ACTA MESOAMERICANA

Volume 31

Maya Religion and History

Proceedings of the 22nd European Maya Conference

Malmö, December 11–16, 2017

Bodil Liljefors-Persson, Harri Kettunen, and Christophe Helmke
(editors)

Rosa-Maria Worm Danbo
(editorial assistant)

VERLAG
ANTON SAURWEIN
2023

Die Deutsche Bibliothek – CIP Einheitsaufnahme

Ein Titelsatz dieser Publikation ist bei
der Deutschen Bibliothek erhältlich

ISBN 3-931419-30-4

Layout: Christophe Helmke
Printed in Germany

Contents

FOREWORD

Bodil Liljefors Persson
Malmö University

Harri Kettunen
University of Helsinki

Christophe Helmke
University of Copenhagen

The 22nd European Maya Conference on the theme *Maya Religion and History* was held at Malmö University in Malmö, Sweden, between the 11th and 16th of December, 2017. The conference was co-organised by the Department of Society, Culture and Identity at the Faculty of Education and Society, of Malmö University and the European Association of Mayanists, WAYEB. The local organisers were Bodil Liljefors Persson as the main organiser, together with local students Axel Flodfält and Arlinda Sokoli, from the Department of Society, Culture and Identity, along with Rita Sanguineti and Marie Nydahl from the Conference Service at Malmö University. Financial support was provided by The Swedish Research Council, the City of Malmö, and the Department of Society, Culture and Identity at the Faculty of Education and Society of Malmö University, and we want to express our sincere thanks for the generous financial support that we received from these institutions.

The conference followed the general structure of European Maya Conferences and consisted of four days of glyphic and ethnohistorical workshops from the 11th through to the 14th of December and was followed by the symposium proper on the 15th and 16th of December. The title of the conference "Maya Religion and History" is inspired by Eric S. Thompson's book *Maya History and Religion,* first published in 1970, a well-known example synthesising the state of the art of the known research of both Maya history and religion at the time. Since the publication of Thompson's book, much has happened, and later research has changed and revised our knowledge of Maya history and religion from various academic disciplines. Since Maya Studies is a dynamic field, it seemed timely and urgent to make a new effort to once more collect leading research on Maya religion and history in a broad sense and thus this was chosen as the theme for the 22nd European Maya Conference at Malmö University in Sweden.

The main topic of the conference, Maya religion and history, was broken down to the following five subthemes: (1) Cosmology, gods, and rituals; (2) Gender, identity, and sexuality; (3) Place, space, and landscape; (4) History, memory, and conceptions of time; and (5) (Inter-)cultural encounters between the Maya and their neighbours. These five themes were chosen because they relate to research that is based on glyphic texts, ethnohistorical sources, iconography, as well as on extensive archaeological and anthropological fieldwork. All the subthemes also apply to a diachronic perspective in terms of continuity and change in the field. Furthermore, the subthemes connect to the contemporary aspects of life among the Maya and the Mesoamerican cultures as a broader cultural area.

The conference started on Monday, December 11th with a welcoming address by Harri Kettunen, WAYEB President (University of Helsinki) and Bodil Liljefors Persson, the local organiser (Malmö University). This was followed by an introductory lecture to the workshops by Marc Zender (Tulane University) and Peter Mathews (La Trobe University, Melbourne). This opening lecture is traditionally the first event of the EMC and it provides the participants with a general overview of the history of Maya hieroglyphic writing as well as presents some of the latest developments and discoveries.

The Workshops

The workshops began on Tuesday, December 12th and the five topics ranged from epigraphy and iconography to the paleography of Colonial documents. Workshop 1, *Introduction to Maya Writing* for beginners, was tutored by Ramzy Barrois, (independent scholar, Paris). Workshop 2, *Ritual Action in Maya Inscriptions* on intermediate level, was tutored by Felix Kupprat (Universidad Nacional Autónoma de Mexico) and Christian Prager (Rheinische Friedrich-Wilhelms-Universität, Bonn). Workshop 3, *Myths of the Ancient Maya,* also on intermediate level, was tutored by Oswaldo Chinchilla (Yale University) and Marc Zender (Tulane University). Workshop 4, *Paleography of Maya Hieroglyphic Writing*, directed towards advanced participants, was tutored by Albert Davletshin (Russian State University) and Philipp Galeev (Russian State University) and prepared together with Alfonso Lacadena (Universidad Complutense de Madrid). Workshop 5, *Paleography of Colonial Documents: Working with Spanish and Maya Language Colonial Documentation* was a special workshop for this conference, tutored by John Chuchiak (Missouri State University).

On Tuesday evening, there was a special event with the screening of a film on Santiago Atitlan, Guatemala, *Tradition and Change in a Modern Maya City* by Andrew Weeks, independent researcher and filmmaker. The screening of the film was followed by a discussion around the continuity of older ritual practices and on to the rituals of present time in the area. On Thursday, the last day of the workshops, a special talk *Uppåkra – from Woden to White Christ – a Tale of Ritual Space and Place in the Viking Age* was given by Thomas Småberg, Head of the Department of Society, Culture and Identity of the Malmö University. In this talk, Småberg presented the latest research on the archaeological excavations of the Viking Age city Uppåkra, an important place of power dating back to the Bronze Age and located just a few kilometres north of Malmö. Of special interest are the wooden hall where the rulers and aristocracy are believed to have gathered and lived, and a larger building called the ceremonial hall, which may have been inspired by the Roman practice to make ritual sacrifices to the gods inside temples, rather than the much older local ritual practices from the Bronze age that took place outdoors. This evening was concluded by a presentation of the newly published book about the Danish researcher Frans Blom, *Restless Blood: Frans Blom, Explorer and Maya Archaeologist* given by one of the authors, Jesper Nielsen, from the University of Copenhagen.

The Symposium

The symposium began on Friday, December the 15th and was held in the Great Aula of the building Orkanen at Malmö University. In total, 22 papers were presented during the two days of the symposium, and the speakers included: Edwin Braakhuis (Utrecht University), who presented *God H in the Classic Period: A Revision;* Allen Christensen (Brigham Young University), *"These are our Jaguars": Fruit and Sacrifice During Holy Week Observances in Santiago Atitlan*; John Chuchiak (Missouri State University), *In the Image of God: An Ethnohistorical Examination of the Production, Imagery, and Functions of Colonial Yucatec Maya "Idols" and Effigy Censers, 1540-1750*; Albert Davletshin (Russian State University for the Humanities, Moscow) and Sergei Vepretskii (Lomonosov Moscow State University), *Ritual Seclusion of Princes in Classic Maya Texts*; Elisabeth Graham (University College London), *What is Wrong with 'Human Sacrifice'?;* Daniel Grana-Behrens (Universität Bonn and Frobenius Institut Frankfurt am Main), *What About Living Objects? The Relationship between Nonhuman Objects and Humans among the Classic Maya*; Nikolai Grube (Rheinische Friedrich-Wilhelms-Universität Bonn), *The Defeat of the Jaguar God of the Underworld*; Stephen Houston (Brown University), *To Cradle a God: Sacred Effigies and Kingship among the Classic Maya*; Wiesław Koszkul and Jarosław Źrałka (Jagellonian University), *The Bedrock Precinct at Nakum and the Rituals of the Earliest Maya*; Felix Kupprat (Universidad Nacional Autónoma de México), *In Memory of Bahlam Nehn: Stela E at Copan and the Tomb of Ruler 7;* Bodil Liljefors Persson (Malmö University), *Sacred Place and Ritual in Yucatec Maya Religion – Perspectives from Ethnohistorical Sources and from Prince Wilhelm's Expedition in 1920;* Peter Mathews (La Trobe University Melbourne), *Maya Anthropologist: J. Eric S. Thompson and the Maya*; Romelia Mo Isem (Ministry of Education, Guatemala), *Mayas, identidad, religión y el sistema educativo guatemalteco*; Charles M. Pigott (University of Cambridge), *Re-Inventing History in Contemporary Mayan Literature*; Meaghan Peuramäki-Brown (Athabasca University), *People, Places, and Things in East-Central Belize: 40+ Years of Archaeology in the Stan Creek*

District (1975-2017); Frauke Sachse (Rheinische Friedrich-Wilhelms-Universität Bonn), *Of Gods and Souls: Ontological Categories in the Missionary Sources from Highland Guatemala*; Harald Thomaß (University of Hamburg), *La cosmología de los mayas de Yucatán*; Alexandre Tokovinine (The University of Alabama), *Travelling to See: Defining Classic Maya Pilgrimage*; Verónica A. Vázquez López (Yaxnohcah Archaeological Project), Kathryn Reese Taylor (University of Calgary), Debra S. Walker (University of Florida), Mikaela Radford (University of Calgary), and Armando Anaya Hernández (Universidad Autónoma de Campeche), *Preclassic Fire Ritual at the Grazia Complex, Yaxnohcah*, *Campeche, Mexico*; Lorraine Williams-Beck (Universidad Autónoma de Campeche), *Flower Houses / Flower Mountains in Campeche and in the Northern Maya Lowlands through Time*; Ulrich Wölfel (University of Bonn) and Byron Hernández (Universidad de San Carlos Guatemala), *Visitando espacios sagrados – una mirada desde las cuevas de Quen Santo, Huehuetenango, Guatemala*; and Marc Zender (Tulane University), *The Maize God and The Deer Lord's Wife.*

During the opening of the symposium, welcoming addresses were given by Kerstin Tham, Vice Chancellor of Malmö University; Audrey Rivera Gómez, Chargée d'Affaires of the Embassy of Mexico, Stockholm; Thomas Småberg, Head of department, Malmö University; Harri Kettunen, President of WAYEB, and Bodil Liljefors Persson, main local organiser, Malmö University. The various sessions during the symposium were chaired by Ramzy Barrois (Independent Scholar, WAYEB Secretary); Harri Kettunen (University of Helsinki, WAYEB President); Jesper Nielsen, (University of Copenhagen); Jarosław Źrałka (Jagellonian University, WAYEB Vice-President); and Bodil Liljefors Persson (Malmö University and main organiser).

