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The Problematical, The Cave, and The Maya: A Theoretical Discussion and Ethnoarchaeological Investigation

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THE PROBLEMATICAL, THE CAVE, AND THE MAYA:
A THEORETICAL DISCUSSION AND ETHNOARCHAEOLOGICAL INVESTIGATION

By

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Abstract

This project concerns itself with the theoretical framework and application of ethnoarchaeological research methods in the Maya region. Following an in-depth discussion of ethnoarchaeology and its theoretical locus within archaeology as well as the transformations it has seen in recent year, the current work focuses on the following source- and subject-side cultural groups and phenomena: cave use at La Ventana and La Ventana Campana by Maya peoples from the Suchitepéquez and Sololá Department of Guatemala in comparison with Problematical Deposit 21 at Tikal, Petén, Guatemala. The purpose of this work is not only to investigate the case study mentioned above but also to take stock of ethnoarchaeological, ethnographic, and archaeological work in the region and critically assess the potential of ethnoarchaeology in the Maya region.

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Problem Statement: Terminal Deposits and Ethnoarchaeology

As an archaeologist specializing in Classic Maya civilization, I find the presence of a robust descendant population as worthy of acknowledgement. Specifically, modern Maya communities provide insight which can combat preconceived, Western understandings of indigeneity, culture, and the "sacred." As a researcher who finds herself grounded in Western, Judeo-Christian ideology this is of particular import; in order to confront the biases and misconceptions which crop up when investigating culture –specifically a culture other than one's own- as comprehensive an understanding as possible should be sought. In this project I propose to study modern cultural and social processes as a potential analogue for ancient behavior specifically involving ritual processes, and, individual and group conduct; the subject matter will be the Early Classic Period[1] and so called terminal deposits. Terminal deposits, also addressed in academic literature (see Culbert 1993; Fitzsimmons and Shimada 2011; Inomata and Triadan 2000; Ponce de Leon 1988; Sheets 2000) as "problematic," are deposits containing, but not restricted to, diverse material content, evidence of burning, complete and fragmentary lithics and their debitage. Other documented contents of "termination" deposits include marl and decayed organic matter, to name a few (Ambrosino 2007; Stanton et al. 2008; Suhler 1996).

In order to gain a more holistic understanding of complex Early Classic processes and ritual[2] I propose the examination of regionally prevalent, heterogeneous deposits in lowland city centers from the Early Classic, specifically Problematical Deposit 21 at Tikal, in conjunction

[1] ~250-600 CE.

[2] Coeval with marked emigration, depopulation of various city centers, and the fall of the divine kingship.

with contemporary deriving from quotidian ritual practice by Maya communities[3]. These practices have been documented ethnographically (See Bunzel 1952; Carmack 1969; Cook 2000; Mock 1998 Molesky-Poz 2006; Palka 2014) archaeologically (See Ambrosino 2007, Chase and Chase 2004, 2007, 2009; Clayton et al. 2005; Coe 1965, 1990; Garber 1986; Garber et al. 1998; Harrison 1970, 2000; Harrison-Buck et al. 2007; Iannone 2010; Inomata 1997, 2003; Inomata and Stiver 1998; Inomata and Webb 2003; Koenig 2014; Kosakowsky and Robin 2009; Mock 1998; Pagliaro et al. 2003; Palka 1962; Suhler 1996; Vogt 1976; Walker 1998; Wells and Davis-Salazar 2007) and, in broader contexts, ethnoarchaeologically (See Brown 2005; Deal 1985; Hayden and Cannon 1984; Ishihara-Brito and Guerra 2011; Mock 1998; Oakes 1951; Palka 2014; Vogt 1976) employing various terminology to describe these pervasive deposits. Using the ethnoarchaeological framework I explain below, I examine the following questions: How does one make a case for examining ancient ritual and can ethnoarchaeology be brought to bear on these questions? For example, is there a recognizable continuity in these behaviors between the past and present? What does this mean in terms of our understanding of past cultural processes? How can our theoretical and objective practices be more informed and focused by adopting ethnoarchaeology as an approach to such contexts?

Through critical analysis of present day contexts, I consider ethnoarchaeology as a viable strategy for understanding ancient ritual practice. A research strategy more than a methodology, ethnoarchaeology is an amalgam of archaeology and ethnography in which ethnography of modern populations is used to inform the study of ancient populations through a material record (David and Kramer 2001). Stated another way, ethnoarchaeology can be considered to include the kinds of ethnographic questions/research an archaeologist would ask of a present population.

[3] Eg. Momostenango (Carmack 1973; Tedlock 1992), Lacandon (McGee 2001), Chichicastenango Bunzel 1952, 1976), Zinacantán (Cancian 1965, 1972; Haviland 1988; Vogt 1969), Momostenango (Warren 1997)

That is, an archaeologist seeks to understand ancient behavior(s) through patterned, material remains. An ethnoarchaeologist conducts ethnographic research in collaboration with extant populations with the purpose of critically considering that group's engagement with and meaning(s) attributed to their constituted material world. The ethnography can be focused in nature -as specific as craft or technological process, ritual, etc. - or examine a culture more extensively through ethnography based upon participant observation spanning a significant length of time rather than solely during a specific event. Upon addressing the suitability of ethnoarchaeology in the context of the Maya region, I examine how, in the case of so-called terminal deposits, knowledge of modern ritual actions and their material remains may present an approach to gain insight into ancient behavior and intentionality.

The Ancient Maya Region: a brief historical review

Figure 1.1 The map featured above shows the distribution of the indigenous cultures of Mesoamerica, some of which continue to occupy the same areas (FAMSI 2014).

Starting in the early 2000s BCE (Early Preclassic) until approximately 1521 CE (Late Postclassic), the ancient Maya inhabited regions which span an area from southwestern Mexico through the jungles and highlands of Guatemala, and into northern Honduras and El

Salvador (See Figure 1.1). As archaeologists continue to investigate ancient activity, ethnographers engage contemporary Maya communities across southern México and northern Central America. A dynamic and heterogeneous cultural group, the (Ancient) Maya continue to be a point of research and discussion amongst anthropologists and archaeologists alike.

Paleoindian Period: ca. Post-glaciation-3500 BCE. It should be noted that preceding the Preclassic, Mesoamerica was inhabited by Paleoindian peoples -approximately 11,500 Ka. This influx of habitation followed the period of glaciation, after which the Pleistocene glacier retreated from the area. Heather McKillop describes the inhabitants as users of "stone tools to hunt ice age animals" (2004). Limited societal structure has been interpreted based on the archaeological record as it currently stands; the association of big game remains with stone tools hints to collaborative hunting efforts (Sharer and Traxler 2006). Following the end of the ice age times, a shift from large to small game[4] (Mckillop 2004; Sharer and Traxler 2006).

Archaic Period: ca. 3500-2000 BCE. As acknowledged by Arthur Demarest in his book titled, *Ancient Maya: The Rise and Fall of a Rainforest Civilization* (2004), there is little known about residence within what is today considered the Maya region specifically, at least not until around 1000 BCE. There is, however, compelling evidence of small villages along the coasts of the Caribbean Sea and the Pacific Ocean, and farther inland across Mesoamerica, marking a shift from nomadic lifeways to small communities sustaining themselves from territorially based foraging (Sharer and Traxler 2006, McKillop 2004). Jon C. Lohse recognizes that for many Mayanists, groups predating the Preclassic are constituents of a separate cultural group to "the Maya" (2010). However, he argues that there is, especially in the Late Archaic Period, that certain sites contain evidence of forager horticulturists. This challenges the conception of

[4] McKillop notes specifically deer and rabbits, especially during the Early Archaic.

"sedentary village farmers," the stereotypical members of Mesoamerican society (Lohse 2010). This regional foraging in the Early Archaic expands into the later dawn of agriculture; the earliest agriculture in the Maya region has been established through palynological analysis in northern Belize. Mary D. Pohl et al. (1996) found that the introduction of maize and manioc occurred in the region circa 3000 BCE. Later on, between 1500-1300 BCE, there is a marked intensification of agricultural processes, as shown in the expansion of paleo-wetland environments (Pohl et al. 1996). Although this expansion is seen mid-II millennia BCE, the accepted end of the Archaic Period is contemporaneous with the establishment of ceramic works in the Maya area.

Preclassic Period[5]*: ca. 1800 BCE-250 CE.* At this point in time, it is generally agreed that the "Maya" as a people and culture begin to socially and geographically come into being; the phrase "come into being" meaning that it is during this period when what is known as Mayan culture is recognized within complex and interacting populations. With the development of ceramic technology ca. 2000 BCE, comes primary instances of material culture. Luis Dumois'(1999) highlights of the Preclassic Period include the preliminary establishment of a writing system and the initiation of an (in)famous calendrical system in the Middle Preclassic (1000-300 BCE), and the inception and implementation of the Maya system of divine kingship in the Late Preclassic (300 BCE-250 CE). Although the end of the Preclassic is marked with the rise of divine kingship, most of the Preclassic Period is characterized by small, agricultural, village communities; simple architecture and infrastructure point to a small community-centric society (McKillop 2004). In the years preceding the construction of the divine kingship, village life was characterized by "mixed subsistence base, the beginnings of part-time craft specialties,

[5] Also addressed in academic literature as the Formative Period.

distinctions in social status, and long-distance trade connections" (Sharer and Traxler 2006: 163). These long-distance trade routes, although established in the Early to Middle Preclassic, were further developed in the Late Preclassic, notably for "elite"[6] items such as jade, obsidian. In comparison, to the rather homogenous, smaller structures atop earthen platforms of the Early to Middle Preclassic, the Late Preclassic architectural styles began to foreshadow the massive cityscapes associated with Early and Late Classic constructions. In tandem with widespread increases in cultural complexity in terms of a formation of a divine kingship system which is coterminous with extensive trade systems, technological advancements, and increasingly complex and labor-intensive public works in the form of architecture and monuments, site centers began to incorporate larger pyramidal temples with stuccoed and/or painted facades during the Late Preclassic (McKillop 2004).

Early Classic Period: ca. 250-600 CE. Following a surge in "demographic growth and cultural florescence" across the Maya region in the Late Preclassic, the Early Classic period was marked with significant population decline paralleled by a slow in construction, specifically in the lowland region (Demarest 2004: 103). However certain sites appear to have persevered through this trend; Tikal -in the southern lowlands- adversely, flourished with construction of monumental architecture increasing during this period[7]. Cultural trends spread south from the Petén of the southern lowlands to the highland region (Rathje 1971). In her discussion of the

[6] While the following items are associated with high social standing, later on in the Maya chronology, certain items are exploited by populations of lower socio-economic level as well -especially obsidian.
[7] At this time, the beginning of the emphasis on dynastic rulership, these construction episodes mark the physical manifestation of the success of contemporary rulers.

Early Classic period, McKillop (2004) comments on the political organization and societal progression that:

> The ruler and the royal court of each city-state were supported in part by the subsistence farmers who provided labor and food to the Maya royalty. The royal Maya courts were located in the cities, including craft specialists producing finely made goods for the elite; artisans working on a variety of building, plastering, and craft projects; and bureaucrats. … reached their peaks. [McKillop 2004: 8-9]

During the Early Classic the multilateral, political system was beginning to take shape, eventually resulting in relationships reaching as far as Teotihuacan in the 4th century CE (Demarest 2004). Both local and intraregional trade systems emerged (See Rathje 1971: metate example) and further solidified into the Classic Period. Dynastic kingship, the monarchical political structure of the Ancient Maya society, entwined into many aspects of society: as the liaison to the gods, the king in power held an amalgam of political, social, and spiritual power (Freidel and Schele 1990; McAnany 1995).

These rulers were part of an elite class of individuals who maintained a certain social prestige. Freidel and Schele note that "The kings of Palenque [Modern Chiapas, México] left a substantial record of texts carved on the fine-grained limestone monuments of their city" (1990: 217); the inception of the practice of divine kingship coincides with the so-called "stela cult" (See Justeson and Mathews 1983; Newsome 1996; Rathje 1971) or the quasi-ubiquitous[8] sociopolitical practice of erecting commemorative monuments in public spaces -manifesting in simple and plain or carved with imagery and hieroglyphic inscriptions[9] and dates detailing, in many cases life events of Maya rulers. According to Michael D. Coe, "The Classic [Period] in

[8] Especially in the Lowlands.
[9] Some argue that these would not be legible by the common Maya person, thought McKillop argues that they served to display propagandized information about "the ruler and the ruler's exploits" (2004: 94).

fact can only be defined accurately as that span during which the lowland Maya were using the Long Count calendar on their monuments" (1993: 71).

Late Classic Period: ca. 600-900 CE. Known as the apogeal period of the Maya civilization, the Late Classic Period is indicative of a cultural florescence: the progression of socio-cultural centralization under the dynastic kingship culminating at this time. Increases in monument erection, architectural construction, interregional trade, urban spread, and closer association and interaction amongst elites as seen through patterns of regionalization are telling of the Period (Coe 1993; Demarest 2004; Hendon 1991; McKillop 2004). Cross-regional trends of simultaneous alliance and conflict are especially evident; as Hendon recognizes, "kinship and descent thus … [became] the mechanisms by which individuals … [were] ranked within their social group and such groups … [were] stratified across the society as a whole" (1991: 895). In this tercentennial period, a surge in affluence among elite members is evident through prevailing ritual burials of then contemporary members of this tier of society (Coe 1993). It is not unfounded, therefore, to question the source of this increase in material and performed wealth. Even as the certain dynastic histories were ending in the Late Classic, the beginnings of anthropogenic climate change manifesting in the Maya region (See Curtis et al. 1996; Kennett et al. 2012; Leyden 2002), and a general pattern of decline in populations, an increase in lavish burial dedications proliferated in sites (Coe 1993; Hendon 1991).

Terminal Classic: ca. 900-1000 CE. Coming out of the Late Classic period and entering into the Terminal Classic, the Maya civilization as it is understood had accumulated significant political, environmental, and societal baggage. The so-called Terminal Classic has been discussed in many different contexts from overpopulation followed by subsequent decline and transformation (See Aimers 2007, Andrews 1973; McKillop 2004), environmental disaster (See

Hodell et al. 1995; Haug et al. 2003; Lucero 2002; and Medina-Elizade et al. 2010), and civilization collapse (See Foias and Bishop 1997; Hughes 1999; Demarest, Rice, and Rice 2004; Webster 2002, 2012), to name a few. In their introductory chapter the edited volume *The Terminal Classic in the Maya Lowlands: Collapse, Transitions, and Transformations* (2004), Rice, Demarest, and Rice acknowledge how, from the beginning, Maya studies have been entrenched in a notion of collapse and/or disappearance of the extensive (ancient) Maya civilization:

> "A century and a half of exploration and public interest in Maya archaeology was spurred by the vision of towering temples and palaces suddenly abandoned, swallowed by the jungle as their inhabitants fled for parts [and reasons] unknown." [2004:1]

The initial interest in the Maya, incited by misplaced and romantic notions of disappeared peoples and civilizations, has in recent years focused on the transitional nature of the Terminal Classic which has long intrigued archaeologists studying the ancient Maya. Much of the literature has been framed under this idea of cultural collapse (See below). However, the Terminal Classic ought not to solely be seen through this lens; the political and ideological changes of the time are equally compelling, with the fall of the divine kinship in many local polities and loss of regional power (Joyce and Weller 2007 citing Culbert ed., 1973; Demarest et al 1997; Diehl and Berlo 1989; Inomata 1997; Lucero 2002; Sabloff and Andrews 1986; Sabloff and Henderson 1993; Sharer 1994; Webster 2002). Taking a behavioral approach, Hendon (1991) examined the transformations of social/hierarchical structure in the Late and Terminal Classic, specifically within the Copán Valley; arguing that distinction based in lineage and patio or household groups form "corporate social group[s]" based upon kinship (Hendon 1991: 911). This tightly situated kinship group structure combined with "high population levels and densities in the Late Classic period … [were] a major source of ecological stress," is addressed

by Demarest (2004) as (faulted) a Malthusian-inspired cause of transformation in the Terminal Classic and is presented a potent(ial) driver of socio-political change. In the southern Lowlands, most site centers had been abandoned by 900 CE (McKillop 2004).

Problems with the Problematical

The problematical deposits have intrigued and puzzled archaeologists across the Maya region (Coe 1965, 1967, 1990; Culbert 1973, 1993; Fitzsimmons and Shimada 2011; Inomata and Triadan 2000; Navarro-Farr 2009; Ponce de León 1988; Sheets 2000; Stanton, Brown, and Pagliaro 2008). In the past, the term has been applied to varied contexts; in the words of Navarro-Farr (2009) they are "so termed because of the inconsistency of their contents, unconventionality of their locations within or with respect to architecture and, the uncertainty of the intent surrounding their placement" (2009: 95). The problematic process of contextualizing and understanding these deposits rests in the diversity of manifestations, question of origin – squatters, peripheral intruding groups, elites themselves. This process is further complicated by the lack of scholarly consensus concerning the deposits themselves; these deposits are heterogeneous in nature, in terms of their context, material content, and depositional episodes, yet terminal, or problematical, deposit is a catch-all term applied in many circumstances. Additionally, a wide variety of terminology has been applied in the past to these manifold phenomena. This variability adds to the confusion and lack of agreement concerning such deposits. Common words use to describe them are as follows: *problematical*: a "historical" term (See Coe 1965, 1967, 1990; Ponce de León 1988) "coined" for use in these contexts specifically at Tikal; *terminal*: of or associated with termination (See Ambrosino 2003, 2007; Brown 2010; Chase and Chase 2004, 2007; Garber 1989; Iannone 2010; Inomata 2003; Kosakowsky and Robin 2009; Robertson and Freidel 1986; Suhler 1996; Stanton, Brown, and Pagliaro 2008). The

term *ritual* implies a certain human, sociocultural agency in the formation of such deposits in addition to acknowledging intrinsic significance to then-contemporary populations, a significance which may be difficult to understand in a modern context – especially as the understanding of ritual versus commonplace is a dichotomy institutionalized by western thought.

In assessing these deposits, it is important to keep in mind possible intentionality of placement and choice of location. Problematical deposits are identified across millennia, in both the Early Classic and Late/Terminal Classic. With this in mind I pose the following rhetorical questions: Do all the deposits labeled as such warrant this designation? Can these deposits be further assessed and a taxonomy constructed to include and acknowledge the array of manifestations? Are some reverential in nature and others not? How might one even assess this?

Additionally, the physical manifestation of these deposits, in terms of artefactual assemblages[10] is assorted, often consisting of, in part or whole, marl, matrix, ceramics (whole, broken, figurines, polychrome, utilitarian, *incensarios* [Belize]), lithics (fragmentary, whole, debitage), human and animal remains, architectural elements (faced stones), and evidence of burning. Further complicating the issue, is the methodology of excavation. Macroexcavations[11] of these deposits exclude the possible discovery of depositional layers (which would indicate a serial use, rather than a one-time-use); with the use of microexcavation[12], archaeologists have a better chance of defining distinct layers within, above, or below these deposits. The use of different methods has resulted in incredibly different, and possibly incomparable, data-sets – adding further to the problematic assessment and categorization of deposits across the region.

[10] And the ability to completely reconstruct artifacts from the whole assemblage.
[11] Large-scale excavations for which the end goal may be to expose architecture, or remove a layer or layers situated atop lower levels of excavation.
[12] Small-scale, detailed excavations which account for more nuanced variability (soil color or composition, layers of ash, microbotanical sample changes, etc).

