

## 26 TO HAVE AND TO HOLD: FORMAL AND STYLISTIC ANALYSES OF CERAMIC ASSEMBLAGES FROM THE NOBLE PALACE AT ACTUNCAN, BELIZE

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*Ceramic assemblages from the terminal deposits of seven structures within the noble palace complex of Actuncan provide evidence for the range of activities performed within these spaces, as well as the relationship between the inhabitants of the complex and the nearby provincial center of Xunantunich during the Late and Terminal Classic periods (AD 600 - 1000). Results of formal analyses indicate that most rooms served multiple purposes; however, Structures 21A and 21B that are located along the back edge of the complex are the exception. Both structures have statistically higher frequencies of storage and cooking vessels and lower frequencies of serving vessels and special function items than other structures. This information combined with their architectural layout and geochemical signatures suggests they were reserved as areas to cook and store food. Comparisons of ceramic assemblages from ancillary palace structures at Actuncan to those at Xunantunich also found statistically significant differences between frequencies of type-varieties. While the two palaces had comparable amounts of Belize Group, Actuncan's palace had five times less Chunhuitz Group than Xunantunich's. Actuncan's access to Chunhuitz Group, which contains the most common local polychrome (Benque Viejo), was likely limited by exchange relationships with Xunantunich rulers and/or elite producers.*

### Introduction

Maya archaeologists often refer to many different kinds of structural complexes as “palaces” without a clear understanding of how they functioned. Often, rooms inside these structures lack features and artifacts, making it difficult to infer how they were used. While architectural configurations may help delineate the range of activities that took place within them (Harrison 1970), the functional ambiguity of empty rooms and repetitive layouts is problematic to their interpretation. To determine the kinds of activities that were performed in Actuncan's noble palace, we briefly summarize previously published descriptions of the palace compound's structures and layout (Jamison 2013; Mixter and Friewald 2013; Mixter et al. 2013), as well as geochemical characterizations of inorganic residues on plaster floors as a means of prospecting for activity areas (LeCount et al. 2016). Complementing these data, we present Taylor Lawhon's (2018) stylistic and formal analyses of ceramic assemblages from the terminal deposits of seven structures within the palace complex. Taken together, all these data provide evidence for the wide range of activities performed within these spaces, as well as the relationships between the inhabitants of the complex and people at the nearby centers, especially the provincial capital of Xunantunich during the Late and Terminal Classic periods.

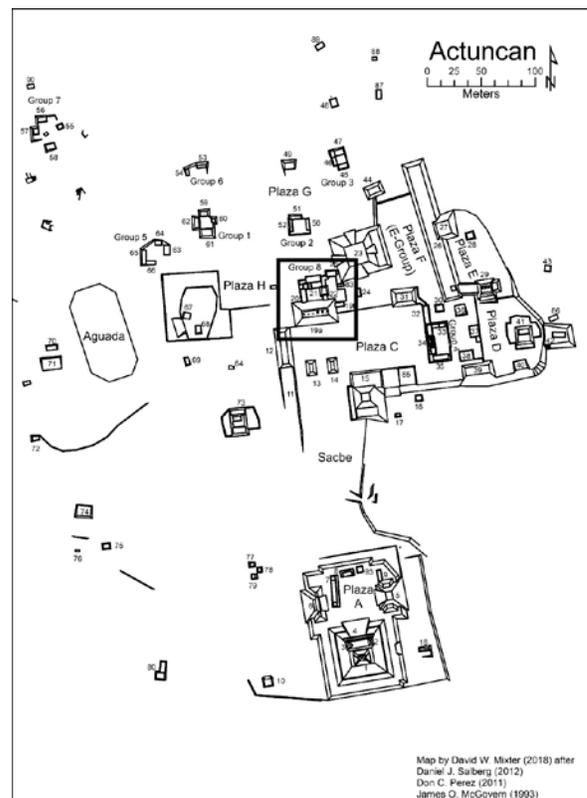
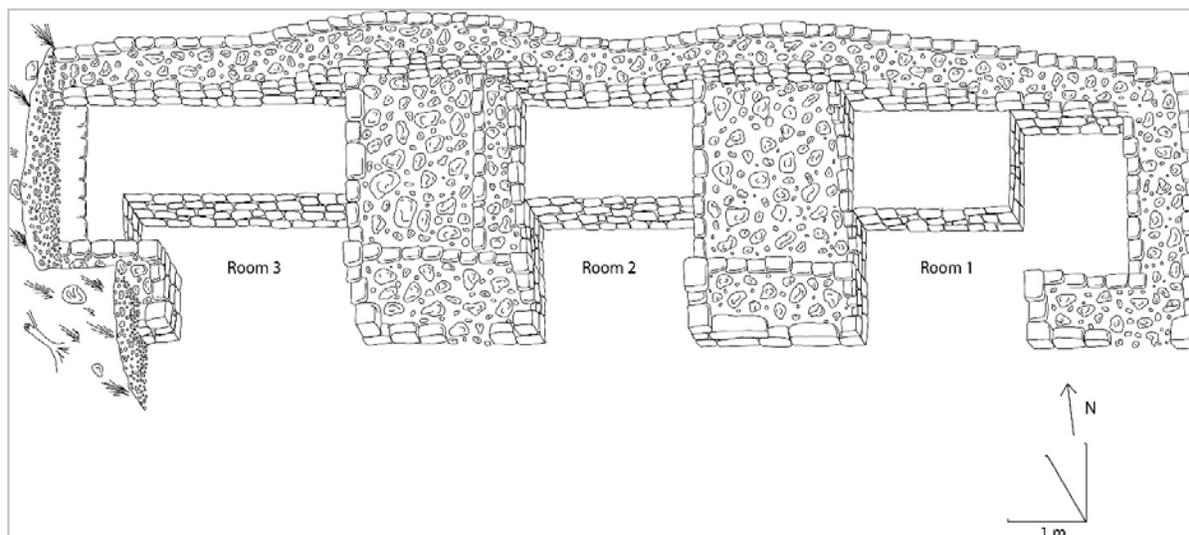


