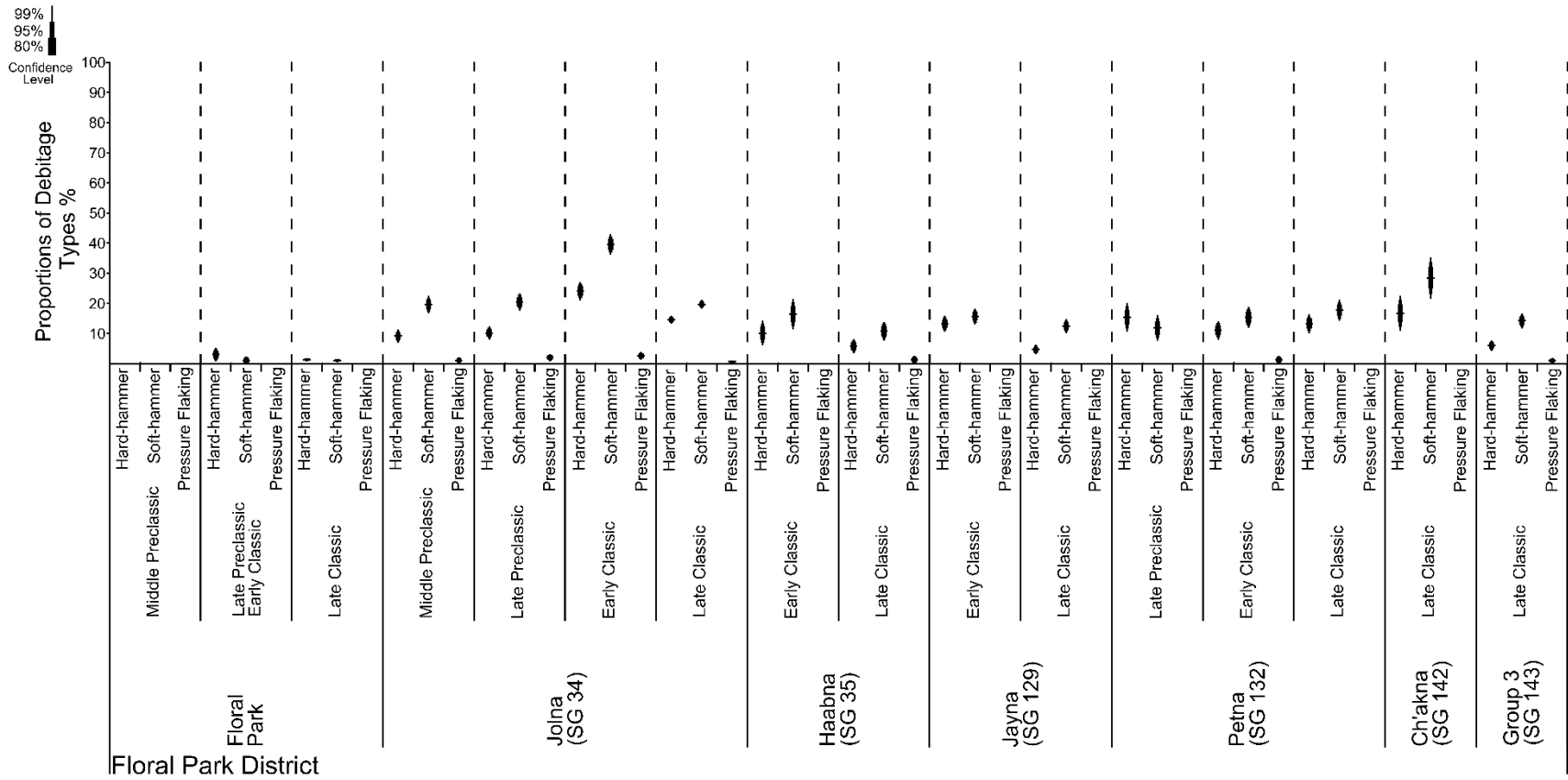


Figure 8.5 Bullet graphs showing debitage at the Floral Park District households

The proportions of hard-hammer, soft-hammer, and pressure flaking debitage to total artifacts in households the intermediate elite center and commoner households at the Floral Park District

Lastly, a brief discussion of patterns of obsidian tool production is warranted. Obsidian prismatic blades are ubiquitous across residential contexts of varying statuses in the Classic Maya lowlands (Ford 2004; Rice 1984). A pan-Belize River Valley pattern of obsidian tool procurement and manufacture is evident in the Classic period. This involves the importation of pre-reduced polyhedral cores, which were then reduced locally to either prismatic blades or bladelets at specialized workshops and then distributed to households through wandering merchants or market exchange (Ebert and Awe 2018; Shults and LeCount 2013). A high degree of specialization is suggested by the fact that, despite substantial household excavations, the only known obsidian workshop in the Belize River Valley region is Latón (Site 272-136) near El Pilar (Ford 2004: 247; Hintzmann 1990; Michaels 1993).

The proportions of obsidian debitage in the Lower Dover area were so low ($n=14$) that statistical analysis was not possible. Most of these flakes were found in different households. The paucity of flakes indicates that the majority of obsidian tools were blades knapped from polyhedral cores. This finding is consistent with Weller's (2009) reanalysis of obsidian artifacts from Barton Ramie and corroborates general patterns apparent across the Belize River Valley (Awe and Healy 1994; Ebert and Awe 2018; Healy et al. 2004: 115; Meierhoff, Golitko, and Morris 2012). The only context which deviates from this pattern is Mamna (SG 3). Four of the 14 obsidian flakes came from SG 3, which had access to much higher proportions of San Martin Jilotepeque obsidian in the Preclassic and Early Classic periods, and also had a poorly knapped obsidian biface lying on the terminal patio floor in front of Structure N1 (see Chapter 6.3.1.2; see Chapter 8.4 for obsidian sourcing). Mamna (SG 3) did not function as an obsidian production site. The poor workmanship evident on the obsidian biface indicates a low level of specialization, which is corroborated by the general paucity of flakes. Overall, throughout the Lower Dover area trajectory, obsidian tool production was not carried out at the household level, instead finished tools were procured through traveling merchants, at marketplaces, or possibly even gifted down elite re-distributional networks.

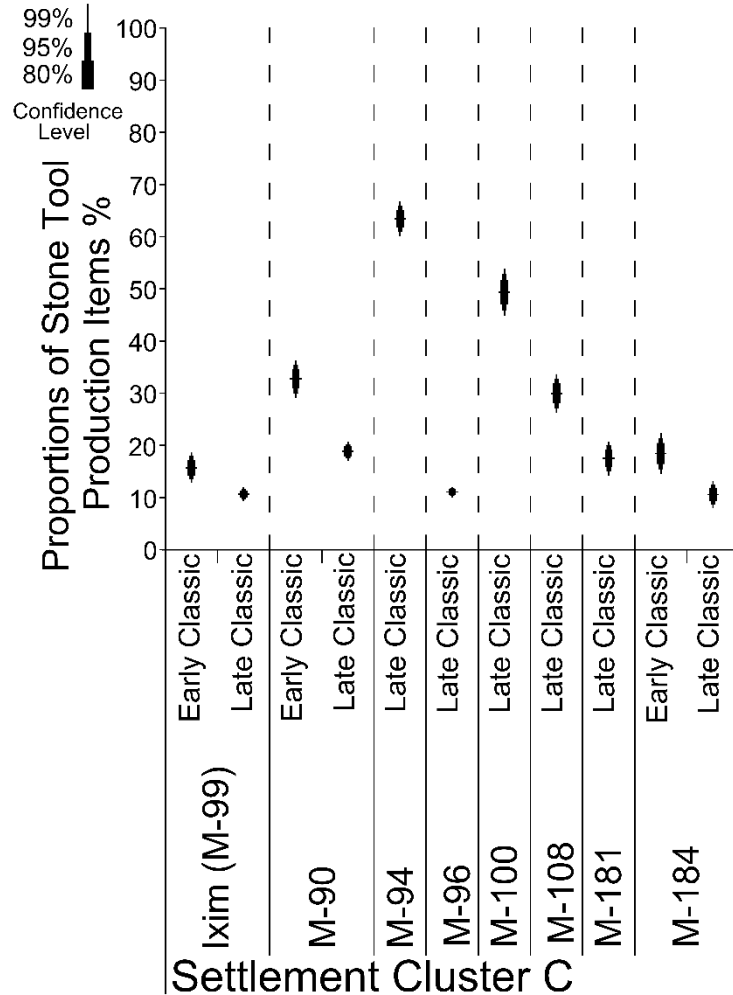


Figure 8.6 Bullet graphs showing stone tool production at Settlement Cluster C

The proportions of stone tool production items to total artifacts in households at Settlement Cluster C at Baking Pot

8.1.3 Comparative Perspectives: Stone Tool Production at Baking Pot

In contrast to the patterns at Lower Dover, it would seem that the Ixim intermediate elite were not involved in stone tool production to the same extent as their peers at Tutu Uitz Na or Floral Park in the Early Classic (Figure 8.6). Most commoner households at Settlement Cluster C were unsurprisingly involved in stone tool production. High-status commoners, such as M-90, M-96, and M-108 were involved in stone tool production to varying degrees. M-90 saw a decrease over time (statistically significant at the 99% confidence interval), culminating in relatively low involvement in stone tool production in the Late Classic period. A similar pattern is noted at M-

96. These data tentatively suggest that variable investment in chert tool production between different households was common at the district level in the Belize River Valley. Household investment in chert tool production was probably not impacted in any major way by the emergence of the Lower Dover polity.

8.1.4 Productive Differentiation in Wealth Items among Elites

Clear differences emerge between the intermediate elites in terms of production of wealth items and ornaments (Figure 8.7). Items associated with the production of ornaments include marine shell, jade, and obsidian debris, specialist tools like drills, borers, chisels, blades, burnishers, and barkbeaters for making paper (Hendon 2010: 139).

In the Middle Preclassic period, the Tutu Uitz Na elite were heavily engaged in the production of marine shell jewelry (Figure 8.7). While the specific drills commonly associated with Middle Preclassic marine shell production locales (Cochran 2010; Hohmann 2002; Keller 2012) were not present at the site, large quantities of marine shell beads at multiple stages of the production sequence were encountered in the *jute* deposit in the Tutu Uitz Na plaza. These items may have been redistributed to surrounding commoner households but if this was the case then some were redistributed at varying stages of the production sequence (see also Keller 2012: 267). In contrast, there was no evidence of ornament production anywhere at Floral Park and only minimal evidence for this activity at BR-180/168.

The onset of the Late Preclassic period marked a major change in elite crafting. At Tutu Uitz Na the elites stopped making shell beads and became less involved in the production of wealth items than their peers at Floral Park and BR-180/168. This dramatic decline is statistically significant at the 99% confidence level. The Floral Park elite increased production slightly, but their involvement in this activity was still minimal. Crafting at BR-180/168 may have involved the working of imported jade or greenstone, as some jade debris was encountered in fill. This requires greater investigation however as some of this debris may actually have been jade items destroyed by plowing. Crafting might have involved hematite, as a sizeable hematite boulder was recovered from fill (see Chapter 6.5.12; see Chapter 5.4.3. for information about p-XRF analysis).

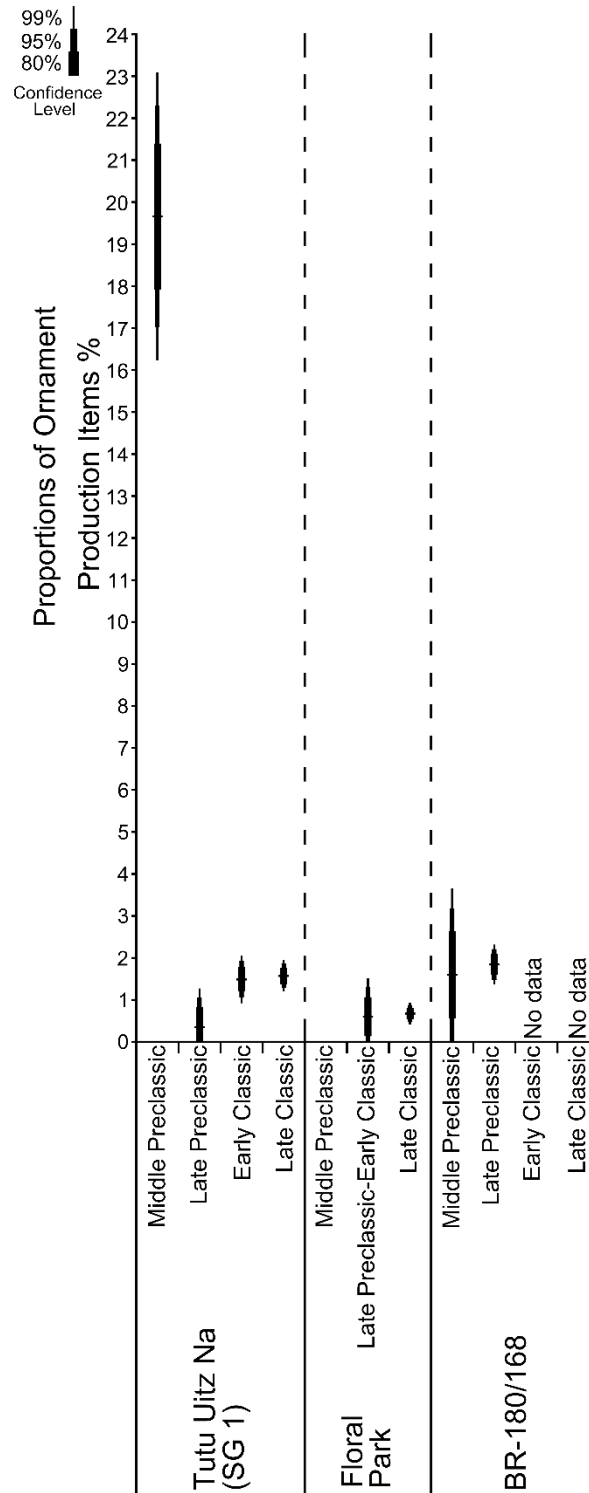


Figure 8.7 Bullet graphs showing intermediate elite manufacture of wealth items

Graph show the proportions of wealth item production paraphernalia to total artifacts at the intermediate elite centers

The proportions of artifacts related to wealth item production increase at Early Classic Tutu Uitz Na center in a statistically significant fashion at the 99% confidence level, and then remain static into the Late Classic period. This increase is not associated with any one discernable activity such as jewelry making. Intermediate elite investment in the production of wealth items at Floral Park remains low but stable throughout the Early to Late Classic transition. Late Classic BR-180/168 elite could not be included in this analysis due to previously outlined issues.

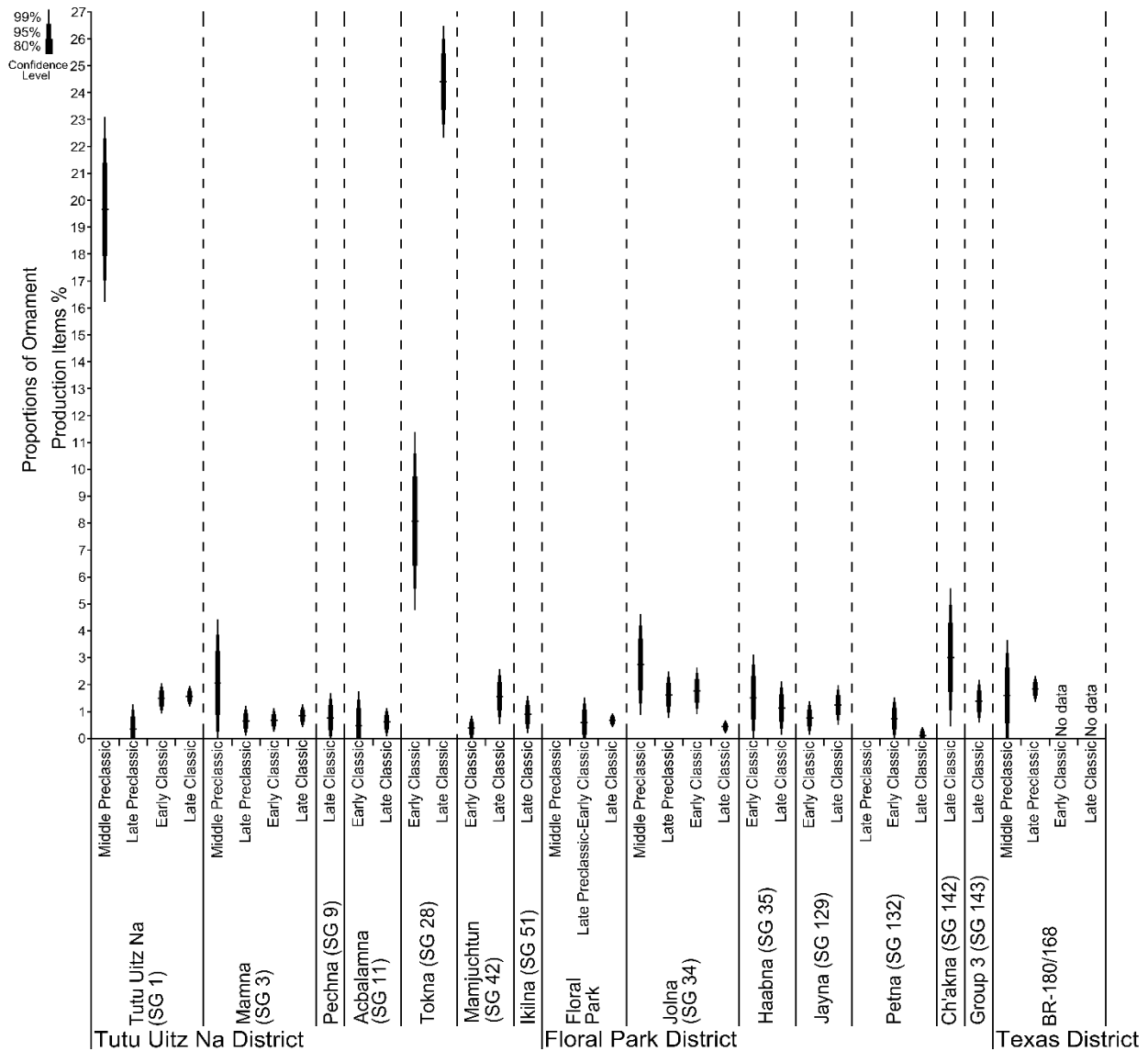


Figure 8.8 Bullet graphs showing wealth item production at the three districts

Proportions of wealth item production items to total artifacts at the three intermediate elite centers and their respective commoner districts (note no debitage was available from Early and Late Classic contexts from BR-180/168, and the commoner households of the Texas District)

8.1.5 Productive Differentiation in Wealth Items among Commoners

The commoners of the Tutu Uitz Na District varied in involvement in the production of ornaments and wealth items (Figure 8.8). In the Middle Preclassic period, the *jute* deposit apparent at SG 3 shows high volumes of marine shell beads at various stages of the production sequence, like the similar but larger deposit at the Tutu Uitz Na center (Figure 8.4). As at the Tutu Uitz Na center, the production of marine shell jewelry declines at SG 3 in the Late Preclassic period, although this is only statistically significant at the 80% confidence interval. During this time, general proportions of ornament production are low at all households in the Tutu Uitz Na District, with the exception of SG 28, which is involved in the production of wooden items. Tokna (SG 28) sees a highly statistically significant increase (at the 99% confidence level) in carpentry related activities in the Late Classic period. While the types of wooden items produced at SG 28 may not have been wealth items as such, the tools present and their small size speaks to the production of small, heavily carved, and gouged wooden items, possibly akin to the incredibly intricate wooden carvings which are preserved at Tikal. With the exception of the massive increase apparent at SG 28, the only other household which saw an increase in production of ornaments is SG 42 (statistically significant fashion at the 80% confidence level). SG 42 which may have been involved in the production of bark paper based on the presence of a barkbeater.

Similar patterns can be seen among Floral Park commoners with one striking difference. The Floral Park commoner household sample lacked anything comparable to the carpentry workshop at SG 28 in the Tutu Uitz Na District. SG 34, the only Floral Park commoner household occupied during the Middle Preclassic period shows similarities with SG 3, in that both have *jute* deposits with a sizeable amount of worked marine shell beads. SG 34 was probably heavily involved in ornament production throughout its occupation although this declines in a statistically significant fashion at the 99% confidence level in the Late Classic. SG 34 is very different from SG 28. Whereas SG 28 was a smaller low-status household, likely specialized in a single type of ornament production, SG 34 was slightly higher status and possessed an array of different types of crafting debris such as slate and marine shell, and an array of different tools, including very high proportions of obsidian blades. It is likely that the commoner household at SG 34 pursued a strategy of “multi-crafting”, producing an array of different items (Hirth 2009b). Most of the Floral

Park commoner households show little change in terms of production of ornaments. SG 132 contained no artifacts indicative of ornament production in the Late Preclassic phase, but shows an increase in ornamental production in the Early Classic period. This might be related to the fact the platform transitioned from a ritual round platform to a regular rectangular house platform during this period. SG 142 shows a high degree of ornament production, which is associated with high proportions of fine-quality quartz debris.

Lastly, a brief comparison with Settlement Cluster C at Baking Pot reveals a decline in intermediate elite crafting of wealth items between the Early and Late Classic periods (statistically significant at the 99% confidence interval). In contrast, both of the multi-component households show a degree of stasis through the transition (Figure 8.9). Interestingly, the commoner households of Settlement Cluster C show much greater variability between households in terms of item production. This might reflect higher degrees of interdependence between households at the district level.

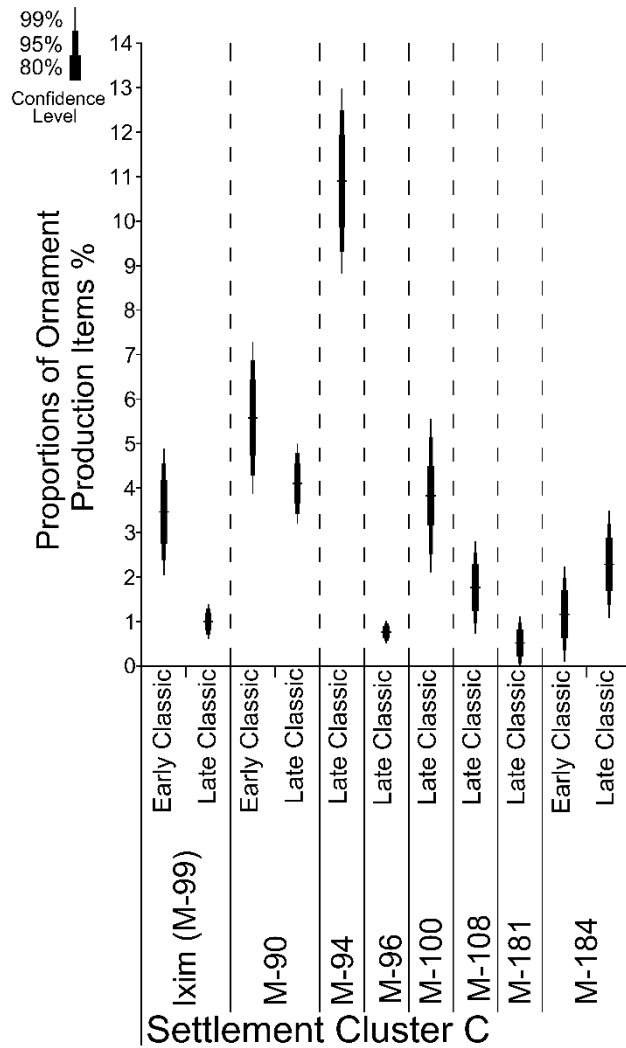


Figure 8.9 Bullet graphs showing wealth item production at Settlement Cluster C
The proportions of wealth item production items to total artifacts at Baking Pot

8.1.6 Changes in Productive Differentiation across the Polity

Through a polity-level perspective, we can distinguish three major changes in craft production across the Lower Dover area. The first is a decline in the production of marine shell jewelry during the Middle to Late Preclassic transition at the Tutu Uitz Na center, and at SG 3 and SG 34. This regional change was not associated with the rise of Lower Dover and its apical elite household. This shift has been documented at multiple settlements in the Belize River Valley and the broader surrounding region including Blackman Eddy (Cochran 2010), Pacbitun (Hohmann 2002), Chan (Keller 2012), and Cahal Pech (Awe 1992).

A second major change is the reduction in intermediate elite production of quotidian stone tools over time. This is most clear at Tutu Uitz Na and Floral Park (where it virtually ceases). One explanation for this shift is that as the political power and authority of intermediate elites rose over time (based on their ability to control commoner labor), they became less involved in quotidian production activities, relying instead on their commoner subordinates. Alternatively, the intermediate elites were less involved in the activities which required stone tools. That said, the high proportions of debitage and cores at the local elite centers early on is noteworthy as it is much higher than surrounding commoner households. While significant evidence exists for intermediate elite crafting luxury items in the Maya lowlands, it seems unlikely that the local elite households were themselves heavily involved in the production of quotidian stone tools (see Foias 2013). A more plausible explanation might involve commoners aggregating to produce such items under the patronage of elites. Another possible explanation involves the tools being produced around the intermediate elite centers as the plazas served as marketplaces through which the stone tools were commercially exchanged. However, this is problematized by the fact that the proportions of pressure flaking debitage, which is often associated with lithic stands in marketplaces (Cap 2015, 2020), are very low. Instead, the patterns of debitage discard at Tutu Uitz Na are very similar to domestic patterns at most commoner households.

The other noteworthy development is the rise and intensification of tool production and carpentry at SG 28. The existence of a specialized household in the sample confirms the existence of some degree of inter-household productive differentiation across the hinterland of Lower Dover. While SG 28 emerged during the Early Classic period, the scale of production increases further in the Late Classic period following the rise of Lower Dover. Despite the high degree of statistical significance in this trend, several interpretative issues exist. The excavation of SG 28 was a product of the vagaries of sampling and as such it remains unclear how many other chert workshops existed across the Lower Dover polity. It is possible that each district possessed at least one similar workshop producing specialist tools and ornaments, or even that multiple specialist carpentry workshops existed within the Tutu Uitz Na District. This issue is further confounded by a lack of data from the Barton Ramie households. Based on comparison with other carpentry workshops recorded, this seems to be the most plausible explanation of the function of SG 28, given the tool assemblage (Chapter 6; see also Aldenderfer 1991: 211). Either way, the fact that the wooden

items produced are materially ephemeral means we have no way of tracing them and establishing whether the workshop functioned as an independent entity, producing items for local consumption, or operated under the patronage of the SG 42 neighborhood heads, the Tutu Uitz Na intermediate elite, or even the Lower Dover apical elite. The fact that production intensified in the Late Classic period following the rise of Lower Dover might suggest a relationship, but it also seems likely that the rise of Lower Dover might have acted as the catalyst for the intermediate elite at Tutu Uitz Na to patronize local commoners to produce items.

All things considered, there is little evidence for changes in craft production as the Lower Dover polity rose. The decline in elite and commoner production of marine shell jewelry predates the rise of the polity by at least 800 years, and the decline in intermediate elite production of quotidian stone tools seems more tied to their increasing political status and ability to draw on commoner labor. The most striking development is the intensification of ornament production at SG 28 during the Late Classic period, yet this household already stood out in the Early Classic period. Thus, we cannot ascribe this intensification of craft production to the rise of Lower Dover.

In sum, the rise of the Lower Dover apical elite had little impact on the crafting economies of surrounding commoner and intermediate elite households. While delineating household economic inter-dependence is complicated given a limited sample, general patterns seem to suggest some degree of household economic interdependence. This finding is largely in keeping with Awe, Hoggarth, and Helmke's (2014) argument that the commoner households of the Belize River Valley polities were not closely integrated economically into overarching political/economic units. That said, some degree of district/neighborhood-level interdependence is likely (*sensu* Sheets 2000). Each household certainly does not have a replicated quotidian tool kit suggestive of complete self-sufficiency (Parry 1987; see also Vandenbosch, LeCount, and Yaeger 2010). Following J. Marcus (2004: 262), sample size is a major issue here. Potentially if a higher proportion of households were excavated in each neighborhood or district a very different picture of general levels of interdependence and self-sufficiency would emerge. Compositional analysis and clay sourcing offers scope for dealing with such issues as it will allow a better idea of production networks (Jordan, Hoggarth, and Awe 2020). Ongoing doctoral dissertation work by Qiu Yijia (n.d.) focuses on examining the ceramic production networks among the districts of Lower Dover to better elucidate household patterns of production and redistribution.

8.2 Shifts in Exchange Patterns and Consumption of Imported Items

Archaeologists working in Mesoamerica have only recently come to focus on the importance of marketplaces and market exchange in pre-Hispanic societies (Cap 2015; Dahlin et al. 2007; Hutson 2020b; Hutson and Dahlin 2017; King 2015; Masson and Freidel 2012). Traditionally scholars viewed Classic Maya economies as decentralized, and commercialization as being poorly developed (Demarest 1992b). However, the discovery of markets at several Maya political centers has begun to shift perspectives. One important question relates to the relationship between centralized markets and the presence of items in hinterland households. The Lower Dover center was originally thought to represent a Late Classic economic boomtown that was situated to control riverine trade on the Belize River (Guerra and Awe 2017). Recent investigations in the civic-ceremonial center have not revealed strong evidence of marketplace functions (Guerra 2018). In theory, if there was a more centralized market system in the Late Classic period, we would expect to see differential access to imported items among commoner and elite households drop through time, as all households acquired similar access to imported items through market exchange (Hirth 1998). This argument is problematized by the fact the households would still likely have to trade/buy to acquire these items in a commercial context, meaning the patterns of unequal access to high-value items may not change so dramatically. Still, if the economic hypothesis holds, we might expect to see a general influx of imported items and previously unavailable exotica. Alternatives to marketplace exchange, include gift-giving/redistribution through patron-client relations, courtly tribute, or barter transactions (Golden et al. 2020: 403; Hirth 1998).

Marketplaces are not easy to identify, but market exchange can be investigated in different ways. The distributional approach was developed by Hirth (1998) to examine the degree of commercial redistribution across commoner and elite households. The distributional approach is applied to test the hypothesis that differences existed in the ways in which high and low-status households were provisioned over time. Hirth (1998) used the distributional approach to compare the frequencies of imported items like ceramics and obsidian among different subgroups at Xochicalco and found out that there were no significant differences in the percentage of imports and the density of imports in elite and commoner households. Hirth (1998) argues that these findings indicate that a commercialized exchange system existed granting all households similar

access to the imported items. Eppich and Freidel (2015) noted a similar degree of commercialization in the distribution of both fine polychromes and locally produced monochromes during the Late to Terminal Classic transition at El Perú Waka', corroborating Hirth's (1998) finding at Xochicalco. Others noted that similar distribution patterns matching Hirth's predictions for market economies could be found in both commercialized and un-commercialized societies, and that other types of behavior not associated with commercialization might lead to similar patterns of material culture (M. Smith 1999). Despite this, the distributional approach remains one of the few tools available for assessing the degree of commercialized redistribution among households in Mesoamerica (Eppich and Freidel 2015).

Ongoing research into exchange systems at Lower Dover have employed the distributional approach to examine possible exchange patterns of four types of items: foreign ceramics, locally made ceramics, obsidian, and all imported items (obsidian, non-local, or luxury ceramics, non-local chert, jade, greenstone, serpentine, basalt, marine shell, and slate). These artifact classes were tested using the distributional approach (Qiu et al. 2019; Shaw-Müller et al. 2021). Selecting non-local ceramics in the Maya lowlands is particularly difficult, as Eppich and Freidel (2015) note in their study. There is no clear evidence of ceramics being imported in the Belize River Valley, those few vessels which did come from elsewhere were incredibly well-made polychromes, but even some of these were likely produced in the palace schools of local polities like Buenavista del Cayo (Ball 1993). Most of the polychrome ceramics found at Lower Dover were not produced at palace schools and likely represent locally produced emulations of these nicer vessels (see Becker 2003 for a similar dynamic). Such ceramics seem to be distributed through processes associated with political economy, not commercial exchange. Some of the cruder imitations of palace school vessels probably reflect locally made imitations which intermediate elites gifted to commoners to forge relationships of clientage (Callaghan 2013; see also Tsukamoto 2020).

Still, for consistency and comparability, any types which may have had some type of value and may have been traded are included in the distributional approach. These included Actuncan, Ixcario, and Dos Arroyo Orange polychromes for the Late Preclassic and Early Classic periods and Saxche and Palmar Orange polychromes, Benque Viejo polychromes, Cabrito Cream polychromes, and molded carved wares for the Late Classic period. Analysis was not conducted on Middle Preclassic assemblages because polychrome ceramics were not made during this period.

A sample of non-polychrome, presumably locally made utilitarian ceramics, which form the bulk of household ceramic assemblages, were used to compare with the “foreign ceramics”. A traditional distributional approach using ANOVA (analysis of variance) to the proportions of imported ceramics and obsidian diachronically before and after the rise of Lower Dover was carried out by Shaw-Müller, Walden, Qiu, and Levin.

Table 8.1 Results of the Distributional Approach (ANOVA).

| <i>Time Period/sample:</i> | <i>Comparison</i> | <i>Critical F:</i> | <i>F Value:</i> |
|-----------------------------|-----------------------|--------------------|-----------------|
| Early Classic Fine Ceramics | Between Status groups | 3.74 | 5.25 |
| Early Classic Fine Ceramics | Between Districts | 3.74 | 1.926 |
| Early Classic Pooled Item | Between Status groups | 3.74 | 7.36 |
| Early Classic Pooled Item | Between Districts | 3.74 | 3.91 |
| Late Classic Fine Ceramics | Between Status groups | 3.49 | 1.09 |
| Late Classic Fine Ceramics | Between Districts | 3.49 | 0.61 |
| Late Classic Pooled Item | Between Status groups | 3.49 | 1.72 |
| Late Classic Pooled Item | Between Districts | 3.49 | 0.48 |

The results of the distributional approach based on ANOVA are displayed in Table 8.1. The Early Classic fine ceramic sample between status groups, the Early Classic pooled item sample between status groups, and between districts both failed to reject the null hypothesis, suggestive of a lack of commercialized exchange at this time. This was not the case for the Late Classic period, however, when the F values for both the fine ceramics and pooled imported items suggest higher degrees of commercialized exchange, possibly at a central marketplace at Lower Dover. To summarize, the distributional approach based on ANOVA revealed that during the Early to Late Classic transition the differences in access to imported/exchanged items between intermediate elites and commoners became less overt in all three districts.