In the following chapters I will examine terminal deposits in the following two ways. First I address the phenomenon of terminal/problematical deposits in the Maya region, specifically the Lowlands, and explore the physical manifestations of these deposits. I additionally flush out the theoretical approaches employed in the past to hypothesize about and analyze these deposits and track the epistemological progression in addressing these deposits. In relying on an ethnoarchaeological research method through which I will audit ethnography of the Maya and past ethnoarchaeological ventures in the region, Finally, I assess the ontology of these terminal deposits taking into mind modern refuse and ritual patterns while simultaneously considering the future of ethnoarchaeological practice and analysis of such problematical deposits.

Chapter II
Theory
An explanation of assumptions, acknowledgement of challenges, definition of terms, and clarification of theoretical position

Introduction

The current study focuses on the connection between contemporary Maya communities and the Classic Maya people with the goal being to further inform research questions which guide our investigation of the past by engaging with present populations. In this ethnoarchaeological analysis the establishment of an analogue will be followed by qualitative and quantitative examinations of the source- and subject-side cultures. Within the scope of this study, one centering itself on the application of analogy between contemporary and ancient Maya populations, it is important to make clear the assumptions and understandings that result from a specific theoretical backgrounds. From the posing of research questions to the interpretations of evidence, each step in this discussion of how modern Maya ritual contexts may inform on our reading of ancient deposits is directed by specific theoretical perspectives.

Of primary importance in this discussion is the role of ethnoarchaeology and most specifically the use of analogy in such reconstructions. Central to this is the development of middle-range theory beginning with behavioral archaeology, the role of agency theory to address questions, otherwise unanswerable, by Binfordian ethnoarchaeology, and the archaeology of ritual. I will begin with a review of ethnoarchaeology and follow with a discussion on analogy. Then, I review agency and ritual theory, attempting to mitigate certain assumptions made in ethnoarchaeological research. Finally, I conclude with a discussion of ethnoarchaeology and archaeology in general in reference to the other theoretical perspectives examined in this chapter.

Ethnoarchaeology

Archaeologists rely on a material record which frames the relationships between otherwise unconnected material assemblages and provides the context in which the excavated record is situated. As a result of the reliance on subjective and objective forms of analysis, archaeology is simultaneously quantitative and qualitative. Within such analyses, the subjective, or qualitative, analysis is informed by personal ideology, theoretical leanings, and (analogical) reasoning whereas the objective, or quantitative, is substantiated by physical evidence. As it is incredibly difficult to separate our understandings of the contemporary world and societal processes from our interpretations of the past, it behooves archaeologists to acknowledge these understandings in order to more holistically conduct research. By this I contend that in order to conduct better research one must acknowledge one's own cultural biases *and* make attempts to further understand cultural systems and their connection to material culture for different populations; I further argue that one way to achieve this is by employing ethnoarchaeological strategies. According to David and Kramer (2001) the goals of ethnoarchaeology can be distilled into the following concerns: to help establish an understanding of 1) the relationships between material culture and culture (See Figure 2.1), 2) the significance(s) of a material record in living and archaeological context, "[3)] to inform archaeological concepts and … [4) to] improve interpretation" (David and Kramer 2001: 2). Jesse Fewkes described an ethnoarchaeologist as one "who can bring as preparation for his [or her] work an intense knowledge of present life" (1900:579). Ethnoarchaeological practice allows

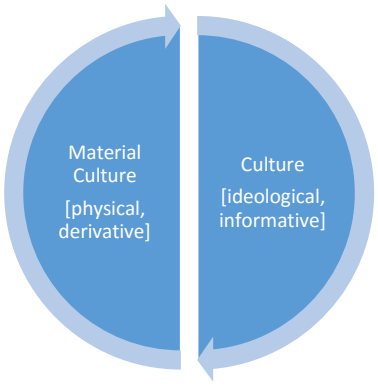

Figure 2.1 Central to the construction of ethnoarchaeological analogy is the understanding of simultaneously formative and reactive (Material) Culture as depicted in the above dialectic, between Material Culture and Culture.

the researcher to take ownership of understandings of culture change, circumventing the problematic assumption outlined by Schiffer (1975) that archaeologists rely on the definitions of cultural change as defined by the social sciences.

In his article, (1975), Schiffer addresses the fact that archaeologists often rely on contemporary understandings of cultural change. Schiffer readdresses therein what he and William Rathje designated in 1973 as "n-transforms" and "c-transforms." Both concern the processes involved in the deposition material –cultural or otherwise- and the ways in which this is reflected or absent in the contemporary static record of the past. Schiffer describes these transforms, or transformations, as "the successive transformations to which the archaeological materials have been subjected" (1975:838). "N-transforms" are non-cultural whereas "c-transforms" are cultural; it is particularly important to be able to tease the locus of post-depositional change (distinguish "C" from "N"). I view "c-transforms" as especially important because c-transform variables are what can be used to argue for cultural continuity. When addressing terminal deposits, which are often varied in material composition and often represent an extended series of depositional episodes, the "c-transforms" are important to discuss as they indicate subsequent, purposeful engagements with previously "established," "ritual" spaces. Because of the behavioral variability evident in the formation of these deposits, Schiffer argues archaeology's reliance upon contemporary laws of cultural change is problematic.

By taking an active role in the construction of these understandings of cultural change, the goal of ethnoarchaeology is to further inform on research questions and resulting interpretations. It is this process of honing research questions of past contexts in reference to contemporary understandings –which ought to be self-critical- that is specifically important to this study. As Matthew Johnson (2010) states:

> All archaeologists of whatever theoretical stripe make a link between present and past by using analogies. We always make an assumption that things in the past were like –analogous to- the present. Analogy underpins even the most mundane interpretation. (50)

Ethnoarchaeology works under the acknowledgement of this assumption and furthermore deliberately engages in cultivating a background knowledge to construct analogy. In the framework of this study, I survey archaeological reports which address so-called terminal deposits in the southern lowlands of the Maya region; in order to further inform my interpretation of these deposits, I additionally look to the ethnoarchaeological record to inform on the archaeological record. It is important to note that ethnoarchaeology is a central means of conducting middle-range archaeological research. I assert that incorporating an ethnographic understanding of modern engagement of ritual centers, documented ethnoarchaeologically, may help to further understand the processes of the Early Classic Period in the southern lowlands. Contemporary literature and communities ought to be consulted in pursuit of understanding a *dynamic* past, in contrast to how it is represented in a *static* record.

Middle-range Theory.

As anthropologists concern themselves with the dynamics of present-day societies, archaeologists attempt to reconstruct the dynamics of past societies and their cultures. In attempting this reconstruction archaeologists interpret a static record so as to assemble an understanding of a dynamic past. Middle-range theory, as addressed by Lewis Binford (1977), centers on the working connection between the past (culture) and present (material record). In the liminal space between a static record and assertions resulting from that record is the "middle-range" (Johnson 2010). In other words, this middle range rests between "particular observations of the archaeological record… [and] general theories about the past" (Johnson 2010:52). In

summation, just as middle-range research operates in between the past and the present, ethnoarchaeology is the method which constructs an analogy in order to better understand the past.

Analogy and Analogical Reasoning

As discussed above, central to the construction of ethnoarchaeological analogy is the understanding of active and reactive (material) culture (David and Kramer 2001; Johnson 2010). Furthermore, this analogy resides in the middle-range between the static record of the present and the dynamic cultural processes of the past, helping the researcher to infer more concerning the past and to guide research questions. As Cameron Shelley recognizes in *Multiple Analogies in Archaeology* (1999), "Analogical reasoning has always been a vital part of archaeological thought" (579). However, the conscious employment and recognition of this analogical reasoning has been debated and critiqued within archaeological theory for some time (Stahl 1993; Wylie 1985). As I rely heavily on ethnoarchaeological reasoning, I inherently defer to analogical interpretation. Although this form of reasoning is intrinsically uncertain, it is nonetheless useful to better, and more holistically, understanding the past. A central obstacle to constructing an analogue is that the researcher must look outside their own understanding of the surrounding world, challenging the very ideology in which one grounds themselves. In addition, the utilization of qualitative and quantitative analysis simultaneously avoids deterministic and purely positivist interpretations. Of particular import to this work is the type of analogical construction used to help address the process of interpreting the past.

John Yellen outlines four types of analogy in archaeological discourse and analysis: the *buckshot* technique: a specific ethnographic analogy contrasted to a specific archaeological question, meaning one source-side example and one subject-side example; the *laboratory*

technique: the collection of ethnographic data with the ends being to establish lab conditions within which to test hypotheses; the *spoiler* technique: using the present (source-side) to inform the questions, research strategies, and assumptions employed in analyses of the past (subject-side) –this technique harkens to the anthropological practice of "studying up" prior to engaging in field research; and the *general models* technique: the use of open-ended analogies, generalizations (which often hold more clout than due), and deterministic hypotheses to examine larger scale culture –ie. behaviors, practices, ideologies, and beliefs. In particular, the *spoiler* technique is central to my forthcoming presentation of data and interpretations (1977). According to David and Kramer (2001), the *spoiler* technique relies on the contemporary-archaeological residues and the observable behavior which produces them in order to inform questions concerning the past. This is particularly essential to the current study as analogical reasoning of this type can highlight nuance within ritual practice which is at times more or less ephemeral in the ancient material record but, observable in the ethnographic present.

Ann Brower Stahl describes this type of analogy as *illustrative analogy* in her article *Concepts of Time and Approaches to Analogical Reasoning in Historical Perspective* (1993). According to Stahl, "Analogy, when used to illustrate the past, forms the basis of a narrative that fleshes out the limited material evidence from the archaeological record" (1993:236). It is important to note that in this type of analogical reasoning there is an inherent assumption of substantive uniformitarianism; uniformitarianism is the understanding of "the present as the key to the past" (Hutton 1785). However, this manner of reasoning continues to be critiqued as it may influence/bias the researcher. As Stahl addresses it, the "use [of] analogy in an illustrative fashion effectively precluded the likelihood that the analogy would reveal significant differences in the past" (1993:245). As I proceed in this research, it is a useful reminder to use source-side

materials to inform, rather than to direct, research and interpretation. Illustrative employment of analogy results in a misrepresentation of the past; therefore, relying on Yellen's *spoiler* technique, I focus on the ways in which an ethnographic present can inform the questions asked of the static past. Assuming a basis of cultural continuity between the Ancient Maya and contemporary Maya peoples, the ethnographic present provides some insight into the motivations behind certain behaviors and their material residues

It is important to highlight the accepted premises of any analogy. The reliance upon these premises is inherent to the construction of an analogy. Alison Wylie's article *The Reaction Against Analogy* (1985) outlines several premises for analogical argumentation. A constructed analogy recognizes several givens: first, that there are two points of analysis –a source[13]-culture and a subject[14]-culture– and second, that these two entities can be connected together by a series of material or behavioral components, each of positive, negative, or neutral significance to the analogy being constructed (David and Kramer 2001; Wylie 1985). The connection between source-culture and subject-culture should be made explicit, and evaluated, when made possible by the existing literature, prior to beginning research. The relationship between the source- and subject-culture is outlined in the methodology chapter. In the context of the current study, the source-culture are contemporary Maya communities in the Guatemalan Highlands, living in the Suchitepéquez and Sololá Departments. Several Maya communities in this area frequent several caves to conduct ceremonies. Two of these caves are La Ventana and La Ventana Campana (Ishihara-Brito and Guerra 2011). The subject-culture is the Early Class Maya of the southern Lowlands at Tikal. Understanding that, as a result of the colonization of the Americas and recent political unrest (ie. The Guatemalan Civil War), many communities have been forced into

[13] Contemporary cultural group(s).
[14] Past cultural group(s).

diaspora away from the lands their predecessors inhabited for millennia. I sustain that the inclusion of highland region communities would add to rather than detract from the investigation as the Highlands are considered a vivid example of contemporary Maya culture.

Cameron Shelley (1999) outlines three advantages (each with their own limitations) of using multiple (rather than a single) source-side examples in order to enhance the constructed analogy. Multiple source-side examples: 1) provide several physical manifestations to compare/contrast, creating (perhaps) a more comprehensive visual understanding (See Shelley 1996) of the present and through the analogy of the past; 2) just as an analogy is more compelling proportionate to the number of similarities between source and subject, similarity between several sources to the subject is likewise compelling (See Wylie 1985), and; 3) the use of multiple source-side examples enhances the basal understandings which are used to interpret the past –through supplementation in the form of further examples, one approaches a more complete understanding (Shelley 1996, 1999; Stahl 1993; Wylie 1985). I include data that derive from multiple source-side examples (from the southern lowland and highland regions), therefore Shelley (1996, 1999) and Wylie (1985) figure prominently in my research. In relying on multiple manifestations, which can be compared and contrasted and create a more profound understanding of the ethnographic present, I endeavor to create an analogy which accounts for the heterogeneity of Maya culture.

Agency: individual actors, living with intentionality

Agency theory strives both to acknowledge and to attempt to understand the individual (their intentions, inspirations, etc.) in reference to the societal structure in which they function. The contention is that material culture is actively/meaningfully constituted and indicative of individual actors within a larger system (Hodder 1982, 2000). As Jennifer Dornan loosely

defines, agency is a combination of the limits, abilities, or will of an individual within a society; this limit-ability-will trifecta can be further described as the following: resistance to social norms, resistance to power inequalities, unique cognitive structures, and free will (Dornan 2002). Inherent to the study of agency in the archaeological record is the acknowledgement of intentionality as potentially informing on human actions (Hodder 1986; Shanks and Tilley 1987). This intentionality dovetails with this study insofar as terminal deposits are indicative of individual actors acting with agency/intentionality. This is exhibited by the quality, composition and episodic construction of these deposits, as well as their placement. As Hodder (2000) notes, "we need to see how 'individuals' and other wholes such as sites, cultures and exchange networks are constructed, not solely by large scale processes and hegemonic groups, but through the intentionality within particular and individual events" (2000:25). However, as Dornan (2002) notes, discussions of intentionality can result in interpretations which are fraught with ethnocentrism. As outsiders attempting to construct agency or intention behind actions, we the researchers are engaging with previously held, stereotypified, understandings of another culture. She further debates that this restricts interpretations based on one's own experience, often disregarding different emotive and emotional behaviors and their motives (2002). What one sees through the archaeological record can be the result of habitual, *yet* varied, actions whose material residues have been, in part, erased or replaced. This erasure and/or replacement results in a fragmentary palimpsest of the actual activity which created the material record (Chapman 2000; Hodder 2000) or a responsive, emotional/emotive act (Dornan 2002). When one addresses agency, one is simultaneously addressing the central identities of the agent, meaning cultural, ethnic, indigenous, and racial identities, as well as differences in neurocognition (Dornan 2002). In sum, it is important to recognize that the palimpsest of an archaeologically recorded

phenomenon –i.e. terminal deposits- is only a culled[15] chronicle of this intentionality and is hinged upon one's own construction, interpretation, or assumption.

Ritual Theory

For most intents and purposes, ritual has become *the* convenient category in which to place a particularly troublesome set of archaeological data –this is to say that perhaps the abundance of contexts classified as ritual are perhaps being laid aside, potential understandings left unlocked. Although seemingly evasive of an agreed upon, formal definition, ritual has pervaded archaeological discourse and research in recent times (Marcus 2007; Swenson 2015). I argue that the dearth of common understanding of what "ritual" is has resulted in the close juxtaposition ritual and religion in the literature[16] (See Insoll 2011; Rowan 2012).

In order to contextualize the current manifesting themes of ritual in the literature, one must look to Durkheim and Marx (Swenson 2015). Whilst there is still much to be done in the way of development of ritual theory, the Durkheim-Marx understanding of ritual as a social-control is a foundational tenet of ritual theory (Angelo 2014; Swenson 2010). Under the disguise of a different word, ritual has become another form of social "othering;" assuming a direct analogy, ritual goes to ""technical, mundane, or practical" as sacred goes to profane (Swenson 2010:332). In her chapter *Rethinking Ritual* (2007), Joyce Marcus acknowledges an alternative to this westernized dichotomy of sacred/profane in the division of ritual into two categories "time-dependent" (calendric) and "ad hoc" (non-calendric) (2007:44).

Lastly, on the topic of ritual, Marcus proposes a framework of ritual in eight parts:

"1. One or more performers
2. An audience (humans, deities, ancestors)

[15] And therefore fragmentary

[16] Problematic on many counts, it is particularly so for the current research. Religion as it is understood in many (colloquial or otherwise) sphere does not indeed define every (cultural) belief system (Hinnells 2005; Orsi 2006).

3. A location (temple, field, patio, stairway, cave, top of an altar)
4. A purpose (to communicate with ancestors, to sanctify a new temple)
5. Meaning, subject matter, content
6. Temporal span (hour, day, week)
7. Actions (chanting, singing, playing music, dancing, wearing masks and costumes, burning incense, bloodletting, sacrificing humans or animals, smoking, making pilgrimages to caves or mountain tops)
8. Food and paraphernalia (stingray spines, obsidian blades, cones and spheres of copal incense, balls of rubber, paper streamers, beverages, meats, tamales) used in the performance of rites" (2007:48)

In the following chapter I will explain how I use these eight parameters to establish an argument for the ritual nature of "problematical deposits" in the southern Maya lowlands.

Having acknowledged the place that analogy, ethnoarchaeology, middle-range theory, agency theory, and "ritual" theory hold in the current study, the remainder of the project will deal with the assessment of ethnoarchaeological research methodologies and their application to the phenomena known as terminal deposits. Relying on the information, an assessment will be made through the exploration of an ethnoarchaeological study in comparison with an archaeological study with the final goal being to explore the application of ethnoarchaeology in re-assessing and constructing the narrative of the transformative period of the Early Classic.

Chapter III
Methodology
An explanation and justification of methodology

The current study endeavors to construct an analogy between contemporary deposits constructed as a result of ceremony and terminal/problematic deposits of the Early Classic. Employing methods influenced by ethnoarchaeological practice, as outlined below, the study will review several studies in order to assess the practicality of ethnoarchaeological research in helping to further our understandings of transformation during the Early Classic.

To begin, the possibility for analogue between the subject and source should be evaluated prior to the research endeavor. Relying on Wylie (1985) and Kelley and Hanen (1988), David and Kramer delineate that the relationship between the subject and source should be strong and evident. They argue that this relationship, and the analysis of that relationship, is constructed and depends on the following six general principles: 1) "the subject and source cultures should be similar in regards to variables likely to have affected or influenced the materials, behaviors, states, or processes being compared" (2001:47); 2) assuming that cultures are "generally conservative," and relying on the first principle and its conditions, the analysis of a source culture whom are descendent of the subject culture increases the applicability argumentative validity of the analogy; 3) in order to continuously expand the possible library of source-side examples, ethnoarchaeologists ought to be looking for other source-side examples judiciously and continuously –so as "to obtain as representative a range as practically possible" (2001: 47); 4) in the course of analysis, several possible explanations –analogs– should be sought from *multiple* source-side cultures; 5a[17]) hypotheses generated throughout research should be tested in various ways –archaeological excavation being one of these ways; 5b) the proving of a

[17] David and Kramer include point five as one, here I subdivide it into 5a and 5b for clarity.

hypothesis through such methods cannot be taken as a true proof, rather than achieving deductive certainty one has justified a single analogical interpretation; 6) in order to make the interpretations drawn from ethnoarchaeological research more credible, methodology of research/analysis and general knowledge of the culture being studied ought to be continuously bolstered by further research and meta-analysis –this should follow Wylie's (1985) model of establishing relevance (David and Kramer 2001, Wylie 1985).

