

CONTEXTUAL AND COMPOSITIONAL COMPARISONS OF ABANDONMENT-RELATED, ON-FLOOR DEPOSITS AT CHAN CHICH, BELIZE

Brett A. Houk 

Department of Sociology, Anthropology, and Social Work, Texas Tech University, Box 41012, Lubbock, Texas 79409

Abstract

At Chan Chich, Belize, archaeologists have encountered Terminal Classic artifact scatters and piled artifact deposits in elite residential compounds near the epicenter of the site. This article presents a detailed comparison of four artifact deposits' contexts and compositions to highlight similarities and differences among them. Commonly classified as “problematic deposits” in the field, all four examples considered here formed directly on floors or steps. Although they exhibit compositional variability, all four deposits appear to be abandonment-related features, which unknown actors deliberately created, specifically targeting elite residential architecture rather than monumental public structures in the site core.

INTRODUCTION

Following the charge the organizers of this special section gave to the contributors, this article presents a site-specific case study and describes four on-floor artifact deposits that the Chan Chich Archaeological Project (CCAP) excavated in monumental architecture contexts at the site of Chan Chich in western Belize. The purpose of this study is to highlight the diversity among similar deposits at the same site by presenting detailed compositional data that other researchers can compare to their own datasets. Excavators at Chan Chich have wrestled with understanding the features' formation processes since 1997, when initial test excavations encountered the first of these on-floor deposits (Meadows 1998). Since then, we have often defaulted to the “problematic deposit” label in the field—an homage to the Tikal Project's “problematical deposit” category used to designate “deliberate deposits, both concealed and open, that materially, locationally, even behaviorally” left excavators “exceptionally puzzled” (Coe and Haviland 1982: 49)—to avoid interpreting the deposits prior to carefully analyzing their composition and context (Houk 2000, 2016). In other words, the difficulty in classifying the deposits comes not from describing them but from interpreting the process(es) resulting in their formations. Temporally, all four of the on-floor deposits appear to be peri-abandonment features—following the definition proffered by Hoggarth and colleagues (2020)—and, I argue, they are also more appropriately described as *abandonment-related* features in terms of context. The distinction between the two labels is that the latter represents part of the process of abandonment, rather than simply something occurring around the time of abandonment for other reasons.

The first features discovered at Chan Chich in the late 1990s included a scatter of artifacts apparently smashed on the steps to a

palace in the Western Plaza and two deposits in the Norman's Temple courtyard (Figure 1)—a dense deposit of artifacts piled at the base of a temple-pyramid and an artifact scatter on the steps to a range building (Ford and Rush 2000; Houk 2012, 2016; Meadows 1998). More recent excavations have uncovered another on-floor deposit—another example of piled artifacts—in the Norman's Temple courtyard (Booher 2016). As Aimers and colleagues (2020) discuss in the introduction to this special section, archaeologists have applied a wide range of interpretative labels to similar deposits in the Maya lowlands. Harrison-Buck (2012:103, 115) has referred to deposits “of smashed and scattered objects in the context of defaced elite residential architecture” as “termination deposits,” while other scholars have described deposits similar to those under consideration here as “desecratory termination rituals” (Stanton et al. 2008). As Helmke and colleagues (2017:228) note, “[d]espite the growing literature on the subject, the activities that these features represent have been greatly debated.” This article discusses the four deposits and compares them in terms of context, density of material, and content to highlight similarities and differences.

BACKGROUND

Chan Chich is a moderate-size Maya city in the southern part of the Orange Walk District, less than five kilometers from the Guatemalan border (Aimers et al. 2020:Figure 1). It is the largest known site in the eastern part of the Three Rivers adaptive region between La Milpa to the north and El Pilar to the south (Houk 2015). The CCAP has investigated the site over the course of 13 seasons (1996–1999, 2001, and 2012–2019), with most excavations taking place in and around the site core (Houk 2017).

The epicenter comprises a north-south line of four plazas and associated structures, flanked by the Eastern and Western Causeways, which radiate from the Main Plaza and into the