To examine this trend in terms of the proportions of imported items, the modified distributional approach developed by Hoggarth (2012) was used (see also Hoggarth and Awe 2014). This approach puts a finer point on the observations of the distributional approach by using bullet graphs to examine the proportions of imported items. This revealed that the patterns noted in the ANOVA results were accurate, but that they were unlikely to be indicative of increased commercial activity. Rather than representing more imported items coming into the region and

being more equitably distributed among elites and commoners, the modified distributional approach revealed a decline in intermediate elite access to imported items was responsible for the lack of variance between commoners and elites.

In part, this decline in intermediate elite imported items was a product of the intermediate elite decline in wealth noted in Chapter 7.1.3. While the imported items employed in this analysis are not the same as the wealth items employed in Chapter 7, there is a lot of overlap between the two categories, as imported items by their nature are often wealth items. Moreover, the lack of variability between commoner and intermediate elite access to imported items could be the product of a commercialized market exchange system (as argued by Hirth 1998), or it may reflect more corporate political strategies of redistribution on the part of intermediate elites and/or the leveling of access to wealth items between intermediate elites and commoners (as argued in Chapter 7). Another aspect of this decline in imported items was more tied to the decline in quotidian production at intermediate elite centers. For instance, the levels of imported items like granite, basalt, and obsidian declined, but this was more reflective of the decline in traditional productive activities as intermediate elites accrued greater status (see Chapter 8.1.1 above). The results of the modified distributional approach are presented in Figure 8.10.

Proportions of exchanged/imported items were high in the Middle Preclassic period at all the sampled contexts. These items largely reflect the aforementioned marine shell included in the *jute* deposits, however. The proportions of imported items drop in a highly statistically significant fashion at most contexts through the Middle to Late Preclassic transition. This might however be more reflective of the decline in the construction of *jute* deposits, due to the sizeable amounts of marine shell beads in these contexts. Generally, the Early to Late Classic transition reveals three important patterns. Firstly, intermediate elites see a decline in access to imported items (as described above). Commoner access to imported items is heavily dependent on district membership. The Tutu Uitz Na commoners see an overarching lack of change in access to imported items through the transition, whereas their counterparts at Floral Park uniformly see a decline in access to imported items (at varying degrees of statistical significance). This decline at Floral Park may be more tied to the aforementioned decline in commoner wealth described in Chapter 7.2.2.

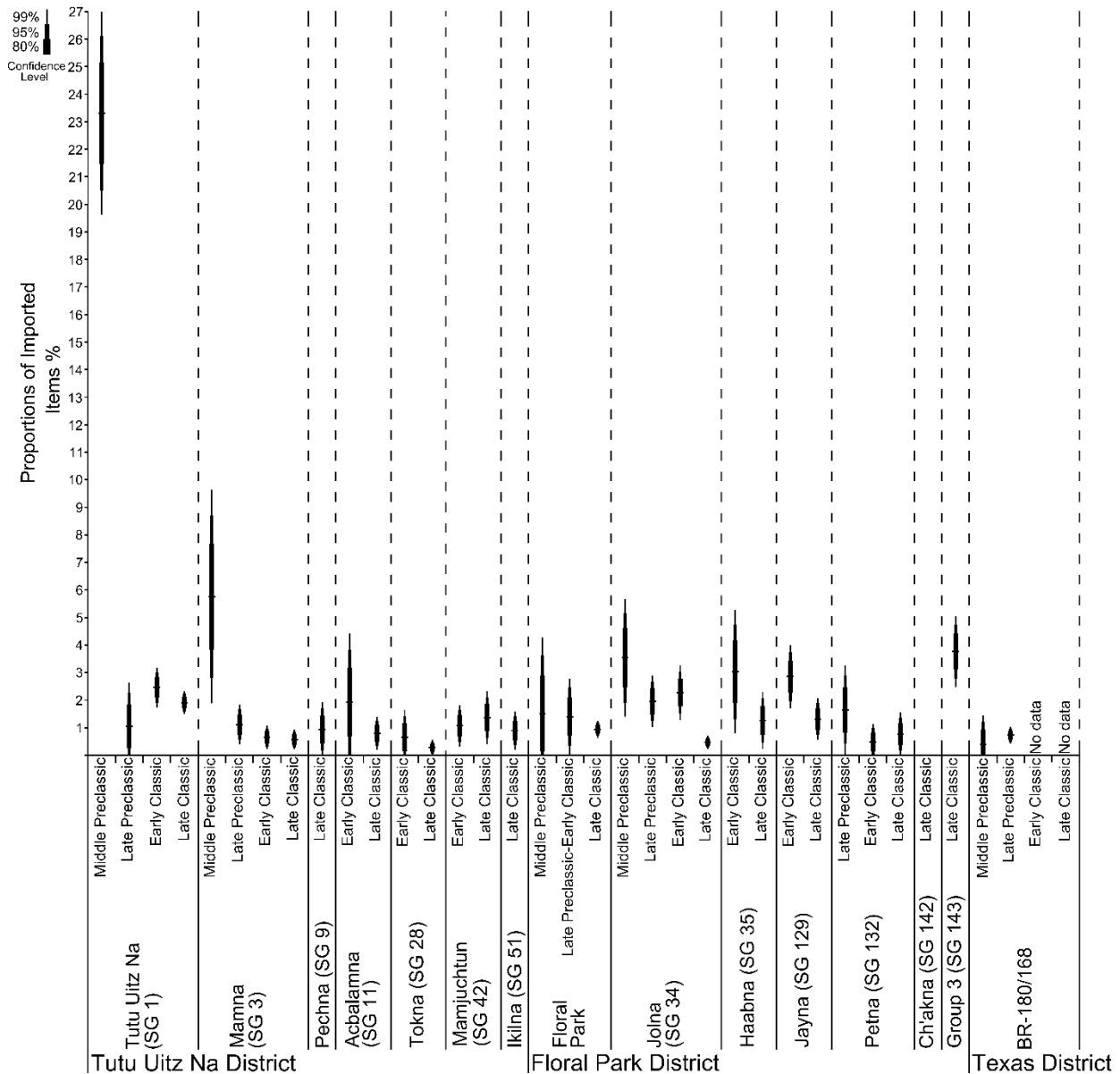


Figure 8.10 Bullet graphs showing imported items at the three districts

The proportions of imported items to total artifacts at the three intermediate elite centers and their respective commoner districts (note no data was available from Early and Late Classic contexts at BR-180/168, and the commoner households of the Texas District)

These findings could indicate that market exchange started at least as early as the Middle Preclassic period and persisted through to the Late Classic period. This is complicated by the distributional approach based on ANOVAs, which rejected the notion that commercialized

exchange played a minor role in the Early Classic period (and preceding periods). Imported items such as marine shell, greenstone, jade, obsidian, and ground stone were common in the Lower Dover area during the Preclassic. While this is not surprising given the extensive evidence of the availability of such items in the region at this time (Awe 1992; Ebert 2017; Horn 2015; Powis, Healy, and Hohmann 2009), it does suggest some type of well-established systems of either commercial exchange or redistribution. It currently remains unclear whether commercial exchange or redistribution through political economy was responsible for this pattern. Jade and greenstone constituted restricted or sumptuary items, as they are seldom encountered in commoner households at Lower Dover (except for Barton Ramie). This indicates that the distribution of jade and greenstone might be more indicative of elite-sponsored redistribution (Ossa 2011). It certainly seems possible that incipient marketplaces existed at the intermediate elite centers and these acted as commercialized exchange hubs (alongside redistribution through gift-giving etc.) prior to the rise of Lower Dover. It is unclear whether marketplaces moved from the plazas of the local elite minor centers to the central plazas of Lower Dover, or alternatively if the markets simply remained at the intermediate elite centers in the Late Classic.

Basically, given all the caveats concerning the data and the issues associated with the approaches, any conclusions should be taken tentatively. While the distributional approach in its traditional form suggested the rise of commercialized exchange in the Late Classic period, the modified distributional approach shows this is due to a decline in intermediate elite access to imported items and a general stasis in commoner access to imported items. Most people, irrespective of status, had access to a slew of quotidian imported items throughout the whole trajectory. General patterns are blurred by the fact that multiple types of household provisioning were likely occurring simultaneously, and while the importance of the different modes of provisioning changed over time, and between districts, the nature of these changes were likely subtle or more short-lived than the periods of comparison employed in this dissertation.

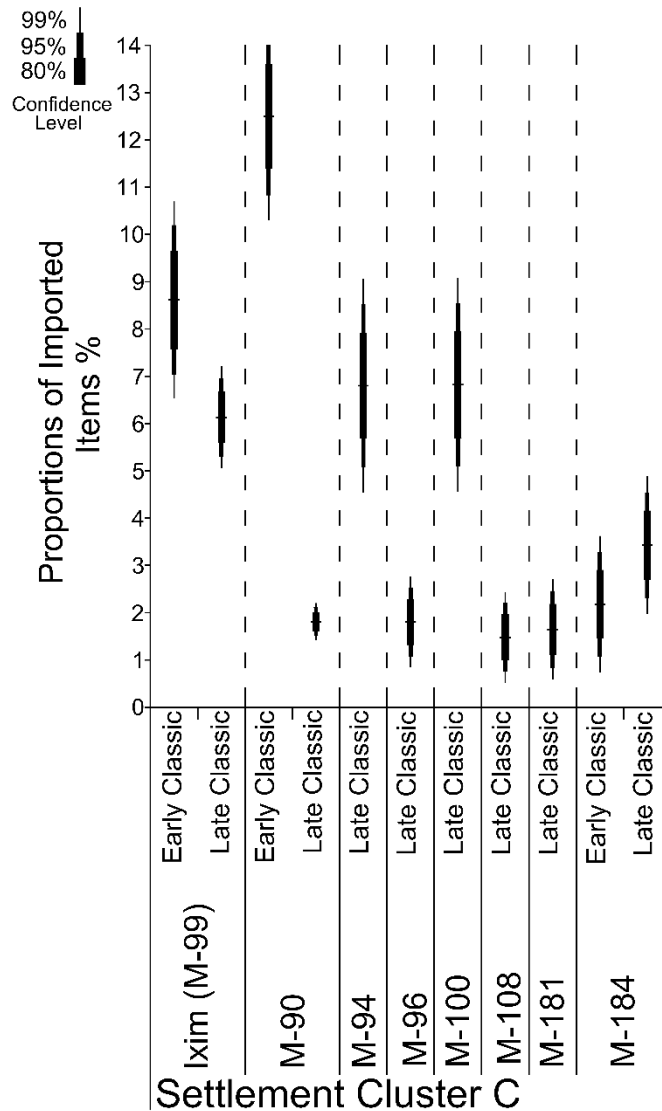


Figure 8.11 Bullet graphs showing imported items at Settlement Cluster C
The proportions of imported items to total artifacts at Settlement Cluster C at Baking Pot

The consumption of imported items through the Early to Late Classic transition at Settlement Cluster C at Baking Pot also shows variability (Figure 8.11). The Ixim intermediate elite sees a slight decline in access to imported items during this time (statistically significant at the 80% confidence level), and the M-90 commoners see a dramatic decline (statistically significant at the 99% confidence level). In contrast, the commoners at M-184 see a slight, but not statistically significant increase in the proportions of imported items. Despite the decline in proportions of imported items at Ixim and M-90, general proportions of imported items are much

higher among Late Classic commoner households at Baking Pot than Lower Dover. This pattern may suggest that Baking Pot had a more developed commercial economy at this time.

8.3 Variability in Obsidian Sources Across the Polity

Portable XRF of obsidian samples from the Lower Dover hinterland was used to assess variability in the sources of obsidian consumed at the intermediate elite centers and their respective districts over time. Figure 8.12 shows a general trend evident in the region which involved higher proportions of obsidian from El Chayal and San Martin Jilotepeque earlier on, but less Ixtepeque. This trend does not change much in the Late Classic period, although the proportions of San Martin Jilotepeque decline in a statistically significant fashion at the 95% confidence level, and Ixtepeque material increases in a statistically significant fashion at the 80% confidence level. The patterns of obsidian sourcing reflect broader regional trends. For the purposes of this analysis, Late Preclassic and Early Classic samples were pooled due to small sample sizes. The separation of the two reveals that much of the El Chayal obsidian is Early Classic whereas the San Martin Jilotepeque obsidian is Late Preclassic. This corroborates patterns at Cahal Pech where San Martin Jilotepeque obsidian predominated early on. Following this, in the Classic period, the obsidian from San Martin Jilotepeque reduced, as El Chayal and Ixtepeque became common (Ebert and Awe 2018; Healy et al. 2004: 115-116). These patterns suggest similar provisioning routes from the respective sources (Hammond 1982).

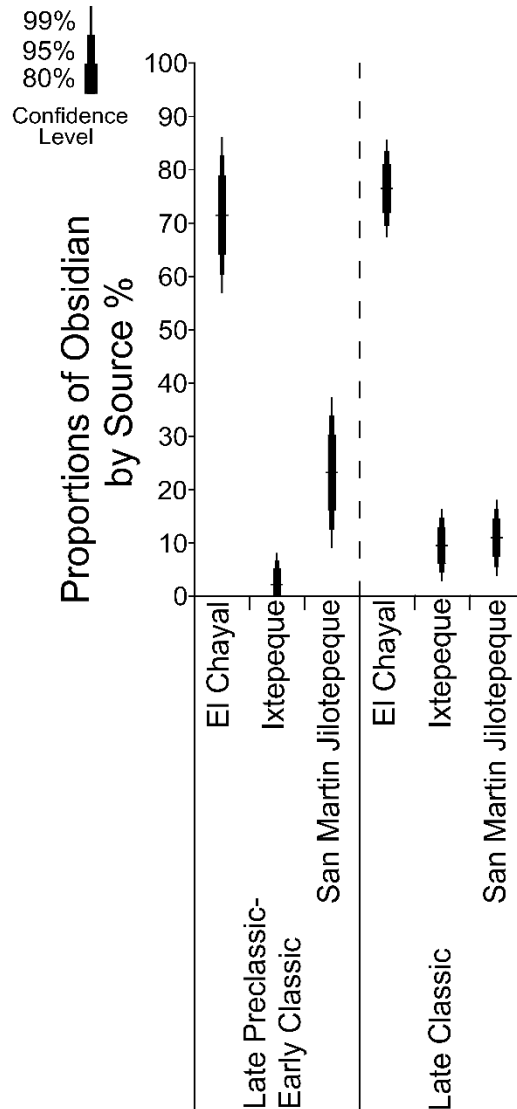


Figure 8.12 Bullet graphs showing obsidian sources in the Lower Dover hinterland
The proportions of different obsidian sources to total obsidian in household assemblages

Figure 8.13 puts a finer point on the patterns outlined above. This shows the proportions of different types of obsidian (based on source) by status (intermediate elite or commoner) within each district. Different patterns of obsidian consumption between intermediate elites and commoners are apparent at Late Preclassic/Early Classic Tutu Uitz Na. Whereas in the Late Classic they become more homogeneous between status groups at Tutu Uitz Na. Unfortunately, no data was available from Late Preclassic/Early Classic contexts at Floral Park but it would seem that the Late Preclassic/Early Classic patterns apparent among commoners at Floral Park are slightly different from consumption patterns at both the Tutu Uitz Na local elites and commoners during

this time. This variability is likewise apparent at BR-180/168 at this time, although sample sizes are quite problematic when it comes to this context. Patterns at Floral Park become more homogeneous between status groups in the Late Classic, like at Tutu Uitz Na. Subtle differences remain across contexts though, for instance, the Late Classic Floral Park commoners (unlike the Floral Park elites, and Tutu Uitz Na elites and commoners) lack all access to Ixtepeque. Generally, obsidian consumption becomes more standardized in the Late Classic period across all contexts. This could reflect the formation of a centralized marketplace at Lower Dover through which obsidian was commercially exchanged. That said, some local variability remains which may speak more to obsidian being bought at marketplace facilities at the district level.

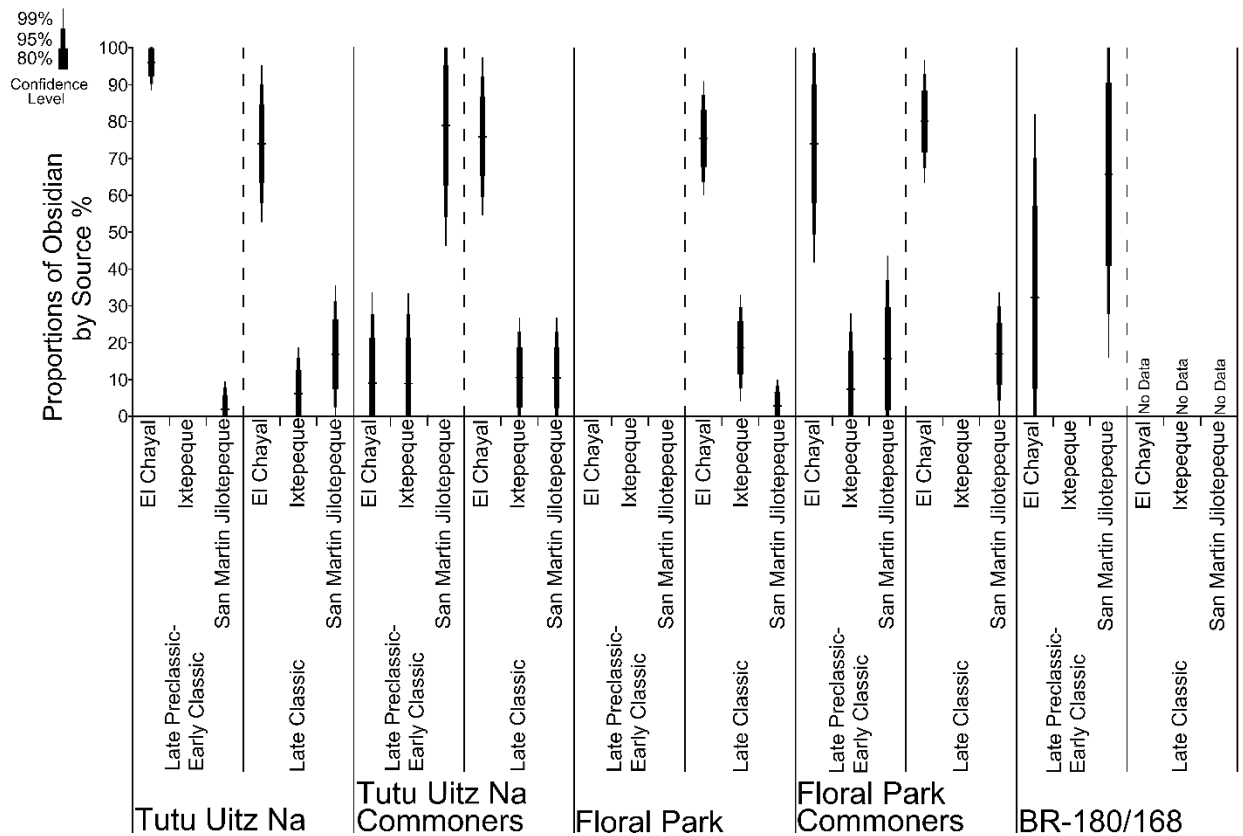


Figure 8.13 Bullet graphs showing obsidian sources between districts

The proportions of different obsidian sources to total obsidian in assemblages from the Tutu Uitz Na and Floral Park Districts, and BR-180/168

8.4 The Economic Role of Elites in Exchange

The patterns outlined through the distributional approach tentatively suggest that the economy of the region may always have been relatively commercialized, but this did not change dramatically in the Late Classic period. While market exchange could have occurred on any area of open land, based on the growing number of marketplaces identified in the plazas of large polity capitals, it seems likely that the intermediate elite plazas fulfilled a similar role. The results of the distributional approach could be interpreted as supporting this scenario, because little change is apparent over time and because the intermediate elite centers all had large constructed plaza spaces from at least the Middle Preclassic onwards. These plazas would form the obvious focal nodes at which exchange would occur. As L. Shaw (2012) argues, the best approach involves the combination of methods to identify markets and the distributional approach among households. While testing to identify markets and market exchange was beyond the scope of this dissertation, the findings do suggest that testing for marketplaces at intermediate elite minor centers and comparing these data with major centers could prove a highly insightful research agenda for understanding the ways in which a polity was economically integrated (Marken and Fitzsimmons 2015; Masson 2002; Potter and King 1995). Currently, it is unclear if the plazas associated with minor centers were used as marketplaces, but it seems likely. If this was the case then assessing whether they acted as scaled-down versions of the marketplaces associated with polity capitals or, whether certain items (potentially originating from the nearby neighborhoods) were only available in at district-level markets could be particularly insightful. Few examples of comparative analyses of marketplaces and activities in intermediate elite plaza spaces exist, especially in relation to civic-ceremonial cores (but see A.F. Chase et al. 2015; Dahlin et al. 2010). Another approach involves portable x-ray fluorescence of the ceramics to identify variability in sourcing across the districts to understand household provisioning and redistribution. This forms the basis of Qiu's (n.d.) dissertation.

Another possibility is that marketplace exchange was occurring on a much larger scale than previously expected. Possible evidence for this comes from the widespread nature of ceramic types throughout the Belize River Valley. Traditionally the distribution of similar ceramics has been used to infer linkages between sites (Willey, Culbert, and Adams 1967). More recently, scholars

have focused on the possibility that certain ceramic types are associated with particular polities. For instance, LeCount (2010) argues that the distribution of Late Classic Mount Maloney bowls and jars through the Xunantunich hinterland is overtly reflective of polity wide identity. That said, districts within the Xunantunich polity, like Chan, clearly had lower proportions of Mount Maloney (see Kosakowsky 2012: 54). Golden and colleagues (2020: 414) argue that the distribution of Santa Rosa group ceramics at Piedras Negras and not Yaxchilan reflects different central marketing spheres. If a similar dynamic was operating within the Belize River Valley, then the general homogeneity in ceramic types across the region could be seen as reflecting centralized marketplaces at polities catering to commoner households beyond their political boundaries. This would involve commoners from Floral Park, for instance walking (or canoeing) five kilometers to Baking Pot to obtain Belize Red. Likewise, ceramic types produced in one polity could be moved in bulk along the river for redistribution or commercialized exchange.

8.5 Summary of Changing Economic Patterns at Lower Dover

Overall, the Late Classic did not see dramatic transformations in the economic realm following the rise of Lower Dover. The emergent economy at Lower Dover seems to have hardly impacted pre-existing patterns among the intermediate elites and did not affect the grassroots of the commoners at all. This could indicate that the Lower Dover apical elites and institutions had little impact on productive differentiation at the household level, or the types of imported items households could acquire. The evidence for productive differentiation among households illustrates changes that were not associated with the Late Classic period rise of Lower Dover and its rulers, specifically the decline in the production of marine shell jewelry in the Middle Preclassic period. This probably reflects the best evidence of intermediate elite crafting, although it is noteworthy that commoners were also producing marine shell jewelry at this time. This practice might be associated more with the initial trans-egalitarian strategies the Tutu Uitz Na elite employed to establish their authority as district heads. Once their status became firmly established, the production of wealth items may have become unnecessary.

The other noteworthy patterns involve the decline in production of quotidian stone tools on the part of the intermediate elite as their status grew, and the intensification of carpentry-related activities at SG 28 in the Late Classic. The interhousehold patterns of stone tool production evident at Lower Dover corroborate traditional perspectives on the economics in the Classic Maya region. The emergence of the apical elite regime at Lower Dover had little effect on surrounding patterns of productive differentiation and economic exchange. Stone tool production was a common household activity, and households were relatively self-sufficient but were bound together in low-level neighborhood webs of interdependence. It is difficult to assess the extent to which the items produced at the SG 28 workshop were intended for consumption among surrounding households or were passed up to surrounding elites due to their biodegradable nature. In contrast, evidence of intermediate elite crafting exists in the Middle Preclassic period in terms of the marine shell jewelry but there is not much evidence of such behavior later in the trajectory. Aside from the tentative possibility that exchange was channeled through markets established at the intermediate elite centers, there is largely little evidence of intermediate elite control of production and it seems most crafting was being carried out at the household and neighborhood levels (Awe, Hoggarth, and Helmke 2014; Sheets 2000). Generally, the picture which emerges from the analysis of production activities across the districts indicates high degrees of commoner agency to pursue different subsistence strategies and production activities at the household and neighborhood levels (Awe, Hoggarth, and Helmke 2014; Hirth 2009b).

The evidence suggesting a lack of change in exchange patterns and marketing versus redistribution is more speculative, but is grounded on the distributional approach and obsidian sourcing. The distributional approach does not seem to suggest a significant shift to a commercialized economy with the rise of Lower Dover (as is particularly clear from the modified distributional approach). Likewise, the obsidian sourcing suggests changes in the sources of obsidian prevalent in the area between the Early and Late Classic periods, but these shifts seem to reflect regional-scale changes at the macroscopic level. Furthermore, when local level variability is taken into account there does appear to be some district-level differences in sources, which if anything are suggestive of a continuation of traditional intermediate elite/district-level processes. In tandem, changes in productive differentiation at the household level and exchange patterns seem to indicate that the rise of Lower Dover did not trigger serious economic changes in the area.

9.0 CHANGES IN THE RITUAL REALM

In the last thirty years, a scholarly consensus has developed on the importance of cosmology and ceremony in the creation and maintenance of political power and authority in the Preclassic and Classic Maya lowlands (Freidel and Schele 1988; Inomata 200; McAnany 2010). Political power and authority were rooted in a system of cosmologically mandated divine kingship, comparable in some ways to power strategies used by historically documented rulers in Africa and Southeast Asia (Demarest 2004; Freidel 2008; Houston and Stuart 1996; see Chapter 2.9.2.). More recently, studies of commoner ritual and ideology have detailed the extent to which commoners hosted their own smaller-scale rituals in domestic contexts (Lohse 2007; Lucero 2003; Robin et al. 2012b). Often investigations of commoner ritual traditions and the degree to which these represented a form of resistance hinge on the concepts of the “great” and “little” tradition. Apical elite ritual tied to the institution of divine kingship is construed as part of a “great” tradition, while commoner ritual can be seen as a “little” tradition (Redfield 1989; see also de Montmollin 2012). Debate exists about whether elite ritual traditions emerged out of commoner ritual traditions (Lucero 2003), commoner ritual traditions were downscaled emulations of elite ritual traditions (Lohse 2007), or whether elites and commoners pursued different ritualized traditions (for at least part of the regional trajectory; MacLellan 2019a; see also Lohse 2007).

Current theoretical models of apical elite and commoner ritual and ceremony are largely macro-reductionist (ritual employed ideologically by a monolithic class of elites to dupe a larger monolithic class of commoners) or micro-reductionist (ritual employed by oppressed commoners to resist top-down control). Although some middle ground has emerged in terms of a focus on heterarchically arranged ritual actors (Robin et al. 2012c). This issue makes it difficult to conceptualize how to incorporate intermediate elites into these prevailing models. A third emergent approach focuses on the role of ritual in promoting camaraderie and solidarity to overcome social issues inherent in the process of coalescence at the community and neighborhood level (Hutson 2016; Yaeger 2000; see also Alberti 2014; Bandy 2004; Coward and Dunbar 2014). This approach offers novel insights into the construction of identity at intermediate social units, but often inherently considers intermediate social units as hierarchically flat. Ferguson and

Mansbach (1996: 13) envision polities as comprising multiple nested identities. At the apex would be a crosscutting polity-level identity although this might clash or dovetail with all manner of lower-level identities. Practices of collective ritualization can unify social groups, build collective identities, and increase solidarity in a manner proposed by structural functionalist theorists (Gluckman 1965). However, in contexts in which collective ritualization is performed at multiple hierarchical levels, ritual practices have the potential to erode group identities on one level as they are simultaneously solidified on another (Bell 1992; Kertzer 1988). Kertzer (1988) argues that power (and authority) intrinsically stem from political ritual, which ideologically binds subjects to regimes and generates unifying identities. Far from simply maintaining the status quo, ritual is a fundamental tool for generating and undermining political power and authority (Bell 1992; Kertzer 1988: 104). The notion that ritual can be simultaneously used to legitimate existing inequalities and effectively be “weaponized” to undermine other political entities has far-reaching implications for reconstructing the relationships between intermediate and apical elite regimes archaeologically. Divergent ritual strategies could also work laterally, between competing factions as Baron (2016a: 117) illustrates at La Corona.

As such, ritualization has important implications for political (dis)integration. There has been a growing trend towards seeing public space and ceremonial architecture as a theatrical stage upon which power could be disseminated through ritual performance (Inomata 2006; Swenson 2011). But, by focusing on ritual at the apical elite and commoner levels, Maya archaeologists have gained an incomplete understanding of how ceremonial power was constructed at multiple levels of the political hierarchy. Settlement patterns clearly show multiple hierarchical levels of ceremonial focal nodes within most Maya polities. Often these represent intermediate elite centers surrounded by districts of commoners. The mechanical replication of such facilities at multiple levels strongly suggests that ritualized collective identities were being simultaneously constructed at all these levels (Golden 2010; Tsukamoto 2014).

Ritual provides a vehicle for the dissemination of ideologies and political narratives on multiple hierarchical levels (Scott 1990: 104). Rather than drawing a dichotomy between the public transcript and the hidden transcripts of oppressed peoples. Classic Maya politics can be considered a nested hierarchy of public (and hidden) transcripts being employed by political actors

on multiple levels. A quantitative approach to examining the scales at which ritual was occurring is the first step.

The Classic Maya can be considered pre-axial as they clearly did not distinguish between the natural, supernatural, and social worlds, as such there be little emic separation between the economic, political, and religious realms (de Montmollin 2012: 99; Trigger 2003: 411; see Chapter 2.9.2). The religious orthodoxy apparent in modern world religions probably did not exist in a recognizable form in Classic Maya worldview (Baron 2016a). The syncretic adoption of elements of Catholicism in the early colonial period is evidence of the malleability of Maya belief systems. More recently, proponents of the “ontological turn” have focused on breaking apart the Western dichotomy of nature and culture (Descola 2013). Applications of such theory to the Classic Maya serve to highlight important differences between modern world religions and Maya cosmology (Grauer 2020).

Collectively, this body of literature has important implications for how we think about ritualization and ceremony in Classic Maya contexts. Firstly, in pre-axial contexts, like the Classic Maya world cosmological beliefs and ritual practice were seemingly fluid localized traditions unlike modern world religions (see Chapter 2.9.2). This means that there was probably little in the way of established orthodox practice. Hence divergent commoner, intermediate elite and apical elite ritualized traditions should not intrinsically be seen as operating in competition with one another (Baron 2016a; de Montmollin 2012; Trigger 2003). As such participation in ritual at multiple levels (commoner household, intermediate elite, apical elite), would not necessarily be problematic to the levels above and below it, even if the content of the rituals were very different. As such the existence of commoner domestic ritual need not undermine intermediate elite ritual in the same way that intermediate elite ritual need not inherently undermine the apical elite public transcript. Indeed, intermediate elite ritual could buttress, undermine or have no real impact of prevailing ideological narratives perpetuated at the polity level.

This means that following the quantitative reconstruction of ritual at different hierarchical scales, a qualitative assessment of the content and underlying political narrative of the ritual is necessary. How did it effectively dovetail or clash with higher-level political narratives? In order to understand how the public transcript of power could be undermined, we need to understand

what the public transcript involved and how this related to the content of lower-level ritual practices (Scott 1990: 104). A further issue involves the inchoate forms of surveillance available to Classic Maya elites. Even if elites did care about the ritual appropriation of symbols of power, there is a strong possibility they were unaware of it, or at least could not keep track of non-conforming ritual practice. Another issue outlined in Chapter 2 involves finding a middle ground when attempting to conceptualize commoner agency and ritual. This is difficult, in that we cannot assume commoners lacked any agency and blindly followed elite ritual narratives, but also we should be careful not to attribute unrealistic degrees of agency to commoners to pick and choose religious beliefs and ritual practices (see Baron 2016a: 118).

Another important observation garnered from this literature is the lack of a clear divide between the sacred and profane, meaning that seemingly ordinary practices would have underlying cosmological undertones. As such ritual practice commonly occurred in quotidian domestic space with seemingly utilitarian items (Blackmore 2011; Brady and Ashmore 1999; Lucero 2010; Robin et al. 2012b). This revelation means that we cannot simply ascribe artifacts to the ritual class in the same way as wealth items, but have to think a bit more reflexively about the broader context in which items were found and how they might relate to overarching Mesoamerican belief systems. The third implication of the ontological turn and axially literature is one which Maya archaeologists have long been acquainted with. The Maya landscape would have been occupied by a number of cosmological beings, who could exert their own secondary agency on humans (Baron 2016a, 2016b; Freidel, Schele and Parker 1993; Hutson n.d.; for secondary agency see Gell 1998; see also Sillar 2009). There is substantial evidence that inhabitants of many ancient complex societies envisioned non-human agents like ancestors, deities, and animals as occupying similar political systems to their own (Sahlins 2017; Trigger 2003: 412-413). This appears to be true of the Classic Maya, who considered deities to occupy stratified political systems and possessed patron-client relationships (Baron 2016). The lack of a clear divide between the material and cosmological world carries implications for any construction of politics because intermediate elites likely culturally construed their upward face as not just articulating with human apical elite patrons but also patron deities and their own ancestors (Baron 2016a; McAnany 1995). These relationships likely involved obligations, which could have political repercussions. With these implications in

mind, I attempt to reconstruct how the ritual landscape of Lower Dover was ontologically assembled.

Classic Maya identities were heavily rooted in place (Tokovinine 2013), and it seems logical that neighborhood, district, and polity identities existed. For instance, at Lower Dover, there is evidence of commoner household ritual, evidence of larger neighborhood-level rituals at high-status commoner households, larger district-level rituals associated with intermediate elites, and then polity-scale rituals staged by the apical elite at Lower Dover. This replication of ritual focal nodes is politically important for understanding processes of identity formation at multiple nested scales and overall political (dis)integration at these scales. Ritualized traditions and activities at each of these spatial hierarchical scales could dovetail or clash with one another. For instance, intermediate elites could disseminate top-down ideologies associated with the apical elite to help foster a community-wide polity identity, or they could pursue more local level traditions, which fostered identity at the district level.