Also, on the first day, Frauke Sachse, former President of WAYEB was officially thanked for her long and outstanding work as President of WAYEB. On Friday evening, the Conference dinner took place in the Malmö City Hall by the invitation of the city of Malmö. During the dinner, a group from the Academic Choir of Malmö University performed the traditional Santa Lucia song and Christmas carols, which were much appreciated by the conference participants.

In this volume, we are delighted to be able to include 13 chapters based on their respective papers presented at the symposium. Thus, following the order of the table of content of the book, after this foreword by Bodil Liljefors Persson, Harri Kettunen and Christophe Helmke, the first chapter is written by Elizabeth Graham (University College London) with the title *What's wrong with Human Sacrifice?* In this interesting chapter Graham discusses various approaches to the concept of human sacrifice by revisiting ideas entrenched in archaeology, history, anthropology, literature, the arts and sciences and challenges the generally accepted idea that the Precolumbian Maya and the Aztecs killed human beings in order to honour the gods. In so doing, she actively challenges the use of the word and forces us to reconsider the question.

The second chapter is entitled *Preclassic Fire Ritual at the Grazia Complex, Yaxnohcah, Campeche, Mexico* and written by Verónica A. Vázquez López, Kathryn Reese-Taylor, Debra S. Walker, Mikael Radford and Armando Anaya Hernández. This chapter explores the relation between the three-stone hearths and cache deposit with a triadic layout at the Grazia complex. This deposit provides evidence of the integration of household rituals associated with public religious ideology connected with the emergence of kings during the Middle and Preclassic period.

In the third chapter, Wiesław Koszkul and Jarosław Źrałka with the title *The Middle Preclassic Steambath from Nakum and Rituals of the Earliest Maya*, the authors explore recent excavations at Nakum. At this site, they have uncovered an interesting precinct which they identify as a steambath and also suggest that it may have been perceived as an artificial cave. This find sheds new light on the ritual activities of the earliest Lowland Maya.

Meaghan Peuramaki-Brown in her chapter *People, Places, and Things in East-Central Belize: 40+ Years of Maya Archaeology in the Stann Creek District (1975-2017)* summarises the more than four decades of significant investigations of coastal and inland trade routes and population movements and displacements. The archaeological research that has been undertaken in East-Central Belize is presented focusing on the key topics in Thompson's *Maya History and Religion*.

In chapter five with the title *Travelling to See: Naj Tunich Inscriptions and the Pilgrimage Genre in Classic Maya Texts*, Alexandre Tokovinine examines the question of pilgrimage narratives as a genre in Classic Maya texts. Tokovinine particularly looks at Naj Tunich, a cave site in the Peten of Guatemala, which was a major centre of ritual activity and he also tentatively outlines the socio-political network that is associated with Naj Tunich as a pilgrimage centre during the Late Classic Period.

Daniel Grana-Behrens addresses in his chapter *What about Living Objects? The Relationship between Nonhuman Objects and Humans among the Classic Maya (AD 300-1000)* the question of ontology among the Classic and Postclassic Maya. Grana-Behrens examines both epigraphic, iconographic and ethnographic sources and documentation in order to explore the question of whether the Maya consider objects as animated and thus analyses their relationship with these objects.

Chapter seven, *Mirrors: Reflection and Complementarity in Mesoamerican Thought and Practice*, is written by Kathryn Marie Hudson and John S. Henderson. They examine data from archaeological, epigraphic, historical and ethnographic sources to arrive at a new and robust perspective on the role of mirroring and reflection in Mesoamerican thought and mirror practice. This chapter develops a critical examination of the ways in which mirrors reflect connections among Mesoamerican cosmology, material production as well as in socio-political organisation, and linguistic composition. Hudson and Henderson could not attend the symposium but we are happy to present this chapter as part of this volume.

In his chapter entitled *God H's Ancestry: A Reassessment*, Edwin Braakhuis explores alternative interpretations of the codical God H from being a flower lord akin to Xochipilli, to the flower lord in the Book of Chilam Balam of Chumayel, and then to the Tonsured Maize God. In this chapter, he further argues that the mythological association of the Tonsured Maize God is that of the role as a culture hero.

Thereafter, Bodil Liljefors Persson in her chapter entitled *Sacred Place and Ritual in Yucatec Maya Religion – Perspectives from Ethnohistorical Sources and from Prince Wilhelm's Expedition in 1920* explores various sources from early colonial times to present-day fieldwork and argues that these give new perspectives on the processes of permanence and change in religious and spiritual discourses in Yucatec Maya (con-)texts.

Lorraine Williams-Beck's stimulating chapter *Yucatan Peninsula Maya Flower House Complexes through Time* discusses Flower House complexes set within sacred landscapes and through time. The chapter focuses on the Flower Houses historical and socio-sacred roles and the iconographic themes and sculptural attributes in order to identify sacrosanct contexts associated with mythical creation, foundation, destruction, and renovation actions.

In her remarkable chapter *Of Gods and Souls: Ontological Categories in the Missionary Sources from Highland Guatemala* Frauke Sachse introduces the reader to the corpus of colonial missionary literature of Guatemala with a special focus on Domingo de Vicos' *Theologia Indorum* and stressed the importance of the texts as providing valuable insights into the creation of a Christian discourse in K'iche', as well as it being a source for the reconstruction of native religion.

Allen Christenson in his chapter *"These are our Jaguars": Fruit and Sacrifice in Santiago Atitlan* presents the traditional ceremonies of world renewal that still takes place in Santiago Atitlan, Guatemala, during the Holy Week. Christenson focuses on significant elements that echo with ceremonies from Precolumbian times during the Wayeb-period. The Holy Week marks the transition from the dry period to the rainy season, which in turn symbolically parallels the death and resurrection of Christ and thus the death and rebirth of life sustaining crops.

Finally, in the last chapter, we have moved to present-day Yucatan and here Harald Thomaß in his chapter *Con palabras se camina por el paisaje celestial. Cambio y continuidad en la lengua y práctica ritual de los mayas de Yucatán* presents three ritual specialists in their individually ritual practices and prayers. Through a semiotic analysis of the textual structures of the prayers in these contexts of agrarian rituals, Thomaß argues that they convey a cosmic order that can be traced back to the colonial influences of Christian mission by the Franciscans in the Yucatan.

Lastly, we wish to extend our warm thanks to the colleagues who have contributed their chapters to this volume. Your work makes this volume a great example of the true WAYEB spirit, so thank you all for being part of this edited volume. A warm thanks also to the members of the WAYEB Editorial Board for your work that also benefitted this volume. Last, but not least, we thank Anton Saurwein and Edith Specht Saurwein for seeing this volume through to publication.

People, Places, and Things in East-Central Belize: 40+ Years of Maya Archaeology in the Stann Creek District (1975 – 2017)

Meaghan M. Peuramaki-Brown
Athabasca University

Abstract

J. Eric S. Thompson's (1970) *Maya History and Religion* features a multi-faceted discussion regarding the movement of people and things between the many 'places' of the Maya world. Although primarily focused on the Contact period, Thompson attempts to push many observed patterns back into the more distant past. At the time of writing, archaeological knowledge of much of the eastern periphery of the Maya world was lacking. Since the 1970s, significant investigations have been undertaken in the material culture sub region of East-Central Belize (Stann Creek District)—a unique highland zone within the eastern Maya lowlands. This sub region has become an important focus for the study of resource acquisition and the movement of goods between identified highland and lowland zones along coastal and inland trade routes and communication corridors, but also in the revisiting of the topics of population movements and displacements, particularly during the Late to Terminal Classic periods. This paper briefly summarizes the 40+ years of archaeological research that have been conducted in East-Central Belize since the writing of *Maya History and Religion*, picking up on key topics addressed in Thompson's volume as they relate to this portion of the eastern periphery of the ancient Maya world.