This chapter will follow these principles, synthesized from Wylie (1985) and Kelley and Hanen (1988) by David and Kramer (2001), in parsing the selected source-culture examples. It is important to evaluate the relevance of each example prior to the explanation of the data therein, and any subsequent analyses. Below I will assess the source- and subject-side cultures, modern K'iche' peoples and their cave use in the Suchitepéquez and Sololá departments of Guatemala and ancient Tikaleños of Tikal, in what is today considered the Petén department, and the so-called ritual deposit (Problematical Deposit 21) excavated there by Josefa Iglesias Ponce de León, respectively. After assessing each of these examples in a brief review, I will then address what I consider the frame of and, in certain aspects, lack of relevance between these two cultural groups. Following these assessments I conclude with an outline of the research and analytical methodologies employed in this study.

Establishing an analogical baseline: cave use in the highlands of Guatemala

In their work *Windows of the Earth: An Ethnoarchaeological Study on Cave Use in Suchitepéquez and Sololá, Guatemala* (2011) Reiko Ishihara-Brito and Jenny Guerra strive to add to the body of ethnoarchaeological research in the region. As they describe in their article, ethnoarchaeological research can further studies of ancient lifeways by "providing more nuanced

interpretations of past behaviors including religious ritual practices of prehispanic Maya peoples" (2011:51). I have chosen their project as a source-side example for four reasons. First, I am both well-acquainted and appreciative of their ethnoarchaeological work. Having relied upon this exact study for past research, I comprehend their methodology and have a solid grasp of the data they present. Second, Ishihara-Brito and Guerra work in the Highland region of Guatemala, a region known for a continuous presence of Maya peoples. This region has been of interest to ethnographers for the past century (See Bunzel 1952; Cook 2000; Gonzalez 1998; Matul 1989, Molesky-Poz 1999; Morris 1987; Oakes 1951; Schuster 1997; Vogt 1976) and more recently to ethnoarchaeologists (See Brown 2005; Scott 2009) as the indigenous peoples living there continue to live in ways which are reminiscent of their ancestors while simultaneously exhibiting the effects of colonialism and proselytization. I consider an argument of complete and "pristine" cultural continuity to be invalid –it is impossible to ignore the effects of processes of colonialism and proselytism– and it is important to acknowledge that cultural change in the past century among highland Maya populations is evident even within the ethnographic record. Thirdly, Ishihara-Brito and Guerra explore several locations and their respective material deposits. In order to pinpoint ephemeral aspects which may have been degraded over time in the archaeological record at Tikal, I assert that including several cave deposits is worth the "noise" it introduces to the data set of materials used. Although it does add this "noise" the inclusion of several examples from the source-side culture could help expose a distribution of trends (ie. burning episodes, use of ceramics, incense or other materials which do no preserve in the archaeological record). Finally, I consider Ishihara-Brito and Guerra's study to be conscious of this. As they self-describe, the second two of their three goals focus on assessing contemporary interfacing between Maya peoples and local caves, in particular "cultural materials, spatial use,

and associated beliefs" and, separately, to investigate "the extent of prehispanic cave use in the area" (2011:51). The two objectives, while juxtaposed, are not seen as dependent upon one another; to me this is indicative of Ishihara-Brito and Guerra's understanding of the impact that post-contact processes have had.

The acknowledgement of post-contact effects on cultural continuity is important, especially when constructing an analogy across millenia. Having outlined my own justifications for selecting Ishihara-Brito and Guerra's work, here I will employ the first two[18] of David and Kramer's (2001) principles for establishing the possibility of analogical construction.

Concerning their first principle (see above), the Maya residing in contemporary Chocolá, those who interface with the caves Ishihara-Brito and Guerra study, are connected with those who might have used the same caves in past millennia (2011). The connection between the ancient Tikaleños of the Terminal Classic and these contemporary actors is more subtle and relies upon understandings of Pan-Mesoamerican and Pan-Mayan understandings of culture. Relying on understandings of *paisaje sagrado*, sacred landscape, I assert that, although subtle, a connection between a cave deposit and the deposit at the North Acropolis is present.

A cave is part of the system of mountains, *witz*, mountain passes, also known as clefts, and valleys (Schuster 1997). It is important to note that the word *witz* is understood as the word for mountain, however it is also employed when naming the constructed mountains of the Maya city-scape –the dominating architectural mountains, the famous pyramidal temples (Dunning et al. 1999). Caves are the entrance to the mountain (Ashmore and Brady 1999). Deposits made in or in front of caves are, arguably, not only associated with the subterranean feature, but also the

[18] The first four principles outlined by David and Kramer (2001) concern source-side research, however principles three and four concern the furthering of research in the field which was not possible within the scope of this study; as such I have excluded them from my analysis of relevance of Ishihara-Brito and Guerra's (2011) work.

geologic feature which houses it, ie. the mountain. Actions which occur in the cave context result in material deposits which exhibit similarity to the archaeological materials uncovered in terminal deposits across the Maya region, including those at Tikal (see Chapter IV and V for further discussion). In conclusion, relying on Pan-Mesoamerican and Pan-Maya understandings of sacred landscape, the symbolic nature of the North Acropolis as an architectural representation of a mountain supports a connection between the source and subject examples of the K'iche' population of Chocolá and the ancient Maya of Tikal in terms of the placement of these deposits in conjunction with a mountain -in actuality or symbolically, respectively.

Having acknowledged evidence relevant to David and Kramer's first principle, I will now focus on their second principle. Despite systemic effort to eradicate Maya populations by governments, religious groups, Maya peoples continue to populate Mid-Central America; the Maya today, although decreased in population size and with many in diaspora from their ancestral lands as a result of multi-millennia long persecution, Concerning contemporary Maya populations, I believe that external pressures have left a lasting impression on current cultural practice and thought in varying degrees.

Colonialism is hard to ignore in Latin America amongst indigenous communities. Its effects continue to surface in contemporary populations in the form of ceremonial adoptions of historically Christian imagery and sacred spaces (Bassie-Sweet 2002). Syncretic processes have resulted in amalgamated practice of Catholic and ancestral belief systems; an example of cultural and "religious"[19] pluralism (Mathews 1960). This being said, understandings of self, the world, and the natural continue from generation to generation (Molesky-Poz 2009).

[19] Religion as it is understood today is steeped in a Eurocentric and Protestant understand of "faith" and belief; I place the word here in quotations in recognition that "religion" does not come close to encapsulating beliefs and practices of indigenous peoples of the Americas.

According to Jean Molesky-Poz,

> While Maya cosmovision underpins psychological, philosophical, and cultural realities in Maya communities, in the complex interplay of people and place, diverse expressions have developed. … Western colonial, national, and transnational processes have attempted to erase or erode indigenous knowledge and power. [As a result] Identities change over time and space, yet clear linkages of ancient Maya forms, though transformed, continue to inform life. [2009:35-6]

As Molesky-Poz discusses, despite diverse and longstanding external factors still link contemporary Maya to their ancestors. I argue that this substantiates a connection between contemporary Maya and their ancient counterparts. Although not descended in blood, there are distinct connections of cosmovision even in the face of continued prejudice and discrimination.

Looking back to the ancestors: a terminal deposit at Tikal's site center

As discussed in the Chapter I, so-called terminal, problematic(al) deposits dot the Maya region in ancient urban centers. As a doctorate student Josefa Iglesias Ponce de León excavated Group 6D-V within the urban center of Tikal. I have chosen to use her data as presented in her dissertation titled *Excavaciones en el grupo habitacional 6D-V Tikal, Guatemala* (1987) and accompanying figures published under the same title in 1986 at the Universidad Complutense de Madrid; in addition, I reference a subsequent article published in 1988 titled *Análisis de un depósito problemático de Tikal, Guatemala*. I have chosen her work for the following reasons.

First and foremost, Ponce de León was the first to label a series of deposits of enigmatic nature as "problematical." Her work has been the baseline for archaeologists throughout the Maya region who have since excavated deposits of similar nature and which, relying on Ponce de León's nomenclature, have been deemed problematical. Ponce de León published the inaugural discussion of such deposits in her dissertation. In addition to her work being one of the initial

points of recognition of these deposits, the documentation presented in her thesis and following article is substantial and detailed[20].

Secondly, the work of Iglesias Ponce de León catalogues that the deposit was excavated within a previously carved *oquedad*, *chultún*, cavity in English, in the limestone bedrock. This cavity is located along the west side of group 6D-V (Iglesias Ponce de León 1988). The placement of the deposit within a cavity harkens back to the creation and/or placement of deposits within caves as documented by Ishihara-Brito and Guerra. I assert that this "cavity" is a symbolic representation of a cave. As I have past experience with cave archaeology within the Maya region, having researched cave archaeology and possible ethnoarchaeological applications for my junior thesis, the cavity context is of great interest.

Finally, Iglesias Ponce de León recognizes that "parece evidente que un gran porcentaje de los materiales contenidos en el Depósito Problemático 21 pertenece a un contexto doméstico [entonces, humilde]" even though the deposit's location is within what would seem to be an elite residence not previously associated with domestic processes such as food processing, craft production, etc. I find this to be of great import as it may be interpreted that these materials making up the deposit were brought into this final location from elsewhere. Again, this is similar to any cave context which one might analyze; other than use of pine or pine needles (See Ishihara-Brito and Guerra 2011; Morehart et al. 2005) which might be procured right outside the cave's entrance, most other materials must be brought in for use.

So, in conclusion, the work of Josefa Iglesias Ponce de León dedicated a large portion of her thesis discussion to problematical deposits and Problematical Deposit 21, enigmatically located in residential areas of urban centers and comprised of diverse materials. In parallel to her

[20] The text of her published dissertation spans over 400 pages, and includes references to 131 figures and 97 prints.

contemporary Marshall Becker who discussed the notion of caches and burials as "earth offerings" (Becker 1987), Iglesias Ponce de León recognized that despite the trash-like nature of the materials found in Deposit 21, it was not merely a midden. Rather, it is the result of purposeful activity, not the disposal of trash. As her work is one of the first on the subject, I consider it to be uninfluenced by the academy, unlike some contemporary analyses[21], and arguably less biased as a result. In summation, relying on past research of caves, their place in the sacred landscape, contemporary use of such locales, and the fact that her work helped pioneer a discussion of such contexts, I argue that Iglesias Ponce de León's work in group 6D-V and Problematical Deposit 21 is well-suited to the current study.

Constructions and obstacles of relevance

As discussed above, the contexts of the caves in the Sololá and Suchitepéquez departments of Guatemala and Problematical Deposit 21 in group 6D-V at Tikal share several similarities. The caves analyzed by Ishihara-Brito and Guerra (2011) are a relevant, source-side point of analysis to the cavity context of Problematical Deposit 21 as both can be associated with openings into the earth or in association with a mountain –in actuality or symbolically. Additionally, Maya communities in the Highlands of Guatemala –where Ishihara-Brito and Guerra conducted their research– is regarded as a region of vibrant cultural continuity in comparison to more ladino-ized areas. This is not to say, however, that Highland communities are a representation of perfect cultural continuity, rather, as Molesky-Poz (2009) discusses, there has been a renewal of Maya spirituality in the area, a reconnection with practices of ancestors past.

[21] As a result of the open-ended definition of a problematical deposit, its contents, and its function the term has, unfortunately become catchall term applied in diverse contexts and with diverse material composition.

It ought to be acknowledged that, "Unfortunately, the expansion of Europe has over much of the world has resulted in major cultural disjunctions with the result that cultural descent must itself be regarded as a problematical concept" (David and Kramer 2001:47). Moreover, critical analysis and recognition of this is lacking in the sparse ethnoarchaeological record in the Maya region. Whether this is due to the dearth of ethnoarchaeological study conducted in the region or is a result of the continued colonialist nature of archaeological practice in general is difficult to say. Self-reflection of the discipline of archaeology as a whole could aid in reversing this ongoing issue; for further discussion on this topic see Chapter VI.

Current methodology and research practices

As I was unable to collect any independent research for the current study, my methodology follows a literature review model. Under this I have selected the source- and subject-side points of analogue and will use the observations and data Iglesias Ponce de León (1986; 1987; 1988) and Ishihara-Brito and Guerra (2005; 2007; 2011) present in their respective works. In doing so I take a two-sided approach, one being qualitative, the other quantitative: The qualitative side of my methodology has involved surveying as much of the literature (academic and layman) as it stands to this day in order to better understand understandings of processes in the Terminal Classic and of contemporary Maya lifeways. As I have been unable to conduct personal research, I have relied on ethnographies to deepen my understanding of post-colonial Maya culture. These qualitative methods have informed the quantitative parts of my research and analysis, and framed the questions I have posed in this study. In comparison the quantitative side of my research hinges on the data presented in Iglesias Ponce de León and Ishihara-Brito and Guerra's work. Relying on their descriptions, I have generated a data set of materials and, in

the case of the work of Iglesias Ponce de León's work their stratigraphic location, all of which will be presented in the following chapter.

The research conducted in the course of this project was only possible through The College of Wooster's Libraries' systems, licenses, and databases. Books were obtained through the Consort, Ohiolink, or ILLIAD systems facilitated by The College of Wooster's Andrews, Gualt, and Timken Libraries. Special thanks goes to the Interlibrary Loan (ILLIAD) Associate, Lorna Flynn for her continuous help and expeditious submittal of numerous requests through the system and Research Assistant Steven Flynn for his consultation through the research process.

This chapter acknowledged the obstacles to this analogy as well as the perceivable connections which validate the construction of this analogy. Relying on David and Kramer's (2001) and Wylie (1985) I addressed the relevance of the source-side examples in caves as documented by Ishihara-Brito and Guerra (2005; 2007; 2011). Additionally I outlined the avenues through which research was conducted and sources were acquired. The following chapter will present the data from Ishihara-Brito and Guerra's ethnoarchaeological project in Sololá and Suchitepéquez and Iglesias Ponce de León's work at Tikal in Group 6D-V.

Chapter IV
Data
An exploration of research conducted by Reiko Ishihara-Brito and Jenny Guerra under the Chocolá Archaeological Project and Maria Josefa Iglesias Ponce de León under the Tikal Archaeological Project

In this chapter I discuss the ethnoarchaeological data resulting from Reiko Ishihara-Brito and Jenny Guerra's investigations (2005; 2007; 2011). I evaluate these data in tandem with archaeological data from a different investigation conducted by Maria Josefa Iglesias Ponce de León (1986; 1988) for her doctoral dissertation. My goal is to provide a holistic understanding of the data, detail, and imagery; as such, detail will be provided as it is available from the original reports, which constitute my primary sources.

I first address Ishihara-Brito[22] and Guerra's data from the Suchitepéquez and Sololá, focusing on two of the seven caves and rockshelters surveyed under the Chocolá Archaeological Project –La Ventana and La Ventana Campana. I compare these contemporary ritual deposits documented inside and at the entrance of these caves with a massive archaeological deposit documented by Iglesias Ponce de León at the North Acropolis (Group 6D-V) at Tikal.

Chocolá: ethnoarchaeological cave reconnaissance

Ishihara-Brito and Guerra's work in the Sololá and Suchitepéquez departments in the piedmont region of Guatemala was guided by three important objectives. First, they wished to examine the then current cave use in the area by the local population, focusing particularly on the use of materials and space. Their second goal was to examine, understand, and interpret any symbolical belief associated therein. Thirdly, they planned to examine the presence of possible Pre-Hispanic use in the area (Ishihara-Brito and Guerra 2011). Though their corpus of work on the subject (2005, 2007, 2011) discusses seven caves in the area, the researchers find that several

[22] All textual references will name Reiko Ishihara-Brito as Ishihara-Brito. The publications from 2005 and 2007 occurred prior to her change in name; all citations will list her name at the time of publication.

of the seven (Figure 4.1) are visited and used by contemporary populations of K'iche and Kaqchikel origin who live in Chocolá. Two of these used contemporarily are La Ventana and La Ventana Campana (Ishihara-Brito and Guerra 2011). With the help of collaborators Mario Alberto Tambriz and Rogelio Tuy Gonzales, Ishihara-Brito and Guerra were granted access to

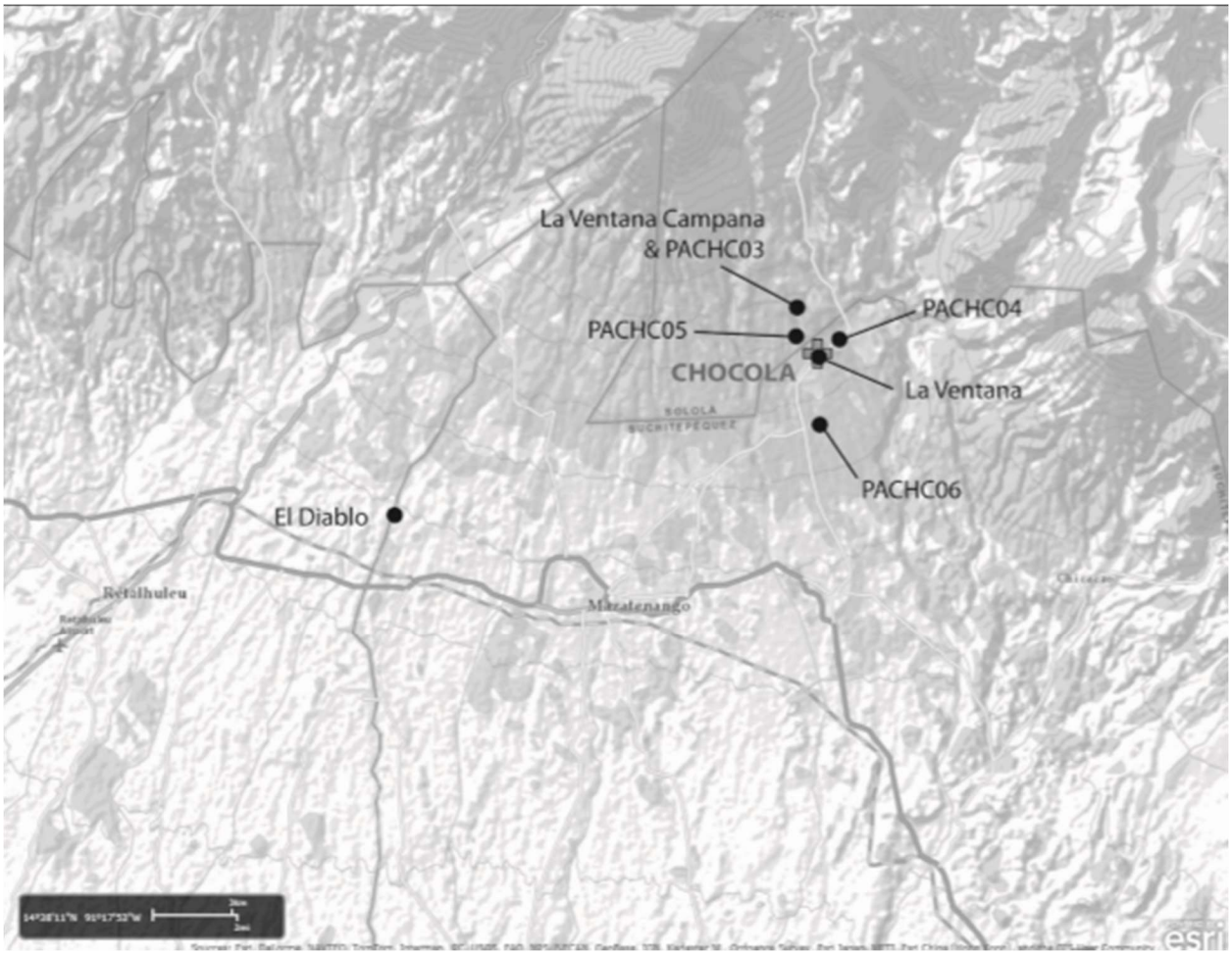

Figure 4.1 Map of caves investigated during the 2005 season by Ishihara-Brito and Guerra. Note the location in association with Chocolá. (Ishihara-Brito and Guerra 2011)

the caves in the area as well as put in contact with several other community members[23] whom

[23] Oscar Barreno, Carlos Casili, and Nicholas Casili (healers, *curanderos*); Antonia García de Manso (priestess, *sacerdotisa*); Juan Pablo Herrera (employee of the Chocolá Project); Boanerges Zapeta (local teacher); Davíd Chavez (water management for Chocolá); and Maria Zapeta Noriega de Gómez, Dr. Jonathan Kaplan and Ejidio Cifuentes.

they interviewed, contributing an ethnographic aspect to their research (Ishihara-Brito and Guerra 2005).