Equally, such ceremonies could foster identities grounded in togetherness and group solidarity or could focus on the valorization of elite lineages. As such, ritualization provides an important tool for understanding the articulation of intermediate elite faces with their subordinate followers, peers, and suzerains. Small public rituals, which included a handful of intermediate and apical elites could foster relations at the upper echelons of a polity, just as dissemination of top-down ideologies to commoner subordinates could unify the overarching polity. Following Kertzer (1988) and Bell (1992), I envisage ritualization as often representing a situational and strategic response to changing social and political circumstances (see also Turner 1974: 39). This approach is situated within an understanding of Classic Maya patron-client relationships, to see how ritualization articulated through the different intermediate elite faces. For instance, ritualization could be used to secure the loyalty of followers, compete with peers, and resist suzerains. Alternatively, intermediate elite ritualization may be geared towards disseminating top-down ideologies of power and promulgating a polity-level identity. The archaeological correlates of ceremony provided allow the reconstruction of nested levels of identities within the polity, from the household to the district, to the polity. The construction of these identities ultimately underpins our understanding of the relationships between political actors on multiple levels of the Lower Dover polity (Insoll 2007: 14; Tsukamoto 2014).

Despite their general omission from perspectives on ritual practice, archaeology and epigraphy illustrate that Classic Maya intermediate elites were involved in diverse ritual practices. While not royalty, intermediate elites seem to have shared many of the practices associated with the divine authority of the apical elites. Intermediate elite ritual roles are evident in the association of intermediate elite residences with ceremonial structures like ancestral shrines, ballcourts, and *sacbeob* and *termini* (A.F. Chase 1992; J. Marcus 2006; Walden et al. 2019), as well as the presence of ritual items dispersed throughout intermediate elite contexts in the hinterlands of polities (Carmean 1998). Chapter 2 provides an overview of the epigraphically documented ritualized duties of intermediate elites (Jackson 2013). The epigraphically documented ritual duties of intermediate elites suggest the existence of quasi-priestly, or at least formal roles, through which intermediate elites performed specialist duties (Zender 2004). Archaeologically, however, downscaled apical elite ritual architecture is prevalent at intermediate elite centers and suggests less specialization and greater replication of top-down ritual activities (Walden et al. 2019, 2020a).

This chapter investigates how the rise of the apical elite regime at Lower Dover may have changed the ritual landscape of the polity. If the apical elite came to dominate intercession with the cosmos, we would expect ritual activities at intermediate elite centers and even commoner households to decline. In contrast, if the Late Classic intermediate elites invested more heavily in the ceremonial integration of commoners, this would show that apical elites did not monopolize the cosmological basis of elite authority. The nature of ritual action among intermediate elites is thus of utmost importance to understanding: **(1)** social integration in the polity; **(2)** how apical elite, intermediate elite, and commoner ritual traditions connected to agency, place, labor, and economic patterns; **(3)** whether intermediate elite religious narratives clashed or dovetailed with those of the apical elite.

Assessment of the changing ritual landscape at Lower Dover is in part based on qualitative changes involving the types of ceremonial structures the elites were commissioning and the nature of ritual deposits they interred in their structures. Through such study, I seek to reconstruct how the intermediate elites used ceremonial strategies in negotiating their control over commoner subordinates and relationships with royal political authority centered at Lower Dover. Quantitatively, we can examine investment in ritual and ceremony at all societal levels. The approach taken to identifying ritual here is admittedly simple - - it is difficult to study ritual in pre-

axial contexts in which people considered all aspects of the landscape, life, and reality to be imbued with divine forces (de Montmollin 2012; Monaghan 2000). While the presence of recognizable ritual artifacts and ceremonial structures does not account for all of the ritual action and beliefs (*sensu* pre-axial or ontological) that took place on the landscape, these items and features do provide a rough idea of who was hosting larger scale ceremonies and what these ceremonies involved (Kunen, Galindo, and Chase 2002). The proportions of ritual artifacts to total artifacts present in different residential contexts provide an understanding of the intensity of intermediate elite and commoner ritual activities over time. The proportion of feasting-related artifacts to total artifacts similarly provides a rough proxy of public, ceremonial commensal activity.

9.1 Diachronic Shifts in Ritualization and Feasting among Elites

This section presents data collected about diachronic changes in ritual at the intermediate elite level. These changes involve: **(1)** the proportions of ritual items, **(2)** the proportions of feasting paraphernalia and the types of faunal consumed, and **(3)** the types of ceremonial architecture constructed, its function, and relative accessibility. These data speak to the different types of emphasis placed upon ritualization in each of these contexts.

9.1.1 Variability in Ritual Items among Elites

A number of distinctive artifacts common to Classic Maya residential contexts can be treated as indicators of ritual activity (de Montmollin 2012; Plunket 2002). These materials include *incensarios* and burnt sherds containing *copal* resin (incense; Carmean 1998; Hendon 1991), figurines (Halperin 2007; 2014), musical instruments (Hendon 2010: 161-162), speleothems, and cave pearls (Brady and Rissolo 2006; Brady et al. 1997; Harrison-Buck 2012), and fossils (Alvarado-Ortega, Cuevas-García, and 2018; Lucero and Kinkella 2015; Riquelme et al. 2012). In addition to items that were utilized in rituals, there are also quotidian items, which can be considered “ritual” in nature given their usage, i.e. placed in burials, or objects ritually cached as offerings in architectural contexts to animate the structure (Schiffer 1987: 79-80; Vogt 2004).

Quantifying the presence of these items across the Lower Dover hinterland before and after the rise of the polity provides a rough metric of the extent to which the rise of the polity changed commoner and intermediate elite devotional activities.

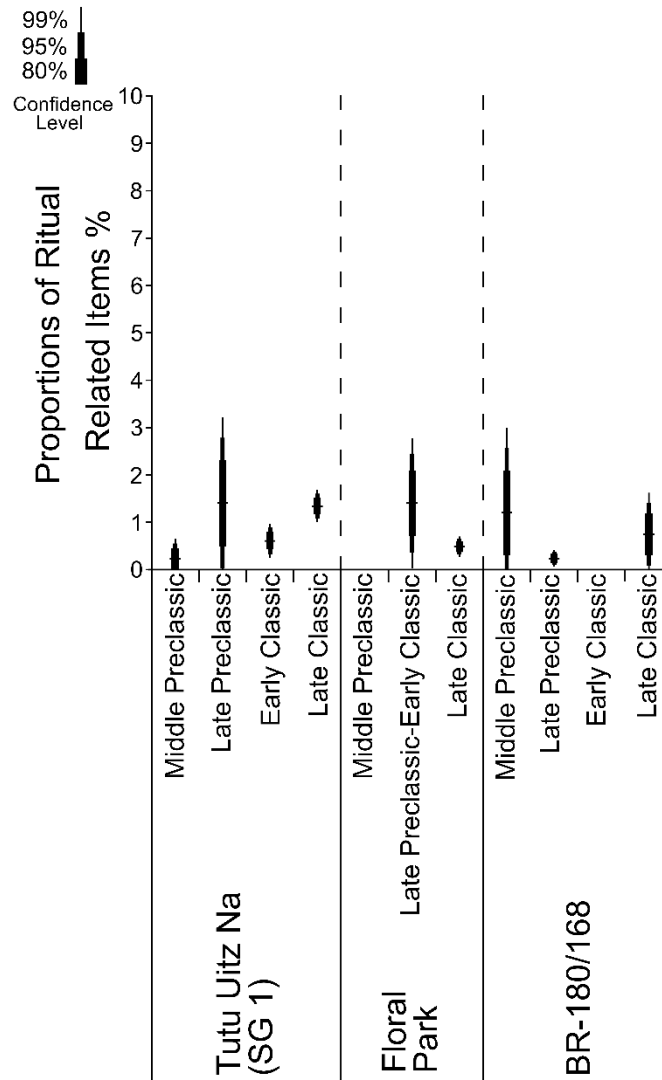


Figure 9.1 Bullet graphs showing intermediate elite ritual

The proportions of ritual items to total artifacts at the intermediate elite centers of Tutu Uitz Na, Floral Park and BR-180/168

Important temporal trends occur in the proportion of ritual items at the intermediate elite centers. The proportions of ritual items at Tutu Uitz Na increase gradually (in a statistically significant fashion at the 80% confidence level) from the Middle Preclassic to the Late Preclassic period, before increasing again in a statistically significant fashion at the 99% confidence interval

in the Late Classic period (Figure 9.1). The increase associated with the Late Preclassic period likely reflects sampling issues. Generally, the increase in ritual items between the Early and Late Classic periods suggests that the Tutu Uitz Na elite hosted more ritual activities following the rise of Lower Dover. The gradual but continuous increase in the proportions of ritual items at the center is paralleled by increases in investment in ceremonial architecture. This process began with the creation of the sizeable dedicatory *jute* deposit in the Middle Preclassic period. As noted in Chapter 6, this dedicatory deposit likely represented a primordial sea from which the structures rose (as *witz*- sacred mountains; Biggie et al 2019; Walden and Biggie 2017; see also Halperin et al. 2003; Keller 2010). The Late Preclassic period saw the first interments of high-status ancestral burials within the eastern mortuary shrine. Further evidence for augmented ceremonial activity at Tutu Uitz Na is apparent during the Late Classic period when the eastern mortuary structure was substantially remodeled into a full eastern triadic ancestral structure.

In contrast, at Floral Park, the opposite pattern occurred. Due to sampling issues, no ritual items were recovered during the Middle Preclassic period (Chapter 5). The proportions of ritual items at Late Preclassic-Early Classic Floral Park are relatively high compared to the other intermediate elite centers. However, the proportions of ritual items decline in the Late Classic period (in a statistically significant fashion at the 80% confidence level). Interestingly, the trend at Floral Park represents the opposite of that at Tutu Uitz Na.

BR-180/168 shows yet a different trajectory. Due to sampling issues at BR-180/168 the error ranges associated with the proportions of ritual items are relatively high. The BR-180/168 intermediate elite begin with relatively high proportions of ritual items in the Middle Preclassic; this drops in (a non-statistically significant fashion) in the Late Preclassic period before increasing again in the Late Classic period (statistically significant at the 99% confidence level). Unfortunately, the paucity of data for the Early Classic period likely reflects sampling issues. While the decline in the Late Preclassic period seems odd, the Late Classic proportional increase makes logical sense given the sizeable investment in the construction of the ceremonial eastern triadic structure at this time. When considering the ritual response associated with the rise of Lower Dover, two trends are particularly clear. Tutu Uitz Na and BR-180/168 both see increases in the proportions of ritual items during the Early to Late Classic transition. The opposite seems to be the case at Floral Park, which sees a dramatic decline in the proportions of ritual items. At face

value, and without consideration of architectural data, this dynamic suggests that the Tutu Uitz Na and the BR-180/168 intermediate elites were investing more heavily in their ritual roles than the Floral Park intermediate elites following the rise of Lower Dover.

9.1.2 Understanding Patterns of Feasting and Consumption

There is a general consensus that feasting and ritual co-occurred in the Maya lowlands (McAnany 1995: 31). However, approaching ritual and feasting as two separate dimensions analytically can reveal nuance in terms of ritual versus non-ritual feasting, and the scale of feasting and other public activities. The ritual items included in this analysis include musical instruments, *incensarios*, and figurines. These items could have been employed in both public and private rituals. To understand the nature of the rituals undertaken in the different contexts other lines of inquiry are required. Evidence of feasting (inclusionary versus diacritical) can provide clarification on whether rituals were public or private in nature. Furthermore, understanding the specific types of foodstuffs being prepared for such events is likewise important for understanding how foods may be used as a mnemonic device, or to create or perpetuate identities and how this relates to the underlying narrative and political importance of feasting events (Figure 9.2; see Chapter 2.10.6).

Feasting offers an important political strategy for the generation of social debt, the development of inequalities, feelings of solidarity and identity, the accrual of political power, and an opportunity to reimburse workers for labor (Bray 2003; Hendon 2010: 182-187, 197; LeCount 2001; see Chapter 2.10.7). Feasting may be seen as expressive of different types of political relationships, which vary along the network-corporate axis (Blanton et al. 1996). Feasting ranges from diacritical feasting, comprising exclusionary events which naturalize social inequalities, on one end, to inclusionary feasting which is undertaken to promote solidarity and *communitas* (Dietler 1996: 98). LeCount (2001: 944) shows that this dichotomy almost certainly existed during the Postclassic and early colonial periods (Tozzer 1941: 92). Deciphering these possibilities from the material record is complicated. The simplest way of detecting the scale of feasting involves the amount and type of paraphernalia employed, for instance, high proportions of undecorated serving vessels may speak to inclusionary feasting whereas smaller numbers of highly decorated fine wares might speak to diacritical feasting (although other behavioral patterns

could account for these differences). Understanding how changes in feasting-related paraphernalia changed in relation to other items often used during public events, such as ritual items, can further clarify whether feasts were public or private events. Establishing the physical context in which feasting occurred also provides clues about how large the associated gathering was. For instance, feasting-related paraphernalia found in a small private residential compound would point towards a diacritical pattern of feasting.

The proportions of feasting paraphernalia (serving vessels and faunal remains) provide a rough metric of feasting practices at the household level (Hoggarth 2012). The Tutu Uitz Na elite staged some communal consumption events in the Middle Preclassic period; these feasts probably involved the consumption of *jute* and other freshwater shell as evident from the sizeable deposit located beneath the plaza (See Chapter 6). Figure 9.2 shows that the proportions of feasting paraphernalia at Tutu Uitz Na increased through the Middle Preclassic to Late Preclassic transition (statistically significant at the 95% confidence interval), before decreasing in a statistically significant fashion at the 95% confidence interval in the Early Classic period. Feasting increased in a statistically significant fashion (at the 99% confidence interval) at Tutu Uitz Na between the Early and Late Classic periods. This indicates that the Late Classic Tutu Uitz Na elite were hosting larger public feasts in the Late Classic. This increase correlates with the concomitant increase in ritual paraphernalia at the Tutu Uitz Na center and suggests that feasting was part of these ceremonial events, which integrated district-level populations. Feasting at Tutu Uitz Na can subsequently be considered inclusionary, but with a diacritical element to it, since these district-level ceremonies were tied to veneration of the intermediate elite lineage, as explained below.

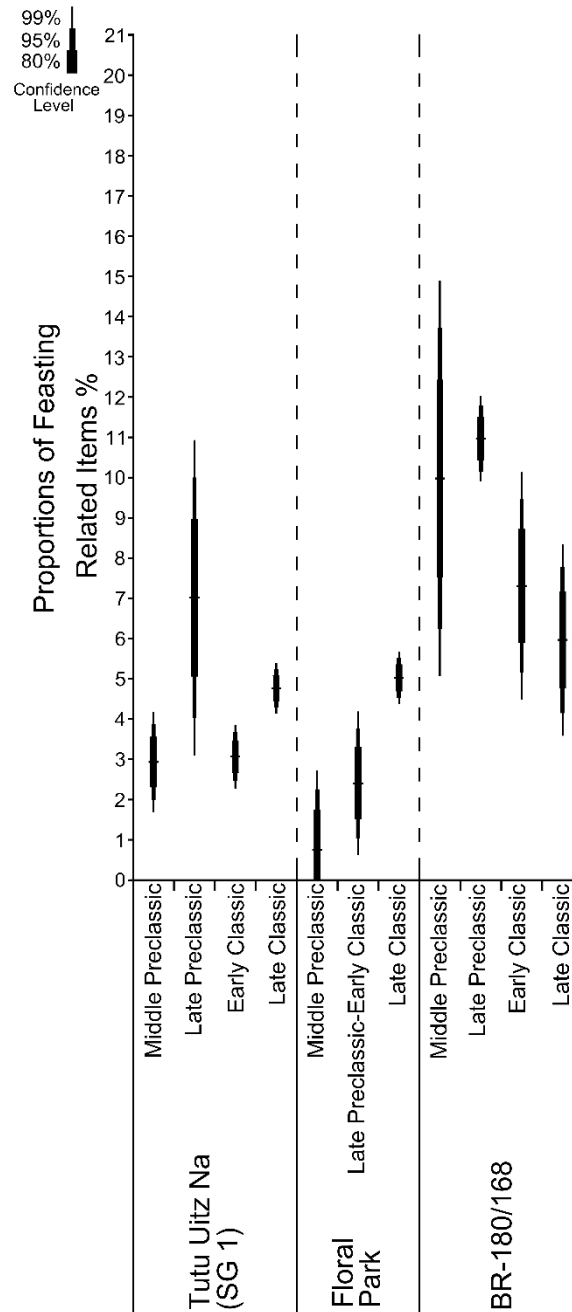


Figure 9.2 Bullet graphs showing intermediate elite feasting

The proportions of feasting related items to total artifacts at the three intermediate elite centers

Patterns of feasting at Floral Park follow a similar trend as at Tutu Uitz Na. The Floral Park center possesses a low proportions of feasting-related items in the Middle Preclassic, and Late Preclassic to Early Classic periods. A dramatic increase in feasting paraphernalia is then evident in the Late Classic period (in a statistically significant fashion at the 99% confidence level). This

pattern runs directly counter to the reduction in the proportion of ritual items present at Late Classic Floral Park noted above. The disjunction between ritual and feasting suggests that either these public feasting events took place without ceremonies requiring ritual paraphernalia, or that the feasting was more of a private affair. The latter interpretation is somewhat corroborated by the fact that most of the feasting indicators came from Group 2, the spatially inaccessible, private elite residential compound (Walden et al. 2020a). However, it seems unclear whether this pattern actually supports diacritical elite feasting because the items come from architectural fill, and therefore could have been redeposited from middens generated by feasting on the adjacent ceremonial plaza. This is further supported by the fact that most of the serving vessels recorded at Floral Park are not the types of finely decorated polychromes that the Classic Maya employed in diacritical feasts, but are monochrome plainware bowls. These findings corroborate a general difficulty identifying diacritical feasting archaeologically (see Lohse and Sagebiel 2006: 326).

The high proportions of feasting-related paraphernalia at BR-180/168 in the Middle Preclassic, the Late Preclassic, and Early Classic periods suggest that the resident elite sponsored large public feasts. This trend reduced gradually over time culminating in the lowest proportions of feasting paraphernalia in the Late Classic period (Figure 9.2). That said, even despite these gradual decreases, the overall proportions of feasting paraphernalia were still comparatively high compared to other intermediate elite centers in the Late Classic period. It is worth noting that aside from limited surface collections at BR-168, the entire sample for this center came from the BR-180 ceremonial complex. This means that ceremonial activities could have occurred at BR-180 and feasts could have been hosted in the nearby residential plaza (BR-168). While it is impossible to discount this possibility, it seems unlikely that inclusionary feasts for the district commoner populace would have been hosted in a private residential context. In addition, as suggested below increased commoner household feasting in the Late Classic may have supplanted much of the elite held feasts.

Excavations across the Lower Dover polity revealed a general paucity of faunal remains except for freshwater snails (see Roa et al. 2020). The proportions of freshwater shells at the Tutu Uitz Na center, the Tutu Uitz Na commoners, the Floral Park commoners, and the BR-180/168 elite is shown in Figure 9.3. The proportions of freshwater shell could not be calculated for the Texas district commoners or the Floral Park elite, as these materials were not available for analysis.

However, it seems fairly clear that nothing comparable to a *jute* deposit was present in any of these contexts, as it seems doubtful that it would have escaped the notice of the excavator. Figure 9.3 shows a heavy dependence on freshwater resources in the Middle Preclassic. Freshwater snail consumption declined consistently across most contexts over time (significant at the 99% confidence level). This temporal decline in freshwater shell consumption has been widely documented across the Maya lowlands (Boileau 2014; Sharpe et al. 2020; Willey et al. 1965: 526-527). This decline in consumption of freshwater species may have been due to the demographic collapse of freshwater populations due to Preclassic overconsumption.

Interestingly, despite the decline, the Tutu Uitz Na center retains the highest proportions of freshwater shell throughout the trajectory. It seems unlikely that the Tutu Uitz Na elite could have maintained some type of top-down control over this resource especially in the Late Classic period; the more likely interpretation is that diets slowly changed in the Late Preclassic as freshwater shell became less available, and was no longer regarded as a staple foodstuff later in the Classic period. Biggie and colleagues (2019) argue that *jute* and other freshwater shell had an important cosmological significance for the ancient Maya. *Jute*, and more broadly freshwater shell was important to local identities at Tutu Uitz Na from the Middle Preclassic period (Chapter 6). Aside from the Middle Preclassic deposit in the Tutu Uitz Na plaza, *jute* has also been recovered in burials dating to all time periods at the center (Petrozza 2015). The most likely explanation is that elite-sponsored *jute* feasts remained a mainstay of the public role of the intermediate elite throughout the trajectory. These large feasts began in the Middle Preclassic period, possibly to repay commoners for construction labor. The continuation of these feasting events, and the consumption of *jute* snails may have functioned as a mnemonic device, which accentuated social memory to maintain a cohesive district identity and a sense of timelessness that would augment the traditional authority of the intermediate elite (in a Weberian sense).

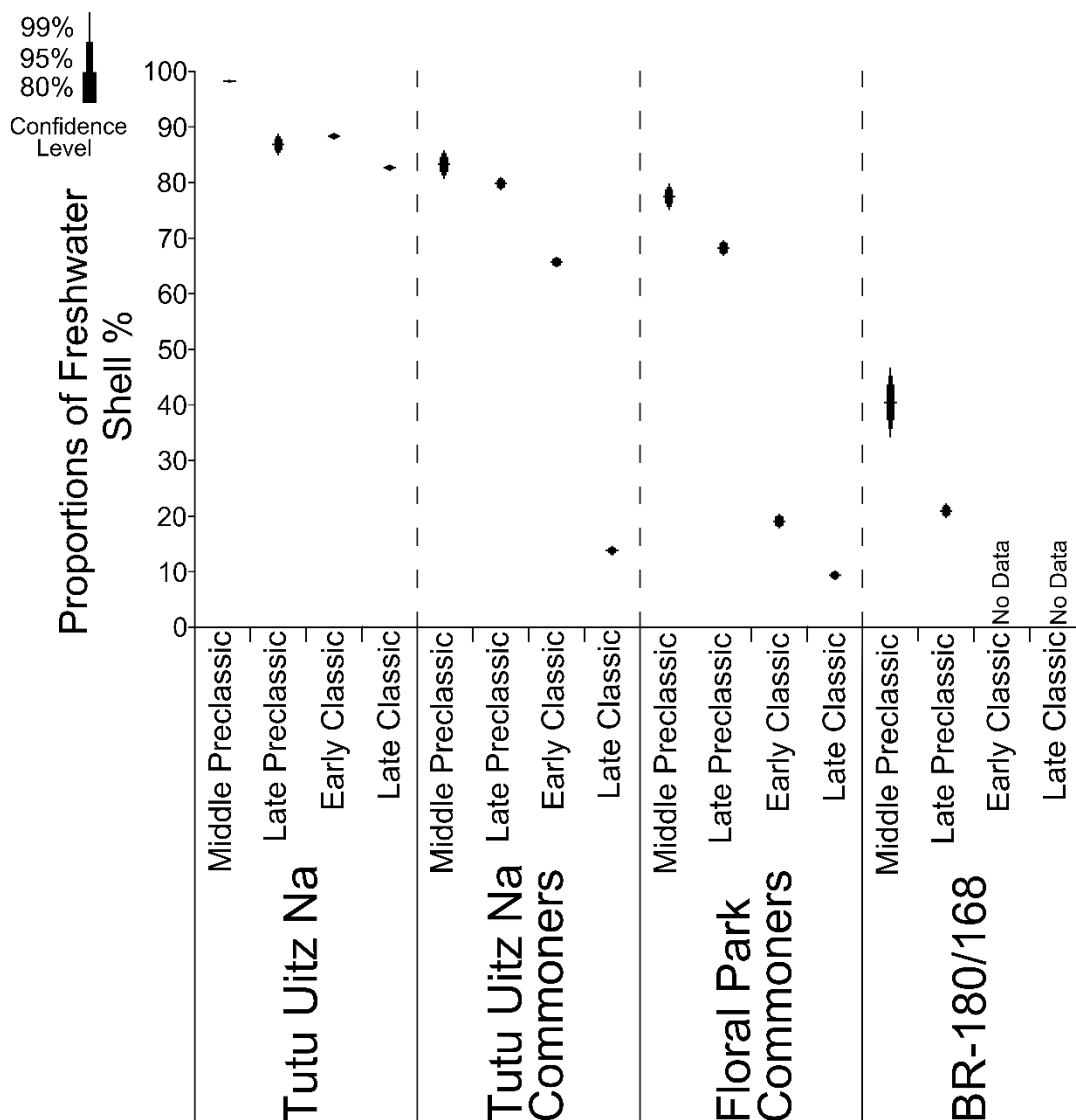


Figure 9.3 Bullet graphs showing freshwater shell consumption between districts

The proportions of freshwater shell to total artifacts at the Tutu Uitz Na and BR-180/168 elite centers and the Tutu Uitz Na and Floral Park commoners (adapted from Roa et al. 2020: Fig. 6)

9.1.3 Architectural Changes at Intermediate Elite Centers

The broader patterns evident in the changing proportions of ritual items and feasting paraphernalia at Tutu Uitz Na, BR-180/168, and Floral Park become more understandable once investment in ceremonial architecture is taken into account. The architectural data speaks more directly to the nature of ritualization, because the spatial contexts and architectural forms speak to

specific rituals such as ancestor veneration, processions, and the extent to which such events were public or private (Awe, Hoggarth, and Aimers 2017; Cheetham 2004; Inomata 2006). In Chapters 6 and 7, I showed that all three of the intermediate elites invested significant amounts of labor into the construction of ceremonial structures in the Late Classic following the rise of Lower Dover. This section examines plaza capacities, architectural accessibility, and solar alignments, before overviewing the construction history of ceremonial architecture at each intermediate elite center.

9.1.3.1 Plaza Capacities

Following methods outlined in Chapter 5.2.16., the capacities of plaza spaces across the polity were calculated using values based on Inomata (2006; see also Moore 1996; Table 9.1). This involves values of 0.46 m² (reflective of a packed plaza with people standing), 1 m² (reflective of people sitting), and 3.6 m² (reflective of people moving/dancing/marketplace activities). Another value of 3.4 m² was also added to Table 9.1, as this figure correlated well with some of the surrounding district populations. These values have been commonly employed by Maya archaeologists (for comparisons see Robin, Meierhoff, and Kosakowsky 2012: 141). The finding that everyone in the Lower Dover polity could easily fit into the main plazas corroborates Inomata (2006: 811-814) and Ossa, Smith, and Lobo (2016) who show that the central plazas of smaller Maya centers could incorporate their polity populations, but that this was not the case at larger centers like Tikal.

Table 9.1 Capacities of Plaza Spaces in the Lower Dover Polity.

| <i>Center</i> | <i>District Population</i> | <i>Plaza Size (m²)</i> | <i>0.46m²/ person</i> | <i>1m²/ person</i> | <i>3.4m²/ person</i> | <i>3.6m²/ person</i> |
|------------------------------|--------------------------------|---------------------------------------|--------------------------------------|-----------------------------------|-------------------------------------|-------------------------------------|
| Lower Dover | 2400 | 8740 | 19000 | 8740 | 2571 | 2428 |
| Tutu Uitz Na Late Classic | 300 | 1000 | 2174 | 1000 | 294 | 278 |
| Tutu Uitz Na Early Classic | 100 | 600 | 1522 | 700 | 206 | 194 |
| Floral Park Plaza A | 200 | 1700 | 3696 | 1700 | 500 | 472 |
| Floral Park Ceremonial Space | 200 | 2700 | 5870 | 2700 | 794 | 750 |
| Floral Park Group 2 | 200 | 400 | 870 | 400 | 118 | 111 |
| BR-180 | 240 | 1850 | 4022 | 1850 | 544 | 514 |

The plaza capacities outlined in Table 9.1 show that the central civic-ceremonial plazas at Lower Dover could easily accommodate polity-level gatherings, even at the more spacious estimate of 3.6m² per person. The Late Classic expansion of the Tutu Uitz Na plaza could arguably have been carried out to accommodate the growing district population as well as offer space for the extension of the southern wing of the eastern triadic structure. The Tutu Uitz Na plaza was constructed to host district scale gatherings however, and could not have accommodated polity-scale gatherings, or for that matter functioned as a destination on a polity-wide ritual circuit (for ritual circuits see Reese-Taylor 2002; Tozzer 1941: 139). Unlike Tutu Uitz Na, Floral Park could accommodate larger polity-level gatherings. Different capacities are provided for the different plazas at Floral Park. The estimate for ceremonial space includes the combined public plaza/*sacbe* areas and provides an idea of how many people could attend larger ceremonial gatherings at the center. The Group 2 capacity reflects the number of people who could fit in the plaza at the elite residential compound. Overall, it seems clear that Floral Park could host large but dense polity-scale ceremonies. The plazas at Floral Park could not accommodate polity-scale events, like markets, which required more space, but the plazas could easily have accommodated district-scale marketplace activities. While it seems unlikely, it remains possible that intimate district-level ceremonies also occurred in the elite residential compound (Group 2).

Lastly, the BR-180 plaza was larger than necessary for accommodating the commoners in the surrounding Texas District. This suggests it had a ceremonial catchment which may have included a good number of the ~1300 people at Barton Ramie. That said, as Willey and colleagues (1965: 34) note, the western part of the Middle River District was closer to the civic-ceremonial center at Spanish Lookout. While the entire Late Classic polity population could have fit into the ceremonial plaza at BR-180 at the maximum density estimate, it seems more likely that this plaza served to integrate the Texas District, and possibly the surrounding Island and Northeast Neighborhoods.

9.1.3.2 Architectural Accessibility

The architectural accessibility aspect of this dissertation is published (Walden et al. 2020a). Accessibility is gauged through how easy it would be to enter a particular architectural complex from the outside. The methods employed to measure architectural accessibility are provided in

Chapter 5.2.17. Based on these methods, a sample of plazas (Lower Dover, Tutu Uitz Na, Floral Park, and BR-180, Plaza F and Plaza H) and smaller high-status commoner patios (e.g. BR-260, BR-147, SG 3, SG 42, SG 2, SG 102, Plaza G) were each given an accessibility index which reflected the size and number of plaza openings relative to the overall size of the plaza.

Figure 9.4a shows a basic trend in accessibility compared to the hierarchical tier/group based on Walden et al. 2019. This reveals that the most spatially restricted elite contexts were the Lower Dover apical elite palace and the Tier 3 intermediate elite compounds at Tutu Uitz Na and BR-180. In contrast, the Tier 2 center of Floral Park was one of the most spatially accessible elite plazas in the Lower Dover polity. Generally, lower-level tier 4 intermediate elites and high-status commoners (tier 5) had more accessible plazas and patios. Figure 9.4b shows how architectural accessibility scales with volume. Figure 9.4c shows a rough trend in which patio/plaza groups situated in denser aggregations of commoner dwellings are more inaccessible. Lastly, Figure 9.4d shows that larger plazas are not always more accessible.

The notable finding of these analyses relates to the way in which architectural accessibility patterns hierarchically. When the hierarchical position of actors, the nature of accessibility, and the content and contexts of the rituals are examined, patterns emerge in terms of whether ceremonies supported or countered ideological narratives associated with the emergent Lower Dover polity/apical elite (J. Marcus 2007, 48). As outlined in Chapter 2, the larger polities of the Belize River Valley contained a single large Tier 2 upper-level intermediate elite center. Despite their lower population densities, Tier 2 centers commissioned an array of architecture including large plazas, ballcourts, and *sacbeob* and termini, but not eastern triadic structures. This provision of special function integrative architecture, but not localized lineage shrines, suggests an overarching integrative function at the polity level (Walden et al. 2019). It would seem that architectural accessibility generally relates to the degree of ritual inclusivity. Contexts in which rituals countered top-down power and authority and sought to promulgate polity-level identities had high degrees of inclusivity. In contrast, the most inaccessible, and exclusive plazas in the Lower Dover polity were those where localized ancestor veneration and lineage rituals occurred. The divisive nature of the ritual narratives expounded in these contexts likely required elites to monitor who was attending a ceremony and potentially exclude people.