Figure 1. Actuncan with palace complex highlighted.

### Actuncan's Noble Palace Layout

In 2013, David Mixter, Thomas Jamison and Lisa LeCount reported in this journal the Actuncan Archaeological Project's excavations of Structure 19, the site's central range structure, and its attached compound, Group 8, which

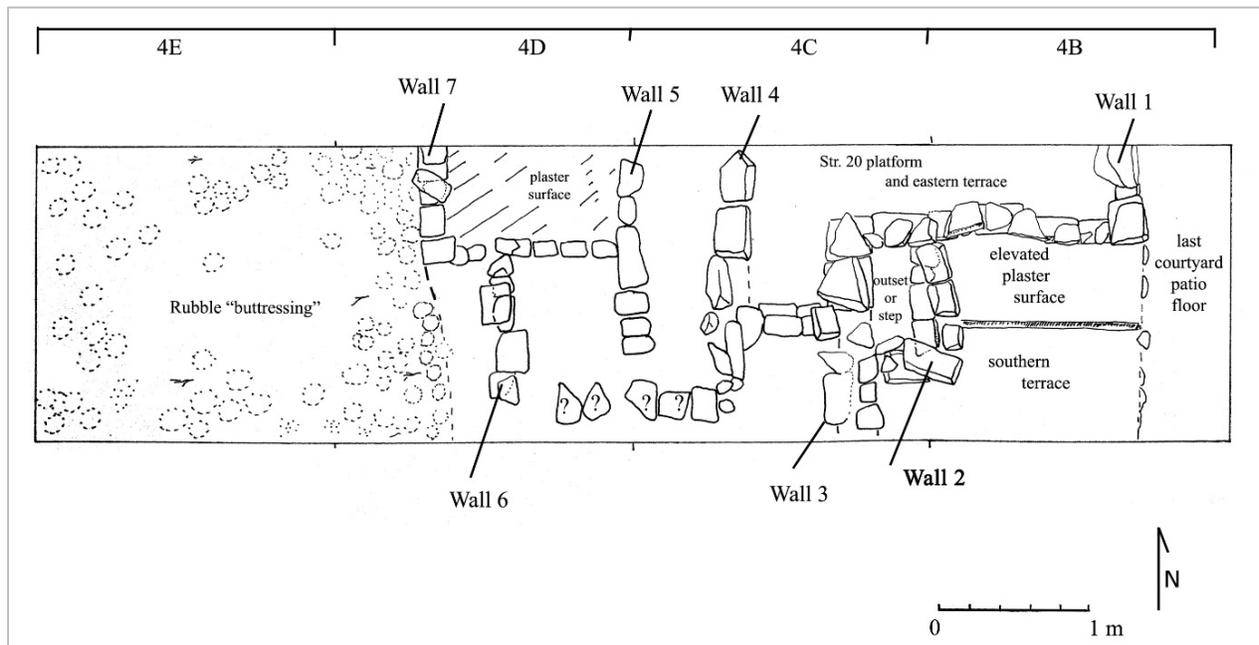


**Figure 2.** Axiometric drawing of Structure 19-1st, Rooms 1 to 3 showing wall additions. Illustration by Merle Alfaro (From Mixter et al. 2013, Figure 5).

together formed the palace (Figure 1). Our excavations revealed that the compound is a palimpsest of building, representing two major stages of construction and many minor renovations. The earliest known version of the range structure was built in the Late to Terminal Preclassic period. During this time, Structure 19 sat alone in the center of Plaza C without its later attached courtyards. According to Mixter (2017), the low range structure anchored the northern end of the ritual circuit in which Actuncan's leaders acted out the cosmological underpinnings of their rule and their position as interlocutors between humans and supernaturals. This circuit would have begun at the Triadic Group, which according to Karl Taube (1998) represented the three hearthstones of Maya creation. Here, Stela 1 commemorated a performance by a leader, who is shown holding a dance baton and surrounded by vegetation (Fahsen and Grube 2005), possibly engaged in the reenactment of the creation metanarrative. From this sacred place, Actuncan's leaders and their entourages would have walked a ritual circuit across the *sacbe* and through the ballcourt to Structure 19, where they could have engaged more openly with people in their role as community adjudicators (Mixter 2016:297). After the shift of political authority to nearby sites, this range structure fell into disrepair sometime late in the Early Classic period.

Renovations to the range structure were undertaken during the Late Classic period, when a single line of masonry rooms were constructed on its summit. Excavations revealed five distinct subphases of construction, the last of which resulted in the arrangement of two small rooms and benches on the eastern ends of the summit and a larger central room with an L-shaped bench that looked out across the central staircase to the Triadic Group (Figure 2). We assume that this architectural arrangement was mirrored on the western half of the summit. Tom Jamison suggests that the thick interior walls were constructed to support a vaulted roof, and indeed he found large cap stones on room floors that were placed there during the termination of the building (Jamison 2013:22).