Resumen

Maya History and Religion de J. Eric S. Thompson (1970) presenta una discusión multifacética sobre el movimiento de personas y bienes entre diversos lugares del área maya. Aunque se centró principalmente en el período de contacto, Thompson arguyó en favor de muchos patrones observados en un pasado más lejano. En el momento en que Thompson escribió esta obra, el conocimiento arqueológico de gran parte de la periferia oriental del mundo maya era muy escaso. Desde la década de 1970, se han llevado a cabo importantes investigaciones en la subregión centro-oriental de Belice (Distrito de Stann Creek), una zona única de tierras altas dentro de las tierras bajas mayas del este. Esta subregión se ha convertido en un foco importante para el estudio de la adquisición de recursos y el movimiento de bienes entre las tierras altas y bajas identificadas a lo largo de las rutas comerciales costeras y continentales y los corredores de comunicación, pero también en la revisión de temas relacionados con movimientos y desplazamientos de población, en particular, durante el Clásico tardío y terminal. Este trabajo resume brevemente los más de 40 años de investigación arqueológica que se han realizado en Belice centro-oriental desde que se escribió *Maya History and Religion*, y considera los temas clave abordados en el volumen de Thompson en relación con esta parte de la periferia oriental del mundo maya antiguo.

A significant portion of Thompson's (1970) *Maya History and Religion*—the work that inspired the topic of the 2017 EMC, toward which this paper was a contribution—is dedicated to a multi-faceted discussion regarding the movement of people and things between the many places of the Maya world and beyond. Although focused primarily on the Contact and Spanish Colonial periods—and associated ethnohistoric documents and later linguistic and ethnographic data—Thompson attempts to push many elements of his hypothesized, observed, and interpreted patterns back into the more distant past, often serving to better explain particular archaeological finds. The volume is fascinating not only for its content and often lovely prose, but that it was written at a time when archaeologists in North America were advocating a more processual approach to inquiry; along with beginning to severely question concepts such as culture areas, and migration and diffusion as prime movers for socio-cultural change, they were advocating for a more anthropological archaeology (Willey & Sabloff 1993). As a result, the volume, in many ways, exhibits the tensions that permeated the discipline in the second half of the 20th century.

Thompson first visited Belize in the late 1920s (then, the colony of British Honduras) to excavate at Lubaantun in the Toledo District and to learn more about the Maya who currently lived in the southern reaches

of the country (Joyce *et al.* 1927; Thompson 1930). It is clear from his writings that he developed something of a love affair with the country; his book, *The Maya of Belize: Historical Chapters Since Columbus* (Thompson 1972)—published in Belize and written for the Belizean people—could be considered a sequel to the aforementioned 1970 volume, and addressed in greater detail the Spanish colonial and indigenous presence in Belize in the 16th century.

At the time of writing both volumes, the archaeological knowledge of many portions of the eastern periphery of the Maya world was lacking, particularly in parts of Belize. Since publication of the volumes, significant investigations have been undertaken in the Stann Creek District (Graham 2001), a material culture sub region known as East-Central Belize; this portion of Belize was acknowledged by Thompson (1970: 125) as being part of a unique highland zone within the lowlands of the eastern reaches of the Maya world, as it is situated along the east side of the Maya Mountains. The sub region has become an important focus for the study of ancient resource acquisition and the movement of goods between sub regions and regions along coastal and inland trade routes and communication corridors. Given this interconnectedness, it is perhaps not surprising that it has also become an important focus for the study of population movements and displacements, particularly during the late facet of the Late Classic to Terminal Classic periods (*ca.* 700 – 900 CE). This paper briefly summarizes what was known archaeologically about the ancient Maya of the Stann Creek District at the time of publication of Thompson's aforementioned volumes, then moves on to summarize the 40+ years of archaeological research that subsequently occurred and continues to this day, picking up on key topics addressed in both of Thompson's volumes.

Maya Archaeology of the Stann Creek District

The Stann Creek District of Belize is part of the eastern Maya lowlands and considered part of the eastern periphery of the ancient Maya world (Figure 1). Relative to many of the other material culture sub regions of Belize, little is known of the prehistory and Spanish Colonial period of the Stann Creek District and the Maya who once inhabited this complex geological and ecological landscape.

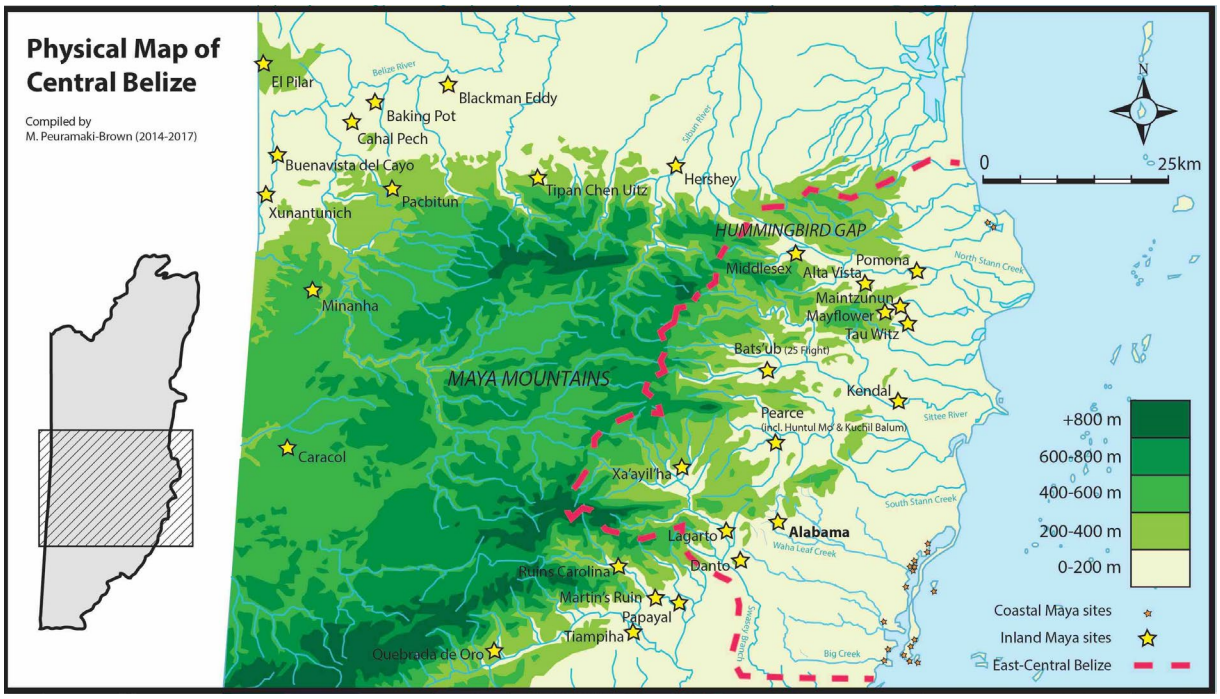

Figure 1: Topographic map showing the location of known ancient Maya archaeological sites of the Stann Creek District (map by M. Peuramaki-Brown).

Covering approximately 2,600 km^2, the Stann Creek District is roughly delineated to the north by the north-eastern extension of the Maya Mountains and beginning of relatively flat landscapes with bigger and longer rivers; to the west by the highest peaks of the Maya Mountains; to the east by the Caribbean Sea; and to the south by the north end of the Bladen Formation, located to the south of the Swasey Branch of the Monkey River—the area of the colonial Campin village, likely today the village of Cowpen (Thompson 1970: 6, Map 1, 61-62).

This part of the country features dramatic landscape transitions, typically within a mere 20 km east-west. Four broad ecological zones are represented, transitioning from coastal mangrove shoreline and lagoons, through pine savannah to the broadleaf forests of alluvial valleys, and up into the undulating metamorphic and igneous foothills and steeper peaks of the Maya Mountains. This diversity of zones led to the development of resource-specialized sites, particularly those associated with salt and lime production along the coast, but likely also within the alluvial valleys and foothills. The presence of small, specialized communities in each zone would have significantly increased the likelihood of success for survival in this part of the Maya world, particularly with regard to population flexibility and mobility between resource areas, and the exchange of local (0-10 km) and mesolocal (within 10-50 km) goods (see Moutsiou 2011 for use of terms 'local' and 'mesolocal').

1890s to 1960s

At the time of Thompson's writings, little was known with respect to the archaeological record of the ancient Maya of the Stann Creek District. Prior to this time, only five archaeology-related expeditions had taken place, including Price's (1899) excavations at Kendal along the Sittee River in 1892 and 1896 (also recounted in Gann 1918); Joyce's (1931) British Museum expedition to the Pearce Ruins (from this point on referred to only as Pearce, and including the nearby sites of Kuchil Balum and Huntul Mo') in the Cockscomb Basin of the South Stann Creek; Mitchell-Hedges' (1931) explorations of offshore cays; Kidder and Ekholm's (1951) work in the mid-20th century at Pomona along the North Stann Creek and along the coast; and MacKie's (1985) 1959-1960 excavations at Pomona. If any Stann Creek District archaeological sites appeared on maps of the Maya area (typically just a blank spot) it was often because of the impressive jadeite finds made at Pomona and Kendal—important indicators of localized Protoclassic to Early Classic (*ca.* 100-600 CE) activity in the northern end of the district, and containing some of the only epigraphic inscriptions in the district (see images in Schele and Miller 1986).

Also noted by explorers and scholars from this early time were many of the characteristics that would later serve to identify the Stann Creek District as a unique material culture sub region of the eastern Maya lowlands (discussed below). These features include a general lack of chert and limestone in the region—although periodically these materials make appearances in special contexts such as the limestone tombs of Pomona; the presence of depressions or borrow pits nearby most sites as the source of construction core for platforms, often forming rings around monumental cores; the poor preservation of ceramics and osteological materials (human and other) at inland sites due to highly acidic soils; and a lack of vaulted architecture and engraved monuments. It is also at this time that the first suggestion of foreign colonizers in the area was put forward; for example, MacKie (1985: 205) suggested the presence of valued portable jadeite items and patolli boards at the small inland centres meant populations from the Belize River Valley initially colonized the region or, at the very least, suggested a very strong connection between the two sub regions.