E-mail correspondence to: brett.houk@ttu.edu

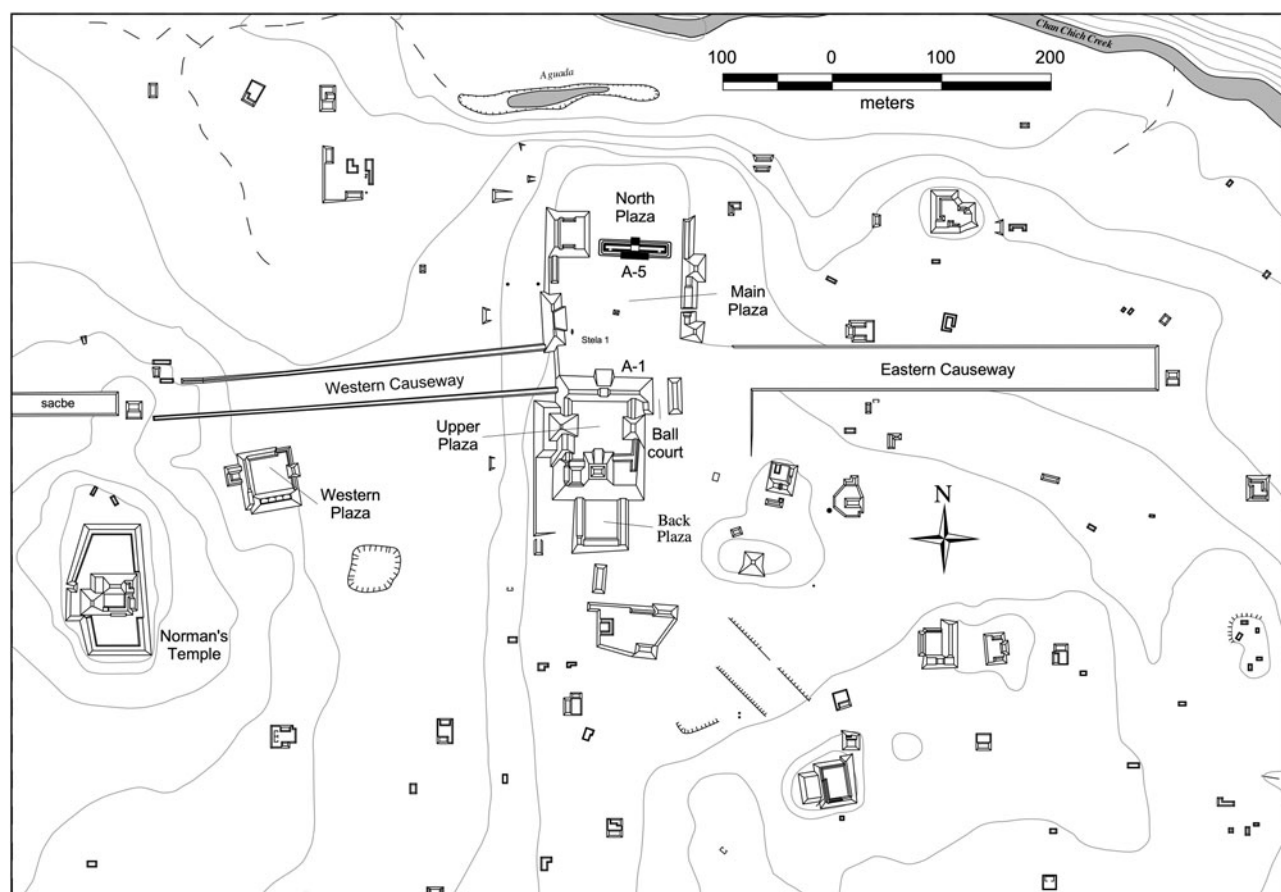


Figure 1. Map of Chan Chich site-core, showing the locations of groups and structures discussed in this article. Map courtesy of CCAP.

surrounding zone of elite compounds, residential courtyards, workshops, and isolated mounds. Two of the largest, non-royal, elite courtyards at the site are the Norman's Temple complex and the Western Plaza, the two groups containing the on-floor deposits discussed in this article.

In terms of chronology, excavations demonstrate the Maya first occupied Chan Chich around 900 B.C. (Gallareta Cervera et al. 2017). The settlement expanded significantly in size during the Late Preclassic period and then again during the Late Classic period, when the site plan took its final form (Houk 2015). The last major construction phase in the Upper Plaza appears to have taken place around A.D. 660 to 760, based on radiocarbon dates from sealed contexts. As the deposits discussed in this article indicate, the Maya abandoned Chan Chich during the ninth-century Terminal Classic period, although Postclassic visitors left offerings sporadically centuries after abandonment (Houk et al. 2008).

TYPES OF ON-FLOOR DEPOSITS AT CHAN CHICH

Over the course of 13 seasons of research, the CCAP has documented two types of on-floor deposits in monumental architectural groups, which are presumably elite residential contexts (Figure 2 and Table 1). The first type comprises artifact scatters documented at the Norman's Temple complex at the base of the northern range structure (Structure C-2) and in the Western Plaza at the base of the group's largest structure (Structure C-6). Houk (2016) has previously reported on the artifact scatters the CCAP excavated in the

late 1990s and 2001, though without the detailed artifact data included here. The second type comprise artifactual material piled together, usually in an ashy matrix. Meadows (1998) excavated the first example of this type at the Norman's Temple complex in 1997 at the base of the western temple-pyramid (Structure C-1). Booher (2016) subsequently encountered a similar deposit at the base of Structure C-3 on the southern side of the same courtyard in 2016. The ceramics from the deposits date all four of them to the Terminal Classic period based primarily on the presence of Fine Orange and/or Imitation Fine Orange sherds.

METHODS OF COMPARISON

Despite differing levels of recording detail and analysis information, sufficient data exist for all but one of the four deposits to compare assemblage composition and artifact density among them. Unfortunately, only an approximate sherd count and brief description exist for the Structure C-1 piled artifact deposit, limiting that feature's comparability.

Examining basic contextual and assemblage-level data provides an initial method of comparing the on-floor deposits to one another. As a second method, I calculated the "richness"—or diversity—of each deposit by comparing the number of different artifact types represented in each deposit to the number of all possible artifact types represented in all of the deposits. While this method produces a numerical richness score, it involves a degree of subjectivity as the artifact categories are analytical constructs used by the CCAP that