Behind the range structure, the Late Classic Maya constructed a series of courtyard groups, which we call Group 8, to house the activities of a noble palace (Mixter and Friewald 2013). The largest courtyard is formed by five structures (19B, 20, 21A, 21B, and 22) aligned around a central patio (Patio 1). Structure 19B is a small, masonry platform attached to the eastern end of Structure 19. To the north of it is Structure 22, hypothesized to be the eastern shrine of noble family. We placed excavations into the patio immediately to the west of the structure and into the platform to locate burials or other evidence of ancestor worship. However no



**Figure 3.** Structure 20 excavation plan view (From LeCount and Blitz 2004:Figure 3).

burials were found; therefore, more research is required to understand what was going on at this structure. Structures 21A and B are located along the northern edge of the courtyard, directly opposite the range structure. In its initial stage, Structure 21A was a sunken masonry room with red-painted walls and a plaster floor. A large round monument was found within the fill of this room, likely placed there to *ensoul* the building. Because this building appears to have had entryways to spaces both inside and outside the compound, Mixer and Carolyn Friewald suspect the building served as a point of interaction between the noble family and members of the community. On the other hand, Structure 21B is a low platform that likely supported one or more perishable structures. A deep and narrow masonry-lined trench along the northern edge of the platform may have been the footing for a sturdy *bajareque* barrier that provided privacy to the interior space of the patio. On the other side of this wall, terraces served as auxiliary spaces for community activities. LeCount suggests that this platform may have served as a kitchen because of its size and position at the back of the courtyard. Finally, Structure 20 is a low platform that stretches along the western side of Patio 1. During the 2004 field season, John Blitz and Lisa

LeCount placed an 8 m by 2 m trench across the entire width of the platform to find evidence that would support its interpretation as a residential structure (LeCount et al. 2005). These excavations revealed low masonry footings that likely represent the foundations of superstructures, the remains of a plastered bench, and a step fronting the patio (Figure 3). Like all the buildings flanking Patio 1, the platform was built during the Late Classic period.