Regarding later Spanish colonial activity, it is Thompson (1972: 41-42) himself who relates the accounts from the 16th century of Friars Martin Tejero and Joseph Delgado. The Friars discussed Spanish and indigenous settlements along the North Stann Creek, Sittee River, South Stann Creek, and Swasey Branch of the Monkey River. To-date, we do not know much more regarding this period. It was not until the 1960s and 1970s that Maya groups returned to East-Central Belize; villages of Mopan and Kekchi Maya were established by families coming from the Toledo District in search of land and economic opportunities within the banana, citrus, and shrimping industries (TMCC & TAA 1997). These rapid-growth communities (a.k.a. instant cities or boomtowns; Barth 1975) and company towns continue to develop to this day, albeit often comprised of temporary immigrants from countries such as Honduras and El Salvador who are working in the aforementioned industries, in particular, the banana industry (Moberg 1997).

1970s to 2010s

Since 1970, a number of minor and major archaeological projects have operated within the Stann Creek District, focused on understanding Maya prehistory from Formative through to Postclassic times. Many of the topics addressed by Thompson, such as issues of cultural affiliations and boundaries, migration, resources and highland-lowland interaction, and trade routes, have been addressed by each of these projects—either directly or indirectly.

The Stann Creek Project (SCP), directed by Elizabeth Graham, represents the first extensive research in the district, having provided a survey of both inland and coastal archaeology sites, with test excavations at the inland centres of Pomona, the Mayflower sites (including Mayflower, Maintzunun, and T'au Witz), Kendal, etc., as well as the Colson Point sites of the coast (Graham 1976, 1978, 1983, 1985, 1989, 1994). The Point Placencia Archaeological Project (PPAP), directed by J. Jefferson MacKinnon, involved additional survey and testing of the coastal and lagoon sites of the 22 km Placencia Peninsula, offshore cays, as well as the inland centres of Alabama Ruins (from this point on referred to only as Alabama; also known as Ch'acben K'ax), Lagarto, and Danto (MacKinnon 1985, 1987, 1988a, 1988b, 1989a, 1989b, 1991a; Schafer 1987; Walters 1988). A renewed focus on the Placencia sites has been recently pursued by Cory Sills (2016), and work on the cays has been re-initiated by Chelsea Blackmore (Blackmore and Arjona 2018).

The Maya Mountains Archaeology Project (MMAP), directed by Peter Dunham, although focused more intensively on material culture in the Bladen further south, spent one season in the Cockscomb Basin to conduct preliminary reconnaissances at the Pearce sites, Xa'ayilha, and Bats'ub (25 Flight), as well as conducting crucial micro-scale geological and biological baseline surveys for various branches of the South Stann Creek (Dunham 1996; Dunham *et al.* 1995); this investigation built from the aforementioned British Museum expedition, as well as observations by the Belize Department of Archaeology (Gundy & McNatt 1984) following reports of archaeological sites by zoologist Alan Rabinowitz (1987). The Mayflower Archaeology Project (MAP), directed by Jeffrey Stomper, picked up from where the SCP left off at the Mayflower sites (Stomper & Brown 1998; Stomper *et al.* 2004; Williamson & Stomper 1996) and Kendal, which also formed part of the Southern Highway Archaeological Assessment that identified numerous sites in the district in advance of the Southern Highway upgrade (Dunham & Wanyerka 1994; Stomper & Brown 1999). Finally, the Stann Creek Regional Archaeology Project (SCRAP), directed by the author, is currently investigating the appearance of and relationship between Alabama and the Pearce sites (Peuramaki-Brown 2015, 2016a, 2016b, 2017a; Peuramaki-Brown *et al.* 2017a, 2018; Peuramaki-Brown & Schwake 2014).

East-Central Belize

Based on results of the aforementioned projects, the Stann Creek District is proposed to represent a unique material culture sub region within the Maya lowlands, variously referred to as East-Central Belize (Graham 2001; Peuramaki-Brown 2017a) or South-Central Belize (Gibson & Moore 1987). While the inland sites of the region are unique from one another in many ways—seemingly due to variability in resource availability in local drainages and differences in occupation dates—they also have a number of features in common, which together serve to distinguish them from other sub regions (*e.g.*, Southern Belize, as described by Leventhal 1990, 1992, and MacKinnon 1991b).

Inland sites of the sub region include locations atop alluvial terraces, adjacent to rivers and streams that are at minimum seasonally navigable to the coast; low, large, non-vaulted architecture; alluvial sandy-clays for core material of platforms and other construction; large borrow pits surrounding/enclosing monumental architecture; facing blocks and 'megalithic slabs' (architectural elements) made of non-limestone materials; uncarved stelae (slab monuments) and altars of non-limestone materials; and special-context use of imported limestone (*e.g.*, ball court markers, corner stones, tomb walls). A general lack of artifacts in construction cores at many sites throughout the sub region has been variously proposed to represent little occupation at sites prior to major construction efforts, rapid construction, or different architectural construction preferences from elsewhere in the lowlands. Clues to regional socio-political organization are scarce, as only limited examples of Maya writing have been encountered in the region—and do not shed light on the topic—confined to portable jadeite and ceramic items and a report of an illegible carved sandstone stela from Kendal by Price (1899) and rumours of a carved/inscribed monument at Bats'ub (Keith Prufer, personal communication, 2017).

Table 1: Occupation dates for Maya archaeological sites in the Stann Creek District. Middle Formative (*ca.* 1000-300 BCE), Late Formative/Protoclassic (*ca.* 300 BCE-300 CE), Early Classic (300-600 CE), early facet Late Classic (600-700 CE), late facet Late Classic (700-800 CE), Terminal Classic (800-900 CE), Early Postclassic (900-1200 CE), and Late Postclassic (1200-1525 CE).

		Middle Formative	Late Formative-Protoclassic	Early Classic	Early facet Late Classic	Late facet Late Classic	Terminal Classic	Early Postclassic	Late Postclassic	Site type	Source data
	Inland Sites (North to South)										
North Stann Ck.	Pomona (Mamey Hill)									secondary	G94 / KE51 / M85
Silk Grass Ck	Mayflower Sites (Mayflower, Maintzunun, T'au Witz)								R	primary	GB87 / G94 / SB98 / S+04 / WS96
Sittee R.	Kendal								R	secondary	G94 / P99 / SB99
	25 Flight									primary	D+95
South Stann Ck	Pearce Sites (Pearce, Kuchil Balum, Huntul Mo')									primary	D+95 / G94 / J31 / PBM16
Waha Leaf Ck	Alabama Ruins (C'hacben K'ax, AL-52)									primary	G94 / M89 / PB25 / PB16a
Swasey Br. MR	Lagarto (LA-63)									tertiary	M89
	Danto (DN-60)									tertiary	M89
	Coastal Sites & Cays (North to South)										
Colson Point	Watson's Island									habitation?, lime, marine resource procurement	G94
	Kakalche									habitation, marine resource procurement	G94
Placencia Peninsula (north end)	PC-25 (Quamina Cay)									unknown	M89
	PL-37 (Hideaway Site)									saltmaking	M89
	PL-36 (Bevier Site)									saltmaking	M89
	PL-34 (Snorkel Site)									saltmaking	M89
	PL-3 (Dalton Eiley Site)									saltmaking	M89
	PL-10 (Santa Maria Creek Mouth)									saltmaking	M89
	PC-6 (False Cay)									coastal trade, lithic workshop	G94 / M89
Placencia Peninsula (middle)	PL-14 (Rollerhome, Pedro Rubio)									saltmaking	G94 / KE51 / M89
	PC-16 (Gladden Cay)									maritime trade, resource procurement	M89
	PC-27H/28 (Funk Cay)									unknown	M89
	MC-50 (Eric Lowry Site)									farming hamlet	M89
	PC-24 (Wippari Cay)									unknown	M89
	PC-22/23 (Cary Cay)									resource procurement, coastal trade?	M89
	PL-32 (George Eiley Site, Indian Hill 1)									saltmaking	M89
	PL-8 (Placencia Lagoon Site)									marine resource procurement?	G94 / M89
	PL-1 (Rum Point Airstrip Site)									limemaking	M89 / MM90
	PL-7 (Traffic Island)									saltmaking?	M89
	PL-4 (Indian Hill 2)									marine resource procurement?	G94 / M89
Placencia Peninsula (south end)	PC-5/PC-12H (Placencia Cay Site & Olive Jar Site)									coastal trade/transhipment/ anchorage; procurement	G94 / M89
	PL-9 (Cello's House, Anthony Eiley, Jungle Bar Path)									habitation?, coastal trade?	M89
	PC-20 (Little Harvest Cay)									unknown	M89

Legend: colouration of cells shows evidence for occupation ranging from strong evidence (black) to possible occupation (light grey), with possible occupation attested on the basis of artifactual materials marked with "R".