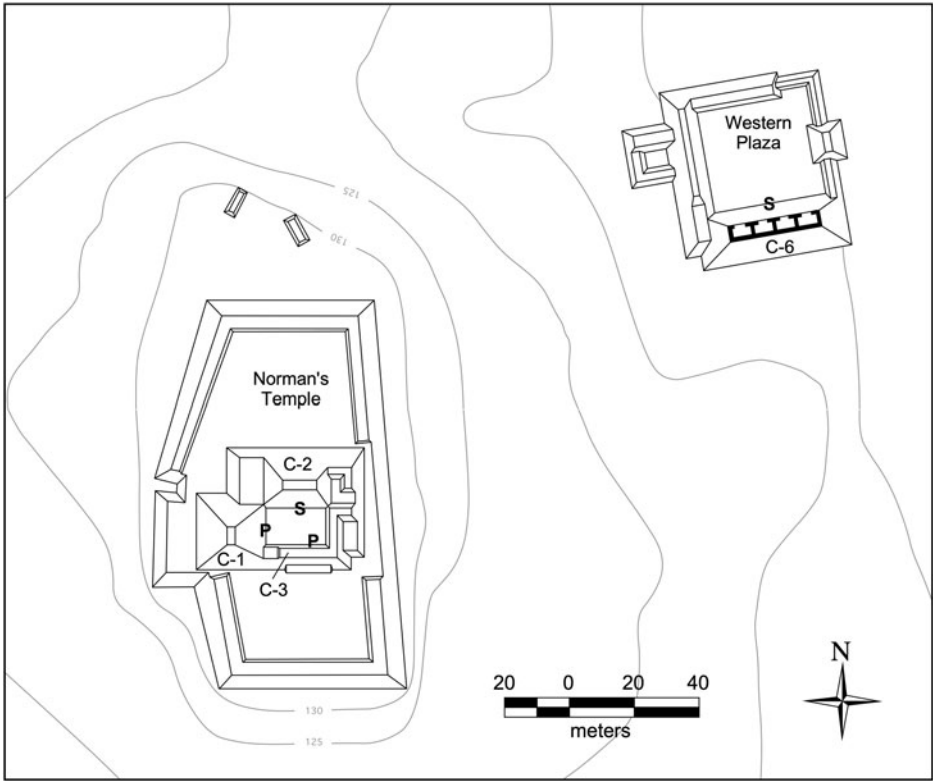


Figure 2. Map of Norman's Temple complex and the Western Plaza showing locations of artifact scatters [S] and piled artifact deposits [P]. Map courtesy of CCAP.

may or may not reflect cultural significance—for example, the analysis subdivides bifaces and biface fragments, but the distinction may have been meaningless to the people who created the artifact deposits. Across the six deposits, there are 24 different categories of artifacts, including human bone. As discussed below, subdividing those categories into 53 more specific artifact types reveals greater diversity among the deposits.

BRIEF DESCRIPTIONS OF THE DEPOSITS

The Norman's Temple complex comprises a small, elevated courtyard in the center of a large, modified hilltop to the west of the Upper Plaza. Structures entirely enclose the courtyard, which measures 18 m east-west by 11 m north-south. This small, elite compound contained three excavated on-floor deposits (Figure 2). Ford and Rush (2000:41) placed three contiguous excavation

Table 1. Contexts of abandonment-related, on-floor deposits at Chan Chich.

Deposit	Season(s)	Type	Group	Setting	Specific Context	Notes
Structure C-1 (temple-pyramid)	1997	Piled artifact deposit	Courtyard C-1	Residential, monumental	On courtyard floor and lowest steps to Structure C-1, a small temple-pyramid on the western side of the Norman's Temple complex courtyard.	Excavated by Meadows (1998) in the course of initial testing at Norman's Temple complex; artifact analysis data are incomplete.
Structure C-2 (range building)	1998 and 1999	Artifact scatter	Courtyard C-1	Residential, monumental	On courtyard floor and lowest three steps to Structure C-2, a small tandem-range building on the northern side of the Norman's Temple complex courtyard.	Excavated by Ford and Rush (2000) to prospect for above-floor artifact deposits.
Structure C-3 (range building)	2016	Piled artifact deposit	Courtyard C-1	Residential, monumental	On courtyard floor piled against Structure C-3 northern platform face on the southern side of the Norman's Temple complex courtyard.	Excavated by Booher (2016).
Structure C-6 (range building)	1998 and 2001	Artifact scatter	Courtyard C-2	Residential, monumental	On courtyard floor and lowest three steps to Structure C-6, a large, range building on the southern side of Courtyard C-2, a Plaza Plan 2 group.	Tested by Ford and Rush (2000) with follow up excavations in 2001 (Houk 2001).



Figure 3. Photograph of the partially reconstructed Pabellon Molded-Carved bowl from the Structure C-2 artifact scatter. Vessel diameter is approximately 20 centimeters. Photograph by the author.

units covering a combined area of 16 m² at the base of Structure C-2, a tandem-range building on the northern side of the courtyard. The units exposed part of the courtyard's final floor and the lowest three steps to the building in the process of documenting an artifact scatter. Described by Ford and Rush (2000:41) as "smashed," the recovered artifacts included thousands of ceramic sherds, mano and metate fragments, bifaces, obsidian blades, disarticulated human bone, a ceramic whistle fragment, a ceramic figurine fragment, bone and shell artifacts, and approximately 1/3 of a Pabellon Molded-carved bowl, the sherds of which were widely scattered across the 16 m² excavation area (Figure 3). Excavators found the majority of the artifacts in the deposit sitting directly on the courtyard floor and steps.

Meadows (1998:62–63) placed a 1 × 4.5-m unit oriented east-west at the base of Structure C-1 and encountered an ashy matrix with high quantities of artifacts piled on the courtyard floor and lower steps to the small temple-pyramid. He recovered red- and black-slipped wares, including Torro Gouged and Cubeta Incised sherds, Imitation Fine Orange sherds, a fragment of a ceramic figurine, ceramic whistle fragments, a medial thin biface fragment, and lithic debitage (Meadows 1998:63).

More recently, Booher (2016) encountered a 30-cm thick, piled artifact deposit in an ashy matrix against the face of the Structure C-3 platform and covering a portion of the courtyard floor. The deposit extended from the base of the platform face 1.12 m north and from the eastern edge of her excavations 2.5 m west. The excavated area contained the western limits of the deposit, but the feature

clearly continued beyond the eastern wall of the excavations. Among the abundant artifacts, the deposit contained a ceramic pendant of an Old God's head and a polished stone celt, along with several shell artifacts and a ceramic whistle fragment.