Peri-abandonment deposits marked the end of everyday life within the compound during the transition to the Terminal Classic period. In the northwest corner of Patio 1, Mixer (Mixer and Friewald 2013:61) encountered a heap of smashed ceramic vessels, two manos, an incised ocarina carefully halved lengthwise, and the reconstructable remains of a whole Mount Maloney bowl with a perfectly cut circular hole in the bottom (Figure 4). This deposit was found underneath collapse debris and embedded in a clay loam that had accumulated over time on the terminal patio floor. Therefore, it represents rites related to the termination of the building sometime well after its abandonment (Coe 1959; Joyce 1992; Tsukamoto 2017). Another peri-abandonment deposit was found on the summit of Structure 19 sitting on the floor of Room 1



**Figure 4.** Taylor Lawhon and a reconstructed Mount Maloney Black Type bowl from termination deposit (Operation 24, Feature 1).

(Jamison 2013:19). Although this deposit is much smaller than that found in the patio, it included ceramics and a star shaped shell gorget. Neither of these deposits appears to have been associated with regular visitation like that seen at Structure 73 where Borislava Simova (Simova et al. 2015) found a deep deposit widely scattered across the top of the collapsed staircase. It contained 5500 jute, numerous groundstone objects, a comal and exceptionally dense and varied chipped-stone tools and debris including abundant spear points.

In sum, the small size of Group 8's structures and their modest construction techniques do not fit the model of regal palace architecture seen at local centers such as Cahal Pech, Buenavista del Cayo or Xunantunich (Awe 2008; Ball and Taschek 2001; Yaeger et al. 2012). For these reasons, we suggest that it was occupied by a noble family beholdng to provincial rulers. More research, however, is required to understand what kinds of activities took place within this compound.

### **Geochemical Analyses**

One way to understand activities that took place in these rooms is through geochemical analysis of soil samples taken from the surface of plaster floors. Multivariate quantitative modeling and spatial interpolation of chemical data from 198 samples demonstrate that a variety of domestic, ritual, and administrative activities happened in the palace complex (LeCount et al. 2016). Three areas of the complex were sampled for geochemical residues: Structure 19 (the range structure), Structures 21A and B (the buildings

that sit at the back of Patio 1's courtyard) and Structure 22 (the proposed ancestor shrine).

The distribution and types of chemical residues identified in the best preserved and most widely sampled plaster floor (Blue Floor) from Structure 19-1st indicate food storage, preparation, and/or consumption in all three rooms. In Room 1, phosphate and iron levels associated with the deposition of organics are highest along the east side of the room near the doorway, while in Room 2 phosphate signatures are concentrated at the back of the room floor at the base of the bench and along the edges of the room where the floors and walls meet. Room 2 is also distinguished from the others as the only location where iron does not overlap with phosphates. In contrast, Room 3, the central room, has elevated phosphate levels in confined areas on the bench and on the west side of the doorway. All these patterns suggest different functions for each room. Room 1 has the best evidence for cooking and eating because phosphate and iron signatures are widely and evenly distributed across the floor. Room 2, with a high concentration of phosphates at the base of the bench and discreet iron concentrations in other non-overlapping locations seems more likely to indicate storage. Room 3, where elevated phosphate levels are found in circumscribed areas on the bench and on the west side of the doorway, may indicate individualized consumption practices associated with feasting on the large L-shaped bench.

Turning to Group 8, the entire northern portion of the patio displays high and evenly distributed concentrations of phosphates and iron, while the eastern portion of the patio near the proposed ancestor shrine has very low levels of these elements. These patterns indicate that Structures 21A and B were the locations of daily residential activities; however, the area in front Structure 22 may have been reserved for special functions that did not include eating, cooking or crafting. The homogenously distributed chemical signatures in the northern patio are similar to those at residential patio spaces at Actuncan's domestic groups, for instance Group 1 (Fulton 2019). In order to investigate activity patterns further, formal and stylistic analyses of ceramic collections from palace structures were undertaken by Taylor Lawhon.

**Table 1.** Frequency of cooking/storage vessels and serving/special function items across contexts at Actuncan's Palace Complex.