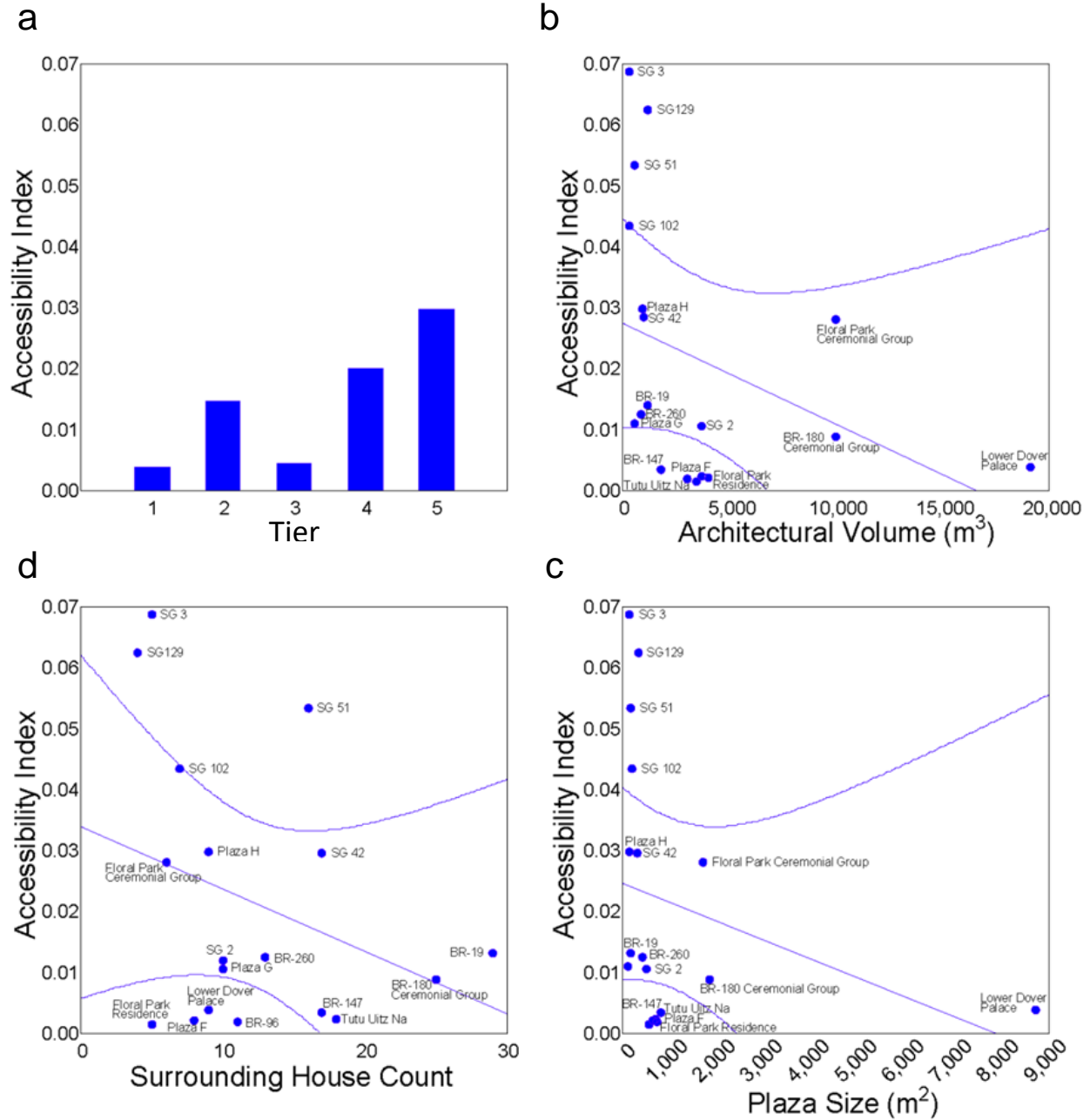


Figure 9.4 Histogram and linear regression plots of architectural accessibility
 (Clockwise from top left), (a) accessibility index and hierarchical group, (b) accessibility index and architectural volume, (c) accessibility index and plaza/patio size (m^2), (d) accessibility index and surrounding house groups (count); (adapted from Walden et al. 2020a: Fig. 15.5)

9.1.3.3 Solar Alignments

Possible solar alignments associated with the four eastern triadic structures (Tutu Uitz Na Str. E2, BR-180, Lower Dover Structure A1, and Strs. 1, 2, and 3 at Plaza F) and the eastern shrine at Floral Park (Structure 2A) were investigated (see methods in Chapter 5.2.14). The summed discrepancy provides a rough numerical value for how accurate the solar alignments on each structure were from the western structures and the plazas (see Table 9.2). The general findings revealed, unsurprisingly that while Structure 2D at Floral Park was on the correct central azimuth to align with the equinoxes, and the north wing lined up relatively well with the summer solstice, the absence of a southern wing meant this structure could not align on the winter solstice. The intermediate elite tier 3 eastern triadic structures all had relatively good alignments. All of these alignments were much more accurate from the plaza, as opposed to the western structure, suggesting that a crowd gathered in the plaza might observe solar alignments on the solstices and equinoxes. This might reflect earlier viewing platforms buried beneath plaza floors (see Ebert, McGee, and Awe 2021). Unlike the Tier 3 centers, the eastern triadic structure at Lower Dover did not function as well (the summed discrepancy is much larger). This is not surprising given the fact that the hill rising immediately to the east of Lower Barton Creek would likely have obstructed any clear solar alignments on the solstices and equinoxes anyway.

To summarize these trends, it would appear that the intermediate elites at Tutu Uitz Na and BR-180 had solar alignments associated with their eastern triadic structures, which likely conferred some degree of authority in the eyes of their subordinates. It seems apparent that the Floral Park elite could have added a southern wing to their eastern mortuary structure in order to make it function as such, but chose to modify it into a Terminal Classic round platform instead. The lack of solar alignments associated with the eastern triadic structure at Lower Dover was likely tied to the fact that the emergent apical elites had more pressing priorities when locating Lower Dover than to ensure good sightlines over the pre-existing intermediate elites.

Table 9.2 Solar Alignments of the Eastern Triadic/Shrine Structures.

| <i>Site</i> | <i>Observer Location</i> | <i>Center</i> | <i>Equinox Azimuth</i> | <i>North Wing</i> | <i>Summer Solstice Azimuth</i> | <i>South Wing</i> | <i>Winter Solstice Azimuth</i> | <i>Summed Discrepancy</i> |
|--------------|--------------------------|---------------|------------------------|-------------------|--------------------------------|-------------------|--------------------------------|---------------------------|
| Tutu Uitz Na | Central Plaza | 89 | 90 | 60 | 58 | 114 | 119.5 | 8.5 |
| | Western Structure | 89 | 90 | 73 | 58 | 98 | 119.5 | 37.5 |
| BR-180 | Central Plaza | 89 | 90 | 56 | 58 | 118 | 119.5 | 4.5 |
| | Western Structure | 89 | 90 | 72 | 58 | 104 | 119.5 | 30.5 |
| Floral Park | Central Plaza | 95 | 90 | 74 | 58 | N/A | 119.5 | N/A |
| | Western Structure | 89 | 90 | 82 | 58 | N/A | 119.5 | N/A |
| Lower Dover | Central Plaza | 89 | 90 | 64 | 58 | 109 | 119.5 | 17.5 |
| | Western Structure | 85 | 90 | 74 | 58 | 92 | 119.5 | 48.5 |
| Plaza F | Central Plaza | 89 | 90 | 61 | 58 | 117 | 119.5 | 6.5 |
| | Western Structure | 89 | 90 | 72 | 58 | 103 | 119.5 | 31.5 |

9.1.3.4 Summary of Changes in Ceremony at Tutu Uitz Na and BR-180

At BR-180 and Tutu Uitz Na, labor was largely invested in the remodeling of eastern mortuary structures into eastern triadic ancestral structures. The Middle Preclassic construction of the *jute* deposit at Tutu Uitz Na reveals that the resident local elite could command sufficient labor to build a sizeable ritual deposit early on in their developmental trajectory, and the nature of their authority at this time was based to some degree on ritual. Six excavation units show that the deposit runs under the entirety of the plaza and under the northern and eastern structures, probably covering an area of 2409 m². The deposit consists of over 99.9% *jute*, but also includes other

freshwater shell species such as apple snail and river clam along with sizeable amounts of marine shell at various stages of the bead production sequence, and a small number of Savana Orange paste figurines (see Chapter 6 for outline of deposit; see Biggie et al. 2019; Keller 2012; Petrozza 2015; Walden and Biggie 2017). Based on the

densities of materials from the excavation units we estimate that the deposit contains over 16 million *jute* shells. Biggie et al. (2018) argue that the inclusion of specific watery themed items in the deposit was a reflection of the cosmological primordial sea (Freidel et al., 1993: 92; Lucero 2006; 2018), and through constructing this specific context the Tutu Uitz Na elite were building a ritual stage for future ceremonies. The laying of the deposit could represent a type of Middle Preclassic “place-making”, which charged the context with ritual power (Powis and Cheetham 2007). The creation of similar smaller Middle Preclassic *jute* deposits at commoner households like SG 3 and SG 34 suggests that these provided some form of foundation ritual, which was common at both the Tutu Uitz Na and Floral Park districts.

The remodeling of smaller eastern mortuary shrines into large eastern triadic structures at Tutu Uitz Na and BR-180 shows a deliberate attempt on the part of the intermediate elite to augment public ancestor veneration (Awe, Hoggarth and Aimers 2017; Biggie 2019; Robin et al. 2012b; Walden et al. 2018; Walden et al. 2020a, 2020c; Willey et al. 1965). These eastern triadic structures were derived from Late Preclassic E groups (Awe, Hoggarth, and Aimers 2017). The construction of these structures was not however limited to earlier periods in the developmental trajectory (Aimers and Rice 2006). The construction of eastern triadic structures at both Lower Dover and Xunantunich in the Late Classic period is testament to this (Jamison 2010: 124). The large plazas at BR-180 and Tutu Uitz Na were likely designed to accommodate the surrounding district commoner populations. This is indicated by the Late Classic expansion of the Tutu Uitz Na plaza to incorporate a growing commoner population (and the southern wing of the eastern triadic structure). Ancestor veneration rituals in both contexts included repetitive interment of wealthy elite burials, but also intrusion into the graves of ancestors to retrieve important body parts for curation (Biggie et al. 2019; Walden et al. 2018; 2020c; see also Fitzsimmons 2015; McAnany 1995). These ancestral rituals served to unify the district population, but also to venerate and legitimize status differences between the commoners and their district-level elites.

As longstanding authorities in the area, the intermediate elite ritualization at Tutu Uitz Na and BR-180/168 strategized the augmentation of their traditional authority. In contrast to the Late Classic eastern triadic structure at Lower Dover, and the mortuary structure at Floral Park Group 2, both the eastern triadic structures at Tutu Uitz Na and BR-180/168 have rough solar alignments associated with the northern wings (summer solstice), southern wings (winter solstice), and central component (equinoxes). This was in direct emulation of earlier Late Preclassic E groups at major centers across the Maya lowlands.

Hendon (2010: 26-27, 178) conceptualizes social memory as a resource, which is used to create and maintain a particular narrative or set of events to justify a political present, and explains that local level ceremonies are more likely to serve the political interests of their occupants as opposed to the overarching polity. Recently, Tsukamoto (2014) has come to associate these performances with identity formation. The Tutu Uitz Na elite in particular seem to have drawn upon the collective social memory of their commoner subordinates by hosting large jute feasts. These grandiose ceremonies would have evoked a sense of timelessness and served to directly justify the persistence of elite authority in the present by drawing on their ancestry and past (Biggie et al. 2019; see also McAnany 1995; see Chapter 2.10.3). In this way, the Tutu Uitz Na and BR-180/168 elites may have been using their ancestral remains to strengthen lineage ties and generate broader district identities in the face of polity-level identities generated through public ceremony at the polity capital of Lower Dover (Canuto and Fash 2004). Potentially the dissemination of these ritual narratives may have represented a low-key tool of political resistance to counter top-down ideological narratives (in a similar way to Scott's weapons of the weak; 1985). Proponents of the Lévi -Straussian (1982, 1987) House model in Maya archaeology suggest the presence of intermediate units of society centralized around a single high-status lineage who legitimated their political position through ritual and inclusion of non-kin within the group (Gillespie 2000a, 2000b; Hendon 2010). It is difficult to know whether members of the districts or the neighborhoods considered themselves fictive kin using the current archaeological data. Despite this, it would seem that the intermediate elite households could be considered similar to "Houses" for analytical purposes. It seems the large ceremonies hosted in these contexts served to legitimate the lineage, consolidate district-level identities among commoners, and perpetuate their power in the eyes of

their followers. In this way, the different districts could be considered “memory communities” (see Hendon 2010: 28).

In addition to serving to reinforce district-level identities and venerate their own ancestors, the types of ancestor veneration conducted at Tutu Uitz Na and BR-180/168 directly countered apical elite ideological narratives and polity-level identities, or following Iannone (2003: 24) denied complete top-down control on the part of the apical elite. The large eastern triadic structure at Lower Dover, which presumably still houses the remains of the apical elite lineage, probably dates to the Late Classic period and therefore could not contain the remains of important Late Preclassic and Early Classic ancestors like at Tutu Uitz Na and BR-180 (Guerra and Awe 2017; Wilkinson and Hude 2011). The ancestral veneration performed on the eastern triadic shrines, by their very nature, memorialized a time long before the rise of Lower Dover. Therefore, these ancestor veneration ceremonies may represent rituals of resistance that countered and possibly undermined top-down apical elite ideologies associated with ancestor veneration at the Lower Dover center. Furthermore, the lack of solar alignments might further delegitimize the apical elite.

9.1.3.5 Summary of Changes in Ceremony at Uchenchoc (RS 2)

Caves and rockshelters were sacred spaces in ancient Mesoamerican cosmology (Moyes 2020a; Prufer and Brady 2005; see Chapters 2.9.2 and 6.3.1.4). Often caves were associated with the foundation of a polity or center (Moyes and Prufer 2013), and there is strong evidence suggesting that caves and rockshelters were seen as the seats of power of earth lords (Baron 2016a: 104; Watanabe 1990; see also Moyes 2005). As places of sacred power, caves could be politically important to the Classic Maya, and there is evidence of war parties targeting their enemies' sacred caves (Brady and Colas 2005; Helmke and Brady 2014). While the study of sacred landscapes has focused on larger caves and the higher status rituals staged within (Brady 1989), it would appear that smaller caves and rockshelters fulfilled a similar ritual function (King et al. 2012). The Classic Maya living in landscapes like the Belize Valley, where large caves do not naturally occur, seem to have made use of smaller caves and rockshelters for ritual practices (Romih, Izzo, and Burns 2017; Walden et al. 2018).

A small rockshelter (RS 1) located in the civic-ceremonial center of Lower Dover contained a burial and related evidence of ritual practice (Romih, Izzo, and Burns 2017). Uchenchoc (RS 2), the small rockshelter located on the flanks of the hill beneath the Tutu Uitz Na probably represents the foundational cave associated with Tutu Uitz Na (see Moyes and Pruffer 2009; see Chapters 2.9.2 and 6.3.1.5). The sizeable amount of ceiling collapse (spall) present and the estimated front dripline of the rockshelter indicates that it was likely much deeper in the Classic period and probably possessed a dark zone making it a true cave. The material assemblage of the rockshelter spoke to an overt ritual function by elite participants. As outlined in Chapter 6, the Late Preclassic Tutu Uitz Na local elite commissioned an architectural shrine with a well-made plaster floor in the rockshelter (Walden et al. 2018). Votive offerings left on this floor included a small cache of human teeth and *jute* beneath the ring base of a Sierra Group bowl. The formal construction of the shrine floor on the bedrock at the rockshelter base speaks to a specialized ritual function and possibly a more formalized public function.

That said this formal shrine appears to have gone out of use in the later Early Classic period. Late Classic ritual in the rockshelter context involved the deposition of ostentatious wealth items, and items commonly associated with the watery underworld on a series of quasi-natural use surfaces which developed as spall fell from the rockshelter ceiling (Walden et al. 2018; see also Halperin et al. 2003; Harrison-Buck 2012). Items deposited included jade beads and a nicely carved jade pendant, polychrome sherds, marine and freshwater shell and vertebrae, and teeth and cranial fragments from an adult jaguar (Roa et al. 2020). The jaguar remains in particular may have been associated with the Jaguar God of the Underworld.

The archaeological trajectory of the rockshelter speaks to an early formalized ritual context, which changed over time to a less formalized usage involving the deposition of specific ritual and wealth items on the use surfaces created by the collapsed spall on the floor of the rockshelter. Uchenchoc may have housed the earth lord who dwelt within the hill Tutu Uitz Na sat upon. As long-term co-inhabitants of the same hill, the Tutu Uitz Na elite may have had a special relationship with the earth lord, and even considered them to be a patron deity (Baron 2016a; 2016b). Propitiating the earth lord may have been a fundamental part of cave ritual at Uchenchoc prior to the rise of Lower Dover, however, this may have become more politically problematic in the eyes of the Lower Dover apical elite in the Late Classic, as the rockshelter represented an

ideologically charged context. Such a dynamic might explain why formalized ritual stopped in the Late Classic but ostentatious wealth items such as jade beads were still left in the rockshelter. Potentially making offerings at the foundational shrine of the Tutu Uitz Na elite became something of a clandestine act due to its political importance in the Late Classic period.

9.1.3.6 Summary of Changes in Ceremony at Floral Park

At Floral Park, a significant amount of labor was invested into a new private elite residence and the ceremonial pyramids in Plaza A. I also argued that the *sacbe* and terminus group also probably represent Late Classic additions (see Chapter 6). Late Classic Floral Park saw the most dramatic investment in architectural construction of the three intermediate elite centers. However, the function of this architecture suggests a completely different strategy of ceremonial integration from Tutu Uitz Na and BR-180/168. This dynamic is apparent when the small eastern mortuary shrine at the elite residence at Floral Park is compared to Tutu Uitz Na and BR-180. Extensive excavations on the eastern pyramid of Floral Park revealed no evidence of elite burials (Glassman, Conlon, and Garber 1995). Instead, all the remains of the intermediate elite household were interred in the small, private Late Classic mortuary shrine on the eastern side of the residential plaza (Brown et al. 1996). Of the nine burials uncovered in this context, seven were secondary and were potentially moved from the eastern pyramid at Plaza A (Brown et al. 1996: 42-43; Freiwald 2011a: 202-205; Glassman, Conlon, and Garber 1995: 64-65).

The design of the eastern mortuary shrine is dramatically different from the eastern triadic structures present at polity capitals and tier 3 intermediate elite centers like Tutu Uitz Na and BR-180/168 (Walden et al. 2019). The eastern mortuary shrine at Floral Park has a Terminal Classic round platform appended to the apex of the rectangular structure (Brown et al. 1996; see also Chapter 6.4.1.3; Harrison-Buck and McAnany 2013). This structure was about one meter high and seems to have been designed to be relatively unassuming, especially in comparison to the eastern triadic structures present at Tutu Uitz Na and BR-180, which were likely emulations of apical elite structures present in civic-ceremonial centers. Furthermore, the elite remains interred within the Floral Park mortuary shrine could not have been buried as part of large public ceremonies due to the small size of the private plaza.

The broader dynamics of ancestor veneration at Floral Park seem distinctly different to those at BR-180/168 and Tutu Uitz Na. The Floral Park elite were not using the interment of ancestors, or collective social memory to generate authority and consolidate district-level identities (for a similar example see Iannone 2003: 19). It is possible that the secondary burials present in the eastern mortuary shrine were removed from the large eastern pyramid on Group A when it was remodeled in the Late Classic, because the presence of burials in such a grandiose context countered apical elite power at Lower Dover. It remains speculative, but the extensive remodeling on Structure A1 noted by Glassman, Conlon, and Garber (1995) may indeed indicate the structure was remodeled from a traditional eastern triadic structure into an eastern pyramid at some point in the Late Classic period (see Chapter 6). The divergent use of the past and collective memory at Floral Park, when compared to Tutu Uitz Na and BR-180, likely follows from different political strategies on the part of these intermediate elite regimes. The Floral Park elite's desire not to counter or undermine apical elite political narratives at Lower Dover is consistent with the special relationship between the two regimes outlined in Chapter 7.

The decision to construct a Terminal Classic round platform and not an eastern triadic structure shows that the Floral Park elite were concerned with broader regional cultural trends, not local level ancestry in the Terminal Classic. Generally, trends in architectural accessibility align with this interpretation of Floral Park. Tutu Uitz Na and BR-180 were some of the most spatially inaccessible contexts in the entire polity, which was likely reflective of the fact that the ceremonies staged within promulgated district-level identities in the face of an overarching polity-level identity, and because the ancestral rituals countered, if not undermined prevailing apical elite narratives and ideologies. In contrast, the ceremonial plaza at Floral Park was the most spatially accessible context in the entire polity. This suggests that whatever ceremonies were occurring at Plaza A, and along the *sacbe* did not require strict control of onlookers and participants. Furthermore, these events were less likely to attract the scrutiny of apical elites.

The temporal decline in ritual items at Late Classic Floral Park noted above, completely contradicts the increased investment in ceremonial architecture at this time (Brown et al. 1996; see Chapter 6). The most logical explanation for this divergence involves the nature of the ceremonial structures constructed at Floral Park. The ritual practices at Tutu Uitz Na from at least the Late Preclassic period, represent a single homogeneous tradition involving district-level public

ceremonies focused around ancestor veneration at the eastern mortuary structure/eastern triadic structure. As the scale of the public plaza and the eastern mortuary structure increased, so too did the proportions of ritual items. Similarly, ritual at Late Preclassic and Early Classic Floral Park seems to have been focused on the eastern pyramid at Plaza A (as Group 2 was not yet constructed). However, the Early Classic/Late Classic transition did not see the intensification of a homogeneous ritualized tradition at Floral Park, but a major break. Instead of venerating their own ancestry, Plaza A was transformed into a large publicly accessible precinct, and the attached *sacbe* and terminus group were likely constructed at this time. Elite ancestor veneration shifted to the inconspicuous, private small eastern structure at Group 2. This pattern would suggest that ancestral veneration involving eastern triadic structures at Tutu Uitz Na and BR-180/168 involved greater proportions of portable ritual items than the processional ceremonies and larger public gatherings in the ceremonial plaza of Floral Park (see also Iannone 2003: 19). Some of these ritual items, such as *incensarios* were associated with forms of patron deity veneration, which might be expected at BR-180 and Tutu Uitz Na, and not Floral Park (Baron 2016a: 70). That said it is expected that more excavation in the areas surrounding the *sacbe* and associated plaza space might reveal greater evidence of portable ritual items such as musical instruments given patterns noted by Keller (2010: 199-201).

9.1.3.7 Settlement Patterns, District Aggregations, and Identity

The consolidation of district-level identities in the wake of the rise of Lower Dover is also apparent in terms of settlement location. As outlined in Chapter 6, test pit excavations and full-scale household excavations at Tutu Uitz Na show that the district increased in size dramatically during the Late Classic period (Walden, Guerra, and Qiu 2019). The Floral Park and Texas districts also grew somewhat (Walden, Biggie and Ebert 2017; Willey et al. 1965: 286-288). In contrast, the non-elite population surrounding Lower Dover itself remained very small and these commoner households all date to the Late Classic period (Walden, Ebert, and Biggie 2017; Walden, Guerra, and Qiu 2019). Incoming commoner migrants avoided, or were not allowed to settle adjacent to Lower Dover. This lack of commoner occupation around the apical center of Lower Dover is unusual. The Baking Pot and Cahal Pech apical elites did not prevent commoners from settling near the civic-ceremonial centers and seem to have actively encouraged it (Awe 1992; Hoggarth

2012; see also de Montmollin 1988). The decisions commoners made about where they lived probably reflected longstanding landholding patterns, a desire to be near kin, and the policies of intermediate elites.

The maintenance and growth of the districts as distinct and discrete residential units no doubt benefitted intermediate elites and disadvantaged the apical elite, as the commoners remained “attached” (in proximity and interaction) to their intermediate elites through the Late Classic period. A sizeable amount of their labor was channeled into the architectural increases at the intermediate elite level, unlike at nearby Baking Pot where the labor was funneled straight into the apical civic-ceremonial center rather than intermediate elite structures. Therefore, the perpetuation and consolidation of district-level identities and the veneration of intermediate elite lineages during the Late Classic showed the continued power and authority of intermediate elites. This was most evident in terms of the intermediate elite ability mobilize labor, which almost certainly cross-cut polity-level identities and undercut apical elite access to labor. Increased investment in ceremonial aggregation and the formation of district-level identities may also have been one response to population increase following the rise of Lower Dover.

9.2 Changing Ritual and Feasting Practices Among Commoners

Comparing the patterns in the proportions of ritual items and feasting paraphernalia evident at the intermediate elite level with those of the surrounding commoner households contextualizes what was happening at the intermediate elite level, with the commoners residing in the surrounding districts. There were few qualitative differences in ritual traditions between the commoner households; most rituals conformed with regional norms. For instance, burials were largely interred extended with the head to the south (Healy et al 2004: 121; Novotny 2012: 245).

9.2.1 Patterned Variability in Ritual Items among Commoners

Little in the way of change is apparent in the proportions of ritual items among commoner households in the Tutu Uitz Na District. The intermediate elite were more invested in ritual

activities throughout the trajectory, but this is particularly true during the Late Classic period (Figure 9.5). The seemingly high proportions of ritual items in Early Classic SG 11 are undoubtedly the product of sampling issues (Chapter 6). The presence of larger patios and eastern mortuary structures at high-status commoner neighborhood heads like SG 3 and SG 42 suggests a downscaled role in ritual integration at the neighborhood level, and these patterns are somewhat evident in the proportions of ritual items in these contexts. High-status commoner neighborhood head households have slightly higher proportions of ritual items although this cannot be said with much confidence. Generally, there is not strong evidence for any ritual differentiation among the commoners. The rise of Lower Dover in the Late Classic does not seem to have had a profound impact on commoner ritual at the Tutu Uitz Na District. SG 3 sees an increase in the proportions of ritual items (statistically significant at the 95% confidence level), but the others do not experience any statistically significant changes.

The Late Classic Floral Park District sees a slight decline in the proportion of ritual items at commoner households. This decline is most evident at Haabna (SG 35; statistically significant at the 95% confidence level), but also at Jolna (SG 34; statistically significant at the 80% confidence level). However, this apparent decline may be the result of a tooth cache (n=15) found in the Late Preclassic fill of the initial house structure that inflated the proportion of ritual items. This particular household lacked high proportions of quotidian items such as chert from its Late Preclassic inception through to the Terminal Classic period (see Chapter 6.4.2.1), and has been interpreted as the home of a ritual practitioner (Garcia, Walden, and Martinez 2020). Other households see little in the way of change however. This stasis in ritual activities at Floral Park is roughly comparable to the situation at Tutu Uitz Na.

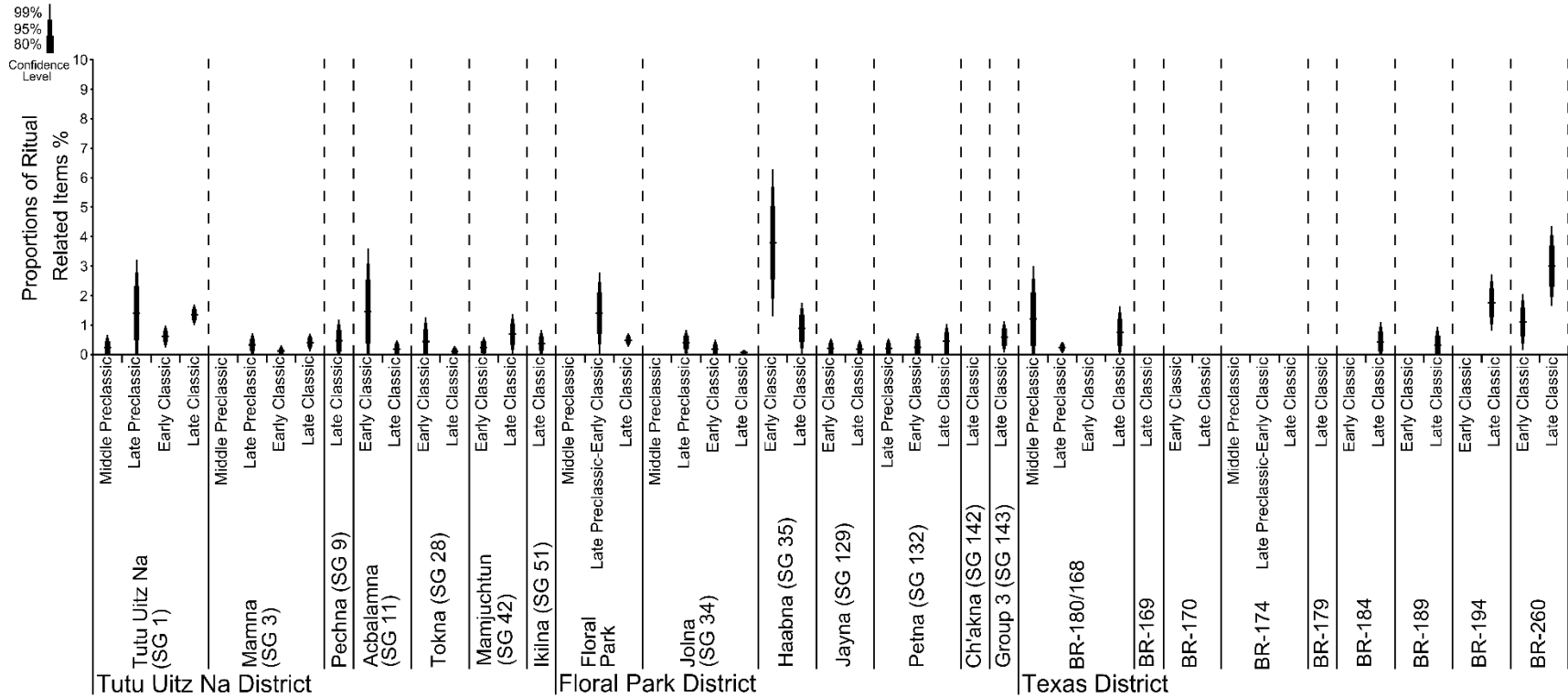


Figure 9.5 Bullet graphs showing intermediate elite and commoner ritual

The proportions of ritual related items to total artifacts at the three intermediate elite centers and their respective commoner districts

At Barton Ramie, patterns in ritual differentiation are less clear than for Tutu Uitz Na and Floral Park. The problem stems from the lack of ritual-related items in the Peabody collections when compared to residential assemblages from Tutu Uitz Na and Floral Park. Ritual items like speleothems, cave pearls, and fossils were not recorded by Willey and colleagues (1965), although there were encountered in the 2019 excavation at BR-180. While these issues explain the lack of artifacts indicative of domestic ritual at most households, the biases operate in the opposite direction with regard to BR-194 and BR-260. Both of these households contained multiple Late Classic interments with substantial grave assemblages. Tentatively, we might say that most households showed a lack of change, except for some larger households like BR-260 which followed the trend evident at BR-180/168 and saw an increased ritual role in the Late Classic period. Overall, we can distinguish three trends: an increase in the proportions of artifacts associated with devotional activity at the Tutu Uitz Na and BR-180/168 centers, a dramatic decrease in these items at the Floral Park center, and a general stasis among commoner households irrespective of district affiliation.

Comparative data from Settlement Cluster C at Baking Pot suggest that the Ixim intermediate elite (M-99) reduced the scale of ceremonies in the Late Classic period (in a statistically significant fashion at the 80% confidence level). In contrast, commoner households in Settlement Cluster C generally show a lack of change although this is somewhat problematized by very small sample sizes of ritual artifacts (Figure 9.6). These data suggest that as the Baking Pot polity became increasingly centralized over time, lower-level intermediate elites in its vicinity performed fewer rituals. This scenario is partly corroborated by data from other intermediate elite centers in the vicinity of Baking Pot (Hoggarth 2012; Conlon and Powis 2004). This might make sense when the patterns evident in wealth, wellbeing, and power, and authority presented in Chapter Seven are taken into account. Both the Ixim and Floral Park elites saw their wealth, and some specific ritual roles undercut in the Late Classic period.

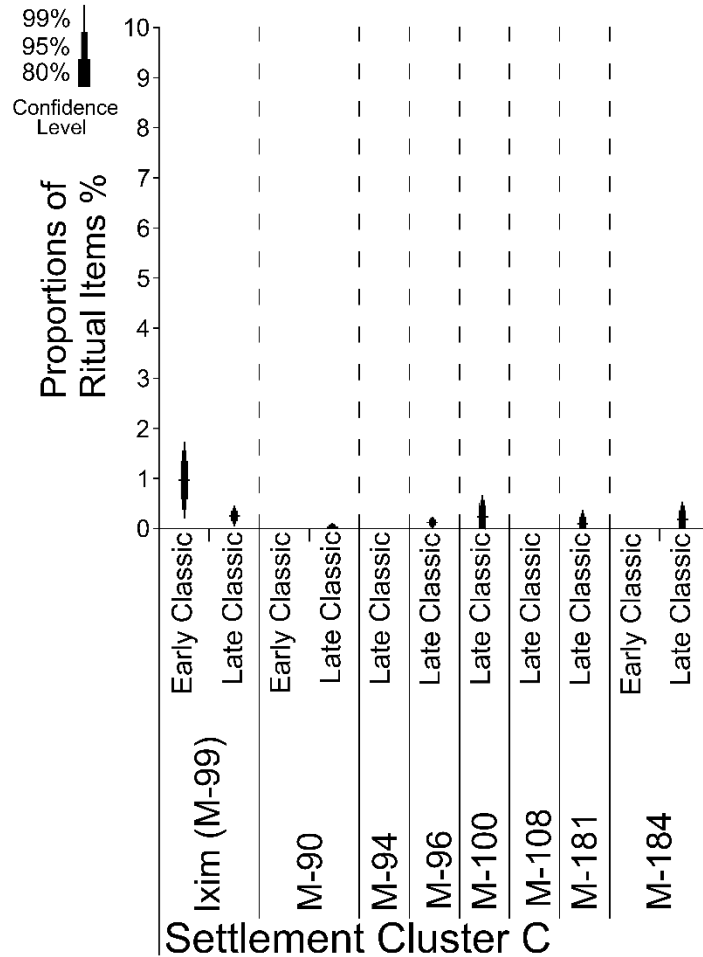


Figure 9.6 Bullet graphs showing ritual at Settlement Cluster C

Proportions of ritual items to total artifacts at households in Settlement Cluster C

9.2.2 Commoner Level Feasting

The commoner households in the Tutu Uitz Na District exhibit different feasting trends than those documented for the Tutu Uitz Na center (Figure 9.7). In the Middle Preclassic period, feasting was likely occurring at SG 3, albeit on a smaller scale than at the Tutu Uitz Na center. It is noteworthy that both SG 3 and the Tutu Uitz Na center possess relatively high proportions of feasting paraphernalia and Middle Preclassic *jute* deposits beneath the architecture. The high-status commoner household at SG 3 shows an increase in the proportions of feasting paraphernalia between the Middle and Late Preclassic transition (statistically significant at the 99% confidence level), then relative stasis into the Early Classic, and a slight decline in the Late Classic (statistically significant at the 80% confidence level). The newly established Early Classic

commoner household at SG 42 on the southern fringe of the Tutu Uitz Na district has high proportions of feasting paraphernalia throughout the trajectory, with little change in the Late Classic period. The Late Classic period saw a statistically significant increase in the proportions of feasting paraphernalia the Tutu Uitz Na center (statistically significant at the 99% confidence level), but a slight decline at commoner households Mamna (SG 3) and Tokna (SG 28; statistically significant at the 95% confidence level). The decrease apparent at SG 28 is probably a product of the previously outlined sampling issues and maybe related to the intensification of its role as a carpentry workshop at this time. Collectively, the evidence for communal feasting indicates that this becomes somewhat concentrated at Tutu Uitz Na in the Late Classic period following the rise of Lower Dover. That said, neighborhood head households at SG 3, SG 42, and SG 51 hosted feasts on a comparable scale to those occurring at the Tutu Uitz Na center. One interpretation of these changes is that while large feasts were hosted at Tutu Uitz Na, surrounding neighborhood heads could still retain pre-existing patronage relations with surrounding commoners through feasting. This interpretation is slightly problematized by the high proportions of feasting-related paraphernalia at SG 9.