The CCAP excavated a fourth deposit considered here in the Western Plaza, a Plaza Plan 2 group, at the base of the Norman's Temple. The group includes a small, looted temple-pyramid on the east, and range buildings on the north, south, and west. The largest structure in the plaza is Structure C-6, the southern range building, which is approximately 50 meters long and five meters high. Two different teams of excavators exposed approximately 19.81 m² of area along the structure's centerline comprising portions of the lowest three steps of the building and the courtyard floor at its base. The excavations encountered an artifact scatter with pockets of ashy matrix that included bifaces, abundant ceramics—including some Fine Orange sherds—human bone, an animal canine, and a fragment of a tenoned, polished stone marker, the only one of its kind found so far at Chan Chich (Figure 4).

RESULTS OF COMPARISONS

Basic Contextual and Assemblage-Level Data

Table 2 presents the results of comparing basic contextual and assemblage-level data. Because ceramic sherds are the most common type of artifact in the on-floor deposits at Chan Chich, I use them to calculate the density of each feature, expressed as the



Figure 4. Photograph of the broken, tenoned stone marker found in the Structure C-6 artifact scatter. Photograph by Mark Billings for the Chan Chich Archaeological Project.

Table 2. Basic contextual and assemblage-level data from abandonment-related, on-floor deposits at Chan Chich.

Category	Material/Trait	Structure C-1	Structure C-2	Structure C-3	Structure C-6	Count
Description	Piled artifacts	X	–	X	–	2
	Artifact scatter	–	X	–	X	2
Density	Excavated area (m ²)	1.5	16.0	2.8	19.81	–
	Sherd count	800	5,276	2,049	4,999	–
	Sherd density (number per m ²)	533.3	329.75	731.8	252.35	–
Context	Monumental context	X	X	X	X	4
	Residential context	X	X	X	X	4
	Directly on final surface	X	X	X	X	4
	On steps	X	X	–	X	3
	Restricting/affecting access	X	X	–	X	3
	Against platform	–	–	X	–	1
	Ashy matrix	X	–	X	X	3
Special	Contains human bone	–	X	–	X	2

Table 3. Presence/absence of simplified artifact categories represented in abandonment-related, on-floor deposits at Chan Chich.

Analytical Category	Artifact Type	Structure C-2	Structure C-3	Structure C-6	Count
Human bone	Human bone	X	–	X	2
Battered stone	Hammerstones	–	X	–	1
Ceramics	Ceramic sherds	X	X	X	3
	Ceramic figurines/pendants	X	X	X	3
	Modeled-carved sherds	X	–	X	2
	Ceramic musical instruments	X	X	–	2
	Bifaces	X	X	X	3
Chipped stone	Spear points	–	–	X	1
	Unifaces/utilized flakes	X	X	X	3
	Cores	X	X	X	3
	Debitage	X	X	X	3
	Obsidian	X	X	X	3
Unmodified faunal	Faunal bones	X	X	X	3
	Shell	X	X	X	3
	<i>Jute</i>	–	–	X	1
Modified faunal	Bone tools/modified bone	X	–	X	2
	Shell tinkler	–	–	X	1
	Modified shell/shell ornament	–	X	X	2
Ground stone	Manos	X	X	–	2
	Metates	X	X	X	3
	Groundstone spindle whorls	–	–	X	1
Polished stone	Tenoned marker stone	–	–	X	1
	Jade bead/mosaic	–	–	X	1
	Celts	–	X	–	1
Richness	Number of categories present (of 24)	15	15	20	–

number of sherds per m² of excavated area. Sherd weight, or a combination of counts and weights, would be a more meaningful measure of density as it would provide detail on average sherd size, but we do not have those data for the deposits in question. The piles of artifacts have much higher densities than the scatters with both having more than 533 sherds per m², compared to less than 330 sherds per m² for the scatters. In all cases, excavators reported that the on-floor deposits at Chan Chich sat directly on the final architectural surface, be that steps or a floor. Researchers at other sites have noted thin layers of sediment accumulation between the final architecture and the bottom of some peri-abandonment artifact deposits (Aimers et al. 2020; Hoggarth et al. 2020; Inomata 2016; Pendergast 1979), implying the passage of time between the abandonment of the architectural group—or at least the cessation of cleaning activities—and the formation of the artifact deposit. Table 2 also includes information on whether or not each deposit contained human bone. As noted by Harrison-Buck (2012:109), the inclusion of human bone is a “key feature of termination deposits that distinguishes them from normal midden or trash deposits.” Both artifact scatters included human bone, but the two piled artifact deposits did not. Three of the four deposits are on stairways, possibly indicating the intentional restricting or blocking of an access way (Harrison-Buck 2012). Three of the four deposits contained ashy matrices.

Artifact Assemblages

Table 3 presents artifact assemblage data for three of the four on-floor deposits at Chan Chich based on 24 categories of artifacts found in the four deposits described here. A deposit’s “richness” reflects the number of different categories present but does not take into

consideration the number of artifacts in each category. The Structure C-6 artifact scatter from the Western Plaza has the most diverse artifact assemblage (20 of 24 categories), while the Structure C-2 artifact scatter and the Structure C-3 piled artifact deposit both have 15 of 24 categories represented. In terms of similarities, all three deposits contain ceramic sherds, bifaces, unifaces/utilized flakes, cores, debitage, obsidian, faunal bones, and metates. Most also contain unmodified shell and ceramic figurines/pendants. The Structure C-1 deposit included exotic artifacts such as Fine Orange ceramics and other fine wares, a ceramic figurine, ceramic whistle fragments, a medial thin biface fragment (Meadows 1998:63), but we do not have artifact counts to include that data in Table 3. Nonetheless, the published description of the deposit suggests it was compositionally similar to the Structure C-3 piled artifact feature.