La Ventana

La Ventana (also PACHC01) appeared to be, the most visited of the caves surveyed (2005). While small, its proximity to the town proper makes it an easy pilgrimage –it takes around 10 minutes on foot from the center of Chocolá (Ishihara and Guerra 2005). As they state, La Ventana is

> "la cueva más importante etnográficamente hablando … el uso, la frecuencia con que la visita la genta, que gente de fuera visite [sic] esta cueva, su asociación al sitio arqueológico, su asociación al agua, las modificaciones y las creencias de que su agua es curativa nos lleva a afirmar su importancia. [Ishihara and Guerra 2005: 469]

Located on Santa Isabel Farm, La Ventana serves as an easily accessible location for ceremonies and acts of healing. As discussed by many, topographically, a cave serves as a point of access –a door, if you will- into the earth and *inframundo* (Adams and Brady 1994; Brady and Ashmore 1999; Brady and Prufer 2005; Brady and Villajero 1993; Vogt 1981; Vogt and Stuart 2013). With this in mind, the very name La Ventana[24], the window or aperture, is a manifestation of the Maya conception of a cave as a portal, "a la tierra, en donde los espíritus y los ancestros residen" (Guerra and Ishihara 2007: 1180). The local population from Chocolá refers to the cave as *ventana*[25]*, wenta'n*[26], and *ch'en*[27] interchangeably (Ishihara-Brito and Guerra 2011). Ishihara-Brito and Guerra collected data at La Ventana over the course of three visits, during one of

[24] La Ventana, and any other names used in association with these cave sites are those employed by the local population (Ishihara-Brito and Guerra 2011).
[25] Spanish.
[26] Maya-Spanish creole.
[27] K'iche Maya.

which they were permitted to observe a curing ceremony in its entirety, “desde el arreglo de la Cueva hasta la finalización de la quema” (Ishihara and Guerra 2005: 464).

Dimensions and Modifications. The cave itself is now a single chamber, a back passageway is blocked by a man-made wall –one of the many contemporary installations at La Ventana (Ishihara and Guerra 2005). According to local memory, the cave was either sealed

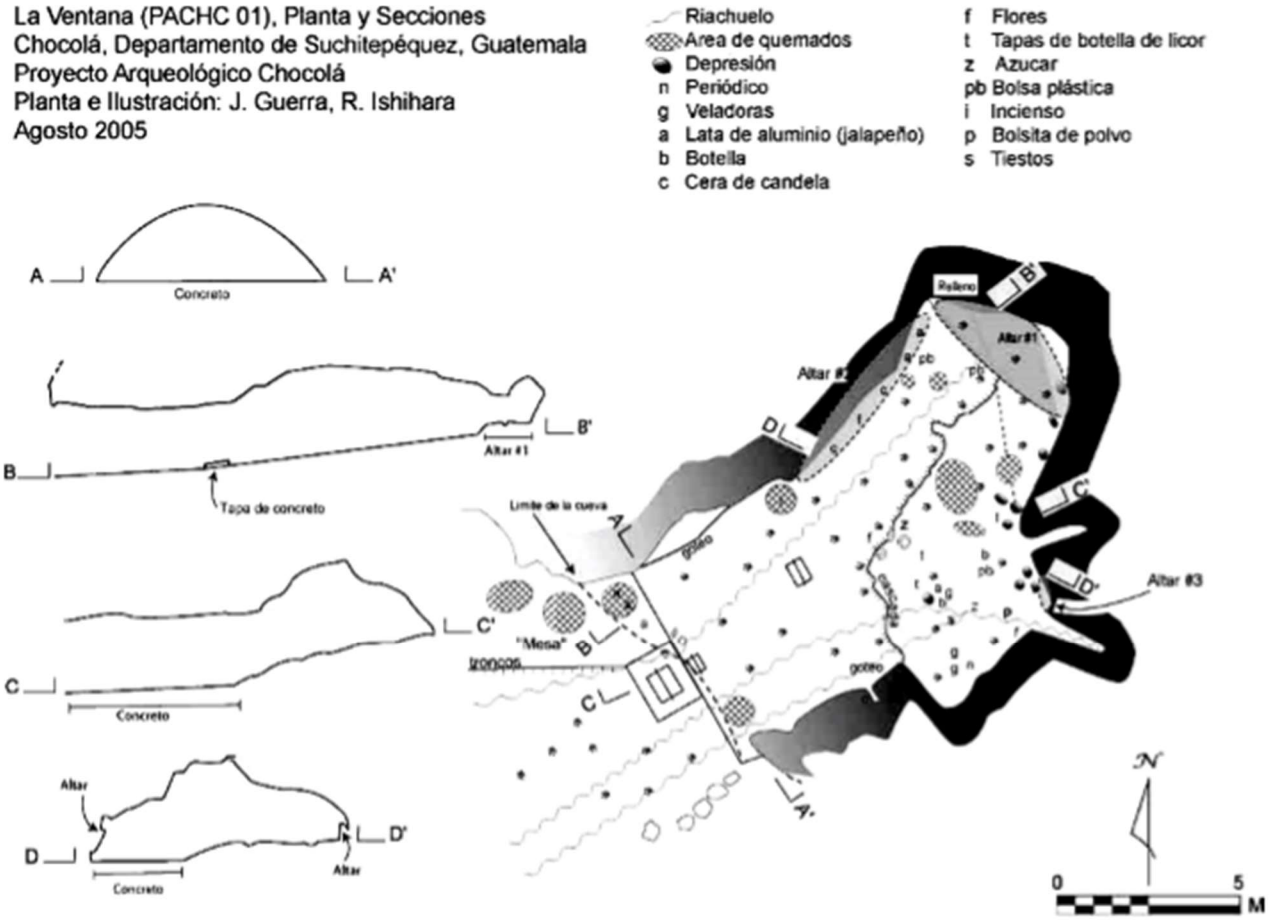

Figure 4.2 This map shows a plan view of La Ventana cave. Note the concrete installations referenced as A, B, C, and D. (Ishihara and Guerra 2005: 463).

after a man wandered into the cave and was never found, or in order to prevent water contamination of the spring (Ishihara and Guerra 2005). The dimensions of La Ventana are 6 m wide, 13 m long, and 2 m high (See Figure 4.2). The majority of the cave’s natural floor has

been covered by one of these installations in the form of a concrete floor, leaving only the Northeast by East corner of the cave's earth exposed (Guerra and Ishihara 2007).

Another such modification is the main altar (Altar 1), located in the furthest point in La Ventana (Guerra and Ishihara 2007). Measuring 2.7 m long, 0.6 m in depth at its widest point, and 1.5 m high, Altar 1 –at the time of fieldwork– showed extensive evidence of controlled burnings, or *quemas* (Ishihara and Guerra 2005; Guerra and Ishihara 2007). The slope of the altar allows for the displaying of items such as candles and flowers. It is worth noting that Altar 1 serves a dual purpose; it is simultaneously a presentational space and constitutes part of the barricade which blocks the entrance to the back passage. According to Ishihara-Brito and Guerra, "Esta parte [de la caverna] se encuentra cubierta por un hollín muy espeso en el techo" (2005: 466).

In addition to Altar 1, another modification to La Ventana greets visitors as they enter the cave –a short earthen platform skirts the edge of the outer rock face (Ishihara and Guerra 2005). Citing Linda Brown's (2005) work on hunting shrines in the Highlands of Guatemala the investigators argue this platform served as a *mesa*; which Brown defines as a practical surface for showcasing actions of importance. In this case these actions are *quemas* (Guerra and Ishihara 2007). *Mesas* are constructed by practitioners; Brown describes that: "When a ritual practitioner constructs an offering mound at El Duende[28] he or she first defines the area of the hearth by pouring sugar on the ground in the shape of a circle. This circle, sometimes referred to as a *mesa,* or table, is where the deities will come to 'eat' the sacrificial foods provided" (Brown 2005). The action of circling with sugar is present in Ishihara-Brito and Guerra's field observations as well, in their case as defining the area where the *quemas* were to take place.

[28] The mountain where Brown conducted her research on hunting shrines.

Similar to Altar 1, the platform (See Figure 4.3) shows evidence of repeated burning (See Figure 4.2). Opposite the earthen platform sits a line of stones which run parallel to the retaining wall made of felled ceiba trees (Guerra and Ishihara 2007).

Each of these modifications has its own evident purposes: as exhibited explicitly through the contemporary material record. Altar 1 provides a space for *quemas* and presentation of

Figure 4.3 This photograph depicts the entranceway to La Ventana and the platform which rests directly outside the cavern. The yellow lines indicate (from right to left) the location of a burning and the ceiba trunks used as a retaining wall for the platform. (Modified from Guerra and Ishihara 2007)

objects; the platform serves as a venue for *quemados*[29]; and, as observed by Ishihara-Brito and Guerra in 2005, the line of rocks provides seating for important observers -ie. family, high status individuals (Guerra and Ishihara 2007). These activities and their resulting debris will be discussed in detail in the following.

Contemporary (ceremonial) use. According to interviews conducted during the 2005 field season, La Ventana has three explicit uses, one of which is infrastructural, the other two ceremonial. La Ventana serves as 1) a potable water source for Chocolá, 2) it is considered an appropriate location for rituals, special ceremonies, *quemados* and *trabajos*, and 3) a place for curing ceremonies in connection to the "sacred" water which flows from the subterranean spring

[29] Larger controlled burnings.

in the cave (Ishihara and Guerra 2005). The latter of the three, in particular, is significant in respect to underground or cave-emerging rivers and their significance in the context of the Ancient Maya worldview; the narrative of the Hero Twins, as related in the *Popol Vuh*[30], in which the twin brothers venture to the *inframundo*, Xibalbá, in a wooden canoe by an underground river (Ángel Asturias and González de Mendoza 1927). Caves from which rivers emerge are a common trope in contemporary Maya ceremonial cave use, in addition to be of folkloric importance. In their article "Ventanas sagradas: un estudio etnoarqueológico de las creencias y rituales relacionados con las cuevas en Chocolá, Suchitepéquez" (2007) Ishihara-Brito and Guerra discuss a ceremony they were permitted to observe at La Ventana. The ceremony was meant to "agradecer a los espíritus por la curación de la enfermedad de un joven." (2007: 1189) This specific installment was the last of four and was attended by, in addition to Ishihara-Brito and Guerra, a "priestess" and her helpers, the child being cured, and his family, all of whom do not live nearby –they had made a pilgrimage to visit La Ventana specifically (Guerra and Ishihara 2007). This makes sense as the researchers describe La Ventana as "una de las cuevas más importantes del área que circunda a Chocolá" (2005: 464).

As the authors describe, before the ceremony officially began, the cave and outdoor platform was cleared and leveled. Different materials (eggs, sugar, candles, the central burning itself) were oriented in alignment with the cardinal directions and created a "delimitación del espacio." Prior to starting the *quemado*, a circle, hemisected by three lines, was established using sugar. Four eggs were then placed to delineate the cardinal directions, again around the outside of the burn area. Once all was in place, the ceremony began. Actions performed during the ceremony including smoking tobacco, the burning of an *ofrenda* (contents were not described

[30] Recognized by some as the "Maya creation story."

by the researchers; see Figure 4.4 for analogous examples), the recitation of *oraciones*[31] and the entering into the cave (only the priestess and the young boy participated in this part of the ceremony.

sugar to outline the circle in the top, left image, and the extensive use of candles in both. The top, right image shows a fire ceremony conducted at Tikal in 2012; the raised platform serves the same purpose as the sugar at La Ventana, demarcating the space for the *ofrenda*. Finally, the bottom, right image shows an *ofrenda* compiled in Quirigua (Images top then bottom, from left to right: Los Elementos 2016; Golden Drum 2012; Amy Block 2012; and Golden Drum 2012)

The ceremony at La Ventana was performed in order to cure a sick boy, but according to Ishihara-Brito and Guerra other types of ceremonies are performed in the cave as well (2007). As the researchers describe, the types of ceremonies carried out in the cave "abarcan desde los pedidos con buenos propósitos como de salud, amor y dinero, hasta aquellos con malos fines como los de maldición" (Guerra and Ishihara 2007: 1190). According to the interviews

[31] Here I use the Spanish word employed by Ishihara-Brito and Guerra in their publication; in Spanish the word *oración* can be translated into English in two ways: 1) phrase/sentence or 2) prayer.

conducted in the area, Ishihara-Brito and Guerra assert that different colors or variations of objects may help meet these different ends; the specific examples they discuss are votive candles, or *veladoras*, and flowers –both of which were prevalent inside and outside La Ventana (See Guerra and Ishihara 2007). I discuss important parallels and distinctions between La Ventana and La Ventana Campana below.

La Ventana Campana

La Ventana Campana (Also PACHC02) is a cave located in the Sololá department, in association with Chuajij, a small community close by Chocolá. The cave is located approximately 30 minutes away from Chuajij on foot. In comparison to La Ventana, La Ventana

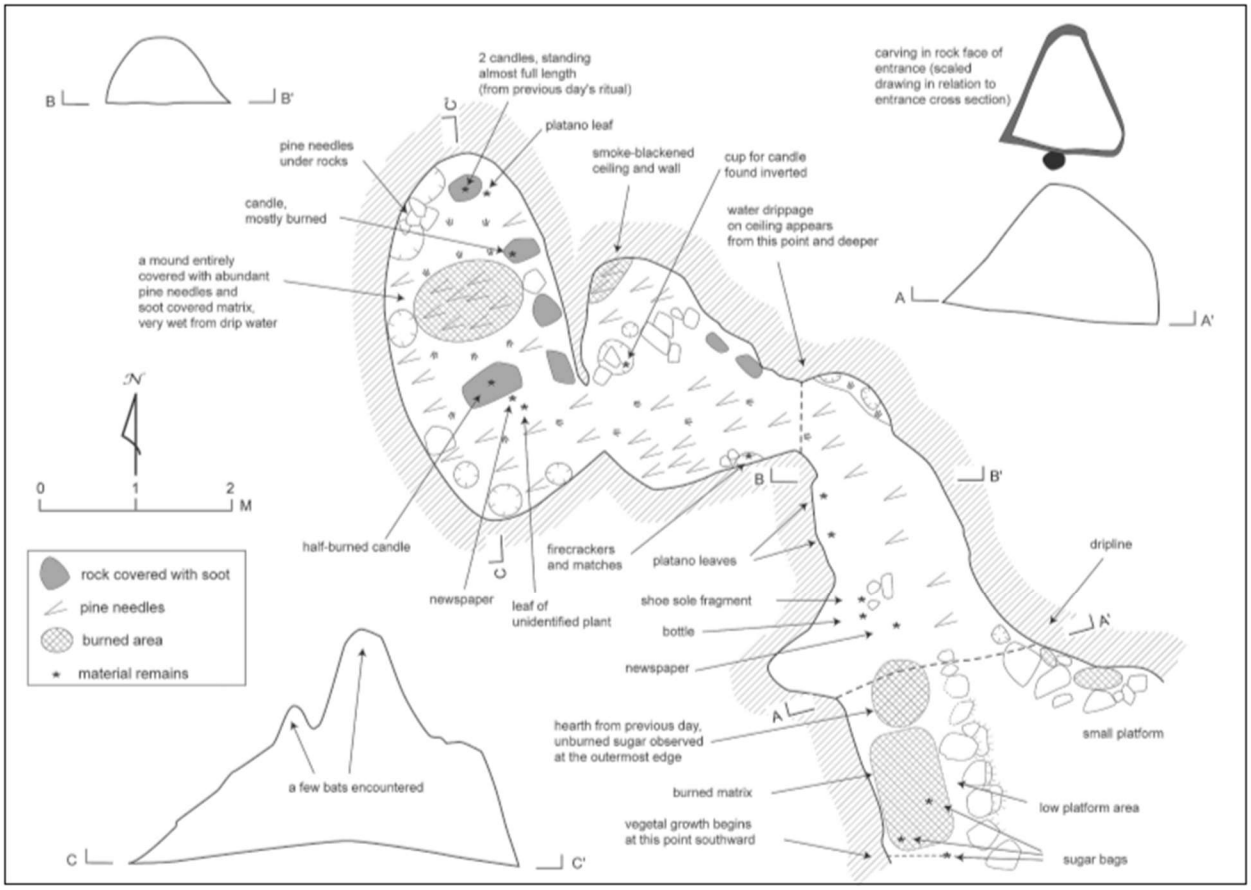

Figure 4.5 This map shows the plan view, with cross-sections of La Ventana Campana (Ishihara-Brito and Guerra 2011: 55).

Campana is quite large (See Figure 4.5). However, unlike the cave previously discussed, there is a "dark-zone[32]" at La Ventana Campana which is significant in that a substantial portion of activity at this site seems concentrated in this area. La Ventana Campana is named such due to the image of a bell, in Spanish *campana*, which is carved outside the cave and directly above the entrance in the same bed rock which walls the cave itself (see top-right of Figure 4.4).

Dimensions and Modifications. La Ventana Campana has three different chambers: the entrance chamber (the *entrada*), a second, smaller chamber (the second chamber), and a third, quite-spacious chamber (the third chamber). As can be seen in Figure 4.5, the back two chambers can only be accessed through the front entrance. The *entrada* measures 1.45 m tall, 2 m across, and approximately 4.55 m deep (at which point, one arrives at the second chamber). The second chamber measures 2.5 m deep at the largest transect, approximately 0.75 m in height, and 2.15 m wide, abutting the third chamber. The third, and last, chamber is 4 m deep, 2.15 m high (at the tallest point), and just under 2 m wide. This last chamber is, indeed, the end of this cave –unlike La Ventana where a wall was installed to block the back passage-ways.

In terms of modifications, outside the *entrada* there is a short, earthen platform akin to the platform at La Ventana. Instead of being barred by trees, it is supported by a line of small rocks. In total the platform measures 2.4 m long and abuts the entrance to La Ventana Campana. Opposite the platform is another, lower platform; however this one is not retained by stones.

Contemporary (ceremonial) use. According to Ishihara-Brito and Guerra, "La evidencia de [sic] uso moderno fue extensa en la cueva" (2005:472). While conducting their survey, the researchers happened upon a young *aj k'in*[33], Pascual Guarchaj, as he was preparing for a

[32] Past a certain point in many (often larger) caves, no natural light enters. This section of a cave or cave system is annotated as the "dark-zone."
[33] Maya for shaman.

ceremony. Unlike at La Ventana, Ishihara-Brito and Guerra were not permitted to observe this ceremony, however they did return the next day to document the residues left behind. Similarly to La Ventana, burning evidence was found both outside the cave and in the third chamber along with a significant amount of pine needles -which were not found at any of the other caves they surveyed (Ishihara and Guerra 2005). In their 2007 publication, Ishihara-Brito and Guerra recognize that La Ventana Campana, "tenía otra diversidad de artefactos modernos sugiriendo otro tipo de actividades" (2007:1190). Unfortunately, the only other documentation of contemporary use was amassed through visual observation and documentation of the cave itself as the researchers were not permitted to attend any ceremonies at La Ventana Campana (Ishihara and Guerra 2005; Ishihara-Brito and Guerra 2011; Guerra and Ishihara 2007). Material residues documented can be seen in Figure 4.6.