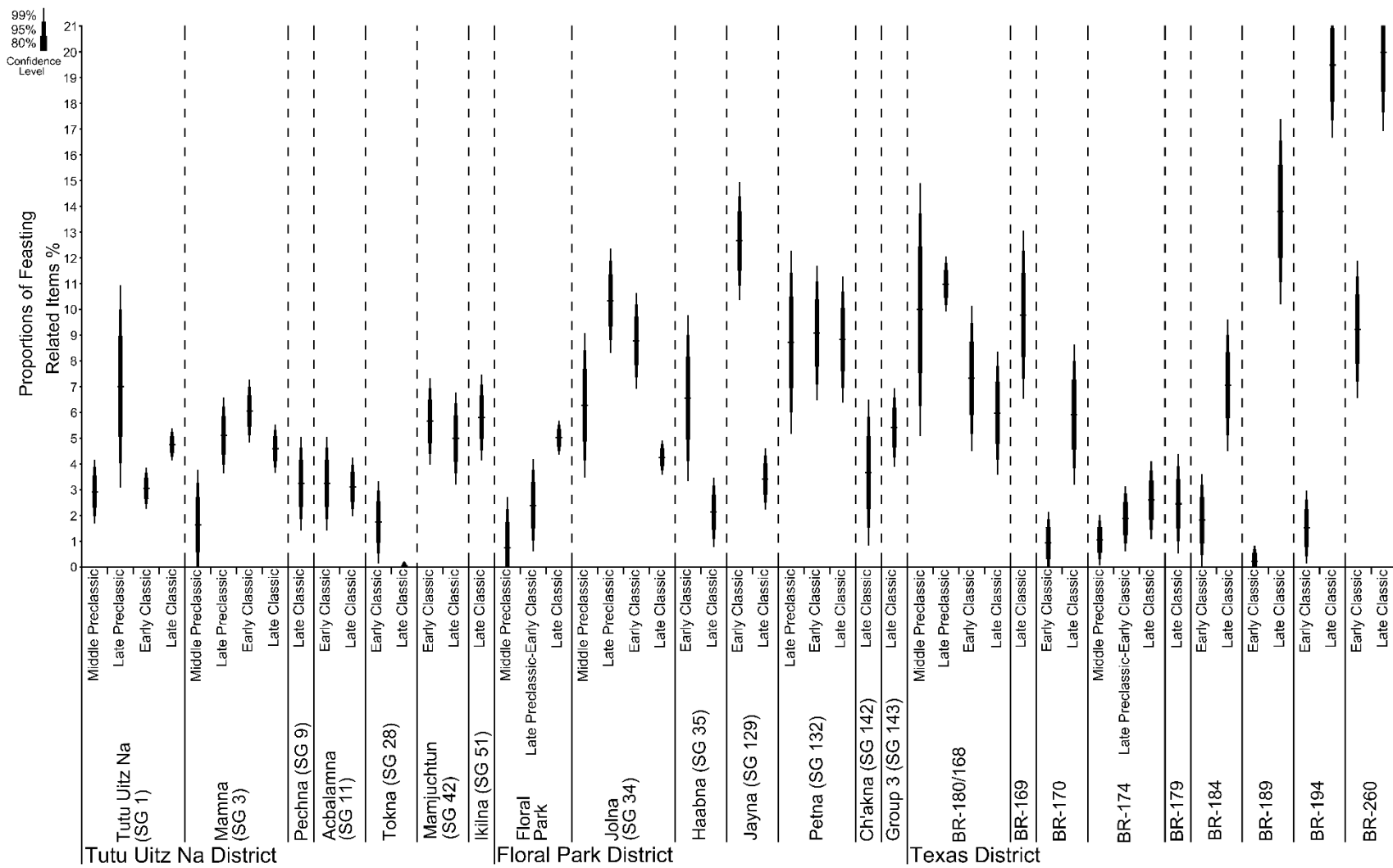


Figure 9.7 Bullet graphs showing intermediate elite and commoner feasting

The proportions of feasting related items to total artifacts at the three intermediate elite centers and their commoner districts

Middle Preclassic contexts were excavated only at the Floral Park center and SG 34. Surprisingly feasting was much more common at SG 34 than the Floral Park center during this time period. SG 34 also yielded a Middle Preclassic *jute* deposit in the lower level of the structure, similar in nature to that seen at SG 3, but much smaller than the Tutu Uitz Na center deposit. To date, all of the Middle Preclassic contexts where we have found *jute* deposits also have relatively high proportions of feasting-related paraphernalia. The Late Preclassic and Early Classic periods at the Floral Park District generally see high levels of commoner feasting among all the commoner households, particularly the neighborhood head household at Jayna (SG 129). SG 35 which was likely the home of some type of specialist ritual practitioner, has a high proportion of feasting-related items, as does the ceremonial round platform at SG 132 (Garcia, Walden and Martinez 2020; Nachamie and Walden 2020). Feasting declines markedly during the Late Classic at SG 34, SG 35, and SG 129 (statistically significant at the 99% confidence level). In contrast, stasis is evident in the proportions of feasting-related items at SG 132. Unlike at Tutu Uitz Na, feasting generally declines among the Floral Park commoners. That said, feasting practices do not disappear entirely; households such as SG 34, 132, and 143 seem as invested in such practices as their peers at Tutu Uitz Na, if not more so.

In contrast to the Tutu Uitz Na and Floral Park Districts, the Texas District commoners did not engage in much feasting during the Late Preclassic and Early Classic periods. Generally, the proportions of feasting-related artifacts found in Texas households are minuscule in comparison to the very high proportions of feasting-related paraphrenia present at BR-180. It would seem that feasting was highly restricted or concentrated in the Texas district at the intermediate elite level in the Late Preclassic and Early Classic periods, in direct contrast to the situation at Tutu Uitz Na and Floral Park during this time. That said, the level of concentration in terms of feasting at Texas in the Late Preclassic and Early Classic periods seems comparable to the situation at Floral Park in the Late Classic. A striking change is apparent in the proportions of feasting paraphernalia in the Late Classic period. The relative stasis in feasting at the intermediate elite level is juxtaposed with dramatic increases in feasting-related items at both the higher-status commoner households like BR-170, BR-184, and BR-260, but also at relatively small commoner households like BR-189 (statistically significant at the 99% confidence level). This pattern suggests that feasting in the Texas District was not concentrated at the intermediate elite level, but involved supra-household

interaction between commoners. This dynamic suggests a very different articulation between intermediate elite patrons and their commoner subordinates in the Late Classic Texas District. Direct comparison of the proportions of feasting-related items in the Texas commoner households and their peers at Tutu Uitz Na and Floral Park is somewhat problematic due to the sampling issues outlined in Chapter 5.

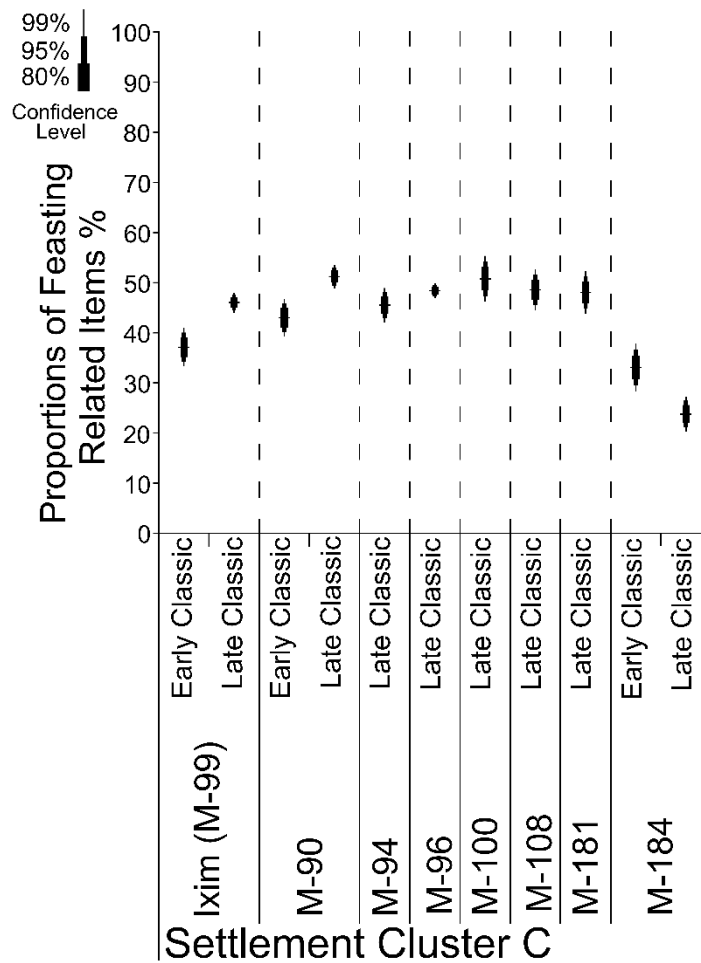


Figure 9.8 Bullet graphs showing feasting at Settlement Cluster C

The proportions of feasting related items to total artifacts at Settlement Cluster C at Baking Pot

The Settlement Cluster C situation seems relatively stable over time in contrast to the fairly dramatic changes evident in the proportions of feasting paraphernalia at the Lower Dover households throughout the trajectory (Figure 9.8). The Ixim intermediate elite sees a statistically significant increase in the proportions of feasting-related items in the Late Classic period, while the M-184 commoners see a contrasting decline. However, across the district, the overall

proportions of feasting paraphernalia are surprisingly similar in the Late Classic period. This may corroborate the idea that feasting is related to construction rates as these remain relatively stable over time in comparison to the Lower Dover districts.

Intermediate elite-based feasting apparent at Tutu Uitz Na and Floral Park might be a strategy of reciprocity tied to commoner labor for construction in what could be construed as a community contractual system of labor organization (Abrams 1994: 99). It seems probable that the distribution of wealth items among commoners at Tutu Uitz Na may have likewise reflected a mechanism for reciprocity. These wealth items may have represented gifts given as part of larger feasting events (Hendon 2010: 193; Tozzer 1941: 92). This might make sense given the sudden increase in building at both centers in the Late Classic period, however, the slight increase evident in feasting is not commensurate with the dramatic increase in architectural construction. Furthermore, while the Tutu Uitz Na and Floral Park intermediate elites do not show more evidence of feasting than some high-status commoners in their respective districts. Some commoner households show similar evidence of feasting but did not command anywhere near as much construction labor as intermediate elites. Feasting may therefore represent some form of public commensalism. Patterns of feasting at BR-180/168 are somewhat different from the Tutu Uitz Na and Floral Park centers in that they decline slightly in the Late Classic period, but when the overall proportions of feasting paraphernalia are compared, all three centers are similar. These probably represent the different idiosyncratic strategies of elite households in their interactions with commoners. While an increase in intermediate elite feasting and a simultaneous decrease in commoner feasting is noted at Tutu Uitz Na and Floral Park, this is far from centralized and large gatherings associated with feasting seemed to occur with high regularity among many households across the landscape.

9.2.3 Changing Patterns of Elite and Commoner Ritualization

To summarize, four clear patterns are identified. (1) All three intermediate elites see dramatic increases in ceremonial architecture, however at Tutu Uitz Na and BR-180/168 this architecture served to venerate local ancestry and integrate district populations, whereas, at Floral Park, architectural changes minimized the importance of elite ancestry and instead placed

emphasis on large public ceremonies and processions, which were likely tied to a polity-wide identity. (2) The changes in the proportions of ritual items corroborate this divergence between Tutu Uitz Na and BR-180/168 on the one hand, and Floral Park on the other. Tutu Uitz Na and BR-180/168 see increased proportions of ritual items, whereas Floral Park sees a decline, which is likely tied to these divergent ritualized practices. (3) Commoner ritual items generally show little change through the transition. This suggests that the rise of Lower Dover and changes at the intermediate elite level did not elicit any change in commoner household or neighborhood-level ritual traditions. (4) Intermediate elite feasting parses out differently to ritual action and ceremonial architecture, although all three intermediate elites hosted large feasts in the Late Classic. At the Texas District, feasting may have become the prerogative of high-status commoner neighborhood head households. While it seems possible that Tutu Uitz Na and Floral Park were hosting inclusionary feasts in exchange for commoner construction labor, this is not particularly clear, as generally, the proportions of feasting paraphernalia were pretty high among commoners as well.

Collectively, these changes strongly suggest that the apical elite at Lower Dover were not monopolizing ceremonial bases of authority and that ceremonial activities were a basis for integration and authority at the intermediate elite level. Variability in practices of ritualization is critical to teasing out the nature of relationships between apical and intermediate elites. Carmean (1998) employs the distribution of *incensarios* and altars at Sayil to argue that the polity was ritually decentralized. Intermediate elites at Sayil managed to retain ritual roles despite attempts by the apical elite regime to appropriate them. At Lower Dover, it would seem that the BR-180/168 and Tutu Uitz Na intermediate elites staged rituals and integrated commoner populations in a way that reinforced their status distinctions within their districts, and integrated district populations, but simultaneously countered, or even undermined top-down ideologies at Lower Dover. In contrast, the Floral Park elite seemed to employ ritual strategies that downplayed ancestor veneration and the importance of their lineage, in favor of promoting polity-level identities grounded in larger ceremonies.

9.3 Summary of Ritualization and Ceremonial Changes

All three intermediate elite centers functioned as forges of local community identity, where people came together for large acts of ritualization (Hutson, Magnoni, and Stanton 2004; Peuramaki-Brown 2013: 179). Important differences existed between these focal nodes, however. The mortuary rituals held atop the eastern triadic structures at Barton Ramie and Tutu Uitz Na acted as “aides-mémoires” for the onlookers. By interring the dead in the large shrines and removing body parts of older ancestors from earlier interments these structures served as important theatrical stages for ceremonies, which harkened back to a time preceding the rise of Lower Dover. Through these public ritual acts intermediate elites were using collective memory and their ancestors as powerful political resources (Golden 2010; Hendon 2010; Kurnick 2019). While the interment of intermediate elite lineage members within the shrine probably saw their transition from a known entity into a more homogeneous class of ancestors, the mortuary ceremonies also likely served to celebrate their lives. While ancestor veneration served as a political strategy with a clear purpose at Lower Dover, it is notable that from an emic perspective the deified ancestors residing within the eastern triadic structures were conceived of as important agents in their own regard (R. Chapman 1981; Kuijt et al. 2008; Walden 2017). As such, the times of political uncertainty associated with the rise of Lower Dover might have stimulated ancestor veneration in an attempt to propitiate these deified ancestors to act on the behalf of the intermediate elites. Whether one takes an emic or etic perspective, it seems that intermediate elite ancestor veneration probably was a vehicle for political resistance at BR-180 and Tutu Uitz Na in the Late Classic Lower Dover polity (Kertzer 1988; see also Iannone 2003: 24).

Assessment of the solar alignments of the eastern mortuary structures across the polity (see Chapter 6) reveals some interesting patterns. In contrast to the solar alignments associated with the eastern triadic structures at BR-180 and Tutu Uitz Na, the large eastern triadic at Lower Dover (Plaza A Structure A1-3) could not have functioned effectively. The solar alignments on the northern and southern wings are off by 10 degrees, and there is a sizeable hill rising immediately behind the structure preventing a clear line of sight of the rising sun. It seems likely that the Lower Dover center was situated in the position it was, to effectively function as a disembedded capital, with a line of sight to the intermediate elite centers, and easy control of riverine trade and

movement (see Chapter 6). Potentially the apical elite had to make a compromise between situating the center in a preferable political and economic position, rather than with astronomical alignments in mind. That said, the solar alignments associated with the BR-180 and Tutu Uitz Na eastern triadic structures probably bestowed some degree of ceremonial authority on the occupants of these centers in the eyes of their subordinates. The lack of apical elite local ancestry at Lower Dover, coupled with the lack of solar alignments of their ancestral eastern triadic structure may have underscored their questionable legitimacy in the region.

The close social propinquity generated by the face-to-face interactions between the intermediate elite households and their commoner followers would have resulted in a sense of social intimacy. Through social memory and collective ritual these ceremonies brought intermediate elites and commoners together at the district level to consolidate district-level identities and foster the creation of a sense of *communitas* (Yaeger and Canuto 2000). Evidence of Middle Preclassic ceremonial architecture at BR-180, Floral Park, and Tutu Uitz Na suggests that the relationships forged between intermediate elites and commoners lasted almost two thousand years and whether relationships prospered or soured there was a high degree of longevity. Major centers like Blackman Eddy and Lower Dover rose and fell but intermediate elites remained stable (Connell 2003; Walden et al. 2019; Yaeger 2010b: 247). This dynamic might suggest highly resilient relationships, which through ritual mediation and communal festivities, reduced scalar stress and the potential of commoners fissioning from districts (Alberti 2014; Bandy 2004). Equally, intermediate elite ritualization reinforced status distinctions and served to politically legitimize the intermediate elites in the eyes of their commoner subordinates. Often sub-polity level leadership is construed as being fundamentally grounded in horizontal relationships in stark contrast to the hierarchical relationships between apical elites and their subjects at the polity level. As Pacifico (2019) notes, there is no reason to suggest that neighborhoods and districts were inherently convivial places. The ritualized strategies of the intermediate elites meant that districts were more reminiscent of downscaled polities in terms of the relationships which integrated their constituent parts. It remains entirely possible that the two different strategies of ritualization employed were also associated with lateral competition between intermediate elites. Baron (2016a: 140) describes how the two rival factional lineages of La Corona used different ritual strategies to compete for power and authority, one using traditional authority born of deep ancestral history in

the region, and the other using foreign status symbols, marriage alliances with external powers, and the use of external patron gods.

In contrast to ancestor veneration, the processional rituals staged at the *sacbe* and terminus group at Floral Park are associated with polity-level ritual infrastructure. *Sacbe* and termini are consistently associated with Belize River Valley apical elite rulers at major centers, and upper-level intermediate elites (Tier 2) in the BVAR area (Cheetham 2004; Iannone 2003; Walden et al. 2019). While the construction of the *sacbe* might be reflective of emulation of apical elite rituals (Novotny et al. 2018), the absence of a *sacbe* and terminus group at Lower Dover suggests a more specialized function. When compared to the types of ceremonies occurring at Tutu Uitz Na and BR-180, it seems that Floral Park was hosting ceremonies that were an exception to the norm and reflective of a very different role in the broader ceremonial organization of the Lower Dover polity.

The smaller eastern mortuary shrine at Floral Park implies an overt desire to downplay ancestor veneration, probably to alleviate the possibility of politically undermining the Lower Dover apical elite. The Floral Park mortuary shrine was still the focus of considerable ancestor ritual in the form of re-visitation and secondary inhumation, but it was more of a private affair. The creation of *jute* deposits in the Middle Preclassic period seems to have cross-cut status as these are apparent at commoner households such as SG 3 and SG 34 and the Tutu Uitz Na intermediate elite center. Elsewhere in western Belize, these deposits are apparent at settlements that would go on to become major centers such as Arenal (Horowitz et al. 2019), Pacbitun (Michelleti, Crow, and Powis 2018: 22), Blackman Eddy (Brown 2008), Xunantunich (Jamison 1993) and minor centers like Callar Creek (Kurnick 2016b) and Chan (Keller 2012).

Tracing strategies of ritualization diachronically between intermediate elite centers and teasing apart the underlying political narratives associated with specific types of ritual action allows a clearer understanding of the relationships between intermediate elites, their commoner subordinates, and their apical suzerains (Kertzer 1988). Charting diachronic and spatial variability in strategies of ritualization relative to their political context allows the elite upward face to be situated on a spectrum of acquiescence to acrimony. Evidence suggests that none of the three intermediate elite regimes were outright hostile to Lower Dover, or completely subordinate. Instead, the upward face of the three intermediate elites varied by degrees, while Floral Park was

more acquiescent, Tutu Uitz Na and BR-180/168 were more acrimonious. Likewise, while the Floral Park were in a position where they could distance themselves from their commoner subordinates to some degree, the BR-180/168 and especially Tutu Uitz Na intermediate elite were more engaged with underlings than ever before.

10.0 CHANGING INTERMEDIATE ELITE POLITICAL STRATEGIES

Chapters 6-9 present information about the ways in which intermediate elites and commoners reacted to the rise of Lower Dover. Chapter 10 brings together the various patterns evident in the data pertaining to wealth and inequality (Chapter 7), economy (Chapter 8), and ritual and religion (Chapter 9) to examine the political strategies of the intermediate elites at Lower Dover. In this chapter, a summary of changes at each district is provided. Next, I assess apical elite political strategies and discuss the overarching factors which structured intermediate elite agency.

10.1 Summarizing the Early to Late Classic Transition

A complicated picture of political dynamics ensues when moving from a perspective that views politics as engrained in the interactions of two diametrically opposed monolithic classes (elites and commoners), to a fluid agent-focused perspective grounded in the minutiae of daily activities and historically contingent relationships (Gledhill 2000: 38). Accordingly, I attempt to summarize patterns emerging at each of the three districts and contextualize them within the broader literature to provide a synopsis of the crucial shifts and continuities at the intermediate elite and commoner levels.

10.1.1 Tutu Uitz Na

The Tutu Uitz Na elite household saw some major changes following the rise of Lower Dover. Intermediate elite wealth declined, but their access to labor increased. The majority of labor was invested in three major Late Classic construction projects, the largest being the modification of the eastern mortuary structure into an eastern triadic structure, and the subsequent expansion of the plaza to accommodate the southern wing of the triadic structure and a growing district-level population. The other major labor investment was the modification of the northern residential structure, although this required substantially less labor. Construction on the eastern triadic

structure saw the removal of human bones from earlier ancestral burials and the lavish interment of Late Classic lineage members. The proportions of wealth items show the general affluence of the Tutu Uitz Na elite was in decline, yet investment in burial wealth increased with individuals routinely interred with well-made vessels, bone ornaments, greenstone celts, and other paraphernalia. These funerary ceremonies seem overtly public affairs. The plaza was modified at this time to accommodate the growing district population. Moreover, the newly constructed eastern triadic structure was highly visible atop the hill. Evidence of feasting continued from the Early Classic into the Late Classic, and it seems likely that commoners received food, and possibly fine ware serving vessels in exchange for their labor. The decline in intermediate elite wealth may reflect more items being redistributed to commoners (see Robin 2012c: 329). The Tutu Uitz Na intermediate elites continued to pursue forms of ritual such as ancestor veneration, which propped up their traditional authority (in a Weberian sense). This ritualization was likely political in nature and harkened back to a time long before the rise of the Lower Dover polity. Ritualization likely involved the consumption of *jute* snails as a mnemonic device to foster social memories of earlier times. These ceremonies may have involved watching the sunrise and set over the wings and central component of the eastern triadic structure on the solstices and equinoxes to highlight the sacred authority of the lineage ancestors who had resided within these shrines for over a thousand years.

Generally, the commoners residing in the Tutu Uitz Na district saw little change in their wealth and wellbeing following the rise of Lower Dover. Unlike other intermediate elites, the Tutu Uitz Na elite either could not or did not want to, impose greater labor burdens on the inhabitants of the district. It seems entirely possible that the lack of decline in commoner wealth was tied to benevolent policies on the part of the intermediate elite. These policies likely involved the redistribution of wealth items downward, especially to high-status commoner clients, in a manner akin to a community contractual system of labor organization (see Abrams 1994; see also Robin, Meierhoff, and Kosakowsky 2012: 135). High-status commoners show similar levels of wealth to the period prior to the rise of Lower Dover, and could still invest labor in their residences. Economically life changed very little for commoners living in the district, except for the intensification of production at the carpentry workshop at Tokna (SG 28). Commoner neighborhood head households continued hosting low-level neighborhood rituals and feasts. The

Tutu Uitz Na District saw an influx of inhabitants throughout the Late Classic period which may have resulted from the intermediate elite pursuit of benevolent strategies to attract client commoners.

In terms of the fall of the three intermediate elite centers, most is known about Tutu Uitz Na. The intrusive terminal mortuary deposit in the eastern triadic structure seems roughly contemporaneous with the first signs of collapse on the northern residential structure. These events are solidly radiocarbon dated to around cal AD 880 at the latest. This evidence indicates that Tutu Uitz Na was abandoned long before the fall of Lower Dover. Abandonment at this time suggests that ultimately the Tutu Uitz Na intermediate elite strategies failed. Evidence for Terminal Classic occupations among the commoners is less clear due to the nature of bioturbation, and our inability to radiocarbon date the upper stratigraphic levels of the residential structures. Spanish Lookout II (Terminal Classic) assemblages are apparent at most commoner households, including low-status commoner households tentatively suggesting they remained in residence after 900 AD. The abandonment of intermediate elite residences prior to their commoner subordinates corroborates patterns noted at Dos Pilas (Palka 1997: 303; *contra* Lamoureux-St-Hilaire et al. 2015: 565; Robin 2012c: 326). The rough trend evident at Late Classic Tutu Uitz Na is somewhat comparable to Chan following its incorporation by Xunantunich (Robin 2012c). The Tutu Uitz Na intermediate elite seems to have tried to ritually distance themselves from the Lower Dover apical elite, and continue pursuing traditional ancestor veneration ceremonies and the incorporation of commoners in large feasts. Similarly, as at Chan commoner quality of life seems unaffected by top-down policies associated with incorporation under a higher tier of political decision-making. However, while the Chan elite seems to have been rewarded for their choice of strategy, the Tutu Uitz Na elite center seems to collapse earlier than the Floral Park and Lower Dover centers.

10.1.2 Floral Park

My work points to the overt top-down co-option of the Floral Park elite by the Lower Dover apical elite. This argument hinges on comparison with the incorporation of the larger Belize Valley center of Xunantunich by the paramount center of Naranjo. There are three similarities between the Late Classic Floral Park intermediate elite center and Xunantunich following its epigraphically

documented incorporation under the hegemony of Naranjo in the Hat's Chaak phase (middle Late Classic). (1) Xunantunich and the Floral Park intermediate elite center both see a reduction in access to wealth items (LeCount and Yaeger 2010c: 353-54, 359; see also Awe et al. 2020b). The fiercely coercive apical rulers at Naranjo probably monopolized opportunities for patronage on the part of the Xunantunich intermediate elite, effectively cutting off other patronage networks which could result in the downward trickle of wealth items (LeCount and Yaeger 2010c: 353-54). The possibility that a similar dynamic played out at Floral Park seems plausible given the lack of wealth items flowing into the elite center and the surrounding district. In comparison, at Tutu Uitz Na and Barton Ramie, intermediate elite wealth declined, but partly because wealth items were likely redistributed to commoners.

(2) In contrast to a clear decline in access to wealth items, the Xunantunich rulers saw their ability to command commoner labor increase excessively (Ashmore 2010: 57; Yaeger 2010; see also Chapter 2.). At Xunantunich, such a pattern probably reflects the elite being able to draw upon the coercive force of their apical patrons at Naranjo, or as Ashmore (2010: 57) puts it “the locally unprecedented capacity to command local labor and materials is perhaps most consistent with outside intervention by the revitalized state and dynasty at Naranjo” (LeCount and Yaeger 2010d: 352; for another example, see Canuto and Barrientos Q. 2020; for downscaled examples see Iannone 2003: 24; Yaeger 2003a: 48). T. Neff (2010: 268) similarly sees evidence of close patronage relationships between the Xunantunich elite and intermediate elites in the hinterland as facilitating the exploitation of commoner subordinates. This pattern not only occurs at Floral Park, but data from the surrounding commoner district, and comparison with other districts of the Lower Dover polity allow us to further unpack this dynamic. In the Floral Park District, commoner labor burdens in monumental construction rose dramatically in the Late Classic period, reflecting a dramatic increase in the ability of the intermediate elite to procure labor. At the same time, commoner wealth declined dramatically; this is visible in terms of wealth items, but also apparent in their ability to construct their own residences. This reflects patterns noted by Driver and Garber (2004: 293) who claimed that the paucity of wealth items suggested Floral Park was not associated with either Baking Pot or Blackman Eddy. Furthermore, unlike Tutu Uitz Na and Barton Ramie, the commoners do not seem to be receiving anything in return for their labor, except perhaps for the occasional feast (if the feasting was not diacritical). While the expanded Late Classic public

plaza (Plaza A) was likely the setting for large public aggregations this space could accommodate many more people (2700-5870) than the district population (~200) associated with Floral Park. It even remains plausible that the plaza may have served to integrate the polity population. The scale and nature of the construction tasks at Late Classic Floral Park may suggest something more akin to an annual labor draft. This finding, in conjunction with the paucity of wealth redistributed to commoners and the decline in commoner wellbeing, may suggest that construction was likely mandated through a *corvée* style system like that imposed by the Lower Dover apical elite.

(3) In being co-opted by the Naranjo apical elite, the Xunantunich rulers moved from their traditional palatial home in the ceremonial precinct surrounding El Castillo to a secondary elite residence at Group A (Leventhal 2010). A similar process occurred at Floral Park in the Late Classic period, with the construction of the secondary elite residential complex (Group 2). This shift also saw the interment of Late Classic lineage members in a small mortuary structure associated with the private residence. The smaller adjoined mortuary structure at Floral Park Group 2 was far more akin to high-status commoner and lower-level intermediate elite mortuary structures like Structure G2 at Lower Dover Group G (Collins 2018), or Structure D at BR-147 (Willey et al. 1965), than the elite eastern triadic structures at BR-180 and Tutu Uitz Na. It is unclear whether the small structures, which comprised the terminus group (Group 1), had a mortuary function, like the terminus pyramid apparent at Zopilote joined to the Cahal Pech civic-ceremonial center (Cheetham 2004: 145). This seems unlikely considering the small scale of these two structures, especially in comparison to Zopilote and other terminus group shrines used for apical elite mortuary practices. It remains largely speculative, but the substantial Late Classic remodeling and realignment of the structures in Plaza A, which seemingly went hand in hand with the construction of the secondary private residence, and could well have involved the modification of an eastern triadic, or mortuary shrine into a far less politically charged ceremonial pyramid. This construction phase likely saw an early period elite residence, probably situated on the northern or western side of Plaza A, either demolished or completely encased in the ~1 m deep plaza floor fill. Excavations on the eastern pyramidal structure of the ceremonial group revealed no Late Classic period interments. It remains equally speculative, but potentially the high proportions of secondary burials present in the eastern mortuary shrine (Structure 2A) on Group 2 represent the bundles of ancestors, which were relocated from Structure A1 during its remodeling. The

construction of a new residence devoid of a ceremonial function likely represented a way of separating the intermediate elite from their traditional ceremonial apparatus of authority and the placement of them in a more custodial role (for a similar dynamic among Chaa Creek local elites within the Xunantunich polity see Connell 2003; 2010). Furthermore, the possible remodeling of the older ancestral shrine and relocation of burials might reflect a direct attempt to fracture the chain of social memory associated with the elite lineage (McAnany 2013: xxxii). Alternatively, the intermediate elite may have sought to broaden the social gulf between their ancestors and their subordinates as an attempt to distinguish rather than downplay their lineage heritage. This interpretation is not mutually exclusive with the former interpretation. What seems most clear from the data at hand is that the Floral Park ancestry was no longer “common property” like the Tutu Uitz Na and BR-180/168 elite ancestry.

Given our partial knowledge of the construction sequences at Floral Park, three scenarios are considered unlikely. The first scenario is the possibility that Floral Park remained an autonomous center and the changes reflect reactions to the rise of Lower Dover (see for example Spencer and Redmond 2006). This is considered unconvincing for four reasons. **(1)** The center lacks an eastern triadic structure and ballcourt, which autonomous tier 1 centers have in the Belize River Valley (see Walden et al. 2019). **(2)** Floral Park undergoes sufficiently similar patterns of Late Classic incorporation into the Lower Dover polity as Tutu Uitz Na and BR-180. **(3)** The types of special function architecture constructed at Floral Park in the Late Classic and the size of the plaza are suggestive of a polity-level integrative function. **(4)** Following Ashmore (2010: 57), an external source of power (Lower Dover) seems the most congruent explanation for the dramatic increase in labor tax rates at Floral Park in the Late Classic period. The central ceremonial plaza could accommodate ~2700-5870 people, however, the surrounding district has a population of ~200. Likewise, if Floral Park were its own autonomous center, it is likely we would not see the construction of the *sacbe* and terminus group for processional rituals, but rather an eastern triadic structure. Secondly, the possibility that Floral Park represented a secondary residence of the Lower Dover apical elite seems improbable given that Floral Park is only 1.8 km from the Lower Dover core (for dual residency see Guderjan, Baker, and Lichtenstein 2003; Haviland 1981; Taschek and Ball 2004: 198). An even more unlikely scenario is that the Early Classic Floral Park elite ascended

to paramouncy like the apical elites of Lower Dover. This does not make much sense since they retained a downscaled, and rather materially impoverished residence.

In contrast, it is plausible that the Late Classic Floral Park intermediate elite were not the original household, but a new household inserted by the Lower Dover apical elite either through elevating a commoner household (Goody 1966), or by installing a client elite brought in from elsewhere (see LeCount and Blitz 2005: 75). Tentative evidence for such a shift might include the higher proportions of secondary burials in Structure 2A. While in theory these could have been removed from Structure A1, they also could have come from further afield. The sample of intermediate elite individuals analyzed with strontium isotope remains small ($n=6$), but this scenario is somewhat supported by the non-local origin of Burial 9 (the only non-local intermediate elite individual). However, Freiwald (2011a) notes a pattern of local patrilocal for the region, meaning it would make more sense if this female individual married into the Floral Park lineage.

The likelihood that the Tutu Uitz Na elite were replaced is very slim given the fact that the Late Classic inhabitants pursued ancestral ritual venerating the earlier lineage, their reliance on earlier symbols of identity, and the complete lack of evidence for an occupational hiatus at the center (although the difficulty detecting hiatuses is noted; Arnauld et al. 2017: 26). A comparable example may be Xunantunich, where Late Classic reoccupation of the civic-ceremonial center saw earlier constructions razed and completely new building projects initiated, in a manner which was “unquestionably a profound break with the past” (Keller 2010: 187). While the disjointed construction sequence at BR-180/168 prohibits an understanding of whether an occupational hiatus occurred, the continued veneration of the local elite lineage into the Late Classic suggests the original household retained occupancy at the center. That said, the resident households present over these sizeable time depths need not have been genetically related. In many respects, this level of continuity is of little importance. It seems clear, however, following the Lévi-Straussian House concept (1983; see Chapter 2), that later occupants of these centers claimed descent from the original elite and venerated the same ancestors (see LeCount and Blitz 2005: 75).