Drilling deeper into the data and comparing more specific artifact subtypes across the deposit reveals greater diversity. Table 4 presents artifact counts and densities for 53 different artifact subtypes used in the CCAP database along with presence or absence information for human bone from three of the four on-floor deposits—I excluded the Structure C-1 deposit because the full data are not available. As was the case when using the broader artifact categories, the Structure C-6 artifact scatter has the most diverse artifact assemblage, containing at least one specimen from 41 of the possible 53 categories, and the Structure C-3 piled artifact deposit has the least diverse artifact assemblage, with only 17 of 53 categories represented.

DISCUSSION

The comparison above highlights similarities and differences among the four Chan Chich on-floor deposits from Norman’s

Table 4. Detailed artifact categories with densities represented in abandonment-related, on-floor deposits at Chan Chich.

Artifact Category/Type	Structure C-2 Count	Structure C-2 Density (per m ²)	Structure C-3 Count	Structure C-3 Density (per m ²)	Structure C-6 Count	Structure C-6 Density (per m ²)
Battered stone	4	0.25	1	0.4	14	0.71
Hammerstone	4	0.25	1	0.4	14	0.71
Ceramic	5297	331.06	2051	732.5	5038	254.32
Ceramic sherds	5276	329.75	2049	731.8	4999	252.35
Ceramic vessel, partial	—	—	—	—	6	0.30
Ceramic figurine, fragment	1	0.06	—	—	22	1.11
Ceramic whistle fragment	1	0.06	1	0.4	—	—
Ceramic pendant	—	—	1	0.4	—	—
Ceramic bead (?)	—	—	—	—	1	0.05
Ceramic disk	1	0.06	—	—	1	0.05
Ash-tempered, slipped, engraved sherd	—	—	—	—	8	0.40
Fine Orange sherd	16	1.00	—	—	—	—
Molded-carved ceramic sherd	2	0.13	—	—	1	0.05
Chipped stone	577	36.06	52	18.6	659	33.27
Debitage	541	33.81	42	15.0	578	29.18
Biface	1	0.06	2	0.7	7	0.35
Biface fragment	24	1.50	—	—	10	0.50
Biface, spear point	—	—	—	—	3	0.15
Blade	2	0.13	—	—	—	—
Core	1	0.06	1	0.4	26	1.31
Other lithic tool	—	—	1	0.4	—	—
Uniface	—	0.00	1	0.4	4	0.20
Uniface fragment	1	0.06	—	—	—	—
Utilized flake	1	0.06	—	—	—	—
Obsidian blade core	—	—	—	—	1	0.05
Obsidian blade fragment	6	0.38	5	1.8	30	1.51
Faunal (unmodified)	14	0.88	14	5	160	8.08
Faunal bone	5	0.31	13	4.6	152	7.67
Faunal bone, animal canine	—	—	—	—	1	0.05
Antler	1	0.06	—	—	—	—
Jute	—	—	—	—	2	0.10
Land snail	1	0.06	—	—	2	0.10
Shell	7	0.44	1	0.4	3	0.15
Faunal (modified)	7	0.44	4	1.4	18	0.91
Bone awl fragment	—	—	—	—	2	0.10
Bone whistle fragment	—	—	—	—	1	0.05
Bone, incised	—	—	—	—	1	0.05
Bone, polished	—	—	—	—	1	0.05
Bone, modified	3	0.19	—	—	—	—
Bone, incised tube	1	0.06	—	—	—	—
Shell adorn	2	0.13	—	—	5	0.25
Shell pendant	—	—	1	0.4	2	0.10
Shell labret	—	—	—	—	1	0.05
Shell ornament, drilled	—	—	—	—	1	0.05
Shell tinkler	—	—	—	—	2	0.10
Shell, drilled	1	0.06	—	—	1	0.05
Shell, worked	—	0.00	3	1.1	1	0.05
Groundstone	15	0.94	5	1.8	19	0.96
Mano	1	0.06	2	0.7	—	—
Mano fragment	5	0.31	—	—	5	0.25
Metate fragment	9	0.56	2	0.7	6	0.30
Ground stone, other	—	—	—	—	1	0.05
Ground stone pestle	—	—	—	—	1	0.05
Spindle whorl	—	—	—	—	3	0.15
Human bone (present)	X	—	—	—	X	—
Polished stone	—	—	1	0.4	3	0.15
Celt	—	—	1	0.4	—	—
Tenoned, polished stone marker	—	—	—	—	1	0.05
Jade bead	—	—	—	—	1	0.05
Jade mosaic fragment	—	—	—	—	1	0.05
Richness (out of 53 categories present)	27	—	17	—	41	—