Sources: D+95 (Dunham *et al.* 1995), **G94** (Graham 1994), **GM87** (Gibson & Moore 1987), **J31** (Joyce 1931), **KE51** (Kidder & Ekholm 1951), **M85** (MacKie 1985), **M89** (MacKinnon 1989), **MM90** (MacKinnon & May 1990), **P99** (Price 1899), **PB15** (Peuramaki-Brown 2015), **PB16a** (Peuramaki-Brown 2016a), **PBM16** (Peuramaki-Brown & Morton 2016), **S+04** (Stomper *et al.* 2004), **SB98** (Stomper & Brown 1998), **SB99** (Stomper & Brown 1999), **WS96** (Williamson & Stomper 1996).

Chronology

To-date, much of the abovementioned research in East-Central Belize has focused on securing occupation chronologies for investigated sites—both coastal and inland (Table 1). If we consider a rough timeline for inland sites throughout the region, based on absolute ^{14}C dates, as well as stylistic dating of architecture, pottery, glyphic elements, and other artifact types (reported in the previously discussed sources), overall, within the north end of the district (north of the Sittee River), Middle Formative to Late Postclassic (*ca.* 1000 BCE – 1525 CE) occupation chronologies have been reported, while areas to the south currently appear to be mostly limited to Late Classic to Early Postclassic (*ca.* 600 – 1200 CE) activity. These patterns must currently be taken with a grain of salt, as so little excavation has occurred within the district; we expect that earlier finds will appear in the southern portion of the district, particularly given recent very early finds (as far back as the Paleo-Indian period) just to the south in the northern end of the Toledo District.

Organization and Identity

Based on monumental area, layout, and architectural inventory, by the late facet of the Late Classic (*ca.* 700 – 800 CE), a visible hierarchy or continuum of settlement existed in the district, including high-level, multiple-plaza, sites with specialized architecture, including ball courts and *sacbeob* (MacKinnon *et al.* 1993). An example of such a high-level site is that of Alabama (Figure 2)—slightly larger than Nim Li Punit in monumental construction area—with a similar population of roughly a maximum 800-1000 people based on the recent SCRAP settlement survey. The site of Pearce, roughly 10 km to the north of Alabama, is said to be slightly larger—comparable to Lubaantun. Middle-level sites include those with single plaza areas, and with plazas lacking clear organization in their monumental construction. Finally, low-level sites consist of isolated monumental mounds and associated settlement.

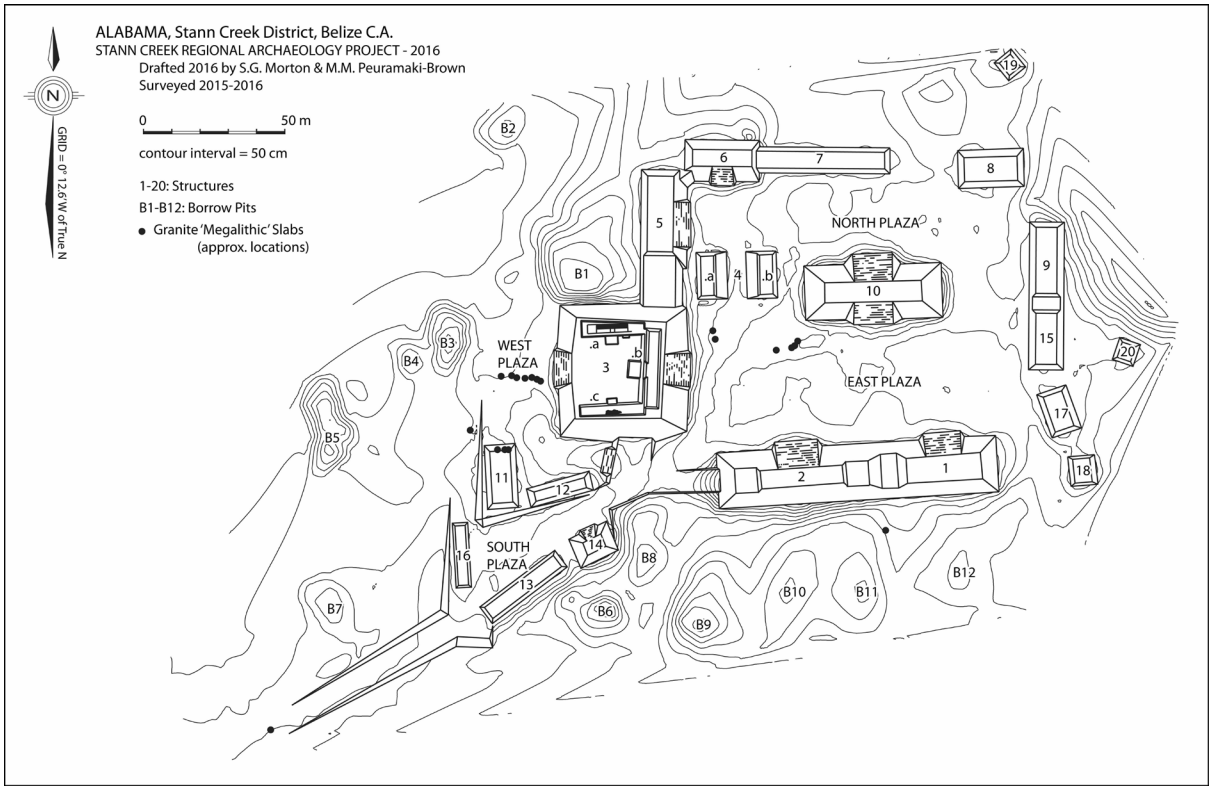

Figure 2: Topographic and rectilinear map of the monumental core of Alabama Ruins (map by S. Morton and M. Peuramaki-Brown).

As mentioned above, understanding the relational geography of this continuum/hierarchy of settlement in the sub region is currently dependent solely on archaeological investigations, given the lack of epigraphic texts. The appearance of larger and different styles of monumental construction and layout, dramatic population

increases, as well as observed shifts in resources use and material culture assemblages around the late facet of the Late Classic at sites such as the Mayflower sites, Pearce, and Alabama have previously generated musings over whether a movement of non-locals—or a "Colonial Impulse" to use MacKinnon and May's (1991) term—appeared at this time in the region. Such musings can be found in the writings of Graham, MacKinnon, and others, and seem to favour connections to the Belize Valley as opposed to strict local growth and development. Wanyerka (1999, 2003), in his discussion of the petroglyphic elements of the southern portion of the district, even went so far as to suggest a non-Maya influence or presence in the region, possibly from Honduras or further south in Central America. These ideas are by no means conclusive and current SCRAP research at Alabama and Pearce is pursuing this line of questioning, among others (Peuramaki-Brown 2017b).

Trade

The role of the development of local resources and inter- and intra-regional trade of commodities has been an important part of all projects working in East-Central Belize. The heavy attention paid by the SCP to the resources and ancient industries of the district served as the inspiration for all subsequent and on-going work (*e.g.*, Graham 1987). The idea of many communities representing both specialized resource communities and forms of gateway communities appears in the writings by Graham, MacKinnon, Dunham, and Stomper, and current SCRAP research is approaching investigations of Alabama and Pearce from a somewhat more open yet linked framework of boomtown development, or rapid growth communities (Peuramaki-Brown & Morton 2018).

From her research at Pomona, the Mayflower sites, and Colson Point sites, Graham (1994) has suggested the importance of the northern end of the district to trade into and out of the central Peten—controlling access to open sea trade routes via the inland Hummingbird Corridor. Indeed, this route was used in Spanish colonial times to transport marine products to the Belize Valley. Although agreeing that the North Stann Creek sites were important locales along the Hummingbird trade route, Stomper and colleagues (2004) have argued that Mayflower was primarily positioned to control the flow of goods into and out of the local box canyon in which it is found, a few kilometres south of the route to the Hummingbird gap. They also suggest that settlement in the area was encouraged, not by trade, but by simple hydrological considerations; Mayflower occupies the only ground between the foothills and coast not prone to substantial flooding in the rainy season.

According to Stomper and colleagues (2004: 325) "the location of Mayflower at the entrance to the canyon and T'au Witz and Maintzunun on the surrounding ridges clearly indicate that anyone wishing to enter the canyon as well as goods leaving, must pass through this population centre." They argue that slate, granite, and quartz may have been the primary resources controlled by the Mayflower population, the latter along with quartzite and phyllite being the lithic material of choice in much of the district, given the lack of local chert. SCRAP researchers are considering similar arguments for the role of Alabama as a control point for access to the Pearce sites via a gap or canyon route (referred to as "The Gorge" on informal area maps) within the foothills, and controlling various resources coming out of the mountains and into the Placencia Lagoon and coastal trade routes (Peuramaki-Brown & Morton 2016).

PPAP research at the coastal sites of Placencia Lagoon and Peninsula, as well as the inner and outer cays, demonstrated that people used most coastal sites for the purpose of resource procurement and processing in the Classic Period, rather than trade (*i.e.*, the sites were not serving as exclusive trade posts, as was the case at coastal localities later in time). One exception was Placencia Cay, which likely functioned as a trans-shipment point on the coastal canoe trade route linking that traffic to the inland centres via the lagoon and rivers, and serving as a sheltered harbour, as it does today (MacKinnon 1986, 1989c, 1990). Resources included small-scale commercial shell-lime production in the Early Classic (MacKinnon & May 1990) and small-scale salt production in the Late Classic (MacKinnon & Kepecs 1989, 1991; Marcus 1991; Valdez & Mock 1991). These substances were likely produced by and for members of inland communities such as Alabama and Pearce.