La Ventana	Materials	La Ventana Campana
	Candles	
	Flowers	
	Burnt Earth ie. *Quemados*	
	Plastic Bags	(Of Sugar)
	Empty Glass *Veladoras*	
(Water, Carbonated Water, Gatorade)	Plastic Bottles	
	Plates	
(Burnt)	(Empty) Cans of Jalapeños	
	Bags of Sugar	
	Animal Bones	
(Partially Decomposed)	Newspaper	
	Fireworks	
	(Remains of) Incense	
	Cigarette Boxes	
	Eggshells	
	Caps of Liquor Bottles	
	Aluminum Cans	
	Glass Cup	
	Candle Wax	
	Ceramic Sherds	
	Pine Needles	
	Tin Foil	(Incense Packets)
	Chewing Gum	
	Burnt Rocks	
	Plantain Leaves	
	Matches	

Figure 4.6 This figure shows the different materials observed at La Ventana and La Ventana Campana caves. Orange signifies the artifact's presence at the site under which it is listed. (Figure Haley Austin 2016, compiled from Ishihara-Brito and Guerra 2011, Guerra and Ishihara 2007, and Ishihara and Guerra 2005).

Tikal

Tikal (See Figure 4.4) is considered one of the most densely populated urban centers in Mesoamerica (Culbert 1990; 1991). Located in the Petén department of northern Guatemala, Tikal is recognized as one of the major, politically influential, urban centers (Haviland 1970; Shook et. al. 1986; Woodfill and Andrieu 2012) in the Maya region during the Classic Period (Shook 1986; UNESCO 2016). Tikal's location, size of urban spread, monumentality of architecture all hint to its influence during the Classic Periods (Shook et. al. 1986). As Shook et. al. (1986) acknowledges, "… a site of such size and importance might well be expected to have exerted dynamic leadership over a considerable area … [furthermore] Tikal has traditionally been regarded as a powerful and influential center, particularly in architecture" (1986: 5). Tikal has been recognized nationally and internationally due to the story it continues to tell of its inhabitants, their social, economic, political, agricultural, etc. lifeways. Employing the terminology of Arlen and Diane Chase (2009), Tikal was one of two "super-states," which were the central hub to a set of other sites and which relied on dynastic, geneological hierarchy (Chase and Chase 2009; Freidel and Rich 2016; Martin and Grube 2000; Woodfill and Andrieu 2012). According to Chase and Chase, "All other sites are viewed as having been in been in alliance, subjugation, confederation, or some sort of hierarchical relationship with one of these two competing centers" (2009: 13). Supporting a population of approximately 62,000 people at the urban center itself (Culbert et al 1990), it's not surprising that it is considered one of *the* major political powers in the Lowlands (Chase and Chase 2009) –not to mention the approximately 500,000 people it influenced when recognizing the economic and political network of which it was the axis (Culbert 1991).

With Tikal's historical influence, alongside the commanding example it provides of Maya culture, it is not surprising how the site has captured the attention of academics, the Guatemalan government and tourism industry, and international organizations like UNESCO, meanwhile persisting as an important site for contemporary Maya populations (Golden Drum 2014; Little 2004; Wurster 2006) In 1956 Guatemala named the area a National Park, encompassing around 576 km^2 including, "la parte central de Tikal, su prerifería y pequeños sitios prehispánicos que lo circundan" (Ponce de León 1986: 17). Later, in 1979, the site was named an UNESCO World Heritage Site (UNESCO 2016).

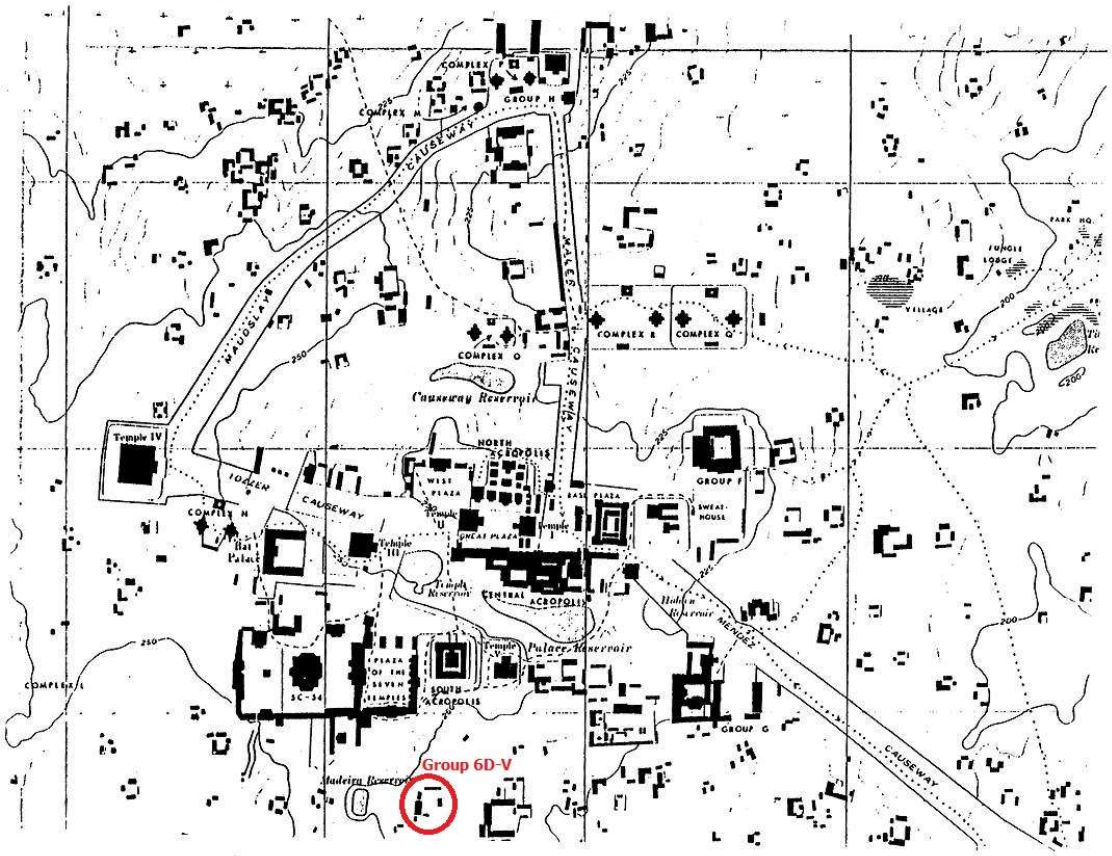

Figure 4.7 This map shows the urban center of Tikal, Petén, Guatemala. Note the consolidation of structures in the southern frame. Group 6D-V is circled in red in the bottom-right off center. (Modified from Casado Internet Group 2016)

Thankfully, this continued national and international attention has supported ongoing archaeological efforts at the site. The site center is both expansive and awe-inspiring; Marcus (1973) names it as a "regional capital" along with other important sites such as Calakmul, Copán, and Palenque. Undoubtedly, before the first "discovery" of the site in 1848 by Modesto Méndez and Ambrosio Tut, local populations knew of its existence and location. Archaeologically, the site has been recognized within academic spheres since the late 1860s (Ponce de León 1986).

Problematical Deposit 21

Problematical Deposit 21 (P.D. 21) was excavated by Maria Josefa Iglesias Ponce de León as part of her doctoral dissertation research; at the time, her research was conducted under the University of Pennsylvania Tikal Project and the Guatemalan Proyecto Nacional Tikal (Ponce de León 2003). Deposit 21 is one of the forefront examples of what has become *the* problematical deposit. Ponce de León defines a problematical deposit in the following terms:

> El Depósito Problemático… [es] una concentración de materiales especiales que han sido cellados y, por lo tanto mantenidos puros de intrusiones posteriores, parece ser un rasgo integrado en la cultura maya desde épocas tempranas… (Ponce de León 1986: 196).

In her dissertation and later publications, Ponce de León acknowledges the eccentric nature of such deposits (Ponce de León 1986; 1988; 2003). These deposits have been documented across the Maya region in the Early or Epiclassic and again in the Late to Terminal and Postclassic (Brown 2010; Harrison-Buck and McAnany 2007; Harrison-Buck, McAnany, and Storey 2007; Iannone 2010; Koenig 2014; Kosakowsky and Robin 2009; Navarro-Farr 2009 and 2012; Ponce de León 2003) I argue that activity of this nature continues to occur across the Maya region (Brown 2002, 2005; Ishihara and Guerra 2005; Guerra and Ishihara 2007; Ishihara-Brito and

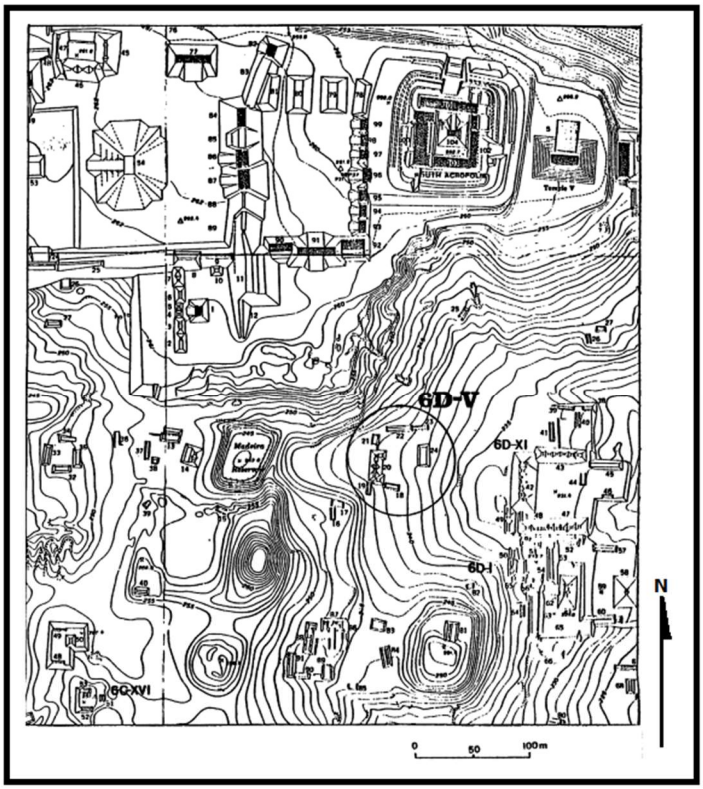

Figure 4.8 This map shows the 6D-V Group's location in association with –from left to right– The Plaza of the Lost World (top-left), the Plaza of the Seven Temples, the South Acropolis, and Temple V. Also of note is the proximity between Group 6D-V and the Madeira Reservoir (Ponce de León 1986).

Guerra 2011; Koenig 2014; Scott 2009), meaning the phenomena endures across millennia. P.D. 21 is constituted of ceramic fragments, lithics, bone, and shell fragments, all of which were excavated from a context in association with primary and secondary[34] human remains (Ponce de León 1988).

Context. The location of the deposit is in direct association with structure 6D-20 (See Figure 4.9), part of Group 6D-V (See Figures 4.7 and 4.8). Other structures in this group include various range platforms and "un palacio abovedado que consta siete cámaras" (Ponce de León 1988: 27). P.D. 21 is adjacent to the western edge of structure 6D-20 along the southern most section of the building (See Appendix A).

Timeline of use. According to a later publication which addresses P.D. 21 specifically, Group 6D-V "comienza su actividad a lo largo del periodo Clásico Temprano" (Ponce de León 1988: 27). Group 6D-V continued to be occupied until the Terminal Classic during the Eznab Phase[35]. Ponce de León describes the climax of development in the group as having occurred in the Late Classic during the Imix Phase (Ponce de León 1988).

[34] In terms of burial/deposition.
[35] Approximately 889 to 928 CE.

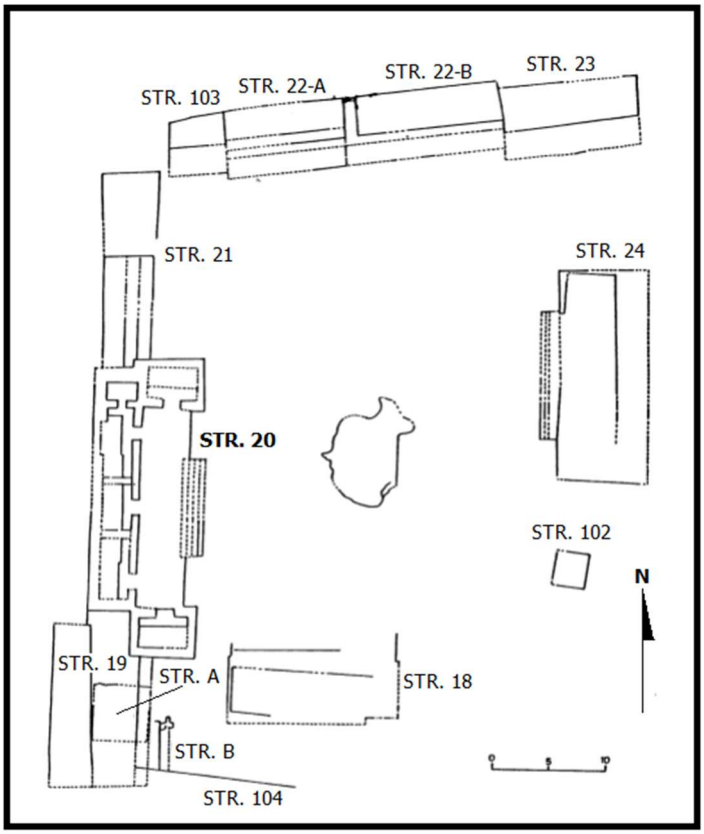

Figure 4.9 Group 6D-V consists of 12 structures forming a plaza whose longer side is oriented North-South. (Modified from Ponce de León 1986: 458)

P.D. 21 is a different topic altogether; within the Early Classic, during the Manik 3a Phase, P.D. 21 began to be deposited (Ponce de León 1986). However, according to a later publication by Ponce de León (1988), P.D. 21 can be dated to as early as the Middle Formative Period[36] with activity enduring into the beginning of the Late Classic during the Ik Phase[37] (Ponce de León 1988).

Stratigraphic Sequence and Architectural Elements. The stratigraphy of the P.D. 21 is relatively homogenous throughout the deposit –meaning the same stratigraphic layers are pervasive through the deposit (Ponce de León 1986). The exception to this can be seen on the unit guide (See Appendix A); a floor separating P.D. 21 from a midden which is located atop P.D. 21. in the stratigraphic sequence, thus indicating a later use of the space, separate from the deposit (See Ponce de León 1986: Chapter IV).

In overview, the stratigraphic sequence was as follows: collapse from 6D-20 –confined in the eastern and southeastern excavation units-, a greyish layer containing what Ponce de León describes as midden materials, below this layer one encounters a thin layer of black earth "con

[36] 750-550 BCE.
[37] 554-692 CE.

grandes concentraciones de materiales de carbón" (See Appendix A for Unit Profiles), following this is a layer of brown-grey matrix with bones, ceramics, lithics, shell, etc. throughout, this brown-grey level ends at the limestone bedrock[38] (Ponce de León 1986: 200). Similarly to other deposits at Tikal, P.D. 21 is placed atop an area of bedrock which has been partially hollowed out; Ponce de León calls this type of feature a *chultún* (Ponce de León 1986; 1988)

This sequence is disturbed by two small structures (See Appendix A) which cut into P.D. 21. Both are small in stature; the North Structure, *Estructura Norte*, cuts through units L-3, K-3, and J-4, and the South Structure, *Estructura Sur*, falls along the edge of units F-1 and G-1, continuing to the West along this boundary through G-3 and what would have been (had it been excavated as such) F-3 (Ponce de León 1986).

Excavations.

In order to fully define the extent of the deposit, a total of 102 m^2 of excavations were opened by Ponce de León and her team (See Appendix A). At its longest point North to South the deposit measures 37 m and from East to West 17 m (Ponce de León 1986).

Contents.

The Early Classic, the Manik 3a[39] Phase to be precise, is when the majority of P.D. 21 was formed. Comprised of, from largest to smallest in terms of quantity, ceramic fragments[40], lithics[41], shell fragments, and bones –some of which are human bone (See Appendix A for a table listing all excavated materials and quantities per unit) (Ponce de León 1986). Further complicating the nature of P.D. 21 is the mix of domestic/utilitarian artifacts manifesting in the

[38] The bedrock fluctuates greatly in depth beneath the deposit, as noted in Ponce de León's dissertation, certain parts of the bedrock have been hollowed and cut (Ponce de León 1986).
[39] 378 to 550 CE (Serra Puche and Navarrete 1988; UCSB 2010).
[40] All broken, seemingly, with intention.
[41] Debitage, blades, eccentrics, etc.

form of ceramics and lithic tools, and what Ponce de León describes as sacred, ceremonial artifacts such as special ceramics[42], obsidian eccentrics, jade, and worked shell (1986). The materials are therefore diverse in nature. Utilitarian/domestic, ceramics and commonplace obsidian blades are found in P.D. 21 associated with ceramics of high quality[43] and obsidian eccentrics[44]; the combination of higher quality wares, some of which appear to have been imported from other regional centers[45], with domestic quality wares is a characteristic of many problematical deposits (Ponce de León 1986; 1988). The artifacts and ecofacts excavated from P.D. 21, specifically ceramic materials gave Ponce de León a bracket of time, Manik 3.a, in which most of the deposit likely formed. However, Ponce de León notes that "en ningún caso existe evidencia de que los restos humanos … puedan pertenecer a gentes que vivieron en Manik 3a, ni siquiera en el Clásico Temprano en general" (Ponce de León 1986: 349). So, while much of the deposit was composed of materials pertaining to the Manik 3a Phase, the intrusive, human remains expand the duration of the depositional timeline of the deposit.

In comparison to the mostly homogenous stratigraphic sequence of the deposit as described above, the material assemblage is both varied and similar simultaneously, depending upon the type of artifact in question. Concentrations of materials are higher near the hollowed section of the limestone bedrock, however, "no hay una pauta general que nos indique una constante como lo sería un centro y sus ondas intermedias y periféricas, etc." (Ponce de León 1988: 31).

[42] Cylinder vases, tops, polychrome pieces, pieces featuring styles from outside the region –eg. Teotihuacán style flute (Ponce de León 1986, 1988).
[43] Eg. Painted ceramic wares, figurines, *incensarios*, ceramic tools.
[44] Lithics which are flaked in shapes other that of a typical blade, or biface; often abstract, and at times zoomorphic, in style.
[45] Such as Teotihuacán (Ponce de León 2003).