Temple complex and the Western Plaza and illustrates the diversity such deposits exhibit even in the same small courtyard, a characteristic noted by Hoggarth and colleagues (2020) among deposits in Plaza B at Baking Pot. In the case of Chan Chich, the following observations about the Chan Chich on-floor deposits highlight potentially significant attributes. (1) Excavators found all four deposits on the final architectural surfaces with no intervening level of sediment, suggesting they were created at a point in time when the occupants of the site still actively cleaned and cared for the Norman's Temple courtyard and Western Plaza or shortly after such maintenance activities ceased. (2) Given their proximity, all three Norman's Temple courtyard deposits likely formed within the same time period, perhaps even as part of the same event, despite their compositional and morphological differences. (3) The Norman's Temple courtyard deposits are not continuous and do not encircle the courtyard. Excavations on the eastern side of the courtyard and at the western end of the southern side of the courtyard in the 1990s did not encounter similar features. (4) Excavations on the summit of Structure C-2 in the Norman's Temple courtyard did not encounter evidence for intentional destruction of the architecture but did document incised graffiti in the poorly preserved plaster in the one partially exposed room. While these graffiti are also a peri-abandonment feature, it is unclear if they are related to the on-floor artifact deposits in the courtyard (Booher and Houk 2017). Similarly, excavators did not find evidence for intentional destruction at Structure C-6 in the Western Plaza. (5) While our original artifact analysis did not look for ceramic refits explicitly, the Pabellon Molded-carved bowl from Structure C-2 in Norman's Temple courtyard provides data on the formation of the deposit. The 10 sherds, which refit into approximately 1/3 of the original bowl, were widely scattered across the 16-m² excavation area, indicating the vessel was intentionally broken and the sherds scattered. Similarly, at Structure C-6 in the Western Plaza, excavators expanded their excavations to recover additional pieces of the tenoned marker stone—the only example of its kind from the site—but failed to find any, suggesting that artifact had been intentionally broken and its pieces scattered. (6) Although utilitarian ceramics comprise the majority of artifacts in the deposits, all of the deposits include exotic, rare, or unique items, including some that could be considered *power-facts* (Iannone et al. 2016). (7) Two of the deposits contained human bone. Pagliaro et al. (2003:79–81) suggest that human remains occur in desecratory ritual deposits and may represent disturbed elite burials or perhaps ritually sacrificed elite residents. Navarro-Farr (2016:254), however, cautions that the inclusion of human bone “does not necessarily suggest a profane act.”

CONCLUSIONS

As the papers in this Special Section demonstrate, archaeologist have employed a wide range of methods and approaches in attempts to ascertain the origin and significance of on-floor deposits like those at Chan Chich. Although an exhaustive review is beyond the scope of this paper, in western Belize contextually or compositionally similar examples are known from Dos Hombres (Houk 2000, 2016), La Milpa (Houk 2016; Sullivan et al. 2013; Zaro and Houk 2012), Blue Creek (Clayton et al. 2005; Guderjan

2004; Guderjan and Hanratty 2016), Aguacate Uno (Koenig 2015), and Baking Pot (Helmke et al. 2017; Hoggarth et al. 2020), among others. Elsewhere in the eastern lowlands, Hammond (1970:196–199) excavated a deep, midden-like deposit, which contained human bone, piled in the corner of a closed plaza in the core of Lubaantun (Norman Hammond, personal communication 2019); Pendergast (1979) reported extensive post-abandonment activity at Altun Ha—some of which may actually be abandonment-related deposits, as noted by Stanton and colleagues (2008); and Lamoureux-St-Hilaire and colleagues (2015) report on apparent termination deposits compositionally similar to the Chan Chich on-floor deposits from residential courtyards near Minanha, which date to several centuries after the abandonment of the site center. Farther afield, other scholars have reported on similar deposits at El Palmar, Mexico (Tsukamoto 2017); Aguacate, Guatemala (Inomata 2016); La Corona, Guatemala (Lamoureux-St-Hilaire and Snetsinger 2020); and Waka', Guatemala (Navarro-Farr 2016), to name but a few.

Various researchers have developed typologies with material correlates in attempts to classify on-floor deposits into types (Aimers et al. 2020:Table 1; Lamoureux-St-Hilaire and Snetsinger 2020) and particularly to identify those created by termination rituals (Pagliaro et al. 2003:79–80; Stanton et al. 2008). The analytical challenge of these features is that they may “represent a wide array of behaviors and attendant meanings,” as Navarro-Farr (2009:67–68) observed in her analysis of an extremely large and complicated peri-abandonment deposit at Waka', and deposits from multiple, diverse events may blanket the same structure (Navarro-Farr 2016) or be found near one another at the same site (Houk 2016). Thus, the term “special or problematic deposit” remains a useful placeholder classification for deposits such as these until more detailed interpretations are possible but is itself not an indication of form, function, or origin for peri-abandonment deposits.

In summary, the four deposits described here formed while the two elite compounds in question were actively being maintained or shortly after the residents had stopped maintaining them, but, based on the fact that the deposits were never removed, maintenance activities did not occur following the creation of these features. They are, therefore, both peri-abandonment and abandonment-related deposits. Excavations in the Main Plaza at the site, which is the largest public plaza at Chan Chich, have not uncovered peri-abandonment features on the stairs to Structure A-1 or Structure A-5, the only two buildings from which have centerline, stairway excavations. Therefore, despite the fact that our sample size is small, it seems that the target of the abandonment-related features was elite residential architecture, not large public structures. Determining the intent behind the deposits—reverential or desecratory, ritual or profane—and the actors involved is more problematic; the data do not clearly favor one alternative over another. The implication, however, is that following the creation of these deposits, the elite residents of the Norman's Temple complex and the Western Plaza abandoned their homes and never returned. Whether they did so of their own volition is unknowable with the data at hand.

RESUMEN

En Chan Chich, Belice, arqueólogos han encontrado varios depósitos de artefactos del clásico terminal en los complejos residenciales élite cercanos al epicentro del sitio. Chan Chich es una ciudad maya de tamaño moderado localizada en la parte sur del distrito Orange Walk, a menos de 5 km de la frontera con Guatemala. En este artículo se presenta una comparación detallada de cuatro contextos y el contenido de varios depósitos de artefactos con la finalidad de resaltar las similitudes y diferencias entre ellos. Clasificados como depósitos problemáticos en campo, los cuatro ejemplos considerados aquí se formaron directamente sobre pisos o escalones. Estos depósitos incluyen dos grupos de artefactos dispersos, el primero ubicado en el patio del Templo de Norman y el segundo en la Plaza Oeste, así como dos depósitos de artefactos apilados, ambos localizados en el patio del Templo de Norman.