Classic Period trade routes were found to hug the coast and did not utilize the cays of the outer reef. Early Postclassic Period coastal trade likewise moved close to the coast, but also made use of some of the inner cays (*e.g.*, False Cay and Placencia Cay). Late Postclassic period trade, by contrast, was found to have moved along the cays of the outer reef edge. MacKinnon (1989c) suggested these different patterns of coastal use over time—small hopping of the coast in the Classic with no clear way stations vs. the cays and way stations of the Postclassic—may suggest smaller canoes were in operation during the Classic; this would counter previous attempts to push

the image/narrative of big ocean-going canoes of the ethnohistoric documents back into earlier periods. MacKinnon also suggested these patterns, along with shifts in obsidian access in the region (discussed below), could be related to a different coastal route in the Classic—one that actually terminated at the rivers of Southern Belize, extending further into Honduras and Lower Central America only later in the Late Postclassic.

Resources

As mentioned above, a variety of resources and industries have been investigated as part of the various projects over the years—again, often making use of Graham's studies as a foundation. PPAP investigated lime manufacture from oyster and mud conch shell at the Early Classic Rum Point Airstrip site, as well as Late and Terminal Classic salt making sites along the Placencia lagoon. The MMAP geological and biological surveys around the Pearce sites in the Cockscomb Basin have brought to light additional resources that the Maya may have been extracting, including magnetite, cinnabar, greenstone (Thompson [1970: 140-141] also speculated a source of jadeite in the Maya Mountains, based on the impressive finds at Kendal and Pomona, and mentioned Wilson's [1886] note of "green rock" while on survey along the Trio Branch of the Monkey River) and tuff deposits, and the identification of 'wild' stands of cacao and rubber trees (possible remnant populations of domesticates; Prufer & Dunham 2009; Thompson 1970: 127). SCRAP research is currently attempting to duplicate such important surveys in the area of Alabama for comparative purposes, as well as conducting soil chemistry and isotopic studies to discuss domesticates such as cacao and maize in the area (Peuramaki-Brown 2017b).

It was Graham's preliminary research and thoughts on the clays and granites of the region that have been particularly insightful and inspirational with regard to resource procurement, development, and trade. Graham (1994) clearly states the importance of the unique clay resources in the Stann Creek District, which is home to many high-quality deposits associated with the erosion and drainage of the igneous and metamorphic portions of the eastern Maya Mountains, as well as the Santa Rosa sedimentary materials. This is in contrast to the primarily karst-derived deposits of the rest of the Maya lowlands. Because the ceramics of the district are subject to intense erosion due to acidic soils, Graham (1986, 1994) also explained her reservations about the use of the type-variety system in discussions of chronology and cultural affiliations. To overcome some of these issues, she initiated the first archaeological and geological study of clay resources and Maya pottery manufacture in the district, collecting clay samples from drainages along the eastern face of the Maya Mountains and providing macrovisual descriptions and possible correlations with the most commonly observed ceramic fabrics (Graham 1994). She concluded that many of the ceramic types encountered in the district would have been manufactured locally, both at inland settlement sites and coastal specialized sites. She went on to theorize that East-Central Belize was an important origin point for exported clay minerals and slips; in particular, she suggested that the high-quality kaolin clays of the Swasey drainage may have been exported beginning in the Early Classic for bichrome and polychrome base slips. Overall, Graham's discussion of clays, highlighted by her musings over polychrome development, called for assessments of internal inter-community relationships in the Maya lowlands vs. the more commonly pursued external extra-lowland influences.

In 2015, SCRAP researchers picked up where Graham left off by providing preliminary characterizations of clays and ceramic (pottery and daub) fabrics recovered from the Alabama area in the southern end of the district (Howie 2018; Peuramaki-Brown *et al.* 2017b). Clays were randomly sampled during preliminary settlement reconnaissance at the site in 2015, and test briquettes were fashioned. These samples, along with a selection of the most commonly observed fabrics at settlement sites (residential groups) throughout the area, were subject to thin section petrographic analysis. These preliminary findings have helped to begin highlighting the complexity of the geological base line in this small area of the district, and to identify local fabrics, in addition to possible imports, including materials from the Bladen Formation to the south and the Hummingbird to the north, as well as Belize Valley grog—highlighting the complex relationships that existed between communities of the eastern Maya Mountains and beyond.

A unique situation of the inland Maya of East-Central Belize was their ease of (direct) access to materials from the two granitic plutons of the eastern Maya Mountains; these materials were commonly used for construction materials (hewn blocks and slabs), as large deposits of limestone are lacking in the district, and for the manufacture of various groundstone items. Graham's collaboration in the 1980s with geologist Webster Shipley, who had conducted characterization studies of the Maya Mountains granites as part of his Master's thesis in the 1970s,

served as an extension of her work in the Stann Creek District where she noted the important use of the material at sites such as Mayflower (Shipley 1978; Shipley & Graham 1987). Through thin section petrographic analysis, Shipley characterized all three granite sources of the Maya Mountains—Mountain Pine Ridge, Hummingbird, and Cockscomb plutons, the latter two associated with the Stann Creek District—and sourced granite artifacts recovered from the sites of Seibal and Uaxactun in Guatemala. Not only were the three major granitic bodies differentiated, but the batholiths themselves were found to comprise different and distinguishable rock types, allowing for more detailed sourcing data. This study and collaboration, above all, demonstrated the advantages that stem from cross-disciplinary collaborations, but also the potential for granite source studies to contribute to discussions regarding trade relationships among the ancient Maya. Up to that point, Mayanists had been primarily concerned with the sourcing of obsidian and pottery to address long-distance trade relations. The results of their work suggested that the pinpointing of sources of raw materials used in groundstone tool manufacture was possible, but that more work needed in characterizing outcrops and assembling comparative collections.

Since 2014, SCRAP researchers have attempted to build from Graham and Shipley's work through additional visual analyses and non-destructive geochemical characterization studies of granites and artifacts—including construction materials (Figure 3)—from around Alabama, situated between the main Cockscomb pluton and various offshoots. Samples of granitic materials were collected from primary and secondary source zones around Alabama and subject to petrographic, desktop X-ray fluorescence (XRF), and portable XRF (pXRF) analyses (Tibbits 2016). From these results, along with source samples collected from the remaining two plutons, environmental scientist Tawny Tibbits was able to develop a method for sourcing granite materials based on non-destructive pXRF values. She then pXRF analysed artifacts from sites throughout Belize in order to discuss source zone access and trade.

Figure 3: Example of domestic architecture using hewn granite blocks at Alabama (Str. ALA-047C, Suboperation 354C). Photo facing east. East unit wall measures 1 m north-south (photograph by M. Peuramaki-Brown).

At Alabama, not surprisingly, most materials (artifacts and architecture) originate from local foothill drainages linked to the Cockscomb pluton and its offshoots, as well as 'erratic' boulders that have made their way down into the alluvial valley where the site is situated, likely due to past hurricane activity. What is most intriguing about Tibbits' results is the possibility of detecting elemental variation associated with the various sub source zones, which could potentially influence our future ability to discuss resource access on a micro-scale at Alabama. The predominance of granite throughout the Alabama monumental core and settlement zone, as both formal construction materials and artifacts, emphasizes the importance of this Cockscomb resource, materials of which also found their way into the hands of Maya at the site of Uxbenka about 100 km to the south and Tipan Chen Uitz over 100 km northwest (following hypothesized trade routes). Additionally, Mountain Pine Ridge *manos* made it into the hands of Alabama Maya; an interesting finding, particularly given the naturally occurring presence of granite materials in the area. This presence will be further investigated, as it relates to the general qualities of granites represented in the Cockscomb, inter-regional trade engaged by the Alabama Maya, and/or the possible origins of late arriving populations in the area, related to SCRAP research into boomtowns.

SCRAP researchers have also been pursuing obsidian sourcing studies to further understand the connection of Alabama to existing trade routes within the Maya world during the Late-Terminal Classic (and possibly beyond), which has afforded a quick glimpse into the relationships between the Alabama Maya and far-flung regions of the Maya world. Preliminary sourcing of 49 obsidian artifacts surface collected during settlement survey has demonstrated an unusually high presence of Ixtepeque obsidian (65%; n = 32), compared to neighbouring areas and regions where Ixtepeque access does increase but does not make up the majority of the assemblage (Williams *et al.* 2016; see also Golitko *et al.* 2012 for obsidian network discussion); this may imply a more substantial Early Postclassic occupation for the site than previously believed, or access to different trade networks than neighbouring Maya. Questions generated from these preliminary results led to the additional sourcing of 119 obsidian artifacts recovered from excavations at three residential groups in one area of the settlement where El Chayal actually dominated the assemblages (Williams *et al.* 2017). Overall, this study has led to questioning occupation dates established in the 1980s by the PPAP, suggesting occupation in the Alabama settlement extended into the Early Postclassic; however, differences in obsidian access between late-occupation settlement sites suggest that different sub-communities within the Alabama settlement may have had access to different resource networks. This might be expected in a community that developed rapidly, perhaps related to power vacuums initiated in the late facet of the Late Classic or the migration of populations from inland communities during the 9th century political collapse of many lowland Maya polities. This may represent an interesting dynamic within the community, with individuals and groups accessing different trade networks—both coastal and inland. As discussed above, compositional diversity was also made evident in recent SCRAP ceramic petrography studies, and may contribute to better understanding Alabama as a possible boomtown and/or hub. As originally suggested by Graham (1994), the Alabama site may have functioned as a "broker," "gateway community," or "way station," interfacing between groups or trade routes, and possibly influencing how goods like obsidian were moved further inland to sites such as Pearce.