In terms of ceramics recovered, Ponce de León recognizes the diversity of forms encountered in the deposit including: pots, bowls, platters, plates, (cylinder) vases, vessel tops/lids, supports, *vertederas*, handles, small jars, miniatures/figurines, musical instruments, and *incensarios*. Utilitarian ceramics outnumber finer ceramics in quantity (Ponce de León 1986). In her analysis, Ponce de León denotes miniatures, musical instruments, and *incensarios* as "formas especiales" thus acknowledging that these two categories fall neither in domestic nor fine ceramic wares. In addition to these artifacts, the special forms classification is also applied to many of the ceramics which have been attributed to other sites; of particular interest to this study is the fragmented candelabrum[46]. The remaining ceramic forms are classified as domestic or ceremonial in reference to other contexts in which they are found at Tikal and in the Petén region of the Maya Lowlands[47] (Ponce de León 1986). In summation,

> "La inclusion de tan variada gama de cerámica en en … [P.D. 21] proporciona a éste una vertiente muy interesante, al estar representada en un solo lugar la práctica de la muestra cerámica que, por lo general, aparece en contextos diferentes de la sociedad maya de Manik 3.a [sic] (Ponce de León 1986: 264).

In comparison to the ceramics recovered, the lithic assemblage of P.D. 21 is even more varied. In her dissertation, Ponce de León relies on analysis conducted by María Elena Ruíz. This analysis separates all lithic materials into the following categories: worked or carved (1986), also described as domestic-artesanal in a later publication (1988) –this class contains projectile points, blades, scrapers, mortar and pestles, and *manos* and *metates*[48]; the next class designated is that of ornamentation (1986), or funerary-ceremonial (1988), and includes beads,

[46] According to Ponce de León, candelabrums of this style are seen at Teotihuacán, Kaminaljuyú, Zacualpa, Chiapas, Monte Albán, Tres Zapotes (1986).
[47] Utilitarian wares are often associated with habitational groups, whereas fine or ceremonial wares are associated with special contexts such as tombs or caches (Ponce de León 1986).
[48] *Manos* and *metates* are grinding stones used throughout Mesoamerica for the purpose of processing corn; these tools are still used today.

ear flares and spools, earrings, pendents, and parts of mosaics; the final category established by Ponce de León is that of problematics (1986) or un-designated (1988) which is the catch-all category for lithics which don't pertain to the two previous groups.

The presence of such a diverse assemblage echoes that of the ceramics, with a mix of both special or ceremonial *and* pieces classified as domestic; additionally the different materials used to fashion the tools is extensive (See Appendix A). As to be expected, obsidian, jade, slate, and chert lithics were found throughout P.D. 21, however pyrite, mica, quartz, a pyrite-galena conglomerate, some small, green stone[49], red pigment thought to be cinnabar or hematite, and an rock of unkown type of a red and pink bicolor (Ponce de León 1986). The diverse variation within the domestic or commonplace category is important to note –especially as it is the largest in quantity. Meanwhile, the funerary-ceremonial group is labeled as such due to the dense association of this class with the primary interments and caches (Ponce de León 1986). This class is also constitued of pieces of considerable variety; "agrupa 12 variables, 2 de piedra tallada y 10 de piedra pulida" (Ponce de Leon 1988: 37).

The final artifact classes discussed here are those of organic remains. In addition to the extensive lithics and ceramics excavated, shell and marine materials, animal bone, and human bone were all identified within the materials recovered from P.D. 21. Much like the lithics excavated, the shell and marine materials were diverse in their function (See Appendix A), however Ponce de León notes that "la catalogación de material malacológico [se apareció] … tanto en el Depoósito Problemático 21 como en el resto de la excavación" (1986: 303). The shell and marine materials were subdivided into worked and unworked categories. Similarly, the animal and several, mostly adult, human remains recovered from P.D. 21 have been designated

[49] Unidentifiable due to its size.

into two sub-groups: carved/worked, and unworked. The human remains belong to approximately 20 individuals, two of whom are specified as Burials 155 and 178 (See Appendix A) (Ponce de León 1986).

In the following chapter I review, compare, and analyze the data presented above . The source (La Ventana and La Ventana Campana) to subject (P.D. 21) analogy will be outlined and its validity assessed at length. The focus of this argument will be on the composition of these deposits, with the specific purpose of arguing for whether cultural continuity in the practice of ritual among the Maya can be made/reasonably asserted with the proposed model.

Chapter V
Analysis
An interpretation and presentation of analogues

In this chapter I concentrate on an interpretation of the analogous materials present in the artifact and ecofact assemblages of La Ventana, La Ventana Campana and P.D. 21. These are respectively created through contemporary cave use by K'iche and Kaqchikel Maya in Chocolá and the surrounding region contrasted to the formation of Problematical Deposit 21 (P.D. 21) by the ancient Maya of Tikal. In addition to the presentation of these interpretations, I include a brief review of other examples which substantiate my analysis. The data employed for the source- and subject-side cultures will be the work of Ishihara-Brito and Guerra (2005, 2007, 2011) and Ponce de León (1986, 1988, 2003) respectively. Prefacing the discussion of an analogy between these two cultural groups, I will outline the degree to which an argument of cultural continuity is valid between the Tikaleños of the Early Classic and contemporary populations in Chocolá.

An argument for cultural continuity

In order to draw a comparison or create an analogy, one must understand the role of assumptions and how they inform the construction of an intertemporal comparison. As outlined in Chapter III, when crafting an analogy, it is important to recognize and identify any implicit assumptions to the comparison being drawn (Johnson 2010). An assumption which permeates this analogue is that of cultural continuity. Cultural continuity can be defined as an obligation to past (and future) generations to maintain cultural lifeways, understandings of symbology and worldview (Verkuyten 2005). As defined by Christine Preston (2008: n.d.), social, and by association cultural, continuity "cannot simply be defined as the absence of social change, that is, things remaining the same, because social change is a continual process in all societies."

However, Preston notes that there are certain practices, structures, etc. which are essential to a culture, and therefore are more persistent from generation to generation (Preston 2008).

I argue that contemporary Maya populations, regardless of dialect, location –diasporic or native– perform practices and behaviors which are indicative of cultural continuity to their ancient counterparts. David Browman (1978) argues in a similar vein in his book *Cultural continuity in Mesoamerica*; he states that "Present information suggests a great deal of cultural continuity between archaeological, extinct cultures, and ethnographic studies…" (1978: 201). Browman discusses the continuation and maintenance of certain cultural practices, beliefs, and understandings. Change has inevitably occurred, however the perseverance of cultural conceptions and/or practices which manifest at an ideological level remain the same. Unfortunately, despite the opportunity this presents for anthropologists and archaeologists alike, collaboration with contemporary Maya populations is not as commonplace as one might assume.

The argument I make for cultural continuity hinges upon three broad categories which include 1) the maintenance of understandings of the world –e.g. the calendar system (See Golden Drum 2012a and 2012b) and as a byproduct of this the preservation a Maya worldview[50] (See Molesky-Poz 1999, 2006; Morris 1987)–, 2) the maintenance of symbology[51] , and 3) the preservation of societal roles and structure –e.g *aqj'ab'* or day-keepers, *h'ilol* or shamans, a connection to the land and its agricultural use or *milpa* culture. In looking to Mary Pohl's (1981) work on the *cuch* ritual, there are obvious ways in which cultural transformation can be seen among contemporary Highland. Specifically, Pohl discusses the ways in which capitalism has warranted societal adaptation. However Pohl also acknowledges that important parts of Maya

[50] Maya calendrics can be traced back through millennia in the epigraphic record. In the Maya conception of time, it is cyclical and the present is/can be a shadow or repetition of the past. Duality, a theme which permeates the Maya worldview is present in this conception.
[51] Eg. weaving patterns, cardinal directions and associated colors, a sacred, living landscape.

culture –ritual in particular– preserve their meanings, even if their manifestation is different[52] - i.e. the *cuch* ritual (1981). As the contemporary Maya "heartland" the Highlands have been the focus of a large corpus of varied, academic research (Brown 2005; Henne 1977; Langan 1991; Tax 1959; Vogt 1976)

Respectively, the Highlands today and the Southern Lowlands of the Classic Period represent cultural hotspots of the contemporary and ancient Maya. As cave use is a prevalent ritual practice among contemporary Maya, it seems proper that it serve as the source-side cultural context. I argue that cultural continuity exists between the Classic and contemporary Maya. In the Classic Period, Tikal was one of the larger sites of the Maya "heartland." I argue problematical/terminal deposits represent a residue of ritual activity, a residue similar to that of contemporary cave use.

Problematical or terminal deposits are, as I argue, parallel in terms of their endurance. As will be discussed further below, the diverse assemblages documented in problematical deposits among the Maya point to a use independent of a midden. For example, the composition of P.D. 21, as discussed by Ponce de León (1986), is heterogeneous in terms of ceramic materials – utilitarian and ceremonial- and the fragmentary nature of all ceramics excavated, the location of the deposit along the western edge of 6D-20 to name a few (See Ponce de León 1986). I believe that this, in addition to their long-term formation, indicates a ritual facet to these deposits.

Problematical Deposits appear in the archaeological record of the Maya region in two concentrated periods, the Early and Late/Terminal Classic with certain periods of deposition continuing into the Postclassic. P.D. 21 is an Early Classic example, Late and Terminal Classic examples also exist in the southern Maya Lowlands in Belize (See Chase and Chase 2000, 2004,

[52] In her discussion of the *cuch* ritual, Pohl notes that some of the materials used, specifically the switch of a bull for a deer (1981).

2007; Clayton, Driver, and Kosakowsky 2005; Harrison-Buck, McAnany, and Story 2007; Iannone 2009; Inomata and Triadan 2000; Kosakowsky and Robin 2009) Guatemala (Becker 1988; Demarest, Rice, and Rice 2004; Navarro-Farr 2009) and Mexico (Friedel, Suhler, and Palma 1998). The continuation of the practice(s) and/or ritual(s) associated with the creation of these deposits is evident in the Classic Period. The continuation of deposit creating behavior among contemporary Maya is also evident in re-entry ceremonies of Tikal[53], cave use (See Bassie-Sweet 2002; Ishihara and Guerra 2005; Guerra and Ishihara 2007; Ishihara-Brito and Guerra 2011), and the marketplace of Chichicastenango (Bunzel 1952) to name a few.

I argue that the debris –ritual in nature- of P.D. 21, although varied in type and patterning generally are an amalgam of materials parallel or analogous to debris at La Ventana and La Ventana Campana. Furthermore, I assert that the argument for cultural continuity between contemporary Maya communities, specifically the community and periphery of Chocolá, and the Classic Tikaleños is both justified by and substantiated in the respective material assemblages and their patterning described in the previous chapter.

A discussion of analogy: material assemblages, stratigraphic and geologic contexts

In the following sub-sections I construct an analogy between P.D. 21 and the cave use at La Ventana and La Ventana Campana based on elements of their respective material assemblages, stratigraphic sequences (in the instance of P.D. 21), and, related to their stratigraphy, their geologic contexts. Combined I argue that these three types of examples constitute a reasonable analogy between the two contexts.

[53] Yet undocumented academically, these ceremonies are an example of a future research possibility.

Material Assemblage

The material assemblages at La Ventana and La Ventana Campana and their proposed overlap can be seen in Figure 4.4 in Chapter IV; a selection of artifacts and ecofacts excavated from P.D. 21 is described in the previous chapter as well. The focus of the material analogy between the source- and subject-side examples will be on the following materials: for the source-side culture I will focus on the candles, alcohol bottles, cans, and sugar circle. For the subject-side, I will look to the broken candelabrum, *incensario* fragments, ceramic assemblage (combination of domestic/utilitarian and ceremonial/funerary), the walls which intersect P.D. 21, and the hollow in the bedrock in which it was placed. I argue that there are significant parallels to be drawn between the contrasting cultural contexts concerning their material elements (See Figure 5.1).

The first parallel is that between the broken candelabrum in P.D. 21 and the use of candles at La Ventana and La Ventana Campana. I interpret the presence of the broken candelabrum (See Appendix A), identical in style to contemporary artifacts excavated at Teotihuacán, as possible evidence of the burning P.D. 21. The piece itself is mostly intact, implying that, unlike other ceramics excavated, it was not intentionally broken for placement in P.D. 21. The use of candles during the curing ceremony at La Ventana, and the presence of burnt candles and candle wax at both La Ventana Campana and La Ventana indicates that candles are a customary part of cave ritual. Videos published by Golden Drum (2012a and 2012b) show the use of candles, along the cardinal directions, in fire ceremonies at Tikal and Quirigua. As Brown (2004) notes in her work on hunting shrines in the Guatemala Highlands, "Burning candles is an essential part of all postcolonial Maya ritual" (2004: 36). The presence of

the candelabrum compared to the prevalent use of candles in contemporary is the first spoke of the proposed analogy (See Figure 5.1).

According to Brown (2004), (copal) incense and candles are "typical ritual offerings" among modern Maya (Brown 2004: 42). I argue that, in addition to candle use, evidence of incense burning is present at La Ventana and La Ventana Campana as well as in P.D. 21. At La Ventana, Ishihara and Guerra (2005) note the presence of incense remains. In the context of La Ventana Campana, the researchers note that there are scatterings of tin foil along the floor of the cave, these fragments were later identified as incense wrappers (2005). Evidence of incense use at P.D. 21 relies on the following two lines of evidence (See Chapter IV): 1) incense fragments were found throughout the deposit, 2) excavations also unearthed a greyish matrix which enveloped the artifacts of P.D. 21 (See Appendix A). I argue this matrix is grey –rather than black or darker brown due to organic content– possibly a result of the dumping of ashen substances throughout the deposition ie. incense. So, in crafting an analogue between the two, the use of incense seems to be present in both the source- and subject-side contexts.

This makes sense; relying on Brown's (2004) observation that candles and incense are staples of modern Maya ritual, it underscores the possibility that the Tikaleños would have been burning incense and –again *possibly*[54]- candles at P.D. 21 during its formation. Incense and candles stand little chance of preserving in a tropical environment like Tikal, Petén, Guatemala. Nevertheless, I believe there is substantive evidence that they were used at P.D. 21.

The second parallel which I wish to highlight concerns the containers or evidence of vessels at P.D. 21 and La Ventana and La Ventana Campana. Ceramics are the most prevalent of

[54] I stress the possibility of this fact, as the use of candles among the Ancient Maya is sparse. The fragment in question was only identified as a candelabrum in reference to similar artifacts from Teotihuacán (Ponce de León 1986).

any material in P.D. 21 and similarly to this, glass and plastic bottles and tin (aluminum) cans were one of the most ubiquitous artifact classes found at La Ventana and La Ventana Campana. I argue that the presence of plastic, glass, and aluminum containers at the two caves is indicative of a modern "ceramic" class. Ceramic fragments of utilitarian nature were documented alongside ceremonial wares in P.D. 21. I believe that the glass and plastic bottles (originally holding alcohol, store-purchased or homemade, Gatorade, carbonated water, and soda) and the cans (aluminum and jalapeño containers) represent a modern ceramic. Used for the purpose of bringing organic substances to the cave for rituals/*ofrendas*, I believe that these containers represent another way in which to bring food and beverages in from elsewhere. Ponce de León (1986, 1988, and 2003) did not publish any analysis of the chemical residues on the ceramic fragments. Relying on an analogy between utilitarian ceramic-wares excavated from P.D. 21 and the glass and plastic bottles and cans documented at La Ventana and La Ventana Campana, one could frame future research questions of other problematical deposits. This more focused research could yield better understandings concerning the use the ceramic materials prior to their placement in a problematical deposit.

In addition to the containers described above, Ishihara and Guerra (2005) note the presence of ceramic fragments at La Ventana; this practice is not unheard of in the region (See Brown 2000). Their description is limited and merely lumps the fragments in with the overall material assemblage found at the cave. However, future research and collaboration with Chocolá locals could reveal greater significance behind these fragments as well as their use in the context of La Ventana ritual.

The final parallel which will I draw between the source- and subject-side cultures' material assemblages concerns the demarcation of space. The separation of space for special use

among modern Maya can be seen in Figure 4.4 in the previous chapter. I believe an analogy can be drawn between the use of sugar circles (laid down prior to ceremonial activity) at La Ventana and most likely at La Ventana Campana[55] and the placement of *Estructura Norte* and *Estructura Sur* in P.D. 21 at Tikal. The sugar circle described by Guerra and Ishihara (2007) were used to separate the placement of the *ofrenda* and to demarcate the central area of the ritual activity of the curing at La Ventana. While the demarcation of space using sugar was not witnessed firsthand by Ishihara-Brito and Guerra at La Ventana Campana, they observed empty, partially full, and full bags of sugar at both La Ventana and La Ventana Campana (2005). Much like the demarcation the sugar circle provided at La Ventana, the placement of *Estuctura Norte* and *Estructura Sur* contains the majority of P.D. 21 (See Appendix A) (Ponce de León 1986). Combined with the hollow in the bedrock, the two walls provide a physical limit to P.D. 21 comparable to the limit constructed by sugar in contemporary ritual. Sugar is not the only way contemporary Maya demarcate the limit of an activity area, other manifestation include short platforms or circles made of stones (See Figure 4.4). I believe the diverse means employed to establish a separate and special space by contemporary Maya recalls the intrusive *Estructuras Norte* and *Sur* (See Appendix A) as well as the cavity dug into the bedrock below P.D. 21.

The points of analogy drawn between contemporary cave use at La Ventana and La Ventana Campana and Problematical Deposit 21 can be seen synthesized below in Figure 5.1. I argue these comparisons support my assertion that cultural continuities exist between the Classic Maya and contemporary populations.

[55] These caves are among many other ceremonial locations used by contemporary Maya populations. The sugar circle is seen in other modern ritual contexts as well

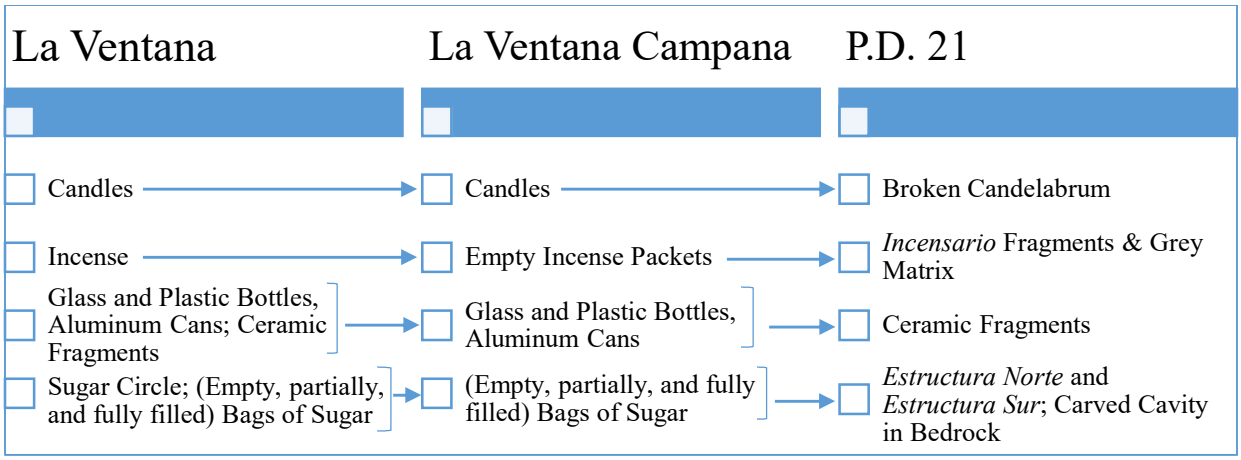

Figure 5.1 This figure displays the material analogies I have interpreted from the data sets compiled by Ishihara-Brito and Guerra)2005, 2007, 2011) and Ponce de León (1986, 1988, 2003) (Austin 2016).