El análisis de los datos contextuales básicos y del ensamblaje nos proporcionan un método inicial para comparar los depósitos entre sí. Como segundo método este estudio calcula la diversidad de cada depósito, esto al comparar el número total de diferentes tipos de artefactos representados en cada depósito con el número total de tipos posibles de artefactos representados en todos los depósitos. A través de estos seis depósitos, calculamos 24 categorías diferentes de artefactos, incluyendo huesos humanos. La subdivisión de esas

categorías en 53 tipos de artefactos más específicos reveló una gran diversidad en los depósitos.

Este estudio muestra que los depósitos se formaron en un momento en el que los ocupantes del sitio aún estaban manteniendo los dos grupos residenciales donde se encontraron los depósitos. A pesar de sus diferencias en composición y morfológicas, los tres depósitos del Templo de Norman probablemente se formaron al mismo tiempo. El patrón de dispersión de los tiestos de cerámica que pudieron ser re-encajados sugiere que algunos objetos se rompieron intencionalmente y las piezas posteriormente dispersadas cuando se crearon los depósitos. Mientras que las cerámicas utilitarias constituyen la mayoría de los artefactos en los depósitos, todos los depósitos incluyen artículos exóticos, raros o únicos.

Aunque exhiben variabilidad en su composición, los cuatro depósitos parecen ser resultado de procesos de abandono creados deliberadamente por actores y dirigidos específicamente a la arquitectura residencial élite en vez de a estructuras públicas monumentales en el núcleo del sitio. Determinar la intención detrás de los depósitos (reverencial o de profanación, ritual o profano) y a los actores involucrados es problemático. Sin embargo, la implicación es que tras la creación de estos depósitos, las élites residentes en el Templo de Norman y la Plaza Oeste abandonaron sus hogares y nunca regresaron.

ACKNOWLEDGMENTS

I would like to thank the Institute of Archaeology, Government of Belize for permitting the excavations discussed here, as well as the Bowen family for allowing us to excavate on their property. The Alphawood Foundation generously supported the 2016 excavations at Norman's Temple courtyard. I would like to thank the staff of the Chan Chich Archaeological Project as

well as the students and workers who conducted the excavations and analysis of the on-floor deposits described here. I thank Tomás Gallareta Cervera, who translated the summary into Spanish. Finally, Norman Hammond and three anonymous reviewers provided helpful comments that strengthened this article.

REFERENCES

- Aimers, James J., Julie A. Hoggarth, and Jaime J. Awe
2020 Decoding the Archaeological Significance of Problematic Deposits in the Maya Lowlands. *Ancient Mesoamerica* 31:67–75.
- Booher, Ashley
2016 Results of the 2016 Norman's Temple Complex Investigations at Chan Chich. In *The 2016 Season of the Chan Chich Archaeological Project*, edited by Brett A. Houk, pp. 39–66. Papers of the Chan Chich Archaeological Project, No. 11. Department of Sociology, Anthropology, and Social Work, Texas Tech University, Lubbock.
- Booher, Ashley, and Brett A. Houk
2017 Peri-Abandonment Deposits at Chan Chich, Belize. Poster presented at the 82nd Annual Meeting of the Society for American Archaeology, Vancouver.
- Clayton, Sarah C., W. David Driver, and Laura J. Kosakowsky
2005 Rubbish or Ritual? Contextualizing a Terminal Classic Problematic Deposit at Blue Creek, Belize. *Ancient Mesoamerica* 16:119–130.
- Coe, William R., and William A. Haviland
1982 *Introduction to the Archaeology of Tikal, Guatemala*. Tikal Report No. 12. University Museum Monograph 46. The University Museum, University of Pennsylvania, Philadelphia.
- Ford, Owen, and Amy E. Rush
2000 1998 Excavations at the Western Groups. In *The 1998 and 1999 Season of the Chan Chich Archaeological Project*, edited by Brett A. Houk, pp. 41–48. Papers of the Chan Chich Archaeological Project, No. 4. Mesoamerican Archaeological Research Laboratory, University of Texas, Austin.
- Gallareta Cervera, Tomás, Brett A. Houk, and Paisley Palmer
2017 The 2017 Investigations in the Upper Plaza at Chan Chich, Belize. In *The 2017 Season of the Chan Chich Archaeological Project*, edited by Brett A. Houk and Claire Novotny, pp. 33–68. Papers of the Chan Chich Archaeological Project, No. 12. Department of Sociology, Anthropology, and Social Work, Texas Tech University, Lubbock.
- Guderjan, Thomas H.
2004 Public Architecture, Ritual, and Temporal Dynamics at the Maya Center of Blue Creek, Belize. *Ancient Mesoamerica* 15:235–250.
- Guderjan, Thomas H., and C. Colleen Hanratty
2016 The Events and Processes Leading to the Abandonment of the Maya City of Blue Creek, Belize. In *Ritual, Violence, and the Fall of the Classic Maya King*, edited by Gyles Iannone, Brett A. Houk, and Sonja A. Schwake, pp. 223–242. University Press of Florida, Gainesville.
- Hammond, Norman
1970 *Lubaantun: A Classic Maya Realm*. Peabody Museum of Archaeology and Ethnology, Harvard University, Cambridge.
- Harrison-Buck, Eleanor
2012 Rituals of Death and Disempowerment among the Maya. In *Power and Identity in Archaeological Theory and Practice: Case Studies from Ancient Mesoamerica*, edited by Eleanor Harrison-Buck, pp. 103–115. University of Utah Press, Salt Lake City.
- Helmke, Christophe, Julie A. Hoggarth, Jaime J. Awe, Sarah E. Bednar, and Amber L. Johnson
2017 Some Initial Comments on the Komkom Vase Discovered at Baking Pot, Belize. *Research Reports in Belizean Archaeology* 14:227–240.
- Hoggarth, Julie A., J. Britt Davis, Jaime J. Awe, and Christophe Helmke
2020 Reconstructing the Formation of Peri-Abandonment Deposits at Baking Pot, Belize. *Ancient Mesoamerica* 31:139–149.
- Houk, Brett A.
2000 Life, the Universe, and Everything: Re-evaluating Problematic Deposit 2 from Dos Hombres, Belize. In *The 1998 and 1999 Seasons of the Chan Chich Archaeological Project*, edited by Brett A. Houk, pp. 141–150. Papers of the Chan Chich Archaeological Project, No. 4. Mesoamerican Archaeological Research Laboratory, University of Texas, Austin.