Final Thoughts

Since the publication of Thompson's two volumes in the 1970s, we have come a long way in our knowledge of the people, places, and things of East-Central Belize. Through past and on-going investigations of chronology, settlement, and resource use and trade, researchers continue to set the stage for creating a solid foundation of archaeological evidence pertaining to culture history and processual understandings that will enhance future investigations of trade, exchange, economy, subsistence, and social and political organization—not only within this small sub region of the Maya world, but well beyond. East-Central Belize may lack the large, grand centres of elsewhere and the beautiful epigraphic texts, but it is in the minute details that we are uncovering interesting stories and dynamics that will better our overall understanding of Maya prehistory and history.

Acknowledgements. For an updated, modified, and expanded version of this paper, please see the *Research Reports in Belizean Archaeology*, Volume 17 (2020): 221-235. The author would like to thank Elizabeth Graham for her on-going support and encouragement of research in the Stann Creek District of Belize. The SCRAP research discussed in this paper was funded by the Social Science and Humanities Research Council of Canada, Athabasca University, and donations through Experiment.com, and permitted by the Belize Institute of Archaeology.

References cited:

Barth, Gunther
1975 *Instant Cities: Urbanization and the rise of San Francisco and Denver*. New York: Oxford University Press.

Blackmore, Chelsea & Brenda Arjona
2018 Historical Archaeology in the Southern Belize Cays. Presentation at the *Belize Archaeology Symposium*, San Ignacio, Belize, June 2018.

Dunham, Peter S.
1996 Resource Exploitation and Exchange among the Classic Maya: Some initial findings of the Maya Mountains archaeological project. In: *The Managed Mosaic: Ancient Maya agriculture and resource use*, edited by Scott Fedick: 315-334. Salt Lake City: University of Utah Press.

Dunham, Peter S., & Phil Wanyerka
1994 The Southern Highway Archaeological Assessment: Field Reconnaissance. Final Report to the Inter-American Development Bank and the Government of Belize.

Dunham, Peter S., Robert C. Murray, William E. Brooks, Robert P. Reynolds, Theresa H. Cookro & Jeremy F. Jacobs
1995 *Field Report of the 1995 Season of the Maya Mountains Archaeological Project (MMAP).* Unpublished technical report. Belmopan, Belize: Department of Archaeology, Forest Department, Office of Geology and Petroleum, Belize Audubon Society. Washington, D.C.: The National Geographic Society. Cleveland: KeyCorp. Masin: The Dart Foundation.

Gann, Thomas W.F.
1918 *The Maya Indians of Southern Yucatan and Northern British Honduras*. Bureau of American Ethnology Bulletin No. 64. Washington, D.C.: Smithsonian Institution.

Gibson, Eric C. & Alan Moore
1987 *Maintzunun and Mayflower: Report of investigations, March 1987.* Unpublished technical report. Belmopan, Belize: Department of Archaeology.

Golitko, Mark, James Meierhoff, Gary M. Feinman & Patrick Ryan Williams
2012 Complexities of Collapse: The evidence of Maya obsidian as revealed by social network graphical analysis. *Antiquity* 86: 507-523.

Graham, Elizabeth A.
1976 *Archaeology of the Stann Creek District, Belize: Stann Creek Project 1975 Interim Report*. Unpublished technical report. Cambridge: Centre of Latin American Studies, University of Cambridge.
1978 Archaeological Investigations in the Stann Creek District. *Belizean Studies* 6 (4): 16-26.
1983 *The Highlands of the Lowlands: Environment and archaeology in the Stann Creek District, Belize, Central America.* Unpublished PhD dissertation. Cambridge: University of Cambridge.
1985 Facets of Terminal to Post-Classic Activity in the Stann Creek District, Belize. In: *The Lowland Maya Postclassic*, edited by Arlen F. Chase & Prudence M. Rice: 215-229. Austin: University of Texas Press.
1986 Barton Ramie Ceramic Types at Colson Point, North Stann Creek: A focus on the Protoclassic. *Cerámica de Cultura Maya* 14: 32-38.
1987 Resource Diversity in Belize and its Implications for Models of Lowland Trade. *American Antiquity* 52: 753-767.
1989 Brief Synthesis of Coastal Site Data from Colson Point, Placencia, and Marco Gonzalez, Belize. In: *Coastal Maya Trade*, edited by Heather McKillop & Paul F. Healy: 135-154. Trent University, Occasional Papers in Anthropology, No. 8. Peterborough: Trent University.
1994 *The Highlands of the Lowlands: Environment and archaeology in the Stann Creek District, Belize, Central America.* Monographs in World Archaeology No. 19. Madison: Prehistory Press. Toronto: The Royal Ontario Museum.
2001 Stann Creek District. In: *Archaeology of Mexico and Central America: An encyclopedia*, edited by Susan Toby Evans & David L. Webster: 684-686. New York: Garland Publishing.

Gundy, E. Z. & Logan McNatt
1984 *Kuchil Balum (Site 33/185-2).* Unpublished site catalogue sheet. Belmopan, Belize: Department of Archaeology.

Howie, Linda
2018 *Results of Petrographic Analysis of Alabama Site Clays, Pottery and Building Materials.* Unpublished technical report. London, ON: HD Analytical Solutions, Inc.

Joyce, Thomas A.
1931 *Report of the British Museum Expedition to British Honduras, 1931.* Unpublished technical report. London: British Museum.

Joyce, Thomas A., James Cooper Clark & J. Eric Thompson
1927 Report on the British Museum Expedition to British Honduras, 1927. *The Journal of the Royal Anthropological Institute of Great Britain and Ireland* 57: 295-323.

Kidder, Alfred V. & Gordon F. Ekholm
1951 Some Archaeological Specimens from Pomona, British Honduras. *Notes of Middle American Archaeology and Ethnology* 102: 429-437.

Leventhal, Richard M.
1990 Southern Belize: An Ancient Maya Region. In: *Vision and Revision in Maya Studies*, edited by F.S. Clancy and P.D. Harrison: 124-141. Albuquerque: University of New Mexico.
1992 The Development of a Regional Tradition in Southern Belize. In: *New Theories on the Ancient Maya*, edited by Elin C. Danien and Robert J. Sharer: 145-153. University Museum Symposium, Volume 3. Philadelphia: The University of Pennsylvania Museum.

MacKie, Euan W.
1985 *Excavations at Xunantunich and Pomona, Belize, in 1959-60*. BAR International Series 251. Oxford: British Archaeological Reports.

MacKinnon, J. Jefferson
1985 The Point Placencia Archaeological Project 1984-85 Fieldwork. *Mexicon* 7 (5): 80-83.
1986 In Search of the Ancient Maritime Maya. *Wisconsin Academy Review* 32 (3): 111-122.
1987 Preliminary Report: Point Placencia Archaeological Project, December, 1986-January, 1987. Unpublished technical report. Belmopan, Belize: Department of Archaeology.
1988a Point Placencia Archaeological Project Belize, Central America: Excavations at C'hacben K'ax, Alabama, Stann Creek District, Belize, 1986-88. Unpublished technical report. Belmopan, Belize: Department of Archaeology.
1988b C'hacben K'ax, 1985-88: Excavations at Alabama, Stann Creek District, Belize. Unpublished technical report. Belmopan, Belize: Department of Archaeology.
1989a *Spatial and Temporal Patterns of Prehistoric Maya Settlement, Procurement, and Exchange on the Coast and Cays of Southern Belize.* Unpublished PhD dissertation. Madison: University of Wisconsin.
1989b *Preliminary Report of the Point Placencia Archaeological Project: Consolidation of the ballcourt at C'hacben K'ax and archaeological survey of the Northern Cays of the Stann Creek District, Belize.* Unpublished technical report. Belmopan, Belize: Department of Archaeology.
1989c Coastal Maya Trade Routes in Southern Belize. In: *Coastal Maya Trade*, edited by Heather McKillop & Paul F. Healy: 111-122. Trent University Occasional Publications in Anthropology, No. 8. Peterborough: Trent University.
1990 Tobacco Range, South Water Cay, Placencia Cay and Maya Sea Trade Routes in Belize. *Mexicon* 12 (4): 75-78.
1991a Point Placencia Archaeological Project, 1991 Fieldwork. *Precolumbian Art Research Institute Newsletter* 14.
1991b Preliminary Reconnaissance of the Quebrada de Oro Site: Implications for a Regional Model of Maya Civilization in Southern Belize. *Mexicon* 8 (13): 87-91.