Stratigraphic Sequence

In this section I highlight the elements of the stratigraphic column of P.D. 21 (see Figure 5.2) which I argue is similar/analogous to the debris deposited during the course of rituals performed at La Ventana and La Ventana Campana caves. Central to this discussion is burning of materials enacted during the processes which ultimately resulted in the depositional patterns seen in P.D. 21. In particular, I will focus on what Ponce de León describes as "una capa de tierra negra con grandes concentraciones de materiales y carbon[56]" (1986: 200). In my opinion this layer of P.D. 21 represents one of the following: 1) a burning of organic material, "sanctifying" the area upon which P.D. 21 was to be placed, 2) a layer of organic material laid down prior to placement of P.D. 21 materials, or 3) a layer of burnt organic material deposited prior to the formation of, and unrelated to, P.D. 21.

Although varied, in relying on an understanding of the ethnographic present and the work of Ishihara-Brito and Guerra, I consider each to be plausible in their own way. Nevertheless, of

[56] Unfortunately the corpus of literature concerning P.D. 21 only mentions this in passing, not addressing the nature of this carbonic stratum. This results in a lack of clarification concerning whether this carbon concentration can be attributed to a concentration of burned material (i.e. charcoal) or simply a concentration of organic materials.

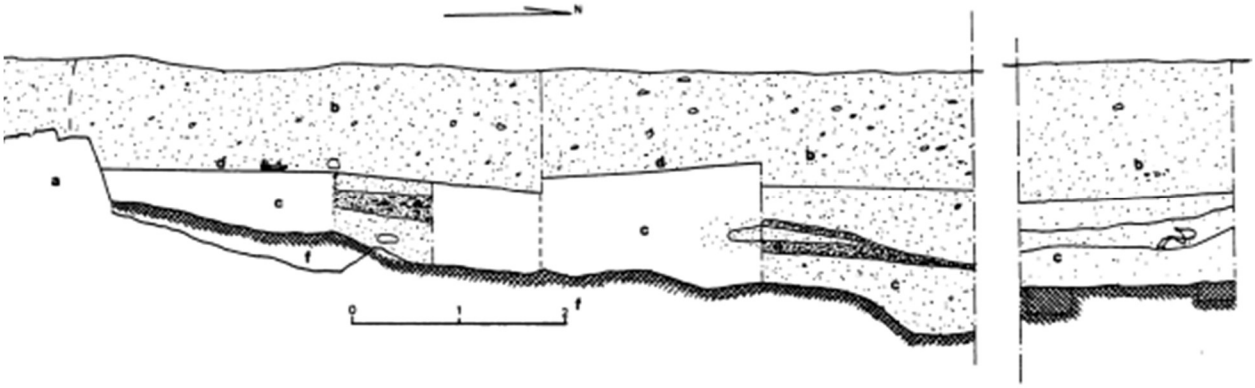

Figure 5.2 This figure features the North-South profile of P.D. 21 along column 3; the legend for this image is as follows: a) *Estructure Sur*, b) midden, c) P.D. 21, d) floor, e) black matrix, high carbon content, f) bedrock –limestone. The red arrow identifies the carbon layer (Modified from Ponce de León 1986).

all three, I believe that the first scenario is the most likely. The first hypothesis relies heavily on the ethnoarchaeological work of Ishihara-Brito and Guerra (2005, 2007, 2011) and Brown (2000, 2002, 2005, 2010) as well as the ethnographic work conducted in the Highland region by researchers such as Vogt (1976). Fire is an essential component to many Maya rituals today.

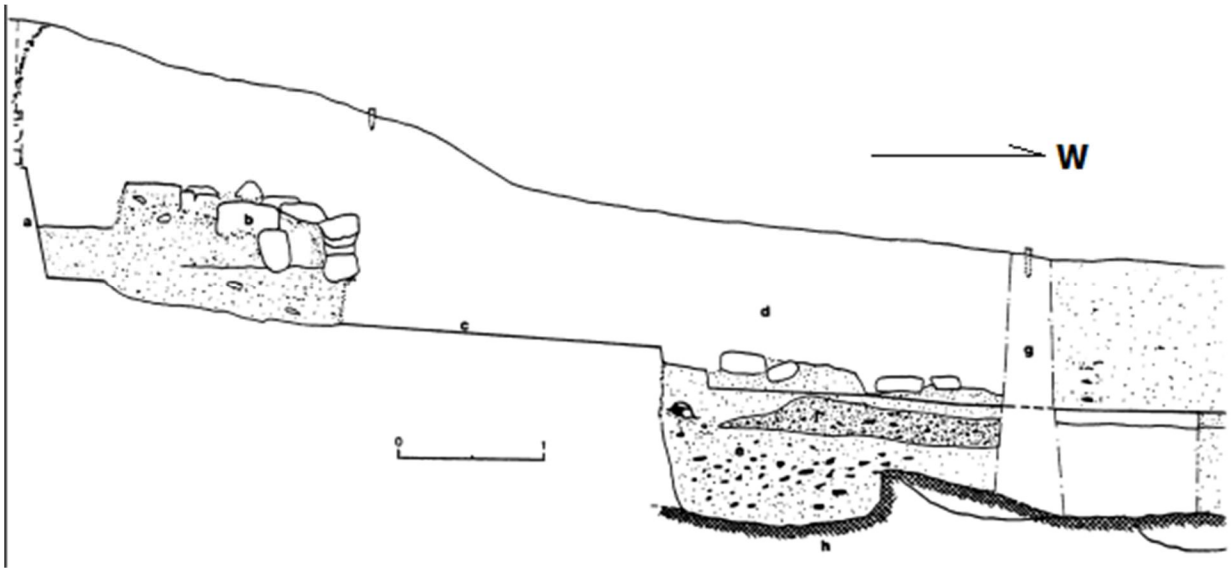

Figure 5.3 is the East-West profile of P.D. 21; the legend for the lower image is as follows: a) back wall of structure 6D-20, b) collapse, c) floor, d) midden, e) P.D. 21, f) black matrix, high carbon content, g) test pit, h) bedrock –limestone. (Modified from Ponce de León 1986).

At the turn of the Baktun 12 in 2012, Maya communities across Central America convened to conduct renewal ceremonies, bringing about the transition to a new period (Golden Drum 2012a, 2012b).

The second hypothesis I propose is a laying down of organic materials in a dense layer, which over time decomposed and resulted in the dark, black matrix described by Ponce de León (1986). For this line of argument, I offer the following analogy. In La Ventana Campana cave, pine needles were observed scattered throughout the interior-most sections of the cavern. Ishihara-Brito and Guerra posit that the placement of the needles may be connected to the wet environment of the cave (2011), however they note that the needles are not only located around the parts of the cave where natural springs flow or water pools but also centralized around an area which showed extensive evidence of burning[57]. I therefore posit that organic substances, were placed in the cavity created in the bedrock and the surrounding area prior to the long-term deposition of P.D. 21.

Two faults I find with this hypothesis are: 1) rainfall in the region is substantial, which would impact the taphonomic processes which would result in the starkly organic layer below P.D. 21, and, 2) the markedly dark color of the layer challenges the deposition of unprocessed organic material –I believe it points more to burning.

The third interpretation I present is that of burnt material being brought in from elsewhere. There are no direct lines of evidence which I can reference to substantiate this interpretation. However, it would be remiss not to acknowledge the possibility of the transportation of burnt material from another locale.

[57] Ashen and burnt materials on the floor at the site of a burning and a soot ring on the ceiling directly above (Ishihara-Brito and Guerra 2005).

A living-constructed-symbolic-sacred-dualized landscape: the geologic context of P.D. 21.

Having studied cave-use and the idealized landscape in the past (Austin 2015), I believe that the hollowed bedrock into which P.D. 21 was placed is no coincidence. Some argue otherwise, calling such intrusive placements as comparable to burn pits or simply holes for middens (Inomata et. al. 2015). Following this line of argument, the placement into the bedrock has no strong significance. However, according to James Brady and Wendy Ashmore (1999), "For the Maya, landscape is firmly linked to powerful supernatural domains," "…built and unbuilt – constructed and conceptualized – Maya landscapes are far from passive arenas or sets" (1999: 124 and 126). Brady and Ashmore assert that architectural elements constructed by the Classic Maya were an extension of the natural landscape in which they lived (1999). Caves in particular represent an entrance into the *inframundo* and are a liminal space between the earthly and the super –also "extra" or "sub"– natural.

P.D. 21 was place in a space bounded by two short structures and concentrated in a cavity carved into the bedrock (Ponce de León 1986). I argue that just as architectural features such as temples or other monumental structures are symbolic of hill and mountains, the hollow carved into the bedrock could represent a cave, niche, and/or cleft in the earth. The question is: why would one dig down into bedrock? A powerful justification may have been the creation of an artificial entrance into the earth. James Brady and George Veni (1992) documented the creation of niches and pseudo-caves by Maya peoples. As they observed, these cavities were carved into volcanic rocks, a rather tough material (Brady and Veni 1992). I argue that the *chultun* into which P.D. was placed is a manmade manifestation of a cave. Following this line of argument, this constitutes another point of analogy between contemporary cave use and problematical

deposits, and P.D. 21 in particular. However, it ought to be noted that holes dug into the bedrock for placement of objects or the dead is not undocumented elsewhere.

In the current example, Structure 6D-20 is the most impressive of Group 6D-V (See Appendix A). If any structure of the group were to be the manifestation of a hill or mountain it would be 6D-20. The placement of P.D. 21 in relationship to 6D-20, an architecturally constructed mountain, further denotes the cavity as a pseudo-cave and hints to the ritualistic nature[58] of the deposition of P.D. 21. However, it ought to be noted that holes dug into the bedrock for placement of objects or the dead is not undocumented elsewhere. At Aguateca, Petén, Guatemala, an adult male was found inside a hollow which had been carved into the bedrock (Inomata and Triadan 2000). Other carved hollows have been documented at Aguateca as well. One such hollow was termed a "fire pit… [containing] a large quantity of ceramics, lithics, and food refuse" (Inomata et al 2015: 4271). Additionally at Cival, Petén, Guatemala a Preclassic offering, Cache 4, was dug into the bedrock in a cruciform shape (Estrada-Belli 2006). Francisco Estrada-Belli asserts that Cache 4 is a representation of the axis mundi or world tree and contains items symbolic of maize and the maize god. While there are significant differences[59] between Cache 4 at Cival and P.D. 21 at Tikal the following similarities can be seen: ceramics smashed with intent, the placement into the bedrock[60], capped with a floor.

In following Estrada-Belli's (2006) analysis, I believe that his interpretation is similar to the one I draw here. Estrada-Belli posits that the cache is representative of the *axis mundi*; understanding that the *axis mundi* is representative of Maya cosmology this supports my

[58] I argue this is due to the importance of the cave in Maya cosmology.
[59] These differences include: placement (plaza versus outside plaza), organization (highly intentional placement at Cival versus mixed strata at Tikal), and context (E-Plaza Group at Cival versus smaller group 6D-V at Tikal). The latter of these three could be why one is more organized that the other as E-Groups tend to be monumental in nature.
[60] However, it should be noted that the description of the shape of the bedrock cut at P.D. 21 is not nearly as precise as documented at Cival in Cache 4.

assertion of the cavity of P.D. 21 as a symbolic representation of a cave (See Taube 2003). The cave is the way in which one accesses the lower levels of the universe (Ashmore and Brady 1999); in other words a way in which to move from one level to another along the *axis mundi*.

In summary, I believe the debris documented at La Ventana and La Ventana Campana, in addition to the curing ritual observed at the former, presents a reasonable analogical baseline for the study of P.D. 21. Considering the diverse goals of cave use[61], additional research is warranted. Perhaps problematical deposits are similarly varied in terms of the purposes they serve. Due to the continuous formation of these deposits, it is possible that the factors and forces influencing the nature its deposition are numerous rather than few. Collaborations with ritual practitioners concerning the variation in their cave use would benefit the framing of archaeological research and interpretation of problematical deposits in the future. The following chapter will summarize the interpretations presented herein, the viability of ethnoarchaeology to further inform the study of problematical deposits and archaeological investigation in general, and the discussion of future research goals.

[61] Goals include: healing, witchcraft, lifting and placing curses, placating and convening with supernatural beings (Ishihara and Guerra 2005).

Chapter VI
Conclusion

Now that the analogy has been presented, the data laid out, one must reflect and interpret. As discussed previously, cave use among the Maya has endured for millennia; it is a robust ritual practice, which persists even today. I believe that this continuous activity represents a pertinent baseline for informing better research methodology –specifically using ethnoarchaeology and analogy– and better interpretations of the past. Contemporary research projects in archaeology, epigraphy and iconography continue to turn up new data and beg new interpretations of the Ancient Maya. Ethnoarchaeological research strategies are promising in their abilities to inspire more pointed or culturally contextualized and, simultaneously, diverse[62] research questions. They also provide important opportunities to engage and collaborate with contemporary Maya populations. I believe these collaborative efforts are important first and foremost for contemporary Maya . Such efforts would create a (often lacked) space for contemporary Maya to interact directly with both the history of their cultural past and speak to and aid in the presentation and/or reconstruction of that past. Second to this, cooperative efforts help archaeologists to conduct better, more informed research. The exclusion of indigenous perspectives, unattainable by western archaeologists, is akin to colonialism. As a discipline tied to past and current efforts of colonization it is important for archaeologists to challenge the assumption that we understand the Ancient Maya, their lifeways, worldview, etc. better than their own descendants. This very assumption engenders a power dynamic which further excludes indigenous perspectives from archaeological research. Furthermore better, more inclusive archaeological practice must be employed if we hope to more accurately understand the past.

[62] In terms of their perspective or framework

Problematical deposits represent one of the many archaeologically documented phenomena which have few, readily evident explanations. As such, I argue that continued and expanded ethnoarchaeological research as expressed through the strategies employed in this study presents a viable approach to better comprehension of these deposits and the processes resulting in their formation.

The analogy presented in the previous chapter hinges on an assumption of cultural continuity of the Maya. I have argued the debris recorded at La Ventana and La Ventana Campana resulting from ritual activities resembles that of Problematical Deposit 21 in terms of their material assemblages, stratigraphic sequence, location, and context. Materially, I argue the following parallels are present between the source- and subject-side cultures: the broken candelabrum goes to the contemporary –and extensive– use of candles; *incensario* fragments found throughout Problematical Deposit 21 go to incense burning (See Brown 2004); ceramic fragments throughout the deposit correspond to glass and plastic wares, and in the case of La Ventana ceramic fragments; finally, *Estructura Norte* and *Estructura Sur* and the hollow in the bedrock which they frame go to the sugar circles and platforms used at La Ventana and La Ventana Campana. Stratigraphically, I argue that the burnt and/or organic material located directly on top of the bedrock and directly below Problematical Deposit 21 can be correlated to the burning activity which is central to cave use at La Ventana and La Ventana Campana. The final analogy which I draw, which is, arguably, speculation, concerns the location of Problematical Deposit 21 in relation to structure 6D-20; I believe that the hollow into which Problematical Deposit 21 is placed is a symbolic representation of a cave, and therefore is even more appropriately comparable to La Ventana and La Ventana Campana.

In the case of Problematical Deposit 21, ethnoarchaeology was integral to my understanding and interpretation of it. That being said the documentation at La Ventana and La Ventana Campana by Ishihara-Brito and Guerra is somewhat limited. The authors themselves acknowledge the diverse use of the cave, however, they were only able to observe a single debris episode at each cave, and single episode of active use at La Ventana. I believe that a more thorough and collaborative ethnoarchaeological project in the region would be beneficial for constructing a improved understanding of use and a better line of comparison to Problematical Deposit 21.

In following the example of problematical deposits, the transitionary period in which these deposits appear in the archaeological record –the Early and Late/Terminal Classic– is likely the result of complex social restructuring. This complexity manifests, in one way, in the chaotic, archaeological phenomena of problematical deposits. In order for ethnoarchaeology to be brought to bear in the interpretation, explanation, and understanding of these deposits, more targeted work must be conducted. In particular, research ought to focus on the diverse range of use and the meanings behind those uses. The diversity and multiple understandings of duality[63] among the Maya in terms of their perceptions of the natural world, societal roles and performance, is a theme which pervades many discussions of the ancient Maya. I believe that problematical deposits are a result of this multi-faceted conception of the world and are diversely inspired by a variety of socio-cultural forces. To better understand these forces, I argue that we would benefit from looking further and spread our gaze from the ancient to the contemporary.

Ethnoarchaeology has an incredible potential of application and use in the Maya region. The insight to be gained from working with contemporary populations is unequivocal. The

[63] In terms of time, symbology, meaning.

Maya still have so much to teach anthropologists and archaeologists alike; furthermore, the very people from whom we have the opportunity to learn deserve to be involved in the processes uncovering their history. Collaborative efforts between archaeologists and contemporary Maya promise to garner more effective research and, I argue, more "accurate" interpretations. In a field flooded with academics trained in a western education system and having grown in westernized societies, working hand-in-hand with contemporary populations is a way to temper etic assumptions of non-western, indigenous, Maya culture.

The field of Maya Studies, specifically archaeological Maya study, is changing. The last generation of research has seen small shifts in research goals: some focusing away from the elite/top-down approaches toward the greater population and community. Slowly but surely ethnoarchaeological research strategies are being increasingly relied upon in the region. However, there is still much to be done in the way of providing access for indigenous archaeologists, engaging and collaborating with communities, and attempting to reconstruct the life of ancient Maya people.

Appendix A

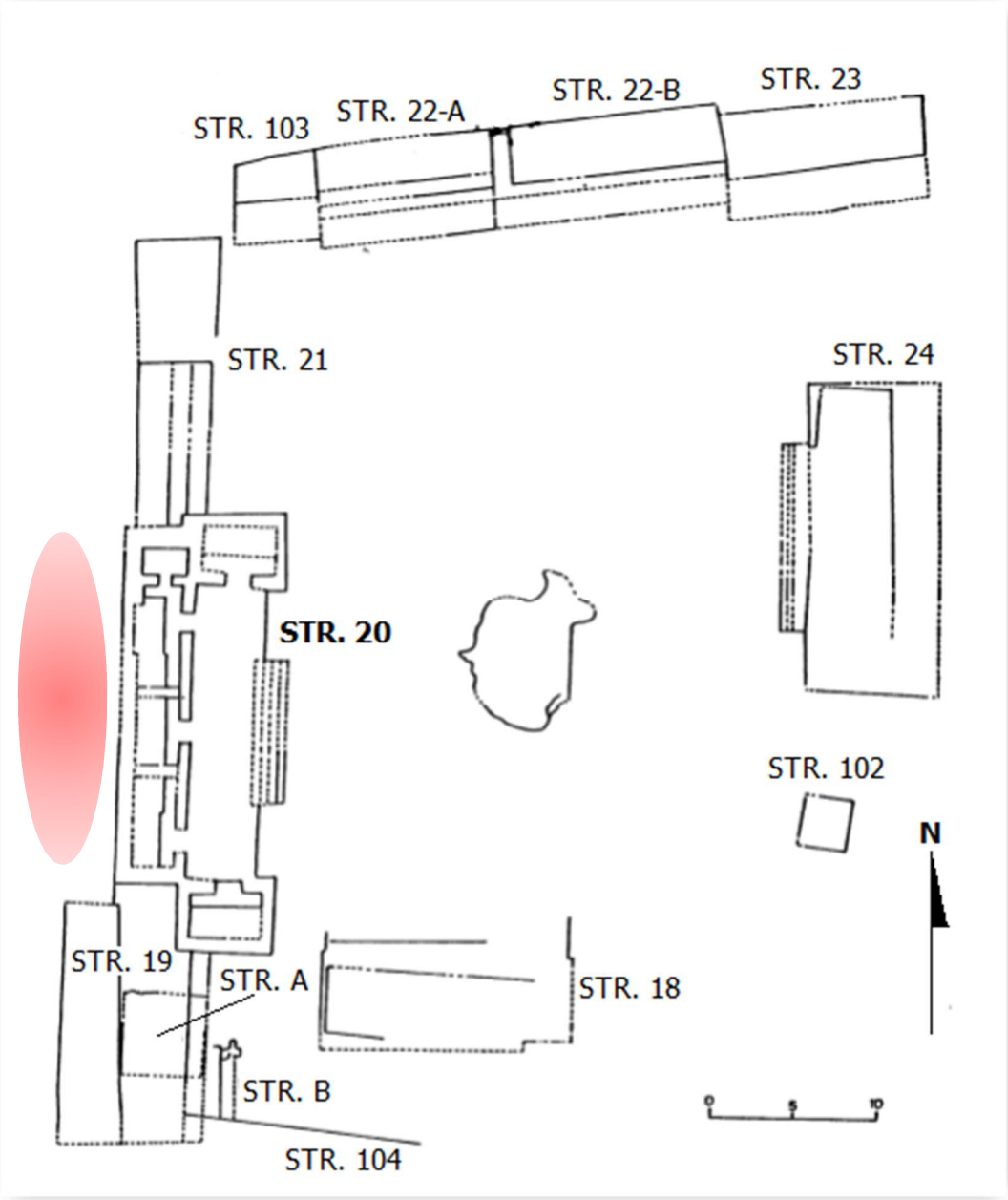

Figure A.1 This map shows Group 6D-V and the location of Problematical Deposit 21 in reference to the structure group is marked by a red oval (Modified from Ponce de León 1986).