A similar pattern, albeit of greater wealth decline and less dramatic increase in the ability to command commoner labor, is apparent at the Tutu Uitz Na elite center. The major reason to suspect that the Floral Park elite household was directly co-opted or annexed by the rulers at Lower

Dover lies in the distinct differences in ritualization between the intermediate elite centers. The Tutu Uitz Na and Barton Ramie intermediate elites pursued strategies of ritualization, which propped up their own district-level authority, and integrated their commoner subordinates under a district-level identity. These ritualized traditions countered top-down polity-level narratives of ancestral veneration promulgated by the Lower Dover apical elite (see Tung and Cook 2006 for an analogous example). The fact such ritualized strategies persisted despite the rise of the polity shows that the Lower Dover apical elite were reliant on intermediate elites, and that the Lower Dover apical elite did not and could not replace the elite households at Tutu Uitz Na and BR-180/168. While relatively little is known about the ritualized traditions of the Floral Park elite prior to the rise of Lower Dover, there is no reason to suspect they were not pursuing similar ritualized strategies to Tutu Uitz Na and BR-180/168. This is corroborated by the rough proportions of ritual items. It remains possible that an eastern mortuary structure lies beneath the Late Classic overbuilding on Structure A1.

In contrast, the Late Classic Floral Park elite employed very different forms of ritualization to their counterparts at Tutu Uitz Na and BR-180/168, which involved large-scale public ceremonies situated in their highly accessible plaza and along their processional *sacbe*. The Floral Park lineage shrine (Group 2, Structure A) was a small, unimposing structure on the private residential group. Funerary ritualization at Late Classic Floral Park involved small, private ceremonies and modest interments. The large public ceremonies staged at Plaza A at Floral Park did not venerate the intermediate elite lineage and their ancestry, or strengthen ties between the intermediate elite and the commoners living in the Floral Park District. As stated previously, the sizeable plaza, *sacbe*, and terminus group were designed and constructed to accommodate far more people than the Late Classic district population. This suggests that the Floral Park elite were promoted to the point of hosting polity-wide ceremonies in accordance with the Lower Dover apical elite. However, the lack of construction at the commoner level within the Floral Park district suggests that local district labor was responsible for this construction. Despite this, and the absence of wealth items, the Floral Park elite regime lived in one of the most lavish private residences in the polity, constructed an elaborate round platform in the Terminal Classic (which speaks to at least regional connections with other elites further afield), and secured a possible marriage alliance with a household of unknown status in the upper Macal River drainage (see Chapter 6; Freiwald

2011a). The use of commoner labor to construct a private residential group, which was separate from ceremonial architecture, versus the construction of a smaller residence associated with public architecture is probably qualitatively meaningful in terms of political power/authority and labor organization (see Elson 2006: 45; Flannery 1998).

In contrast to the Tutu Uitz Na commoners, the Late Classic period represented a time of decline for the commoners of the Floral Park District. While still slightly wealthy, the high-status commoner neighborhood head household of Jayna (SG 129) was a shadow of what it was previously. Other commoner households at Jolna (SG 34) and Petna (SG 132) witnessed an even more serious decline in household wealth, while the emergent household at Ch'akna (SG 142) was the most impoverished in the polity. Labor relations at Late Classic Floral Park were more asymmetrical, with onerous construction burdens placed on the commoners. The most likely explanation for the changing “downward face” of the Floral Park elite from one grounded in public ritual to coercive labor-mobilization is that they could now draw upon the coercive capability of their new patrons at Lower Dover (see Ashmore 2010: 57). As noted in Chapter 2, this shift was likely one of degrees from a role grounded in publicly mandated authority to one which was based more on coercive control facilitated through Lower Dover. These shifts suggest that the power of the Floral Park intermediate elite was no longer overly contingent on the support and goodwill of their followers but was grounded in external sources (Blanton and Fargher 2007). A similar pattern has been noted at Xunantunich following incorporation by Naranjo (LeCount and Yaeger 2010a), and at La Corona after the elite fell under the patronage of the Kaanul dynasty at Dzibanche/Calakmul (Canuto and Barrientos Q. 2020). Labor relations probably shifted from a community contractual to a *corvée* system of labor organization (Abrams 1994).

Unlike the situation at Tutu Uitz Na, the circumstances surrounding the fall of Floral Park remain unclear. The terminal construction phases on the elite mortuary shrine (Structure 2A) and residence (Structure 2D) at Group 2 contain sufficient Terminal Classic (Spanish Lookout II) ceramics to posit a date after AD 800, maybe as late as AD 900. The creation of a substantial peri-abandonment deposit on the eastern pyramid at Plaza A speaks to the perceived function and standing of the center (Glassman, Conlon, and Garber 1995). The peri-abandonment deposit at Floral Park seems very similar to other deposits at major centers in the Belize River Valley (Awe et al. 2020a; Hoggarth et al. 2020). Several sizeable deposits exist in the courtyards of the Lower

Dover apical elite palace (Kulig 2015; Romih 2019a; Watkins et al. 2017; see Chapter 3.4.2). As mentioned in Chapter 6, the presence of this deposit at Floral Park, but not at smaller intermediate elite centers in the Valley (tiers 3-4), suggests that the creators of the deposit saw some inherent similarities between the Lower Dover palace and Structure A1 at Floral Park.

While we lack radiocarbon dates on the collapse of Floral Park, the terminal construction phases indicate control of labor into the Terminal Classic period. This is corroborated by the modification of the eastern mortuary shrine (Structure 2A) on Group 2 into a Terminal Classic round structure, a construction style which becomes fairly common in Belize around AD 800-900 (Harrison-Buck and McAnany 2013; see Chapter 6). The construction of a Terminal Classic round structure speaks to intermediate elite contacts with more distant elites at this time. While these structures existed in the region at Pook's Hill and Baking Pot (Helmke 2006; Audet and Awe 2003: 1-24), they were not that common, and likely speak to interconnections with elites situated downriver at Huum Chaak, K'ak'nal, and Ik'nal in the Middle Belize Valley (Harrison-Buck, Murata, and Kaeding 2012: 134-139; Harrison-Buck, Kaeding, and Murata 2013: 79, 85-87; Harrison-Buck et al. 2011: 65-66). This outward focus may be tentatively corroborated by the presence of Burial 9, the only non-local intermediate elite identified, in the albeit small sample from the three centers. The presence of this female individual suggests that the Floral Park elite had access to external marriage alliances, external ties, or were themselves from elsewhere (Freiwald 2011a).

The current data support the notion that the Floral Park elite likely outlasted the Tutu Uitz Na elite by ~100 years. Current information about the abandonment of commoner households in the Floral Park District is even more speculative, but the general paucity of Spanish Lookout II types ceramics across commoner households of all statuses at Floral Park likely suggests they were abandoned around the onset of the Terminal Classic. If this was the case then the Floral Park intermediate elite, unlike their peers at Tutu Uitz Na, outlived their commoner subordinates in a similar manner to their peers at Minanha (Lamoureux-St-Hilaire et al. 2015: 565), and possibly Chan (Robin 2012c: 326). The possibility of elite continuation despite commoner abandonment serves to further corroborate the idea that the Floral Park elite were less reliant on their commoner subordinates.

This is interesting, as this pattern is the inverse of that noted in the Xunantunich polity, where the Chaa Creek intermediate elite pursued a policy of cooperation with the apical elite in a manner somewhat akin to Floral Park, which led to long-term instability (Connell 2010; Robin 2012c: 334; see also Conlee and Schreiber 2006). There has been a general acceptance that the collapse of higher levels of political decision-making simply involves a reversion to the autonomy of lower-level pre-existing units (see J. Marcus 1989; Yoffee 1988: 67). This dynamic seems to operate on a regional scale, where polities such as Xunantunich, and probably Baking Pot and Lower Dover declared autonomy in the Terminal Classic as larger hegemonies such as Naranjo waned (Helmke, Awe, and Grube 2010: 120). It seems however that the Lower Dover polity potentially outlasted Tutu Uitz Na, and collapsed roughly around the same time as Floral Park. While some examples of post-collapse continuation in the Maya lowlands exist (see for instance Landau 2016; 2020; n.d.), generally it would seem that the Late Classic collapse of the lowland polities at the local-level generally saw the collapse of at least the apical and intermediate elite levels of the political hierarchy (Connell 2010), if not demography more broadly (Hoggarth et al. 2014).

10.1.3 BR-180/168, the Texas District, and Barton Ramie

The Late Classic BR-180/168 elite pursued some strategies, which were similar to those of the Tutu Uitz Na elite. For instance, the intensification of ancestor veneration is apparent in the modification of the eastern mortuary structure into a large eastern triadic structure with possible solar alignments on the solstices and equinoxes. The likely synchronous construction of similar ancestral structures at both intermediate centers following the rise of Lower Dover likely speaks to a common intermediate elite strategy of ancestor veneration for legitimation in the face of political eclipse (see Chapter 9). The increase in proportions of portable ritual items associated with this trend is likewise similar to that noted at Tutu Uitz Na. These similarities likely result from the geographical proximity of the two centers and the fact the members of the elite households were in contact. While this increase in ancestor veneration was a direct result of the rise of Lower Dover, it seems these similarities were not born of top-down policies on the part of the Lower Dover apical elite, but similar bottom-up policies on the part of the intermediate elites who wished

to retain legitimacy among their clients, appease their own ancestors, and counter top-down ideologies associated with the Lower Dover apical elite.

In other respects, BR-180/168 is somewhat different from both Tutu Uitz Na and Floral Park. For instance, unlike their peers, the BR-180/168 elite were always hosting large feasts for their commoner subordinates, and while this decreased over time, the scale of elite feasting was still comparable to that at Tutu Uitz Na and Floral Park (see Chapter 9). The significant decrease in wealth at Late Classic BR-180/168 is likewise comparable to the trend in wealth decrease at Tutu Uitz Na (see Chapter 7). It seems likely that the BR-180/168 elite, like their peers at Tutu Uitz Na, were relying on a community contractual system of labor organization grounded in the redistribution of wealth in exchange for commoner labor (see Chapter 2). The Tutu Uitz Na and BR-180/168 elite may have adopted this strategy from one another in the Late Classic period following incorporation by Lower Dover, although it remains unclear where this system emerged first. One reason for this adoption could be that it provided a way of integrating commoners under a district-level identity during a time of uncertainty. Another reason would be that it held potential to continue competing with the Floral Park elite, who were likely employing a *corvée* system of labor organization in the Late Classic period, supported by the Lower Dover apical elite (Abrams 1994). While the construction volume associated with monumental architecture seems high at Late Classic BR-180/168, the previous history of the high commoner labor investment in monumental architecture may have become normalized over time in the eyes of the commoners, who had become accustomed to providing significant labor. It also remains likely that the BR-180/168 were drawing labor from a larger catchment area, possibly including the Middle River District, and the Island and Northeast neighborhoods (see Chapter 6; it is likely that the Middle North District was associated with the Spanish Lookout intermediate elite; Willey et al. 1965: 34). Community contractual labor organization was perhaps the most egalitarian form of labor organization (essentially remaining familial in nature; see Abrams 1994; see Chapter 2). As such this system would be consistent with the existence of ranked or possibly stratified lineages operating in the Tutu Uitz Na and Texas Districts.

Nothing is known of the Terminal Classic abandonment of BR-180/168 due to the devastation wrought by the bulldozer and the plow. That said, when the region was resettled in the Early to Late Postclassic (Hoggarth et al. 2014, n.d.), the new occupants avoided BR-180. To this

day, BR-180 remains the only mound sampled at Barton Ramie without New Town phase ceramics (Gifford 1976; Walden et al. 2020c; Willey et al. 1965; Willey 1973: 102). Hypothetically, Postclassic occupants may have actively avoided the context due to a sense of reverence or distain, although this remains largely conjecture (for a similar logic see Brown 2010; Robin 2012c: 326-327). Generally, evidence of brief Postclassic revisitation is more common in the region than established occupations (Robin et al. 2012b: 129). Barton Ramie and Baking Pot remain the exception to the rule in this respect. No evidence of Postclassic revisitation or resettlement is apparent at the Tutu Uitz Na and Floral Park centers. Although, unlike the commoner households of the Texas District, none of the commoner households in the Tutu Uitz Na and Floral Park Districts show substantial evidence of New Town occupations. This preference for resettlement at Barton Ramie likely resulted from the quality of the soils (Lucero 2008: 817-820; Willey et al. 1965). The peri-abandonment deposit on Structure A1 at Floral Park could date to the Postclassic, although this is highly unlikely as the material is entirely Spanish Lookout I-II (see Chapter 6).

Fieldwork and analysis undertaken as part of this dissertation have built upon previous attempts to understand Barton Ramie within its broader political context (Weller 2009; Willey et al. 1965; Yaeger 2003a). To return to the questions posed by A.F. Chase and Garber (2004: 10) “Was Barton Ramie independent? Was it a cluster of nonrelated households? Was it a tightly organized group of people? Did it have different societal levels and an elite stratum? How were these people organized socially, politically, and economically?”. Based on settlement pattern analysis, reanalysis of older collections, and excavations conducted as part of this dissertation, I would argue that Barton Ramie was quasi-independent in the Middle Preclassic through to Early Classic periods, although it was situated on the fringes between the Blackman Eddy polity and the emerging Baking Pot polity (see Chapter 6). While the BR-180/168 elite and the commoners of Barton Ramie may have paid limited tribute or owed some fealty to the Blackman Eddy and Baking Pot apical elites, Barton Ramie is way outside the demographic clusters and labor catchments associated with these polities. Spatial analysis reveals that Barton Ramie comprised three districts (Middle River, Oxbow, and Texas) and two smaller neighborhoods (Island and Northeast). The Northeast Neighborhood was beyond the original survey boundary of Barton Ramie. Each of these neighborhoods and districts was headed by a tier 5, high-status commoner household (BR-19, BR-75, BR-96, BR-147, and SG 173), except for Texas, which was headed by the tier 3 intermediate

elite at BR-180/168. While the population of the immediate Texas District could provide sufficient labor to construct BR-180/168, it remains likely that the other district and neighborhood heads were politically subordinate to the BR-180/168 elite (Willey et al. 1965). This does not answer all the questions but provides a starting point. This finding was only possible due to the prior work undertaken by Willey and colleagues (1965).

Questions about the relatively high levels of wealth among households at Barton Ramie remain unanswered, however, a few points are clear. The relative wealth apparent at some “plazuela” type units such as BR-260 are not overtly out of place given their construction volume/size (see Chapter 6). That said, the profusion of supposed sumptuary items such as the monolithic axe with a (pseudo)glyphic inscription, ceremonial slate “monkey wrench” mace, and long ceremonial serpentine celt are intriguing (Willey 1956: 779). The high-status commoner household of BR-260 might represent a failed attempt on the part of the Lower Dover apical elite to patronize a high-status commoner household and use them to replace BR-180/168 as local patrons (Goody 1966). Other unusually wealthy households at Barton Ramie (such as BR-1) were not included in this dissertation dataset, and so it is difficult to contextualize this trend. Sampling issues are important when confronting these sorts of problems; commoner household excavations typically involve smaller units and one wonders about whether the extensive horizontal stripping of mounds is partly responsible for the detection of so many burials (and higher proportions of wealthy ones). The wealth at commoner households at Barton Ramie (and their peers at Baking Pot) is likely due to the alluvial soil and the potential for cacao production in the area (Willey et al 1965: 24; see Chapters 2 and 6). It seems likely from patterns of household wealth and the presence of sumptuary items that the commoner farmers and local intermediate elites likely had a high degree of control over production and could choose between multiple patrons (McAnany et al. 2002). This potentially changed in the Postclassic period when cacao production in the Belize River Valley was controlled in a top-down fashion by the polity of Noh Peten (Jones 1992, 1998).

This case study illustrates some of the issues associated with a reliance on a single variable as a metric of wealth over broad regions (see Hirth 1993: 140, 143; Lohse and Valdez 2004: 5; Tourtellot, Sabloff, and Carmean 1992: 88). The localized availability of construction materials even within the Lower Dover polity renders the use of variability in commoner household sizes as a wealth metric problematic. Only by taking portable wealth, soil productivity, the availability of

construction materials, and the viability of labor into account does the full picture become clear. The Barton Ramie households (which were generally larger than dwellings on the southern bank of the Belize River), like their counterparts at Baking Pot, had high construction costs as they were far from limestone sources and relied heavily on river clay for construction, which was much more laborious to move. In contrast, the (generally smaller) households situated within the Tutu Uitz Na and Floral Park Districts had an abundance of construction materials literally beneath their feet. Despite their distance from good sources of construction materials, most households at Barton Ramie constructed large dwellings suggestive of high levels of success (see Chapter 7). This picture is strongly corroborated by the distribution of portable wealth items. The Barton Ramie households on the alluvium could grow cacao, which seems to have been convertible into portable wealth (Baron 2018a), hence households had access to sumptuary items (mace heads, jade). In contrast, the quite often wealthy households south of the Belize River did not have access to much jade or the more exotic sumptuary items found at Barton Ramie. This dynamic illuminates the issues with an over-reliance on a single metric of wealth inequality (see Peterson and Drennan 2018). Unsurprisingly, this issue becomes even more acute when attempting to understand the wealth and status of intermediate elites (see for instance Berdan 2006: 156-157).

10.2 Situating the Intermediate Elites within the Epigraphic Corpus

Intermediate elite titles proliferate epigraphically in more politically decentralized contexts in which apical power rested on the successful co-option of intermediate elite clients (Golden and Scherer 2013). These elite titles are comparatively lacking from the central Peten where more centralized political entities like Caracol, Tikal, and Calakmul held sway and did not need to offer incentives to intermediate elites to curry their favor, and retain their clientage (Houston and Inomata 2009: 172; Houston and Stuart 2001; see also Foias 2013). Given all we know of the decentralized political organization of the Belize River Valley, the proliferation of titles in a similar manner as the Usumacinta would be expected. However, the epigraphic record at Lower Dover, like other Belize River Valley polities, is silent, and scant information is available about its internal political organization. While utterly speculative, I attempt to situate the intermediate elites from Lower Dover within the corpus of epigraphically known titles. In theory, the Tutu Uitz Na and

BR-180/168 elites may have held titles similar to the neighborhood heads known as *lakam*. While the *lakam* title was potentially a commoner title (Lacadena 2008), Tsukamoto (2014) notes the existence of the *lakam* title at the outlying Guzmán Group at El Palmar, which is of comparable size to Tutu Uitz Na and BR-180/168, and located a similar distance from the core of El Palmar. That said it seems unlikely the Guzmán intermediate elite were of commoner status because they possessed a sizeable epigraphic staircase outlining their connections to the Copan polity, despite their suzerain's at El Palmar being clients of the Kaanul dynasty (Calakmul/Dzibanche polity). In contrast, the Floral Park elite, like other Group 2 elites in the Belize River Valley, who constructed monumental architecture like ballcourts, temples, and palaces despite operating under the suzerainty of a higher apical elite, may have been more comparable to those elites known as *chak tok wayaab'* (Beliaev 2004; Estrada-Belli et al. 2009: 246-248).

10.3 The Changing Roles and Strategies of Intermediate Elites

A series of intermediate elite political strategies can be reconstructed from the patterns outlined in Chapters 7 through 9. Reconstruction of strategies provides an answer to the first research question: **1) How and why did the political strategies and agency of Classic Maya intermediate elites change after incorporation into a larger polity?** Evidence for a series of strategies and evidence for why they were employed is provided below. Strategies include apical elite emulation (Chapter 10.3.1), ceremonial integration of commoners (Chapter 10.3.2), ancestor veneration (Chapter 10.3.3), benevolent relationships with client commoners (Chapter 10.3.4), hosting polity-level integrative ceremonies for the apical elite (Chapter 10.3.5), and production of wealth items (Chapter 10.3.6). An overview of the data relating to each of these is followed by an assessment of the evidence supporting each strategy.

10.3.1 Apical Elite Emulation

Local elite emulation of apical elite styles and traditions was common in the Classic period Maya lowlands (Novotny et al. 2018). Yet, solid evidence for emulation among the intermediate

elites at Lower Dover is sparse. The Tutu Uitz Na local elite commissioned architecture in the Middle Preclassic period which emulated the architectural styles of more powerful chiefly elites at nearby centers like Pacbitun (Powis, Skaggs, and Micheletti 2020), Blackman Eddy (Garber et al. 2004a: 25), and Cahal Pech (Awe 1992; Healy et al. 2004a: 107), and is reminiscent of early constructions at more distant centers like Cuello (Gerhardt 1988: 9–22). The walls of the northern residential structure (Structure N1) were constructed of large well-cut stone limestone blocks with dense river cobble fill within. The first construction phase on the northern structure at Tutu Uitz Na involved the construction of a one-meter high platform with a masonry front (see Chapter 6). It is unclear whether the earliest stage of construction at BR-180 was in keeping with popular architectural styles at the time, but a sizeable structural platform was constructed using dense river cobble fill as at other surrounding centers (see Chapter 6). The only excavated architecture at Floral Park, which dates to the Middle Preclassic, is a smaller platform located beneath the northern outset on Structure A1. Not much can be said about this platform, except that (based on the excavation reports) it was sizeable and probably served a ceremonial function at that time (Glassman, Conlon, and Garber 1995).

The Late Preclassic and Early Classic periods saw the expansion of the northern residential structure at Tutu Uitz Na. Large masses of plaster were found slumped at the foot of the Late Preclassic front wall of the structure, and while there was nowhere near enough plaster to represent a plaster mask like those found at emergent polity capitals at this time, the local elite may have attempted to produce something similar (Garber et al. 2004a). The first clear construction phases on Structure E2, the eastern shrine, date to the Late Preclassic/Terminal Preclassic transition, although it is highly likely that earlier phases of the structure were missed by our excavation, given the Middle Preclassic cist uncovered (cal 765-535 BC PSUAMS#8094 modeled). It is difficult to speculate how large this structure would have been at this time because of the subsequent major renovation in the early Late Classic period, which saw the structure remodeled into an eastern triadic structure. It seems likely based on the height of internal fill, that the structure was around 1 meter in height (see Chapter 6). Likewise, Late Preclassic construction at BR-180 saw the construction of a sizeable ancestral shrine with a series of tiers ascending to the platform at its apex. Both eastern shrines contained a number of burials dating to the Late Preclassic. The presence of these burials could be interpreted as emulation of apical elite practices of ancestor

eneration at the surrounding major centers, or taken to infer the existence of organic underlying practices of ancestor veneration among the lower echelons, which were only later adopted by elites (McAnany 1995; Lucero 2004).

Potential practices of emulation continued into the Late Classic period when all the elites retained access to commoner labor, and their ability to commission monumental architecture increased. This period saw the construction of large eastern triadic structures at Tutu Uitz Na and BR-180, and the separate elite residential compound at Floral Park. The northern residence at Tutu Uitz Na was significantly expanded during this phase when a large outset staircase was added with an accompanying stair-side outset (see Chapter 6). The construction of eastern triadic structures at two of the centers at this time may well reflect emulation of apical elites.

The available architectural evidence of intermediate elite emulation suffers from some of the issues of equifinality outlined in Chapter 2. The Preclassic and Late Classic architectural features evident at Tutu Uitz Na and BR-180 are not direct emulations of construction styles at Lower Dover but are more representative of broader architectural trends across the lowlands. This problematizes the interpretation of emulation, as the intermediate elites may simply have been able to build bigger structures, which necessitated employing common architectural grammars (Becker 2004). Many of the high-status commoner households at Tutu Uitz Na, Floral Park, and Barton Ramie were likewise employing similar construction styles in an albeit downscaled manner throughout the trajectory (Willey et al. 1965: 562). The anonymity of the apical elites, whose styles the intermediate elites were mimicking, generates problems because we cannot clearly ascertain whether the intermediate elite were actively choosing to incorporate construction styles that would enhance their prestige or authority or were simply constructing their buildings in the particular style that was prevalent at the time. For these reasons, I cannot be certain that the similarities present between the intermediate elite centers and larger nearby polity capitals necessarily represents the specific emulation of the Lower Dover apical elite. Better evidence might involve the Late Classic period replication of patterns specific to the Lower Dover civic-ceremonial center for example.

That said, the Late Classic construction of eastern triadic structures, like those found across the Belize River Valley at Tutu Uitz Na and BR-180, may reflect something akin to “antagonistic

acculturation” (*sensu* Graeber and Sahlins 2017: 13-14), by which intermediate elites were attempting to undermine the local political order. However, the onus of this attempt to counter top-down ideologies was not inherent in the emulation of the structure format so much as the types of ancestral ceremonies and the ways in which they drew upon social memory to legitimize the intermediate elite in the face of top-down pressures. In contrast, the construction of stair-side outsets and an outset stair at Structure N1 at Tutu Uitz Na might be more comparable to “complementary schisomogenesis”, whereby elites emulate suzerains to compete with rivals (Graeber and Sahlins 2017: 13-14; see also Renfrew 1986: 8). Despite issues teasing apart the nature of emulation and extrapolating underlying patterns, the data do clearly show that the intermediate elite households at Lower Dover were tied into a much broader network of apical and intermediate elite actors and that this interconnectivity did not decline in the Late Classic period.

10.3.2 Ceremonial Integration of Commoners

The research strongly supports the hypothesis that intermediate elites played a major role in ceremonial engagement with commoners (Walden et al. 2019, 2020a). Like their peers across the lowlands (Burham 2019; Carmean 1998; A.F. Chase and D.Z. Chase 1992; Tsukamoto 2014), the intermediate elites all possessed sizeable ceremonial architecture including eastern triadic structures, *sacbeob*, and termini, pyramids, and plazas. I briefly summarize the evidence for intermediate elite engagement of commoners in ceremonies for each of the periods in question.

All three local elite centers show some evidence of ceremonial architecture in the Middle Preclassic period, consistent with regional patterns in the Belize River Valley (Awe 1992; Ebert 2017; Garber et al. 2004a: 25; Powis, Skaggs, and Micheletti 2020), the broader Maya lowlands (Freidel 1992), and Mesoamerica at this time (Drennan 1976; Flannery and Marcus 1996). Both the Tutu Uitz Na and BR-180/168 elites possessed the necessary architectural apparatus to integrate commoners in ceremonies from their inception in the Middle Preclassic. At Tutu Uitz Na this is evident in the creation of a substantial public plaza, which was ritually consecrated as a “primordial sea” in the Middle Preclassic (Biggie et al. 2018). This investment in creating a symbolically charged arena for public ritual indicates a desire to host large integrative ceremonies. While the Middle Preclassic phase on the BR-180 plaza was far less remarkable, it was similarly

well built and seemingly quite large (Walden et al. 2020c; Willey et al. 1965). A securely dated Middle Preclassic construction phase on the northern appendage of Structure A1 likewise suggests that Floral Park Plaza A served a ceremonial role at this time.

It often remains unclear whether these early Maya ceremonial projects reflect communal constructions or projects commissioned by trans-egalitarian local elites (Garber et al. 2004a; Healy et al. 2004; Inomata et al. 2020). Our knowledge of Middle Preclassic Tutu Uitz Na, Floral Park, and BR-180/168 is somewhat impeded by sampling issues. Evidence of Middle Preclassic elite residency is variable between the three centers. The elite residence at Tutu Uitz Na was occupied at this time (Structure N1). BR-168, the residential component of the BR-180/168 minor center saw at least one substantial Middle Preclassic construction episode. The absence of evidence of an elite residence at Floral Park is almost entirely due to sampling, as the northern or western portions of Plaza A (where such a structure is expected to be) remain unexcavated. The paucity of Middle Preclassic burials at the intermediate elite centers calls into question the interpretation they were residences, although this paucity of remains is almost certainly a result of sampling biases. Middle Preclassic burials are expected to be found in small mortuary structures at the hearts of the later eastern structures, effectively buried beneath centuries of overbuilding. For various reasons outlined in Chapter 6 (taphonomic issues, looting, data availability) these contexts were not investigated satisfactorily. That said, the empty Middle Preclassic cist excavated into bedrock at the base of Tutu Uitz Na Structure E2 may speak to a Middle Preclassic funerary function because similar mortuary cists are common in the region (Robin et al. 2012: 126).

Regardless of their residential function, it seems abundantly clear that the elite plazas formed the nexus of their respective districts by this time. The amount of Middle Preclassic labor that the emergent elites could draw upon may suggest that they were already well established in the region and that earlier Cunil occupations lie undiscovered at all three intermediate elite centers (see Powis and Cheetham 2007). Indeed, more excavation at the respective centers may yet reveal the use surfaces and low-lying apsidal Early Preclassic dwellings identified at Blackman Eddy and Cahal Pech (Awe 1992; Garber et al. 2004a: 33; Healy et al. 2004: 105).

The Late Preclassic and Early Classic periods reveal strong evidence of the expansion of elite ceremonial architecture at both BR-180/168 and Tutu Uitz Na. In contrast, evidence for

ceremonial construction at Floral Park Plaza A is limited to the small Terminal Preclassic/Early Classic phase on the northern appendage of Structure A1 (although this is a product of limited sampling). The clearest evidence of Late Preclassic and Terminal Preclassic ceremonial activity exists at BR-180; this involved the construction of a substantial Late Preclassic eastern mortuary platform, which showed substantial evidence of ongoing ritual usage through the Late and Terminal Preclassic periods. The earliest clear construction phases and an elite burial (SG 1 Burial 5) at Structure E2 at Tutu Uitz Na date to the Terminal Preclassic/Early Classic transition. It remains plausible that Burial 5 was earlier and was reopened in the Early Classic. Regardless, by the early part of the Early Classic a substantial eastern mortuary structure containing multiple elite interments was apparent at Tutu Uitz Na. Again, evidence of elite burials and funerary ritual is lacking at Floral Park, but this is almost certainly the product of sampling. Generally, these patterns reflect a regional pattern of usage of eastern structures for a mortuary function in the Late Preclassic (Robin et al. 2012b: 122).

Ceremonial construction at all three intermediate elite centers accelerates dramatically following the Late Classic rise of Lower Dover. The early Late Classic (Tiger Run) saw the construction of the sizeable eastern triadic structure at Tutu Uitz Na, and the expansion of the plaza to incorporate a growing Late Classic District populace. While it is less clear exactly when the massive eastern triadic structure at BR-180 was constructed, this definitely occurred at some point between the late Early Classic and the Late Classic, suggestive of a similar construction tempo. While ceremonial construction at BR-180 and Tutu Uitz Na reflect an intensification of new construction on older structures, Floral Park sees a remarkable expansion, with the construction of a range of new structures at this time. The elite residential compound and at least two construction episodes on Structures A1 and A2 date to the Late Classic period. It is also highly likely that the *sacbe* and terminus group at Floral Park were constructed at this time as well.

The noteworthy finding in my research was not that intermediate elites were heavily invested in ritual sources of power and authority, but the fact that investment in these ceremonial strategies increased dramatically following the Late Classic rise of Lower Dover. Many Classic Maya polities have sizeable secondary and tertiary centers with ceremonial architecture surrounding them. Other studies of intermediate elite incorporation have found that that this ceremonial architecture was often constructed prior to incorporation by a higher-level center

(Connell 2010; Kurnick 2016b). In other instances, the types of structures change following incorporation, due to top-down pressures and emulation of apical elite stylistic preferences (Connell 2003; J. Morris 2004b: 210-211). Connell (2010) shows that following their incorporation into the Xunantunich polity, the Chaa Creek elites stopped ceremonial integration of commoners, and moved from their residences with feasting facilities and public plazas into more private L-shaped elite residences with little potential for commoner integration. The opposite of this scenario took place with the intermediate elites at Lower Dover. Here, all elites retained their public function from the Middle Preclassic through the Late Classic. While the changes at Floral Park saw a dramatic change in the types of ceremonial architecture and ritualization following the rise of Lower Dover, the Tutu Uitz Na and BR-180/168 elites carried on renovating and expanding pre-existing eastern structures and investing more substantially in much older ritualized traditions associated with ancestor veneration. The continued construction indicates that the rise of Lower Dover did not undermine local elites' ability to draw upon surrounding commoner labor and to follow prior architectural traditions. Moreover, the situation suggests that the emergent apical elite could not interrupt labor flows into projects like ancestral eastern triadic structures, which served to venerate the intermediate elite lineage and augment district-level identities. In this way, Tutu Uitz Na and BR-180/168 seem to follow the trajectory evident at Chan, where the intermediate elite carried on constructing their eastern triadic lineage shrine despite incorporation by Xunantunich (Robin et al. 2014). This continuation in the construction of ceremonial architecture suggests that the emergent apical elite at Lower Dover did not desire to, or could not, fully supplant or curtail the ceremonial integration of the intermediate elites with their associated commoners.

10.3.3 Ancestor Veneration

Each of the three intermediate elite households constructed sizeable ceremonial architecture in the Late Classic period. Examination of the different types of structures and the ways in which these structures were used reveals the different types of ceremonies performed in these spaces. One of the most important rituals was linked to ancestor veneration (McAnany 1995). As outlined in Chapter 3, the presence of an eastern triadic structure (Strs. A1, A2, and A3), and a secondary elite eastern mortuary pyramid (Structure B1) at the Lower Dover polity capital strongly suggest that the apical elite, despite their short-lived occupation in the area, were employing

similar ideological narratives associated with ancestor veneration as other apical elites in the Belize River Valley (Awe, Hoggarth, and Aimers 2017). The lack of the apical elite lineage history in the region is indicated by the paucity of elite interments in these architectural edifices (Guerra and Romih 2016: 129; Wilkinson and Hude 2010: 8-10). Similarly, the construction of eastern triadic structures, and the interment of high-status burials within them at Tutu Uitz Na and BR-180 show that these locales saw large-scale ancestor veneration ceremonies. The placement of these ancestral mortuary shrines on large plazas large enough to accommodate the district populations suggests a focus on the public aggrandizement of the intermediate elite lineages residing at Tutu Uitz Na and BR-180/168. These ancestor rituals served to immortalize past intermediate elite lineage members and offered a way for the intermediate elite households at Tutu Uitz Na and BR-180/168 to undermine, or at least counter apical elite ideological narratives and overall authority while simultaneously reinforcing their own ancestral claims to their land. I argue that the intensification of ancestral veneration at Tutu Uitz Na and BR-180/168 accentuated their ancestral claims to the area and augmented their authority over their commoner subordinates. These practices may even have averted a crisis of legitimacy in the eyes of their followers after the emergence of the Lower Dover apical regime (*sensu* Jacobson 2001). LeCount and Yaeger (2010: 359) describe how the long-standing local elites and commoners of the Xunantunich hinterland likely imposed a “formidable front against top-down policies”. In many respects, the intensification of large public ancestor veneration and lineage rituals at Tutu Uitz Na and BR-180 reflect the long-standing local populations of the Lower Dover area responding to the formation of the polity.