MacKinnon, J. Jefferson & Susan M. Kepecs
1989 Prehispanic Saltmaking in Belize: New evidence. *American Antiquity* 54 (3): 522-533.
1991 Prehispanic Saltmaking in Belize: A reply to Valdez and Mock and to Marcus. *American Antiquity* 56 (3): 528-530.

MacKinnon, J. Jefferson & Emily M. May
1990 Small-Scale Maya Lime Making in Belize: Ancient and modern. *Ancient Mesoamerica* 1 (2): 197-203.
1991 The Ballcourts of C'hacben K'ax and its Neighbors: The Maya ballgame and the Late Classic Colonial impulse in Southern Belize. In: *The Mesoamerican Ballgame: papers presented at the international colloquium "The Mesoamerican Ballgame 2000 BC-AD 2000, Leiden, June 30th-July 3rd, 1988,"* edited by G.W. van Bussel, P. L. F. van Dongen & T. J. J. Layenaar: 71-80. Leiden: Rijksmuseum voor Volkenkunde.

MacKinnon, J. Jefferson, Jeffrey M. Olson & Emily M. May
1993 "Megalithic" Maya Architectural Features at the site of Chacben Kax, Alabama, Stann Creek District, Belize, CA. *Mexicon* 15 (1): 1-4.

Marcus, Joyce
1991 Another Pinch of Salt: A comment on MacKinnon and Kepecs. *American Antiquity* 56 (3): 526-527.

Mitchell-Hedges, Frederick W.
1931 *Land of Wonder and Fear.* Century and Co., New York

Moberg, Mark
1997 *Myths of Ethnicity and Nation: Immigration, work, and identity in the Belize banana industry.* Knoxville: University of Tennessee Press.

Moutsiou, Theodora
2011 The Obsidian Evidence for Scale of Social Life during the Palaeolithic. Unpublished Ph.D. dissertation, London: Royal Holloway, University of London.

Peuramaki-Brown, Meaghan (editor)
2015 *The Stann Creek Regional Archaeology Project: Report of the second (2015) field season.* Unpublished technical report. Belmopan, Belize: Institute of Archaeology.
2016a *The Stann Creek Regional Archaeology Project: Report of the third (2016) field season.* Unpublished technical report. Belmopan, Belize: Institute of Archaeology.

Peuramaki-Brown, Meaghan
2016b Settlement and Resource Development at Alabama, Belize: Past, present, and future investigations. *Research Reports in Belizean Archaeology* 13: 239-250.
2017a Revisiting the Ancient Maya of Alabama, Belize: Description, recent research, and future directions. *Mexicon* 39: 64-72.
2017b *Becoming an Ancient Maya Boomtown: People, spaces, and things in East-Central Belize.* Successful Insight Grant proposal submitted to the Social Sciences and Humanities Research Council of Canada. Manuscript in possession of author.

Peuramaki-Brown, Meaghan & Shawn Morton
2016 The 2016 Reconnaissance of the Pearce Sites of the Cockscomb Basin Reserve. In: *The Stann Creek Regional Archaeology Project: Report of the third (2016) field season*, edited by Meaghan Peuramaki-Brown: 111-124. Unpublished technical report. Belmopan, Belize: Institute of Archaeology.
2018 Maya Monumental 'Boom': Spatial development, rank ordering, and planning considerations at Alabama, East-Central Belize. Conference presentation at the *83rd Annual Meeting of the Society for American Archaeology*, April 12, Washington, D.C. Manuscript in possession of author.

Peuramaki-Brown, Meaghan, Shawn Morton & Cristina Oliveira
2018 "Some lessons can't be taught, they simply have to be learned": Experiences from three seasons of investigations at Alabama, Stann Creek District. *Research Reports in Belizean Archaeology* 15: 297-306.

Peuramaki-Brown, Meaghan, Shawn Morton, Tawny Tibbits & Lisa Green
2017a Phase I Reconnaissance (2014-2015) At Alabama: A summary of SCRAP investigations in East-Central Belize. *Research Reports in Belizean Archaeology* 14: 299-309.

Peuramaki-Brown, Meaghan, Linda Howie & Joanna Potter
2017b Pre-Columbian Pottery and Building Materials of the East-Central Belize Maya: A petrographic characterization study. Conference presentation at the *82nd Annual Meetings of the Society for American Archaeology*, Vancouver, British Columbia, Canada, April 2017.

Peuramaki-Brown, Meaghan & Sonja Schwake (editors)
2014 *The Stann Creek Regional Archaeology Project (SCRAP): Results of the first (2014) field season.* Unpublished technical report. Belmopan, Belize: Institute of Archaeology.

Price, H. W., Esq.
1899 Account of excavations on Sittee River, British Honduras. *Society of Antiquaries*, Feb. 16, 1899.

Prufer, Keith M. & Peter S. Dunham
2009 A Shaman's Burial from an Early Classic Cave in the Maya Mountains of Belize, Central America. *World Archaeology* 41 (2): 295-320.

Rabinowitz, Alan
1987 *Jaguar: One Man's Struggle to Save Jaguars in the Wild*. London: Collins.

Schafer, Kevin
1987 Chacben Kax: The first excavations of a newly discovered ceremonial site provide new links to Maya sea traders. *Earthwatch* Oct-Nov. 1987: 19-23.

Shipley, III, Webster E.
1978 *Geology, Petrology, and Geochemistry of the Mountain Pine Ridge Batholith, Belize, Central America.* Unpublished Master's thesis. Golden: Colorado School of Mines.

Shipley, III, Webster E. & Elizabeth Graham
1987 Petrographic Analysis and Preliminary Source Identification of Selected Stone Artifacts from the Maya Sites of Seibal and Uaxactun, Guatemala. *Journal of Archaeological Science* 14: 367-383.

Schele, Linda & Mary Ellen Miller
1986 *The Blood of Kings: Dynasty and ritual in Maya art.* Fort Worth: Kimbell Art Museum.

Sills, Cory
2016 Re-evaluating the ancient Maya salt works at Placencia Lagoon, Belize. *Mexicon* 38 (3): 69-74.

Stomper, Jeffrey & Wendy L. Brown
1998 *Mayflower Archaeology Project: Final report summer field season 1998.* Unpublished technical report. Belmopan, Belize: Department of Archaeology.
1999 *Mayflower Archaeology Project: Kendal excavations report.* Unpublished technical report. Belmopan, Belize: Department of Archaeology.

Stomper, Jeffrey, Wendy Brown & Elizabeth Pope
2004 Recent Research at Mayflower, Stann Creek District, Belize. *Research Reports in Belizean Archaeology* 1: 323-331.

Tibbits, L.B., Tawny
2016 *Geochemical Sourcing of Granite Ground Stone Tools from Belize.* Unpublished PhD dissertation. Iowa City: University of Iowa.

Thompson, J. Eric S.
1930 *Ethnology of the Mayas of Southern and Central British Honduras*. Field Museum of Natural History Publication 274, Anthropological Series, Vol. VII, No. 2. Chicago: Field Museum of Natural History.
1970 [1990] *Maya History & Religion*. Norman: University of Oklahoma Press.
1972 [1988] *The Maya of Belize: Historical chapters since Columbus*. Belize: Cubola Productions.

Toledo Maya Cultural Council (TMCC) & Toledo Alcaldes Association (TAA)
1997 *Maya Atlas: The struggle to preserve Maya Land in Southern Belize.* Berkeley: North Atlantic Books.

Valdez, Jr., Fred & Shirley B. Mock
1991 Additional Considerations for Prehispanic Saltmaking in Belize. *American Antiquity* 56 (3): 520-525.

Walters, Gary Rex
1988 *Field Report Dec. 1987-Jan. 1988 Point Placencia Archaeological Project.* Unpublished technical report. Belmopan, Belize: Department of Archaeology.

Wanyerka, Phil
1999 Pecked Cross and Patolli Petroglyphs of the Lagarto Ruins, Stann Creek District, Belize. *Mexicon,* 21: 108-111.
2003 *The Southern Belize Epigraphic Project: The hieroglyphic inscriptions of Southern Belize.* Unpublished technical report. Foundation for the Advancement of Mesoamerican Studies, Inc. Available online: *www.famsi.org/reports/00077/wanyerka_full.pdf*

Willey, Gordon R. & Jeremy A. Sabloff
1993 *A History of American Archaeology*. Third edition. New York: W. H. Freeman and Company.

Williams, A. Megan, Elizabeth Paris, Tristan Carter & Meaghan Peuramaki-Brown
2017 The Implications of Obsidian Source Analysis to Occupational Chronology and Economic Relations at Alabama, Belize. Conference presentation at the 50th annual meetings of the Canadian Archaeological Association, Ottawa, Ontario, Canada, May 2017. Manuscript in possession of author.

Williams, A. Megan, Meaghan M. Peuramaki-Brown & Tristan Carter
2016 Implications of Obsidian Source Analysis in the Stann Creek District of Belize. Conference presentation at the *Athabasca University 2016 Graduate Student Conference*, Edmonton, Alberta, Canada, September 2016.

Williamson, Richard & Jeff Stomper
1996 *Mayflower Archaeology Project 1996 Final Report.* Unpublished technical report. Belmopan: Department of Archaeology.

Wilson, C.H.
1886 *Notes on River Surveys.* British Honduras: Local Publication.