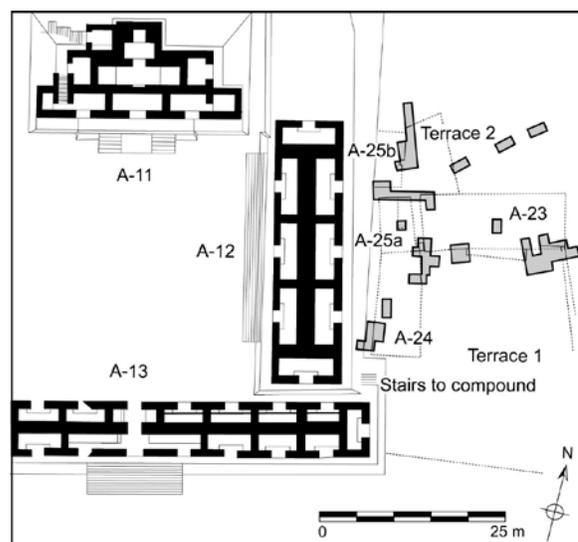
	19		19B		20		21A		21B		22		TD	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%
Cooking/storage	27	69.2	81	78.6	42	71.2	23	92.0	88	95.7	126	78.3	41	70.7
Serving/special	12	30.8	22	21.4	17	28.8	2	8.0	4	4.3	35	21.7	17	29.3
<b>Total:</b>	39		103		59		25		92		161		58	

$$\chi^2 = 25.283, df = 6, p < 0.001$$

### Ceramic Analysis

Lawhon (2018) hypothesized that if some palace rooms were residential in function then they should have more multi-functional ceramic assemblages than those rooms which were used for more specific functions such as ritual, storage, or administration. To test this hypothesis, she divided vessel forms into functional groups based on Julia Hendon's (1987, 1989, 1991) four activity categories. Serving vessel forms include vases, plates, and dishes, as well as ash-tempered bowls and jars. Cooking vessel forms includes those which were primarily used to prepare and cook foods such as calcite bowls, pans, ollas, comals, and micaceous jars. Censers, drums, effigy vessels, miniatures, gaming pieces, and ocarinas were categorized as ritual items, while storage is represented by calcite jars. She recorded vessel form, paste composition, and surface treatment on rim sherds to create these groups.

A total of 10,522 sherds, of which 775 are rim sherds, were analyzed from rooms and structures within the palace compound. These ceramics were recovered from matrices located on top of and embedded into floors; however, we found no de facto materials or primary refuse. Therefore, the nature of these ceramics assemblages are rather questionable, likely remnants of on-floor deposits mixed with recycled refuse from collapse. If Actuncan's palace was abandoned simultaneously with Xunantunich's, as the timing and character of the termination events suggest, then at least some materials would have been left *in situ*. While the collection was not small, the sample size of formally diagnostic rims per structure or room required Lawhon to combine Hendon's functional categories into two groups for



**Figure 5.** Xunantunich's ruler's compound and ancillary platforms that served as a kitchen area (From LeCount 2010: Figure 6.3).

statistical analyses: 1) serving vessel and special function items and 2) cooking and storage vessels.

Table 1 illustrates the proportions of cooking and storage vessels versus serving and special-function items across seven contexts within the palace complex. Structures 19 and 20, as well as Patio 1's peri-abandonment deposit have the highest frequencies of serving and special function items at roughly 30% of the assemblage. Structure 19's pattern aligns with previous geochemical research which shows that the range structure had specific areas inside rooms where exclusive feasting could have occurred, likely on benches. Structure 20's relatively high percentage of serving and special items is indicative of an elite residential area with substantial numbers of serving vessels. While Patio 1's collection of serving vessels and special

**Table 2.** Frequency of Rim Sherds by Ceramic Ware and Group from Ancillary Structures at Actuncan's and Xunantunich's Palace Complexes.

	Actuncan <sup>a</sup>		Xunantunich <sup>b</sup>	
	n	%	n	%
<b>Wares:</b>				
Calcite ware	564	87.0	570	73.1
Ash ware	84	13.0	210	26.9
Total rims:	648		780	
<b>Calcite groups:</b>				
Unslipped groups <sup>c</sup>	109	38.0	174	27.5
Mount Maloney	117	40.8	273	43.2
Other slipped groups <sup>d</sup>	22	7.7	56	8.9
<b>Ash groups:</b>				
Belize	33	11.5	61	9.7
Chunhuitz	6	2.10	68	10.8
Total rims:	287		632	
Exotic rims <sup>e</sup>	0		5	