In contrast, the eastern mortuary shrine at Floral Park is small and situated on the eastern side of a private elite residential compound rather than in the ceremonial core of the center. In contrast to its peers, the Floral Park elite chose to construct their mortuary shrine in as inconspicuous a place as possible. This modesty aligns with the unassuming interments within. Unlike intermediate elite burials at Tutu Uitz Na and BR-180, which contained jade and marine shell jewelry and lavish polychrome vessels, the elite burials uncovered at Floral Park Structure 2A were relatively impoverished in terms of grave goods (Brown et al. 1996; Glassman, Conlon, and Garber 1995). Elite mortuary practices at Tutu Uitz Na and BR-180 speak to elaborate funerary rituals with ample scope for theatricality (such as Tutu Uitz Na Burial 4). The Late Classic plazas in front of the eastern triadic structures at Tutu Uitz Na and BR-180 had maximum capacities of

294 and 544 people respectively (at the 3.4m²/person capacity). In contrast, the majority of burials at Floral Park were secondary, and even those primary individuals were far from elaborate interments. This lack of theatrical mortuary rituals is reflected in the diminutive plaza size and inaccessibility of Floral Park Group 2. This plaza was the least accessible in the polity and had a capacity of 111 people (at the 3.4m²/person capacity). The combined elite population of polity was probably around 100 people, and a plaza capacity of ~100 is replicated at several private elite courtyards of the apical elite palace, the Lower Dover ballcourt, and the plazas of aulic elite households in the vicinity of Lower Dover (see Kulig 2015: 44; Walden et al. 2020a; see Chapters 6 and 9). The replicated capacities in these contexts may indicate that they were all geared to accommodate the combined elite population of the Lower Dover polity.

While Floral Park Plaza A was providing an important ceremonial locus for commoners, the ceremonies at the center probably propagated ideologically less divisive narratives at a polity-level than the ceremonies hosted at Tutu Uitz Na and BR-180/168. The ancestral shrine at Floral Park would have been sufficient to venerate the ancestors interred within, but not so large as to challenge or undercut the legitimacy of the Lower Dover apical elite. The Floral Park ceremonial plaza and the main plazas at Lower Dover likely served as the settings for rituals, which conveyed apical elite ideologies relating to negotiating a polity-level identity. As such, the ceremonial precinct (Plaza A) was the most accessible plaza in the polity. In contrast, the plazas at Tutu Uitz Na and BR-180 were two of the least accessible plazas in the polity (after Floral Park Group 2). This pattern is consistent with these plazas serving as the settings for consolidating district-level identities through veneration of intermediate elites and their ancestors (Walden et al. 2020a). Robin and colleagues (2012b: 124) note a shift in declining interment of wealth items in graves in the E Group at Chan in the Late Classic, and suggest that the interment of these items in caches reflects a change in ancestral veneration practices. Based on comparisons between Tutu Uitz Na and Floral Park, this shift at Chan may reflect a diminishing of ancestral veneration tied to the rise of Xunantunich. Alternatively, this may reflect a shift to public ritual to better integrate commoners in ceremonies that were not directly associated with the veneration of an elite lineage (Robin et al. 2012c).

Robin (2012c: 320) suggests that the presence of eastern triadic structures at Bedran, BR-180, and Chan show “that this type of ceremonial complex had its roots in the development of

small as well as large sites” (see also Awe, Hoggarth, and Aimers 2017). While this is true, the Late Classic constructions of the eastern triadic structures at Tutu Uitz Na and BR-180 suggest that while ancestor veneration had its roots in deep antiquity, this particular architectural form reflected a response to political incorporation. This argument is tentatively corroborated by the construction sequence at the tier 3 center of Bedran in the Baking Pot polity. Conlon and Powis (2004: 80) argue Bedran was incorporated into the Baking Pot polity in the early Late Classic through an alliance, which is roughly coeval with the modification of the eastern round platform into an eastern triadic structure.

10.3.4 Benevolent or Coercive Relationships with Client Commoners

Despite Late Classic co-option by Lower Dover, all three intermediate elite households still possessed sufficient agency to devise their own strategies for interacting with their suzerains and subordinates. The downward relationship with commoners varied on a spectrum from benevolent to exploitative (Blanton et al. 1996; Blanton 1998; Feinman 2000). In the Late Preclassic and Early Classic periods, relationships between local elites and commoners in all three districts occupied a position in the middle of this spectrum. Floral Park represented the wealthiest elite (although all three local elites were comparably wealthy), yet all the commoner households in the district were likewise relatively affluent. A similar trend is apparent across all three districts and their intermediate elites. There are few examples of a major gulf between elites and commoners prior to the rise of Lower Dover. In the Late Classic period all of the intermediate elites changed their relationships with their commoner subordinates dramatically. As discussed in Chapter 7, all three intermediate elites took a uniform dramatic “hit” in their ability or desire to procure wealth items in the Late Classic period, but concomitantly gained access to ever-increasing amounts of labor for monumental construction.

Of the three regimes, Tutu Uitz Na could be characterized as pursuing a collectively beneficial, or benevolent downward face in the Late Classic period, because commoners invested much less labor in architectural construction at the Tutu Uitz Na center than at the Floral Park and Texas Districts. The Tutu Uitz Na elite were hosting large feasts (of comparable scale to those hosted by the other intermediate elites), but were also heavily involved in the redistribution of

wealth items to commoner subordinates (see Chapter 7). In contrast to the intermediate elite, the commoners of the Tutu Uitz Na District did not see a dramatic reduction in their wealth, and unlike the impoverished commoners at Floral Park, could still command sufficient labor to invest in renovations and remodeling of their own homes. I argue that the Tutu Uitz Na intermediate elite strategically shielded their client commoners from top-down burdens and distributed wealth in exchange for labor resulting in a more equitable distribution of wealth items (see also Robin 2012c: 326). This position would explain why the Tutu Uitz Na elite saw such a statistically significant decrease in wealth, but commoners did not. In comparison to the other intermediate elites, the Late Classic Tutu Uitz Na elite extracted the least labor from their subjects by far. This lower labor tax rate could be interpreted as simply showing that the Tutu Uitz Na elite were less politically powerful than their peers. I hypothesize however that the Tutu Uitz Na elite constructed smaller architecture than their peers at BR-180/168 and Floral Park because they were actively pursuing a more benevolent political strategy, which was communally beneficial for themselves and their clients. Like the other elites, the Tutu Uitz Na elite required integrative architecture for the aggregation of district commoners, and the assimilation of a district/lineage identity, but chose not to push onerous labor burdens on their subordinates. This strategy appears to have been successful in the short term as the Late Classic period likely saw in-migration into the Tutu Uitz Na District (compared to population stagnation at Floral Park). But in the longer term, the strategy seems not to have paid off quite so well, as it seems almost certain that the Tutu Uitz Na center was abandoned prior to the Floral Park center.

In contrast to Tutu Uitz Na, the Floral Park center was potentially the most aggrandizing regime. The rise of Lower Dover had reduced the wealth of both the intermediate elites and commoners of Floral Park, but unlike the commoners, and the Tutu Uitz Na and BR-180/168 elites, Floral Park elite wealth was not reduced in a statistically significant fashion. Moreover, the proportional increase in intermediate elite architecture and the labor tax rates for monumental construction per household are the highest evident in the Lower Dover polity. At the same time, the surrounding commoners almost completely stopped renovating and expanding their own house structures. The labor investment in the separate elite residence at Floral Park may have seemed all the more irksome to commoner laborers, who no longer possessed the time to expand their own homes and were probably well aware of the fact the nearby Tutu Uitz Na elite had not

commissioned a separate residential group for themselves (see also Robin, Meierhoff, and Kosakowsky 2012: 144). In some respects, the difference between the ability to command commoner labor to construct public ceremonial architecture, which will serve some collective function, and private residential architecture might be reflective of different underlying power strategies in terms of labor deployment (see also Clark 1997: 226; Elson 2006: 45; Flannery 1998; Sanders 1974). Aside from the private elite residence, the rest of the commoner labor was invested in the sizeable remodeling of Plaza A, and probably in the construction of Group 1 and the *sacbe*. While the Floral Park commoners no doubt took part in the ceremonies hosted in these spaces, the spaces were not designed for them specifically, as was the case at Tutu Uitz Na. Instead, the combined ceremonial architecture (Plaza A, the *sacbe*, and Group 1) could accommodate 800 people (at the 3.4m²/per person rate), and the whole polity population of 2700 people (at the 1m²/per person rate). Floral Park likely provided ritual/processional services geared towards polity integration (see A.S.Z. Chase 2016).

The coercive potential to extract a more onerous labor load from their subordinates was likely born of alliance with the emergent apical elite at Lower Dover (*sensu* LeCount and Yaeger 2010; Canuto and Barrientos Q. 2020). From a collective action standpoint, the ability of the Floral Park elite to disregard commoner wealth and wellbeing might further indicate that while commoners supplied construction labor, this labor was extracted through a *corvée* system mandated top-down through relationships with the Lower Dover apical elite. As such the political power of the Floral Park elite was simply contingent upon their upward face which articulated with the Lower Dover apical elite (Blanton and Fargher 2007; Feinman 2017: 463-464, 466; see also Beck 2003; Caballo, Roscoe, and Feinman 2014). This “network” relationship allowed the Floral Park elite to violate the commoner moral economy without repercussions (see Scott 1976). In contrast, the political authority of the Tutu Uitz Na elites was “internally funded” by their commoners leading to a greater desire to act in a collectively beneficial manner (Blanton and Fargher 2007: 12-22, 253-256). Likewise, this alliance may underly the reason that the Floral Park elite, unlike their peers at Tutu Uitz Na and BR-180/168, did not see a statistically significant decrease in wealth.

The lack of in-migration into, and limited out-migration from the Late Classic Floral Park District may reflect commoner disenchantment with this intermediate elite strategy. These changes

suggest that dramatically different political strategies were employed by the Floral Park and Tutu Uitz Na elites. Whereas the Tutu Uitz Na elite chose to look inwards and buffer top-down pressures on their commoner subordinates, the Floral Park elites turned outward and appealed to the Lower Dover apical elite. These two divergent stances are not dissimilar to Wolf's (1957) conceptualization of communities as being either "open" or "closed" in the face of external interaction with higher-level actors. This dynamic at Lower Dover seems highly contingent on the policies and faces of intermediate elite agents. While the Floral Park elite strategy of commoner coercion might have led to dwindling district populations in the short term, in the longer term it seems to have paid off to a greater degree than the benevolent strategy employed at Tutu Uitz Na, because the Floral Park elite seem to have outlasted their peers at Tutu Uitz Na.

The BR-180/168 elite sit midway along this spectrum of benevolent/exploitative relationships. In terms of access to wealth items, the BR-180/168 elite were as wealthy as the Tutu Uitz Na and Floral Park elites in the Early Classic period. When Lower Dover rose, BR-180/168 experienced a statistically significant decline in wealth. This decline left many of the commoner households in the Texas district as wealthy - -if not wealthier- - than the intermediate elite. Contrasting the wealth of the Texas District commoners on the one hand with those of Tutu Uitz Na and Floral Park on the other, shows that the commoners in the latter two districts were comparatively impoverished. However, due to sampling issues outlined in Chapters 5 and 7 this comparison is problematic. It seems the proportions of wealth items among the Texas District commoners are skewed downwards and they were likely wealthier than their peers. For instance, high-status commoner burials at BR-260 were wealthier than most intermediate elite burials at Tutu Uitz Na, Floral Park, and BR-180/168 (see Chapter 6). The higher rates of commoner wealth in the Texas District might have been related to the rich alluvial soils (see Chapter 6). This disparity in wealth items at the commoner and intermediate elite levels is worth reiterating and further study as it is likely indicative of important variability in terms of tributary or exchange networks.

The decrease in intermediate elite wealth contrasts dramatically with labor investment in architecture. In terms of volume BR-180/168 dwarfs Tutu Uitz Na and Floral Park prior to the rise of Lower Dover, and is still almost a third larger than Floral Park in the Late Classic period. This sizeable investment in elite architecture did not have a massive impact on commoner wealth or construction labor, unlike the situation at Floral Park. It seems largely that the BR-180/168 elites

were employing similar forms of wealth item redistribution and benevolent interactions with their subordinates as the Tutu Uitz Na elites. However, the labor costs associated with constructing the vast projects at BR-180/168 far exceed those associated with Tutu Uitz Na and could have impacted commoner households in a manner more akin to Floral Park. While this is difficult to ascertain, commoner wealth does not seem to have declined too dramatically at the Late Classic Texas District. It is possible other people from the wider Barton Ramie settlement might have been involved in the construction of BR-180 during this period, which would have offset the labor cost to the local Texas District (Willey et al. 1965: 34). The continued Late Classic population growth of the Texas District may also be reflective of relatively benevolent intermediate elite policies.

10.3.5 Hosting Polity-Level Integrative Ceremonies

The staging of ceremonial aggregations at Floral Park differed dramatically from Tutu Uitz Na and BR-180/168. Instead of constructing large eastern triadic structures in sizeable but spatially inaccessible plazas, the Floral Park elite constructed pyramids atop a large accessible public plaza and the *sacbe* and terminus group. As noted earlier, I suggest that this architecture served an integrative purpose at the polity-level operating as the setting for ritual practices that fostered an overarching polity-level identity.

There are several further reasons for thinking that the Floral Park elite were likely clients of the Lower Dover ruling household (see Chapter 10.1.2). The Floral Park elite constructed important ceremonial architecture like the *sacbe* and terminus group, which were not replicated at any other level of the polity (including the Lower Dover center itself), and remodeled an earlier eastern structure (possibly a triadic structure) into a sizeable eastern pyramid, the Late Classic episodes of which lacked burials (Glassman, Conlon, and Garber 1995). Walden et al. (2019) show that each of the three largest Late Classic Maya polities in the central portion of the Belize River Valley contain a single secondary intermediate elite center (tier 2) with specialist architecture like ballcourts, termini, *sacbeob*, pyramids, large public plazas, separate private residential complexes, and low surrounding population densities. The combination of sizeable public facilities, which could accommodate populations in excess of their surrounding districts, and the lack of ancestral structures, led to the conclusion that these centers served to more broadly integrate populations

from across the polity. The low population densities in the immediate vicinity of these secondary centers coupled with the extensive construction burdens associated with them led Walden et al. (2019) to argue the tier 2 centers were constructed with labor from across the polity mandated through apical elite policies in a top-down fashion (see also Iannone 2003: 25). However, it would appear that the Late Classic construction of the Floral Park center was within the means of the commoner district population. It just reflected a more onerous burden, which may have diverted commoner labor from their home improvements and constructions. This finding counters Walden et al.'s (2019) argument in that the workforce was likely local, but the more probable explanation for why the Floral Park elite could suddenly extract more labor from their commoner subordinates probably lies in top-down relationships with the Lower Dover apical elite. That said, it seems reasonable to suppose that some labor from other districts probably went into the constructions at Floral Park. As the only center in the Lower Dover polity where processional rituals could be held along causeways (Cheetham 2004), Floral Park probably played an important role in polity-wide public ceremony. The ceremonial strategy of the Floral Park elite thus involved an “upward face” of cooperation with the Lower Dover regime.

10.3.6 The Production of Wealth Items

Despite the sizeable literature on elite crafting in the Maya lowlands there was not much evidence of this in the hinterlands of Lower Dover (Halperin and Foias 2010; Inomata 2001; Kovacevich 2015; see Chapter 2). As illustrated in Chapter 8, the high proportions of marine shell debris and shell beads at various stages of the production sequence within Middle Preclassic contexts at Tutu Uitz Na suggest that the elite were personally crafting, or patronized the production of marine shell jewelry. The co-existence of crafting debris with freshwater shell feasting middens suggests that potentially early feasting and redistribution of wealth items occurred simultaneously (Chapter 6 and Chapter 9; see also Spielmann 2002). As outlined in Chapter 8, marine shell jewelry production was common in the Belize River Valley and the broader lowlands during this period (Freidel, Reese-Taylor and Mora Marín 2004; Hohmann 2003; Keller 2012; Moholy-Nagy 1985). The decline in production of these items occurred across the Belize Valley in the Late Preclassic period and obviously has nothing to do with the rise of Lower Dover. A provisional interpretation would be that the redistribution of such items may have been

important for trans-egalitarian elites to accrue commoner labor for construction. Later, as socio-political inequalities became more entrenched there was less need for commoners to be reimbursed for their labor as a *corvée* system became the norm (Abrams 1994). The fact that there is no evidence of marine shell jewelry production at BR-180/168 and Floral Park may simply be due to sampling issues or might be indicative of differential strategies for accruing authority at this early time (Brown and Bey 2018).

Evidence for elite crafting of other items is less clear later on in the trajectory. It is possible that the chert workshop at SG 28 was working under the patronage of the Tutu Uitz Na elite, although it is equally possible that the Lower Dover apical elite offered their patronage to this household, or that the household were working outside the patronage of either elite. Regardless of the specifics of that arrangement, it is very clear that the rise of Lower Dover did not trigger an intermediate elite shift in the production of wealth items.

10.4 Intermediate Elite Relationships with Commoners and Apical Elites

The changing intermediate elite relationships with commoners and apical elites are addressed through Research Question 2: **How did intermediate elite relationships with apical elites and commoners change following the rise of the polity?** This question is approached through understanding how intermediate elites wielded coercive power versus legitimate authority (Chapter 10.4.1), their political strategies over the *longue durée* (Chapter 10.4.2), and ultimately has implications for our different models of Classic Maya social organization (Chapter 10.4.3). This section concludes by discussing how the intermediate elite agency approach can inform about the centralization and political strategies of the Lower Dover apical elite (Chapter 10.4.4).

10.4.1 Power and Authority in the Lower Dover Polity

In Chapter 2, I reviewed the theoretical literature on the concepts of power and authority. An axis of variability was established between power, construed as the ability to coercively make one do one's bidding (Miller and Tilley 1984), on the one hand, and authority, seen as a group's

recognition of its leader's decision-making ability on the other hand (Gerth and Mills 1960; A. Smith 2003). By tracing the relative wealth and wellbeing of commoners in relation to elites, and the ways in which they interacted, we can understand how elite activities impacted their followers (Rathje 1983). Prior to the rise of Lower Dover, evidence of gross inequalities is fairly scant. Each of the local elites seems to be accessing commoner labor for construction through commensal reciprocity. The local elites all seem to have acted as local ceremonial leaders from the Middle Preclassic through to the Early Classic period. This use of more collectively beneficial political strategies corroborates broader scholarly characterizations of the Middle Preclassic period as more corporate (Blanton et al. 1996; Blanton 1998). Evidence of overt coercive power, such as centralization of wealth at the local elite level or extraction of substantial labor tax from commoners, is weak at this time. It would seem that the local elites drew upon publicly mandated authority and were seen as legitimate village leaders in the eyes of their community.

While this trend appears to intensify at Tutu Uitz Na in the Late Classic, the dynamic changes dramatically at Floral Park. With the lines of evidence available, it is less clear what services the Floral Park intermediate elite are performing for their commoner following. Indeed, the rise of Lower Dover does not seem to benefit commoners in any real way whatsoever. Household, neighborhood, and district-level economic patterns of redistribution continue, and there is not a marked increase in wealth items. Following Abrams (1994), I suggest that the rise of Lower Dover signaled a transition in labor organization in at least some parts of the polity (see also McAnany 1995: 137). The fact that the rise of Lower Dover and the huge investment in construction associated with it led to no tangible benefits for the commoners supplying the labor, speaks to a *corvée* system, which was probably mandated through coercion. These findings suggest that elites may be partly responsible for the impoverishment of neighborhoods and districts (Pyburn 1998). The heavily co-opted Floral Park elite derived coercive force through their relationship with Lower Dover (see Canuto and Barrientos Q 2020; Yaeger 2010). This effectively allowed them to place more onerous labor burdens on their commoner subordinates without worrying about the articulation of their downward face (for a similar situation at Xunantunich see LeCount and Yaeger 2010). That said, the Floral Park elite gained little in the way of material wealth, and may have considered their new private residential compound a downgrade considering they probably previously lived on the civic-ceremonial plaza (Plaza A). The preponderance of

secondary burials in the Late Classic eastern mortuary shrine also meant that they may have chosen, or been instructed to move their ancestors from their original resting place in the eastern pyramid to a less cosmologically charged context in the smaller residential plaza. This might suggest that the Floral Park intermediate elite were subordinate to the new apical elite at Lower Dover even in terms of ancestral practices and mytho-lineage matters.

Whether intermediate elites accessed commoner labor through coercive power, or through legitimate authority, the overarching result was the same in terms of labor investment in construction. The Late Classic transition saw dramatic increases in the size of monumental architecture at all three intermediate elite centers. It is difficult to empirically extrapolate lateral competition between peer intermediate elites in the archaeological record, but these construction programs may have reflected internal competition between the elites (see Neiman 1997). Intermediate elite competition could also have been driving possible attempts by the Tutu Uitz Na elite to poach clients from their peers at Floral Park. At Early to Late Classic Baking Pot, commoner labor flowed smoothly into centralized construction programs in the core. Less than 10% of the overall monumental architectural volume within the polity was invested in intermediate elite construction programs. This resulted in architecturally unimpressive tier 3 intermediate elite centers like Bedran, which unlike its peers in the Lower Dover polity, had unparalleled levels of affluence in portable wealth, with luxury polychromes gifted down from rulers of larger external polities (Colas et al. 2002; Conlon and Moore 2003: 65). In contrast, at Lower Dover ~30% of overall investment in monumentality is invested in intermediate elite architecture, mainly at BR-180/168, Floral Park, and Tutu Uitz Na, but also at smaller tier 5 contexts such as SG 115, SG 173, BR-147, and BR-96. Modeling the flow of labor between polities can provide a good understanding of relative levels of centralization and specific elite strategies. Intermediate elite investment of commoner labor in monumental architecture may however have been advantageous for the apical elite. As outlined in Chapter 2, there are many examples of apical elites seeking to exacerbate lateral intermediate elite competition, because it was preferable to confronting a unified upward face presented by an allied intermediate elite (Conlee and Schreiber 2006; D'Altroy 1992; Grimal 1992). Thus, it is plausible that intermediate elite mobilization of commoner labor might not have been directly in contest with that of the Lower Dover elite, but instead part of a general process shared by apical and intermediate elites.

10.4.2 The Historically Contingent Nature of Relationships

The political authority of the intermediate elites accumulated over many centuries, from their original settlement on the landscape in the Middle Preclassic as ceremonial leaders to the rise of Lower Dover during the Early to Late Classic transition. Large scale ancestor veneration in the eastern triadic structure and the consumption of *jute* feasts at Tutu Uitz Na show the co-opted intermediate elite employing practices from their past in negotiating relationships with their subordinates. The efficacy of this strategy is evidenced by a growing district population, and sufficient sway to continue constructing public architecture, even following the emergence of Lower Dover. These strategies grounded in publicly mandated authority potentially did have their limits. Neither the BR-180/168 or Tutu Uitz Na elite marshaled commoner labor to the extent that commoners had to stop renovating their own residences. Co-option by Lower Dover meant that the Floral Park elite were no longer so reliant on pre-existing patterns of authority maintenance as they could draw on coercive power through association with the center. That said, one reason the Lower Dover apical elite were unable to remove the BR-180/168 and Tutu Uitz Na elites was due to their long-held ceremonial positions, which were grounded in publicly mandated authority. As outlined in Chapter 2, overtly undercutting legitimate intermediate elites could have undermined attempts at integrating the Lower Dover polity-level, and may have even sparked resistance from their commoner client base (Bailey 1969: 17; Kertzer 1988: 288).

10.4.3 Social Models of Classic Maya Organization

My assessment of fluctuating wealth and status patterns across the three districts and at their intermediate elite centers provides a new perspective for evaluating different models proposed for Classic Maya social organization. In general, the intermediate elites of the Belize River Valley were likely not a separate class (in a three-class model) as they only represent ~2% of the population (A.F. Chase and D.Z. Chase 1992, D.Z. Chase and A.F. Chase 2004). In contrast, the two-class model seems more applicable in the Belize River Valley (J. Marcus 1992; 2004). But this model does not take into account the strong horizontal divisions which permeated society in terms of hierarchical intermediate elite districts with nested neighborhoods within (Webster 2002a). All three of the districts probably represent lineages, which may have been employing

“House” dynamics to integrate commoners as fictive kin. This strategy seems more likely at Late Classic Tutu Uitz Na and BR-180/168 than Floral Park, given the private nature of elite ancestral veneration in Group 2. Following correlates outlined by Reed and Zeleznik (2015), it would appear that prior to the rise of Lower Dover all three districts probably represented something akin to ranked lineages. Ranked lineages involve relatively close proximity between intermediate elites and their commoner subordinates, and mutual obligations to one another. The permeability of elite residential and ceremonial space at Tutu Uitz Na prior to the Late Classic suggests high degrees of interaction between lineage heads and district members.

The rise of Lower Dover may have engendered the transformation of the Floral Park District from a ranked into a heavily stratified lineage in which the intermediate elite were more socially distanced from their commoner subordinates and lacked tangible obligations to them (Reed and Zeleznik 2015: 179). This shift may also be evident in the construction of a private mortuary shrine and the removal of the ancestors from the public sphere (see Chapter 10). In contrast, it is unclear what type of lineage dynamics were at play at Tutu Uitz Na and BR-180/168 in the Late Classic, but the ongoing obligations to commoners suggest a ranked, or at least less stratified form of lineage dynamics in which commoners possessed greater agency (Webster 2002b: 442).

10.4.4 Flipping the Coin: Political Centralization at Lower Dover

The settlement-based perspective shows how processes of top-down centralization occurred at the Lower Dover center, and the types of strategies the apical elite rulers employed to secure their power over the polity. The labor investment in the construction of a civic-ceremonial center the size of Lower Dover had a significant impact on the populace (see Chapter 6), however, Lower Dover seems to not have been very centralized economically, politically, and ceremonially. Seen as a whole, the most striking change across the polity was the homogeneous leveling of wealth at the intermediate elite level. This leveling was caused by two factors, one being an increasingly restricted flow of luxury items into the intermediate elite centers, and the second being a greater intermediate elite redistribution of these items to surrounding commoners to secure labor for construction. Cross-culturally the downward flow of wealth items from patrons to clients is

common (Tsukamoto 2020), but client elites can also draw on the coercive power of their patrons (Canuto and Barrientos Q. 2020). As shown in Chapter 7, the rise of Lower Dover did not induce a downward flow of wealth, which manifested at the intermediate elite and commoner levels. While some of the Tutu Uitz Na commoners saw an increase in wealth in the Late Classic period, this seems to be a localized phenomenon, largely structured by the policies of the Tutu Uitz Na elite. The general wealth of commoners at Barton Ramie likewise does not seem to be influenced by the rise of Lower Dover in any tangible way. This does however corroborate patterns following the co-option of Late Classic Xunantunich by Naranjo, which resulted in a paucity of overt material wealth at the center (Yaeger 2010b). It is likely however that the co-option of Floral Park allowed intermediate elites to channel the top-down coercive power of the apical elite, although this mostly was invested in polity-level public integrative architecture.

This approach has provided a bottom-up perspective on the degree and nature of the integration of the Lower Dover polity. Generally, it seems that aside from commoner labor tax, the rise of the political center was felt only in an archaeologically visible way at the intermediate elite level. This dynamic seems particularly clear in the lack of any homogeneous change in commoner households across the polity. It is possible that the lack of change at some commoner households reflected a desire on the part of the apical elite not to undermine commoner quality of life to too great an extent (Scott Hutson, personal communication, 2018), or possibly reflect a conscious effort not to disrupt local level practice to the point at which commoners became disillusioned with the emergent polity (Pyburn 1996: 247). On the other hand, intermediate elite shielding of client commoners may have also provided a way for them to exploit their clients more so than their apical elite suzerains. Although the changes, which do occur at the household level in the Late Classic period are largely constrained to particular districts suggesting the intermediate elite district heads played a significant role in determining these patterns. In general, all three districts remained internally ceremonially integrated. Floral Park also seems to have been providing ceremonial services to the broader polity as the plazas are larger than needed to host the district populace and the presence of the *sacbe* and terminus group indicates that any processional type rituals staged in the polity, which required a *sacbe*, would have occurred there. In summary, while the rise of Lower Dover represented another level of socio-political integration, a

segmentary structure prevailed, and the polity still consisted of three fairly autonomous components (see J. Marcus 1989).

The Lower Dover apical elite probably actively sought out and co-opted the Floral Park regime in a concerted effort. Floral Park was spatially the most distant regime in the hinterlands and therefore may have represented the most appealing bastion of the apical regime, or a viable frontier center from which to control access to Upper Barton Creek (the only navigable waterway into the Belize River in the polity). The Xtent model shown in Chapter 6 illustrates that Floral Park was more likely to remain autonomous of Lower Dover for longer than the other centers, although this is to be expected based on the size of Floral Park, and its geographic distance from Lower Dover (given how the model works). That said, the Floral Park elite and the Lower Dover apical elite may have been joined by marriage alliances or some other form of kinship relations, which are not archaeologically detectable in this study.

Aside from Floral Park, however, I suggest that the intermediate elite households at Tutu Uitz Na and BR-180/168 were less enamored with their situation in the Late Classic period, and actively integrated their own commoner subordinates in large ancestral ceremonies, which I have argued represented a form of ideological resistance to the apical regime at Lower Dover. While the Floral Park elite stop making overt statements about their ancestry, which might undermine the nascent lineage based at Lower Dover, the other two intermediate elites seem far more intractable. A potentially similar dynamic is reconstructed archaeologically at Sayil, where the ruling elite could only maintain a relatively decentralized political system as the intermediate elite heads maintained a sizeable grasp on political power (Carmean 1998: 269). Still, in comparison to surrounding polities like Baking Pot, which formed slowly and in tandem with their demographic growth, Lower Dover has a more segmentary structure consisting of intermediate elite headed districts.

These findings should not be interpreted as showing that Classic Maya polities were decentralized, or even that small polities in the Belize River Valley were decentralized. Instead, it seems most likely that Lower Dover was an intrusion external to the polity itself, and as such the apical elites probably possessed less agency to affect major change than well-established peers at nearby polities like Baking Pot. In contrast, it seems that Baking Pot might have formed as multiple

nuclei, with aspiring district leaders situated at Ixim in Settlement Cluster C and Lubul Huh in Settlement Cluster G (Hoggarth 2012: 74; Hoggarth et al. 2010), however these formed in tandem with the center (in the Middle to Late Preclassic), and were brought under the control of the center early on (for incorporation see Cheetham 2004: 142). Furthermore, it might not have been in the ruler's interests to affect substantial restructuring of the economic sphere (Newbury 2000). Another possibility, without delving too far into the realms of counterfactual thinking, is that if the polity existed for longer would higher degrees of integration have emerged? Would commoner households see more drastic changes? Landau (2016) presents similar diachronic data from the San Lucas neighborhood at Copan, which shows that despite state-level expansion into the immediate area in the Early Classic period, it took almost 400 years of major infrastructural and economic shifts to occur at the commoner level. This tentatively indicates that the Lower Dover polity may have become increasingly centralized had it not collapsed in the Terminal Classic period (900-1000 AD) alongside other centers in the region. This stark internal variability between the intermediate elites and districts of Lower Dover, and the regional variability with Settlement Cluster C at Baking Pot shows that a series of important levels of internal political decision making existed between true apical elites situated at Caracol and Naranjo, and household level variability in the districts of lower-order polities like Lower Dover and Baking Pot.

10.5 Structural Factors Underlying Intermediate Elite Agency

To summarize findings to this point, it would seem that Floral Park was firmly integrated into the Lower Dover polity through an asymmetrical patron-client relationship. Tutu Uitz Na was incorporated through a patron-client relationship but continued to possess the agency to construct their sizeable ancestral eastern triadic structure, and conduct rituals, which countered top-down ideologies. BR-180/168 was a part of the Lower Dover polity, but patron-client ties between the apical elite and the intermediate elite seem to have been weak. The rise of Lower Dover did not have much of a recognizable effect on the wealth of the BR-180/168 elite, or their ability to command commoner labor.

The next task is to tease out the underlying factors which structured intermediate elite co-option to answer the question **3) Why did the political agency and strategies of intermediate elites change in the way they did?** Underlying factors, which may have structured intermediate elite co-option, include the nature of the Lower Dover regime itself (Chapter 10.5.1), the geographic distance between the apical elite and the intermediate elite regimes (Chapter 10.5.2), and the wealth, authority, retinue size and resources of the local elites at the point of co-option (Chapter 10.5.3).

10.5.1 Examining the Development of Lower Dover Anew

The formation processes underlying the emergence of Lower Dover carry important implications for understanding the historically grounded reactions of intermediate elite households in the periphery. Likewise, changes at the intermediate elite speak to the nature of changes at the Lower Dover polity capital.

Cui bono, if Lower Dover was an internal development? It is difficult to see any stakeholders who effectively benefitted from its rise, except the Lower Dover ruling household. None of the intermediate elite households show evidence of abandonment and relocation to Lower Dover in the Late Classic period (despite the short distances involved), and none of them seem to have benefitted dramatically except from their ability to extract increasing amounts of labor from their respective districts. That this labor was invested in intermediate elite level lineage rituals and ancestor veneration at Tutu Uitz Na and BR-180 indicates that this increase in labor was likely the result of intermediate elite policies aimed at their commoner subordinates. The Floral Park elite were probably engaged in a closer relationship with Lower Dover, than Tutu Uitz Na and BR-180/168, however, this relationship did not manifest in any wealth incentives for the Floral Park regime. The fact that none of the intermediate elite seems to have benefitted from the rise of Lower Dover indicates that Lower Dover probably does not represent the ascendance to paramountcy of one of the pre-existing local elite households over the others. Likewise, Lower Dover was probably not an acephalous confederacy of all three intermediate elites, because none of the intermediate elites effectively benefitted from its rise, and because all of their respective centers remained occupied throughout the Late Classic period.