- 2001 Chan Chich Archaeological Project (unpublished field notes). Manuscript on file, Department of Sociology, Anthropology, and Social Work, Texas Tech University, Lubbock.
- 2012 *The Ruins of Chan Chich: A Self-Guided Archaeological Tour*. 3rd ed. Chan Chich Lodge, Belize City, Belize.
- 2015 *Ancient Maya Cities of the Eastern Lowlands*. University Press of Florida, Gainesville.
- 2016 Signs of the Times: Terminal Classic Surface Deposits and the Fates of Maya Kingdoms in Northwestern Belize. In *Ritual, Violence, and the Fall of the Classic Maya King*, edited by Gyles Iannone, Brett A. Houk, and Sonja A. Schwake, pp. 203–222. University Press of Florida, Gainesville.
- 2017 An Introduction to the 2017 Season of the Chan Chich Archaeological Project and the Belize Estates Archaeological Survey Team. In *The 2017 Season of the Chan Chich Archaeological Project*, edited by Brett A. Houk, pp. 1–32. Papers of the Chan Chich Archaeological Project, No. 12. Department of Sociology, Anthropology, and Social Work, Texas Tech University, Lubbock.
- Houk, Brett A., Lauren A. Sullivan, and Fred Valdez, Jr.
2008 Rethinking the Postclassic in Northwest Belize. *Research Reports in Belizean Archaeology* 5:93–102.
- Iannone, Gyles, Brett A. Houk, and Sonja A. Schwake
2016 Introduction. In *Ritual, Violence, and the Fall of the Classic Maya King*, edited by Gyles Iannone, Brett A. Houk, and Sonja A. Schwake, pp. 1–22. University Press of Florida, Gainesville.
- Inomata, Takeshi
2016 Concepts of Legitimacy and Social Dynamics: Termination Ritual and the Last King of Aguateca, Guatemala. In *Ritual, Violence, and the Fall of the Classic Maya Kings*, edited by Gyles Iannone, Brett A. Houk, and Sonja A. Schwake, pp. 89–107. University Press of Florida, Gainesville.
- Koenig, Emma
2015 Identifying Abandonment Processes Through Terminal Ritual Deposits at Aguacate Uno, Belize. *Research Reports in Belizean Archaeology* 12:323–338.
- Lamoureux-St-Hilaire, Maxime, and Andrew Kent Snetsinger
2020 Explaining Variability in On-Floor Assemblages: The Behavioral-Contextual Method. *Ancient Mesoamerica* 31: 99–108.
- Lamoureux-St-Hilaire, Maxime, Scott Macrae, Carmen A. McCane, Evan A. Parker, and Gyles Iannone
2015 The Last Groups Standing: Living Abandonment at the Ancient Maya Center of Minanha, Belize. *Latin American Antiquity* 26:550–569.
- Meadows, Richard
1998 Test Pit Program in Group C. In *The 1997 Season of the Chan Chich Archaeological Project*, edited by Brett A. Houk, pp. 59–66. Papers of the Chan Chich Archaeological Project, No. 3. Center for Maya Studies, San Antonio.
- Navarro-Farr, Olivia
2009 *Ritual, Process, and Continuity in the Late to Terminal Classic Transition: Investigations at Structure M13-1 in the Ancient Maya Site of El Perú-Waka', Petén, Guatemala*. Department of Anthropology, Southern Methodist University, Dallas.
- 2016 Dynamic Transitions at El Perú-Waka': Late Terminal Classic Ritual Repurposing of a Monumental Shrine. In *Ritual, Violence, and the Fall of the Classic Maya King*, edited by Gyles Iannone, Brett A. Houk, and Sonja A. Schwake, pp. 243–269. University Press of Florida, Gainesville.
- Pagliaro, Jonathan B., James F. Garber, and Travis W. Stanton
2003 Evaluating the Archaeological Signatures of Maya Ritual and Conflict. In *Ancient Mesoamerican Warfare*, edited by M. Kathryn Brown and Travis W. Stanton, pp. 75–89. Altamira Press, Walnut Creek.
- Pendergast, David M.
1979 *Excavations at Altun Ha, Belize, 1964–1970, Volume 1*. Royal Ontario Museum, Toronto.
- Stanton, Travis W., M. Kathryn Brown, and Jonathan B. Pagliaro
2008 Garbage of the Gods? Squatters, Refuse Disposal, and Termination Rituals among the Ancient Maya. *Latin American Antiquity* 19:227–247.
- Sullivan, Lauren A., Brett A. Houk, Gregory Zaro, and Lindsey R. Moats
2013 Deciphering a Terminal Classic Surface Artifact Deposit at Courtyard 100, La Milpa: The View from the Ceramic Data. *Research Reports in Belizean Archaeology* 10:211–218.
- Tsukamoto, Kenichiro
2017 Reverential Abandonment: A Termination Ritual at the Ancient Maya Polity of El Palmar. *Antiquity* 91:1630–1646.
- Zaro, Gregory, and Brett A. Houk
2012 The Growth and Decline of the Ancient Maya City of La Milpa, Belize: New Data and New Perspectives from the Southern Plazas. *Ancient Mesoamerica* 23:143–159.