Figure A.2 This figure shows the layout of units used to expose P.D. 21. The grid nomenclature reads by row (letter E-L) then column (III-I, 1-6). Patches marked in gray indicate the presence of a floor separating P.D. 21 from a subsequent midden occupying the same location but later, ie. higher, in the stratigraphic sequence. (Modified from Ponce de León 1986: 525).

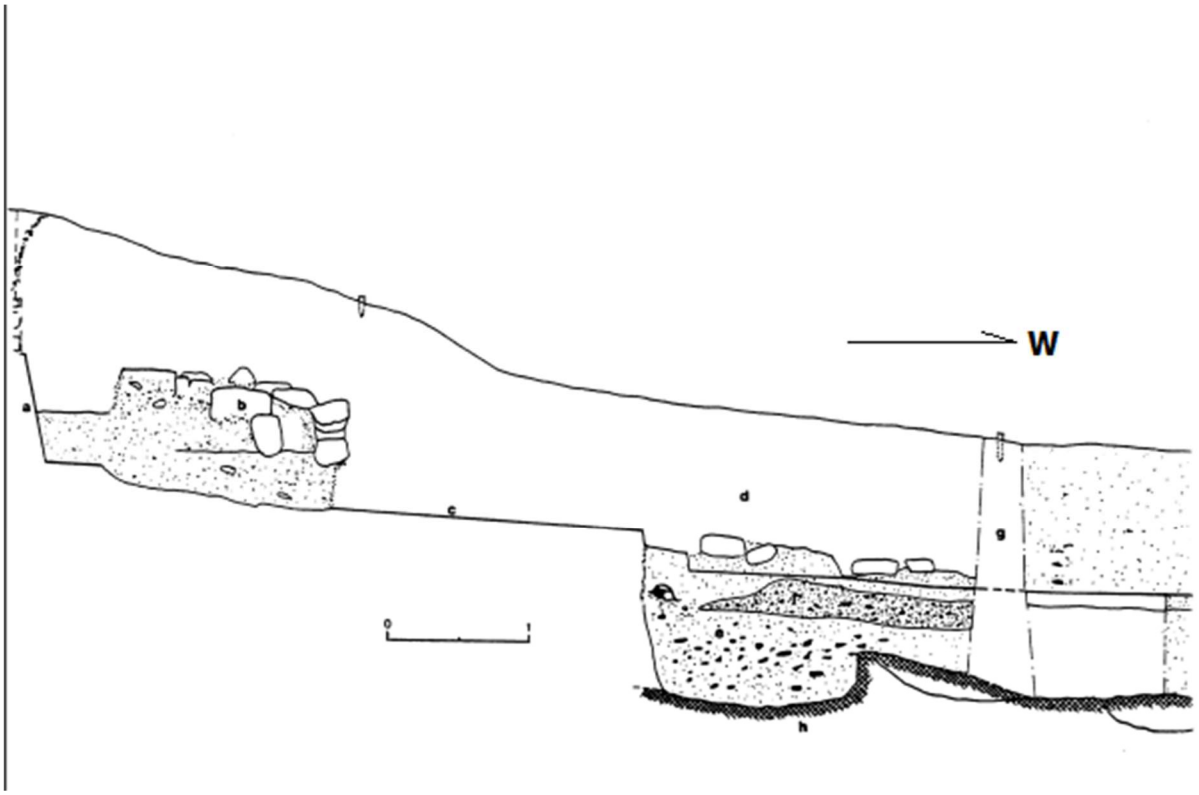

Figure A.3 This shows the East-West Profile of Problematical Deposit 21; (a) Back wall of Structure 6D-20; (b) Collapse; (c) Floor; (d) Midden; (e) Problematical Deposit 21; (f) Black earth; (g) Test-pit; (h) Limestone (Modified from Ponce de León 1986).

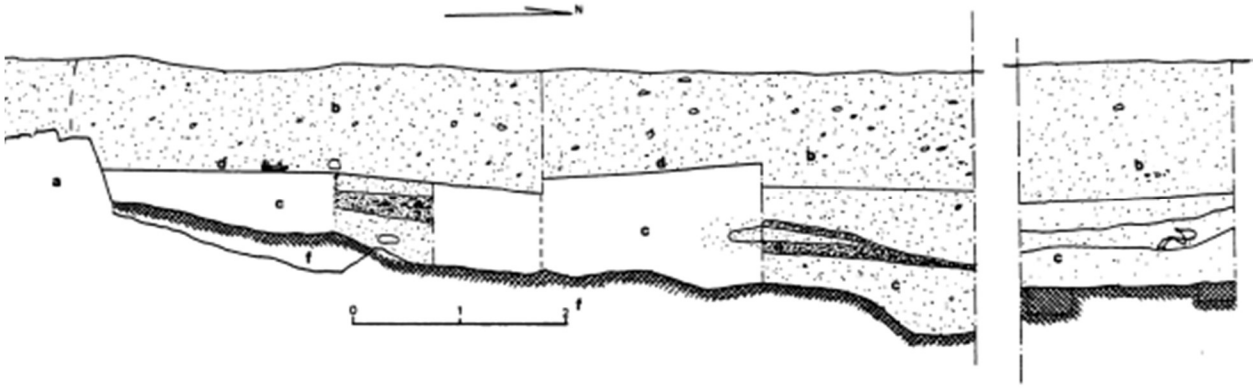

Figure A.4 This shows the North-South Profile of Problematical Deposit 21; (a) *Estructura Sur*; (b) Midden; (c) Problematical Deposit 21; (d) Floor; (e) Black earth; (f) Limestone (Modified from Ponce de León 1986).

Figure A.4 Above the concentrations of materials excavated from Problematical Deposit 21 is shown: the red outline encircles the area with the highest concentration of materials, the orange the second highest, and the yellow marks the peripheral area of the deposit (Modified from Ponce de León 1986).

CUADRICULA	CERAMICA	LITICA	CONCHA	HUESO
B-2	199	2	-	-
E-2	2.043	31	1	1
E-3	5.621	71	-	14
G-1	1.365	16	-	5
G-2	1.149	70	2	10
G-3	8.809	213	612	25
G-4	101	4	-	-
G-5	262	2	-	-
H-1	3.153	84	2	9
H-2	7.907	260	4	56
H-3	7.115	528	14	49
H-4	993	55	1	4
I-1	7.222	190	4	21
I-2	10.278	327	16	46
I-3	12.813	674	6	39
I-5	2.298	93	-	4
I-I	1.194	61	-	11
I-II	1.977	66	1	1
J-1	8.877	316	11	15
J-2	7.520	286	9	30
J-3	5.779	96	3	14
J-4	13.688	617	14	36
J-5	10.461	632	26	34
J-I	2.221	51	-	2
K-2	12.641	358	13	36
K-3	6.638	179	2	16
K-4	14.031	760	29	42
K-5	11.056	639	30	49
K-6	2.158	73	3	-
K-7	1.855	40	-	2
L-3	3.997	84	2	13
Ñ-3	1.364	19	-	-
Q-1	537	6	-	2

Figure A.5 The above table exhibits the artifact counts by artifact class per unit in Problematical Deposit 21 (Modified from Ponce de León 1986).

Subindustrias Categorías	Cuarzo	Pedernal	Pizarra	Jade	Varios	TOTAL	%
METATES	17	-	-	-	18	32	16,41
MANOS METATES	21	-	-	-	18	39	20
PERCUTORES	1	13	-	-	-	14	7,17
MORTEROS	-	-	-	-	2	2	1,02
YUNQUES	-	-	-	-	1	1	0,51
ALISADORES	-	-	-	-	1	1	0,51
CINCELES PULIDOS	-	1	-	-	-	1	0,51
HACHAS PULIDAS	-	-	-	1	1	2	1,02
ARTEFACTOS COMPUESTOS	-	-	-	-	1	1	0,51
INDETERMINADOS	-	-	-	2	3	5	2,56
MISCELANEA :	27	5	16	38	11	97	49,74
PULIDORES	3	5	-	-	5	13	6,66
MACANAS	-	-	-	-	2	2	1,02
CUENTAS	20	-	-	23	1	44	22,56
OREJERAS	4	-	-	7	-	11	5,64
DISCOS	-	-	4	2	2	8	4,10
PLACAS	-	-	12	2	-	14	7,17
PENDIENTS	-	-	-	1	-	1	0,51
ESFERA	-	-	-	-	1	1	0,51
PARAFERNALIA	-	-	-	3	-	3	1,53
TOTAL ...	66	19	16	41	53	195	
% de Subindustria	33,8	9,7	8,2	21	27,17	99,87	

Figure A.6 This image shows the type of material used to make the stone tools and tool fragments excavated from Problematical Deposit 21 (Modified from Ponce de León 1986).

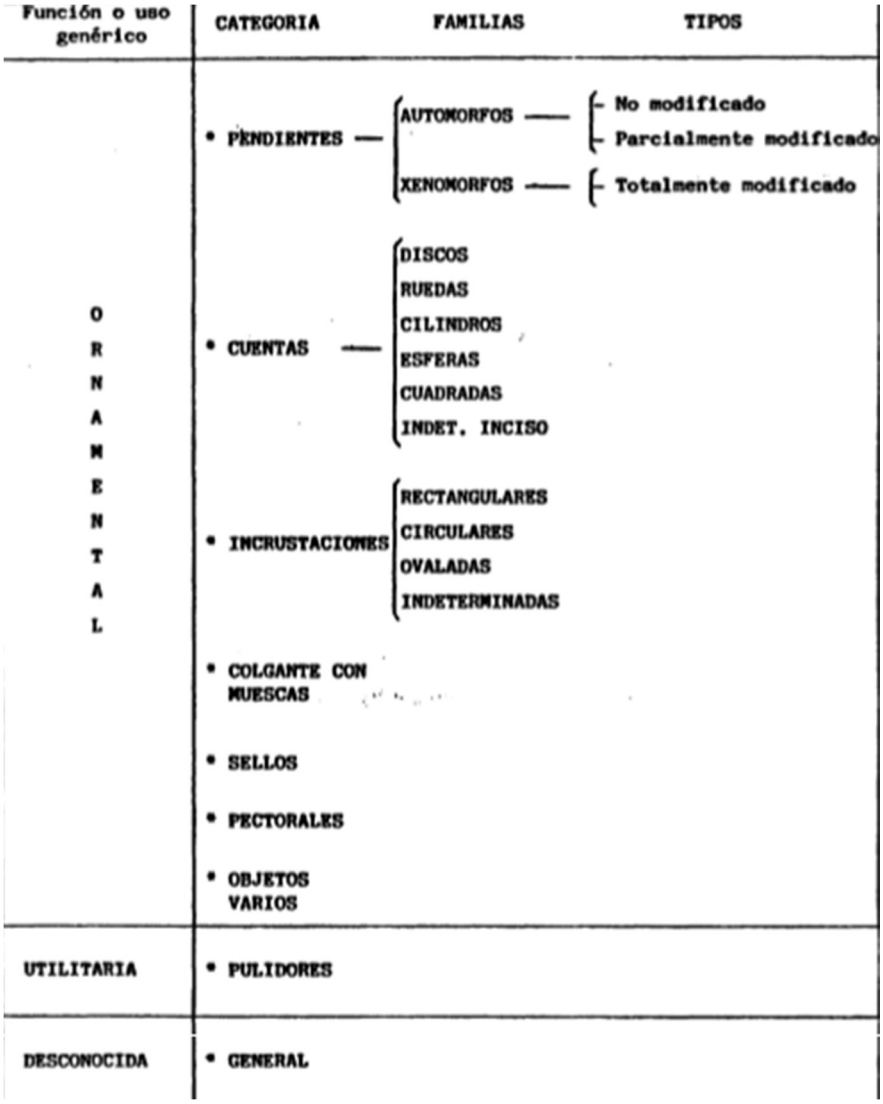

Figure A.7 This table shows the diverse range of modified, whole, and fragmentary shells materials as well as their classification concerning use (Modified from Ponce de León 1986).

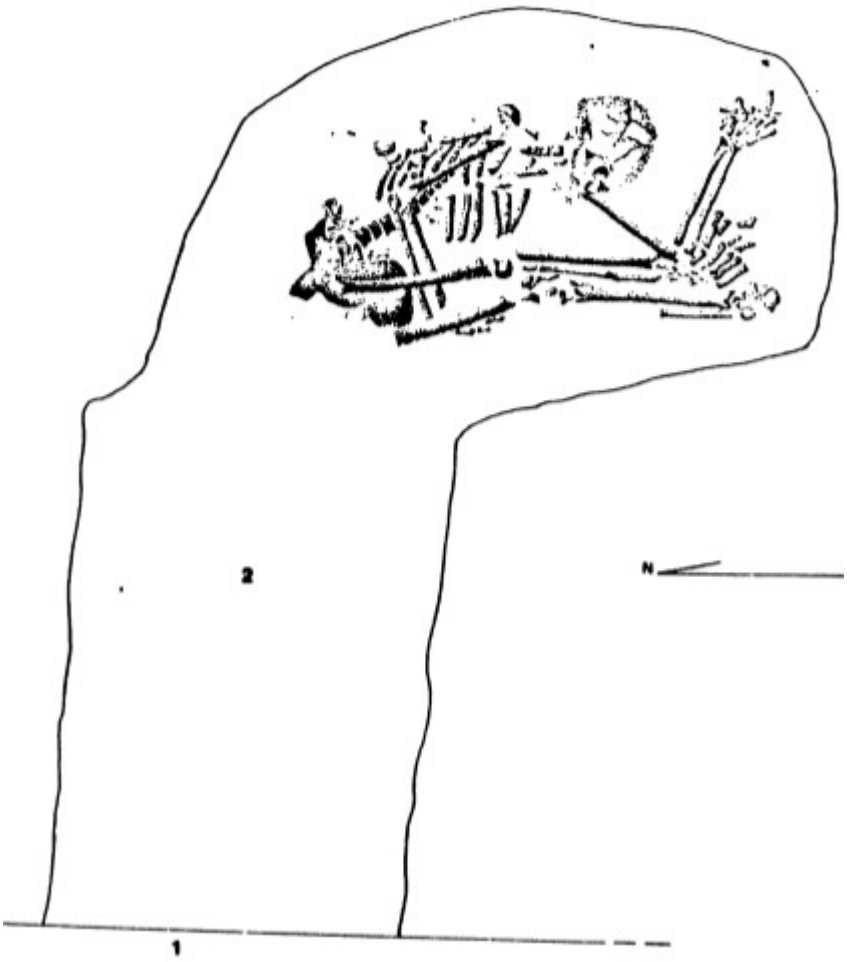

Figure A.8 The above image depicts Burial 178; (1) Back wall of 6D-20; (2) Tunnel (Modified from Ponce de León 1986).

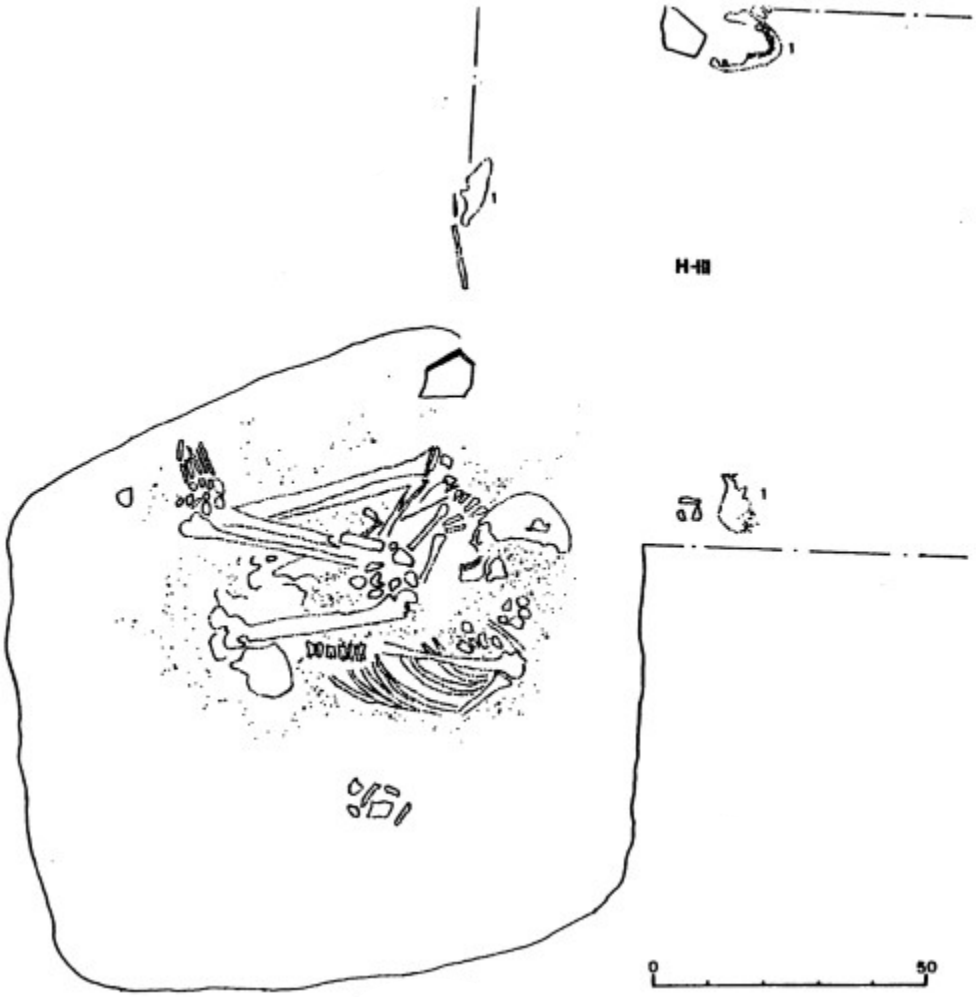

Figure A.9 This image shows Burial 155 and associated mandibles (1) (Modified from Ponce de León 1986).

Figure A.10 This is a laminate of the candelabrum fragment recovered from Problematical Deposit 21 (Modified from Ponce

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