The existence of a single apical elite palace at Lower Dover may not speak to a confederacy as such either. Excavations at the Lower Dover center have revealed a single large apical elite palace, with a possible throne room (Guerra and Awe 2017; Watkins et al. 2017; see Harrison 2001; Valdés 2001; Yaeger 2010b for discussion of throne rooms and political organization). While the founding of a new dynasty through intermarriage between the three local elite households could result in a single apical elite household, similar obvious correlates in terms of palatial architecture representing some type of oligarchic council-based arrangement, like a *popol nah*, are absent at Lower Dover (Fash et al. 1992). The lack of evidence for some type of confederacy or council-based system at the polity capital suggests that such a system did not exist. However, when this evidence is combined with the settlement data, which shows how dramatically the various intermediate elites lost out wealth wise, and the degree to which they pursued strategies of ritualization which countered polity integration, it becomes fairly clear that Lower Dover did not represent a bottom-up confederacy or league.

Consequently, it seems most likely that Lower Dover represents some type of external imposition, potentially by the rulers of the declining Blackman Eddy polity, or rulers from upriver at Baking Pot or Cahal Pech, or even farther afield. While population grew significantly in the Late Classic period, these population increases are almost within 0.1% of the expected in the birth rate projections (Hassan 1978: 68-69). Settlement study as part of this dissertation confirms Willey and colleagues' (1965) original conclusion at Barton Ramie; the major period of population influx was the Terminal Preclassic. This has political implications for the rise of Lower Dover, as the Late Classic population (more or less) could realistically have grown naturally internally from the 0.1% birth rate. This means that no in-migration was necessary to arrive at the Late Classic population and supports the idea that the intrusive elite regime only brought a small retinue of followers with them (see for example de Montmollin 1995: 35; J. Fox 1987). This suggests that possible increases in certain districts, like Tutu Uitz Na in the Late Classic period might reflect fissioning from other districts, which did not grow so dramatically, like Floral Park. This idea is further corroborated by the fact that Late Classic population growth saw emerging households spring up in the pre-existing districts adjacent to older households, not the immediate Lower Dover core area. The fact that the apical elite regime did not bring a large contingent of followers with them is quite remarkable as it did not give them a reliable labor pool, tax base, or military faction

(see Inomata 2004: 186). This pattern implies that the emergent apical elite had a high level of confidence that their power and authority were not going to be questioned. This dynamic may suggest that much of the coercive power of the apical elite was based on recourse to force, likely involving a powerful external patron in the immediate vicinity.

To briefly summarize, the majority of data available from both the Lower Dover civic-ceremonial center and the intermediate elite households in the periphery point towards Lower Dover being some form of external imposition, possibly by an external regime with no small amount of power. The types of changes, which occur following the rise of the polity suggest an external hegemon with sufficient power to form a polity and co-opt the intermediate elites to varying degrees. The lack of a clear retinue associated with this emergent regime likewise suggests a certain level of confidence. Likewise, the lack of a clear retinue suggests the polity may have been more of a top-down imposition by a higher-order hegemon than reflecting the arrival of a roving court who had broken free from an existing polity. While it remains somewhat speculative, such a group would be reliant on their own retinue who would likely arrive with them. Possible local contenders include Cahal Pech (based on similarities in the civic-ceremonial layout of Lower Dover), and Blackman Eddy (see Chapter 6). It remains unclear whether either of these polities possessed sufficient political power to create a new polity from the ground up in an already densely populated area within a well-developed political structure. Given the fact Lower Dover rose in the Early to Late Classic transition, Caracol may have played a hand in its development. The apical elite situated at Caracol would have the coercive potential to impose a new polity on a frontier region like the Belize River Valley. Yet little evidence exists of overarching Caracol hegemony at Lower Dover. The only association being the existence of the finger bowl cache in Structure B1 (Guerra and Romih 2017: 125-126). That said, this cache was interred in a Terminal Classic *Miseria incensario* within terminal construction, likely dating to the latter 9th century, long after the rise of the polity. Moreover, the existence of such caching practices across a broader region of the Maya lowlands may refute the idea they represent a Caracol polity-level identity (McCauley 2019: 83). Either way, the question of the intricacies underlying the rise of Lower Dover remain very much open for debate and speculative (see forthcoming dissertation by Guerra n.d.). What is clear, however, is that regardless of the power differential and impetus inherent in its initial

founding, the Lower Dover apical elite certainly did not transform the lives of their subjects in any major way except through increased labor tax rates.

10.5.2 Geographical Distance

If geographical proximity to the center structured the degree to which intermediate elites were co-opted and saw their agency erode, then we would expect to see the greatest changes at Tutu Uitz Na (the closest), followed by BR-180/168, and greater evidence of autonomy at Floral Park (the furthest from Lower Dover). Instead, the Floral Park intermediate elite was more tightly co-opted by the Lower Dover apical elite than their peers at BR-180/168 and Tutu Uitz Na. The fact that the Floral Park elite were more closely co-opted into the polity suggests that Lower Dover was in some ways a territorial entity. If this was not the case, we might expect to see changes at the intermediate elite level drop off in a concentric fashion as distance increases from the polity capital (Tutu Uitz Na and BR-180/168 see more dramatic changes than Floral Park). The direct co-option of Floral Park could have been an attempt to consolidate the immediate borderlands with Baking Pot to the east, or integrate peripheral households into the polity. A similar dynamic is evident among other examples of secondary intermediate elite centers (tier 2) in the Belize River Valley. For instance, the tier 2 centers of North Caracol Farm and Xualcanil are situated near the projected Late Classic borders of their respective polity capitals of Baking Pot and Cahal Pech. Either way, it seems that their borderland position did not grant the Floral Park elites the types of agency frontier elites had in other contexts, as there is no evidence of the elite regime being able to “play off” multiple suzerains to their own benefit (see Chapter 2).

Despite being situated so close to the Lower Dover civic-ceremonial center, the Tutu Uitz Na elite still managed to retain some degree of political autonomy in terms of access to labor for the construction of monumental architecture. This agency is likewise reflected in their focus on ancestor veneration to propagate ideologies, which potentially countered apical elite narratives at Lower Dover. While it is possible that Tutu Uitz Na was small enough to fly under the radar of the Lower Dover apical elite, this seems unconvincing considering the Tutu Uitz Na elite were heads of one of the largest Late Classic district in the polity. Moreover, the Tutu Uitz Na District saw the greatest demographic increase in the Late Classic period. The intermediate elite at Tutu Uitz Na

then siphoned off the labor of the growing district population to build their own eastern triadic structure. It is worth remembering that this is labor, which could have been expended on the Lower Dover civic-ceremonial center. A similar dynamic holds true for the BR-180/168 elite, who were similarly constructing sizeable monumental architecture, including an eastern triadic ancestral structure in the Late Classic period.

10.5.3 Local Elite Wealth, Authority, Retinue Size and Resources

By examining the wealth, authority, retinue size, and resources of the local elites prior to co-option, we can assess how these factors played a role in their co-option and ability to negotiate. Table 10.1 shows the local elite wealth (portable wealth items in structural fill and burials), power/authority (person-days invested in monumental construction), retinue size (district population), and resource control (soil class of surrounding area) prior to the rise of Lower Dover. The Tutu Uitz Na local elite had the smallest commoner retinue of all three intermediate elites in the Early Classic period. But, the Tutu Uitz Na elite possessed local authority and the ability to command the labor of their subordinates. That said, the Tutu Uitz Na elite were relatively impoverished and the soil productivity in lands around their district was the lowest in the polity. In contrast, the Floral Park elites and commoners possessed access to good quality soils and were some of the wealthiest households in the region in the Early Classic period. Despite this, the district was relatively small, and the local elite could command less labor for construction than the other districts. The BR-180/168 local elite were the most authoritative local elite at the end of the Early Classic, based on their sizeable monumental construction. The Texas District had the highest population also. BR-180/168 was around ten times the size of Tutu Uitz Na and Floral Park at this time. But it was also the most impoverished center in terms of access to wealth items. This represents a paradox as the Texas District (and most of Barton Ramie) is situated on the most productive soils in the polity. The low wealth at BR-180/168 at this time may be due to the redistribution of wealth to commoners in exchange for monumental construction (in a similar manner to Late Classic Tutu Uitz Na). Another possibility is that the fill of the monumental architecture at BR-180 was constructed using redeposited commoner middens from the surrounding district.

Table 10.1 Early Classic Elite Wealth, Power/authority, Retinue Size, and Resources.

| <i>Local Elite</i> | <i>Geographic Distance</i> | <i>Wealth</i> | <i>Power/Authority</i> | <i>Retinue Size</i> | <i>Resource Control</i> |
|--------------------|----------------------------|---------------|------------------------|---------------------|-------------------------|
| Tutu Uitz Na | Closest | Middle | Middle | Lowest | Lowest |
| Floral Park | Farthest | Highest | Lowest | Middle | Middle |
| BR-180/168 | Middle | Lowest | Highest | Highest | Highest |

These patterns suggest that prior possession of material wealth on the part of the Floral Park elite did not facilitate a better position within the ascendant Lower Dover polity. This wealth might have actually made Floral Park a more lucrative target for co-option. In contrast, the size of a local elite's following (district population) and their ability to marshal construction labor from their retinue could have allowed local elites to better negotiate their position in the emergent Lower Dover polity. All three local elites employed ceremonial strategies, from their Middle Preclassic inception through to the Early Classic period, to build legitimate authority in the eyes of their subordinates (see Chapter 9). However, what seems to have been most important was the degree to which they could command labor. In Chapter 2, I suggested that the ability to command labor may translate into the ability to command people militarily. I speculate that this was the case at the Tutu Uitz Na and Texas Districts and that negotiation of softer co-option on the part of these intermediate elite regimes rested partly on a recourse to force.

Not only was population lower in the Early Classic Floral Park District, but the excavated sample of Early Classic Floral Park households suggests the district contained a diverse array of commoners. The Late Preclassic and Early Classic household samples contained a ceremonial round platform with an associated residence, which was probably the home of a ritual specialist (SG 132), the residence of another possible ritual specialist (SG 35), a highly affluent high-status commoner neighborhood head with few constituents (SG 129), and a multi-crafting residence (SG 34). The residents of the district were affluent and potentially represented a lucrative tribute target for the emerging apical elite. Unfortunately, much of this district-level variability is not that stark. For instance, the variability in wealth is not statistically significant between the three Early Classic local elite households. While Floral Park was the wealthiest, Tutu Uitz Na and BR-180/168 were not much poorer. Similarly, retinue size varied between 100 people (Tutu Uitz Na), to 125 people (Floral Park), to 185 people (Texas). The discrepancy in terms of power/authority based on person-days of monumental construction is slightly clearer. Based on the 20% dependency ration, the

Early Classic BR-180/168 elite were extracting roughly 1.4 person-days per person per year, whereas the Tutu Uitz Na elite were extracting 1.3 person-days per person per year, and the Floral Park elite were only capable of extracting 0.75 person-days per person per year. Lastly, access to high-quality soil is perhaps the most divergent dimension, in that the Texas District sat upon incredibly productive Class I soils. Floral Park had access to a very small pocket of Class I soils immediately near the intermediate elite center. Tutu Uitz Na was situated on a large expanse of Class II soils. Some degree of household-based inequality in the Early Classic may in fact be explained by soil zone.

10.6 Summary of Intermediate Elite Political Strategies and Agency

The three intermediate elite households all suffered a decline in their wealth, while at the same time increased their access to labor during incorporation into the Lower Dover polity. Exactly how the rise of Lower Dover augmented the intermediate elite's ability to access labor remains an interesting question. At Floral Park, this access likely came through alliance with the emergent apical elite. In contrast, at Tutu Uitz Na elite labor was mobilized through new collectively beneficial/benevolent policies, and district-level rituals and feasts, which commemorated their ancestral past and venerated the intermediate elite lineage. Finally, the BR-180/168 elite may have persisted using older policies involving the redistribution of wealth for labor, but with greater intensity. The clearest curtailment of intermediate elite agency in the Late Classic took place at Floral Park. While the Floral Park elite remained slightly more affluent (in terms of wealth) than their peers at Tutu Uitz Na and BR-180/168, this seems to have been a meager payoff in terms of their alignment with the emergent Lower Dover center. In contrast, both the Tutu Uitz Na and BR-180/168 elites possessed sufficient agency to adopt ritualized strategies, which countered if not undermined emergent polity-level apical ideological narratives. All three intermediate elites clearly possessed the agency to develop policies of their own devising with their commoner subordinates and apical overlords in the Late Classic. However, it seems that the agency of the Floral Park elite might have been curtailed to a greater extent in some ways, but this also opened doors for this elite household. While the evidence is somewhat meager, it seems that the Floral Park elite household outlasted its peers at Tutu Uitz Na, was engaged in regional marriage

alliances, and was constructing broader regional architectural styles through the Late Classic and into the Terminal Classic periods.

Secondly, clear patterns emerge in the three dimensions (political, economic, and ritual) investigated as part of this dissertation. Perhaps the clearest patterns relate to the economic dimension, which really does not change much throughout the trajectory. Generally, the data on household production differentiation and the data associated with the sourcing of obsidian are reliable indicators of production and exchange patterns. In contrast, the distributional approach is more problematic given the amount that is unknown about polychrome pottery production in the valley and its redistribution/exchange patterns. Some consolation can be taken from the fact that when combined all these different approaches to examining the economic realm strongly support an overall lack of change associated with the rise of the Lower Dover polity. This perspective is more aligned with traditional arguments that Classic Maya polities did not have strongly integrated political economies. If this were the case then we should expect to see more evidence of tribute demands such as greater intermediate elite or commoner crafting, a wholesale reduction in architectural investment at the commoner and intermediate elite levels due to increased labor tax burdens imposed from above. Assessing change in terms of commercialized exchange is more difficult but it seems that the rise of Lower Dover was not associated with the emergence of a radically new exchange system, because, most households saw no change in terms of access to utilitarian imported items. This is partly reflected in the obsidian data too, not only was obsidian not becoming any more abundant, but changes in obsidian sources were not tied to the rise of Lower Dover but were more reflective of regional changes evident at a number of surrounding polities (Awe and Healy 1994; Ebert and Awe 2018). It remains highly possible that the founding of Lower Dover was somehow economically motivated but these benefits were only reaped by the apical elite.

Changes in wealth and status inequalities are relatively simple at the most abstract level. Generally, the intermediate elites saw the greatest changes in this respect. This is most notable in the homogeneous decline in intermediate elite wealth but increase in the intermediate elite ability to command commoner labor. The Tutu Uitz Na and BR-180/168 elites saw the most dramatic reduction in wealth, whereas Floral Park saw the least. Furthermore, Floral Park saw the greatest increase in access to commoner labor. These shifts in wealth and political power/authority may be

related to patterns of intermediate elite household abandonment. While little can be said about the decline at BR-180/168, Tutu Uitz Na was likely abandoned at least 100 years before Floral Park. This suggests that relative wealth and command of labor may have led to a degree of resilience, although these variables may be interrelated in complex ways. Alliance between the Floral Park intermediate elite and the Lower Dover apical elite likely underlay the less dramatic reduction in wealth and the increased ability to extract ever more onerous labor tax rates from their commoner subordinates. Subsequently, this alliance may have granted the Floral Park elite greater resilience. Unlike the intermediate elites, the commoners show a lack of change throughout the Early to Late Classic transition in terms of wealth and wellbeing. A decrease in wealth was only evident among the Floral Park commoners; elsewhere, commoner life seems to have continued as normal. The nature of these patterns points strongly to the co-option of intermediate elites by Lower Dover, and the continuation of pre-existing intermediate elite policies for most districts (except Floral Park).

Changes in ritualization are perhaps the most complicated pattern. Generally, evidence of ceremonial activity increases in all the intermediate elite contexts following the rise of Lower Dover. The nature of that ritual activity varies quite dramatically, however. The simplest pattern occurs in terms of feasting, which may or may not have been ritualistic in nature. All the intermediate elites hosted larger feasts in the Late Classic period. In contrast, the proportions of ritual items vary between centers; Tutu Uitz Na and BR-180/168 see an increase in such items, whereas Floral Park sees a decrease. The construction of large-scale ceremonial architecture at Floral Park strongly suggests that the proportions of ritual items are not a reliable metric of ritual overall, but more of a metric of certain types of ritual activity. The expansion of Plaza A, and the ceremonial pyramids situated around it, and the construction of the *sacbe* and terminus group at Floral Park all speak to a substantial ceremonial role. However, the lack of concordance between these changes and an increase in ritual paraphernalia is more indicative of the possibility that the types of ceremonies staged in these contexts simply did not involve ritual items like figurines, *incensarios*, and musical instruments, such as those used in the ancestor veneration ceremonies at Tutu Uitz Na and BR-180/168. Architectural metrics of ritual activity such as the construction of ceremonial structures and the interment of burials and caches within provide an insightful angle into ritual. When all metrics are combined, it appears that while all the elites were employing

ritualization as a political strategy, this took very different forms. Tutu Uitz Na and BR-180/168 were heavily invested in ancestor veneration and the creation of district-level identities focused on social memory, their collective past, and the elite lineages. Floral Park downplayed ancestor veneration, and instead focused on providing broader-level ritualized integration at the polity-level through the sizeable ceremonies focused around the *sacbe* and terminus group.

Lastly, to summarize the findings of Question 3, intermediate elite control of a larger commoner retinue seemed somewhat important for negotiating with the emergent apical elite regime. However, what seems more important was the ability to command labor from this retinue. This is evident in the comparison of Floral Park and Tutu Uitz Na. While Floral Park had a large commoner retinue in the Early Classic, the Tutu Uitz Na elite were better able to command labor from their somewhat smaller contingent. The possession of material wealth (at least in the Early Classic) does not seem to have translated into the ability to better negotiate a position in the emergent polity, as the example of Floral Park reveals. Likewise, occupation of a borderland position did not grant any overt advantages in negotiating a better position. As the wealthiest and most distant intermediate elite, Floral Park saw the greatest changes following the rise of Lower Dover. This situation indicates that the relative affluence and borderland position of Floral Park may actually have acted as incentives for the emergent apical elite of Lower Dover to incorporate Floral Park. It remains speculative but highly possible that the BR-180/168 intermediate elite were too politically powerful/authoritative for easy integration into the emergent polity. Control of agricultural resources may have benefitted the ability of the BR-180/168 intermediate elite to negotiate politically, but this is far from clear.

11.0 CONCLUSIONS AND FUTURE DIRECTIONS

A research focus on the ways in which intermediate elite social actors respond to the tumultuous set of circumstances associated with their political eclipse by a higher order provides a needed window into how ancient political systems functioned. A focus on the intermediate elite provides a framework for unpacking the “inter-hierarchical” nature of these “meso-actors”. I have organized my interpretation within a framework of intermediate elite “faces” (to subordinates below, to each other, to apical elite, and to the deities) through which these actors articulated with their underlings, suzerains, and peers. In doing so, I sought to move away from an interpretation of political life as a struggle between opposing monolithic classes of commoners (resistant but dominated actors/agents) and elites (dominating institutions). In essence, I followed the perspective that each household (regardless of status) sought to perpetuate itself (Lévi-Strauss 1982), and then endeavored to critically examine its agency. However, bestowing similar degrees of agency on hierarchical actors situated at all levels of the Classic Maya political hierarchy is idealist, likely unrealistic, and can distort our interpretations. Approaching intermediate elites as “meso-actors” situated between commoner “micro-actors” and apical elite “macro-actors” is heuristically useful for examining “inter-hierarchical” agents like intermediate elites because it recognizes the extent to which political power and authority underlay agency and the ability to impact other actors (following Mouzelis 2003). This approach aids in the archaeological examination of governance from an agent-based perspective. Following Kurtz (2001), a focus on the actors situated at multiple hierarchical positions, which made up a state or polity, offers a clearer understanding of the political dynamics of that particular system than a fixation on amorphous and monolithic social construct like “the state” (see also Bailey 1969).

11.1 Multi-variate Archaeological Perspectives on Ancient Life

If a traditional macro-reductionist approach, focusing solely on the apical elite, was adopted, then the entire changing nature of the hinterland would be dismissed from reconstructions

of sociopolitical change. Conversely, if a micro-reductionist approach were taken, and intermediate elites and commoners were simply lumped into a homogeneous monolithic class of people residing in the “settlement” prior to the rise of Lower Dover, then the patterns uncovered would defy meaningful interpretation. By focusing on changes at the intermediate elite centers, at commoner households, and at the overarching polity, I present a framework for interpreting intermediate elite agency built on empirical data. As a case study, this agent-focused approach provides a clearer and more nuanced picture of the processes of (de)centralization in ancient complex societies.

A focus on the political strategies, which elites employ to maintain their following, compete with peers, and negotiate with suzerains is fundamental to understanding political dynamics. In the last three decades, scholars have begun to emphasize the historically contingent nature of relationships between actors to processes of political centralization (Mann 1986; A. Smith 2003). In following this path, some Maya scholarship has chronologically pigeonholed itself in a focus on the political strategies of emerging elites in the Middle Preclassic period, or how Late Classic elites responded to incorporation, or how strategies changed following the onset of political collapse (Runggaldier and Hammond 2016: 38). However, by understanding how intermediate elite power and authority and political strategies changed over the political *longue durée*, we can see how the options open to actors were constrained or facilitated by previous interactions with subordinates, peers, or suzerains. For instance, the ceremonial strategies, which the Tutu Uitz Na elite employed to gather a following in the Middle Preclassic period, may have been relevant in shaping the potential strategies they could pursue over 1000 years later in the Late Classic. To understand political strategies and the agency of actors we should avoid temporal compartmentalization and incorporate diachronic perspectives to reconstruct broad trajectories, which can be compared between one another. Another important aspect of this is the pursuit of an anthropological frame of reference, which understands political, economic, and religious changes in relation to one another. Focus on any one of these dimensions individually would have led to a stilted understanding of the shifts associated with the rise of Lower Dover. All too often a single dimension is given explanatory preference over the others. Fortuitously, archaeological excavation often grants material that allows the reconstruction of the political, economic, and ritual realms.

Charting changes at the intermediate elite level provides a novel political lens. However, attempting to tease out the overarching factors, which resulted in patterned variability at the intermediate elite level, provides a more bottom-up agency-based perspective on issues of political centralization. Such an approach also allows us to tease out the broader factors that structured co-option. The relationships between intermediate elites and their followers, and the ability to deploy the followers in politically meaningful ways, was important in negotiating positions in the emergent Lower Dover governing structure. Temporal trends in demography between the districts of the Lower Dover polity seem to corroborate the notion that intermediate elite actors were often keen to attract commoner clients. Moreover, benevolent intermediate elite strategies, which benefitted commoners, seem to have served as attractors, allowing intermediate elites to poach clients from their rivals to expand their retinue. The clear exception to this pattern is Late Classic Floral Park, however, this distinction probably lies in its relationship with Lower Dover and its ability to coerce higher labor tax from district commoners.

11.2 Moving from Local-Level Variability Towards Higher-Level Processes

In the last four decades, many archaeologists have eschewed broad-level synthetic comparison in favor of a localized focus on agency and the minutiae of daily praxis. As such many abstract high-level models of polities and political processes have faced increased scrutiny (Pauketat 2007; A. Smith 2003, 2011; Yoffee 2005). This trend began in the 1980s when post-processual archaeologists began to shine a spotlight on the importance of individual agency and the historically contingent nature of events and human relationships (Shanks and Tilley 1987). In the Maya lowlands, contemporary epigraphic perspectives document increasingly complex and variable political systems (Jackson 2013; Golden and Scherer 2013), and how people related to place (Tokovinine and Estrada-Belli 2015). As LeCount and Yaeger (2010d: 368) note “the diversity of Maya political strategies requires that we examine them on a case-by-case basis. It is unrealistic to assume that there was a single script or formula that dominant states enacted in their attempts to build regional states and multiplicity networks”. The approach taken in this dissertation is heavily focused on reconstructing the daily minutiae of quotidian processes, this endeavor is construed as necessary to understanding the higher-level processes associated with the emergence

of a polity. But when it comes to broader regional comparison, how does the Lower Dover case study fit into our understanding of the Classic Maya lowlands?

Two decades ago, the middle levels of the settlement hierarchy drastically needed empirical investigation, as opposed to being hammered into settlement typologies, or being mischaracterized to fit into overarching models of political centralization (see critiques in Ashmore 2003: 8; de Montmollin 1988a: 165; Iannone and Connell 2003). Now we are arriving at a point where we have a more nuanced understanding of the developmental trajectories of various minor centers and their intermediate elite occupants. Despite this, there remains a general fervor for documenting more and more middle and low-level settlements to describe the variability these contexts exhibit. Ultimately, as McAnany, Berry, and Thomas (2003: 71) ponder, “is it really necessary to survey and excavate every rural settlement that existed? Are our limited resources better spent documenting seats of power and authority in ancient Maya society?” These are important questions lest Maya archaeology become mired in some Boasian spiral.

Moving from a complex and nuanced understanding of the local-level commoner and intermediate elite actors inhabiting a small social world, born of rich contextual data, towards a more synthetic understanding of higher-level political processes involves bridging the schism between state level-actors and ordinary people (Robin 2009: 25; for similar endeavors on a grander scale see Drennan and Peterson 2012; Peterson and Drennan 2012). Concepts of political, economic, and ceremonial centralization, and models of political organization like Roy’s (1943) Type A, B, and C polities, unitary and segmentary models, territorial states versus city-states, may yet offer us something useful in this comparative endeavor (for a good example see Cervantes-Quequezana 2020; Fargher et al. 2019). While these relatively simple concepts and models were criticized in the past, many of their shortcomings were due to limited data being forced to fit various models. In contrast, we are now at a point where we can diachronically apply these models to multiple individual stages of the different districts, which comprised a polity. Such an approach could be one first step towards moving from a localized microscopic understanding of household variability and individual agency to macroscopic comparisons of multiple polity trajectories over time, and the ways in which agency, practice, and political centralization intertwine (Roscoe 1993). This dissertation offers a framework, which could be pursued at the level of multiple districts among many polities to create a broader comparative understanding of political centralization and

the agency and the strategies of various actors, which is heavily grounded in data-driven local-level perspectives. The framework developed here was designed to tease out the types of elite interactions usually considered to be accessible through epigraphy, but in a region where hieroglyphic texts are largely absent. This archaeological approach would however compliment epigraphy well and could form the basis of a historical Maya archaeology (see Martin 2020a). For instance, these methods could be deployed before and after epigraphically attested incorporation events to gauge the extent to which co-option impacted the wealth and wellbeing of actors in a client state, or to understand the ways in which economies and ritual changed.

11.3 Unanswered Questions and Future Research

Several important questions remain unanswered. These largely relate to the relationship between Floral Park and Lower Dover. The nature of the developmental sequence at Floral Park is pieced together but would benefit from future excavations to understand the earlier construction sequence on Plaza A, and whether an earlier elite residence was present. Likewise, broader scale horizontal excavations on Structure A1 could confirm or refute the possibility that this structure was an eastern triadic structure at an earlier point in its construction sequence. By establishing a more solid handle on the early trajectory of Floral Park, we could arrive at a better understanding of the changes which occurred as Lower Dover rose. Similar questions exist in relation to the latter part of the trajectory at BR-180/168, but the scale of destruction wrought by plowing and bulldozing likely means we will never be able to piece this information together archaeologically.

This study has illuminated three important future avenues of research. One avenue would be gaining more information on the economic role of intermediate elites in production and exchange networks. The modified distributional approach offers a coarse grain understanding of exchange, indicating that aspects of market exchange did not change following the rise of the Lower Dover polity. It is possible that intermediate elite centers may have functioned as marketplaces, similar to the central plazas in polity capitals (for an example of this see Dahlin et al. 2007). This warrants future investigation of marketplace functions at minor centers using the types of methods employed by Cap (2015; see also King 2015). The notion that secondary centers

could have functioned as nodes in a commercialized exchange network is corroborated by findings at district nodes at Caracol (A.F. Chase et al. 2015). Being able to understand not simply where items were produced in a polity, but where different types were then processed and exchanged would provide powerful tools to rethinking commercial systems in ancient polities (see Qiu n.d.).

A second avenue would be further study of high-status commoners. Research at Lower Dover has revealed an “inter-hierarchical” scale situated below the intermediate elite level. High-status commoner neighborhood heads (tier 5) likely engaged in similar relations with their intermediate elite patrons and commoner clients. Unlike most Belize Valley intermediate elites (tiers 2-4), tier 5 households show immense variability. For instance, at Lower Dover, some tier 5 high-status commoners like BR-147 functioned as the heads of large districts. The same is true of the Ixim household at Baking Pot, which served as the intermediary between the commoners of Settlement Cluster C and the Baking Pot apical elite (Hoggarth 2012). A similar framework could be employed to generate comparative data on how lower-level patron-client relationships functioned, the implications of these relationships for wealth and wellbeing, and ritual and economic production and exchange at the neighborhood level.

The third avenue involves assessing the patterns highlighted in this study through comparison with other regions. For instance, does the relative decentralization of the Lower Dover case study reflect the divergent developmental trajectory through which the polity formed? Or was it the norm among late forming Classic Maya polities in general? In many ways the development of Xunantunich seems comparable to Lower Dover, although the Xunantunich elites, and their patrons at Naranjo were far more politically powerful. Other case studies indicate the case is far from clear; Landau (2016) found that the Copan polity existed for several hundred years before it began to tangibly integrate surrounding neighborhoods. In the Upper Grijalva Valley, de Montmollin (1995) noted a general trend involving greater degrees of demographic centralization around longer-lived polity capitals. The inclusion of Hoggarth’s settlement data from Settlement Cluster C at Baking Pot represents the pilot stage for expanding the research focus to multiple intermediate elite-headed districts in the Belize River Valley. Possible next steps could involve incorporating data from the other districts of Barton Ramie and pursuing commoner household excavations in the vicinity of minor centers like Bedran and Zubin, for which solid excavation data exists (Conlon and Powis 2004; Iannone 2003).

The types of broad temporal comparison necessary to reconstruct the historically contingent strategies of intermediate elites can be a labor-intensive task, often taking decades (see Elson and Covey 2006b: 14). Reconstruction of political dynamics at Lower Dover was only possible because of the small size of the polity and the substantial amount of work that had already been conducted in its immediate hinterlands by archaeologists who had the foresight to ensure that their materials were available to others for study. Incorporation of data from an array of sources, notably Willey and colleague's excavations at Barton Ramie, Brown and Garber's excavations at Floral Park, and Hoggarth's material from Settlement Cluster C have provided a basis for tackling broad polity-level research questions within a doctoral dissertation project. While the inclusion of data from an array of different projects poses challenges for comparative analysis and requires careful thinking about specific biases and differences between datasets, I hope the dissertation serves to showcase the interpretive potential of integrating multiple (old and new) datasets from museum collections to build larger datasets to assess broader polity-level questions. The Barton Ramie collections remain an incredibly useful research asset. The analyses conducted as part of this dissertation both at Barton Ramie and on the southern side of the Belize River Valley have resoundingly corroborated many of the overarching patterns Willey and colleagues saw at Barton Ramie. I hope that in years to come, when all the theory and ideas in this dissertation are moribund, the data gathered at Lower Dover are useable by future generations of archaeologists.

The Lower Dover polity has been examined in this dissertation through an approach grounded in political anthropological perspectives. In many ways though, the Lower Dover polity formed a small world socially, politically, economically, and ritually (see for instance M.L. Smith 2003). While heuristically useful, the social categories of commoners, intermediate elites, and apical elites used to structure the dissertation do unconsciously reinforce divisions, differences, and socio-political distance between actors (Blackmore 2012: 174). In reality, the farmers, laborers, family heads, craftspeople, and lineage heads of the polity were probably a tight-knit social community, and very likely tied together through kinship relationships which developed over two thousand years of interaction. The intermediate elites were likely comparable to the older "elite" families in the Colonial Yucatan described by Farriss (1984: 351). These older families had deep roots in an area, maintained local traditions, and safeguarded the community. Frequently understanding the intimacy of these small worlds and the relationships is archaeologically difficult.

The next research project will involve attempting to tease out the social lives of those at Lower Dover. Multiple scholars have long noted the importance of marriage alliances for charting political networks (LeCount and Yaeger 2010b: 32; J. Marcus 2006: 232). Future research will focus on the reconstruction of genetic relatedness (through aDNA) and social kinship (through archaeological data) among the various commoner, intermediate elite, and apical elite actors examined in this dissertation, and hopefully provide clarity on the often confoundingly complex networks of relationships between inter-hierarchical agents in the Maya lowlands (see McAnany 1995: 104). This type of approach also has the potential to speak more to lateral relationships between peers, which is one aspect of intermediate elite dynamics that is hard to tease out of the current dataset. Such an endeavor might also pose interpretive issues and even complicate the archaeological patterns in completely unprecedented ways. The reconstruction of kinship networks and marriage alliances has the most dramatic potential to explain political dynamics in contexts like the Belize River Valley where so much is known archaeologically about the different political actors and their associated assemblages.

This dissertation represents an attempt to embrace the political complexity inherent in ancient complex societies through the employment of quantitative and qualitative methods. A similar framework could be employed to produce comparative data in many different regions of the Maya lowlands, or further afield. Understanding the hierarchical divisions and intermediate elite structures present within any society is fundamental to understanding any aspect of it and answering broader questions about it (Kintigh et al. 2014). Such an approach has the potential to bring back to life the alliances, intrigues, power struggles, and feuds, which comprised political life in the past.

APPENDIX A

The intermediate elite settlement pattern dataset for this dissertation is available online at the University of Pittsburgh's Center for Comparative Archaeology, found at: <http://www.cadb.pitt.edu/waldenjaa/index.html>. This online resource contains all the data used by Walden et al. (2019a). The architectural accessibility data employed in this dissertation is already published in Walden et al. (2020a).

Household assemblages and architectural data will be available online at the University of Pittsburgh's Center for Comparative Archaeology, found at: www.comparch.pitt.edu/.

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