Notes: For wares,  $\chi^2 = 42.191$ ,  $df = 1$ ,  $p = <0.001$ ; For groups,  $\chi^2 = 26.681$ ,  $df = 4$ ,  $p = <0.001$   
<sup>a</sup> includes Structures 19B, 20, 21A, 21B, 22, and Patio 1  
<sup>b</sup> includes Structure A-23, A-24, and A-25 (from LeCount 1999:Table 2; In Appendix:Table A.2)  
<sup>c</sup> includes Cayo, Cambio, and Macaw Bank Groups.  
<sup>d</sup> includes Dolphin Head, Vaca Falls, Garbutt, and Chial Groups (other red-slipped groups).  
<sup>e</sup> includes Palmar Group, San Lorenzo Black, and unspecified cream-slipped ash wares.

items is not likely an elite midden, it is similar to other peri-abandonment deposits reported in the literature (Stanton and Magnoni 2008). At the opposite end of the scale, Structures 21A and B have the lowest frequencies of these vessels, and conversely the highest frequencies of cooking and storage jars. In fact, jars make up more than 90% of the assemblage, and the differences in proportions are statistically significant. These data indicate that the rooms at the back of the compound served as specialized areas for storage and cooking, and that Structure 21B may have been a kitchen.

Actuncan's kitchen is somewhat reminiscent of Xunantunich's in the sense that both are integral parts of the palace compound (Figure 5). But at Xunantunich, the kitchen was located on the exterior of the palace compound and had a more diverse assemblage than that found at Actuncan (LeCount 2010). Further, at Xunantunich very large utilitarian vessels were also found broken *in situ* in rooms of the Lower

Building of Structure 11, considered by Jason Yaeger to have been the ruler's residence (Yaeger 2005:24). Therefore, both Xunantunich and Actuncan provide substantial evidence for cooking and storage of food stuff at their palace compounds.

Lawhon's second aim was to determine the socio-political relationships between inhabitants of Actuncan's and Xunantunich's palace. To do so, she compared LeCount's (1999) previous published ceramic type-variety data from the Xunantunich palace with similar contexts at Actuncan to compare access to fine wares and other status-linked items. Highly decorated polychromes produced at workshops in Peten have been shown to be evidence for sociopolitical networks created through feasting and gift giving (Tokovinine 2016); while locally made polychromes and other styles may have circulated through elite redistribution (Foais and Bishop 2007). Actuncan's range structure (Structure 19) and the peri-abandonment deposits

**Table 3.** Frequency of Ceramic Wares and Groups in Late Classic II Assemblages (From LeCount 1999, Table 2).

	Xunantunich Group A		Xunantunich Group D		San Lorenzo <i>Plazuelas</i>		San Lorenzo Mound clusters	
	n	%	n	%	n	%	n	%
Calcite wares	570	73.08	245	80.59	129	86.00	85	83.33
Ash wares	210	26.92	59	19.41	21	14.00	17	16.67
Total rims	780		304		150		102	
Calcite groups								
Unslipped groups <sup>a</sup>	174	27.32	32	16.08	21	18.75	7	15.22
Mount Maloney	273	42.86	116	58.29	72	64.29	35	76.09
Other slipped groups <sup>b</sup>	56	8.79	18	9.05	8	7.14	1	2.17
Ash groups								
Belize Red	61	9.58	18	9.05	7	6.25	2	4.35
Chunhuitz Orange	68	10.68	13	6.53	4	3.57	1	2.17
Exotic items <sup>c</sup>	5	.78	2	1.01	0	.00	0	.00
Total rims	637		199		112		46	

*Note:* For wares,  $X^2 = 18.175$ ,  $df = 3$ ,  $p = .001$ ; For groups,  $X^2 = 47.016$ ,  $df = 15$ ,  $p = .001$ .

<sup>a</sup> Includes Cayo, Cambio, and Macaw Bank Groups.

<sup>b</sup> Includes Dolphin Head, Vaca Falls, Garbutt, and Chial Groups.

<sup>c</sup> Includes Palmar Group, San Lorenzo Black, and unspecified cream-slipped ashwares.

were therefore eliminated from this analysis. Chi-square tests were calculated to compare the proportions of ceramic wares and groups in the Actuncan and Xunantunich palace complexes, as well as differences in ash ware groups (Belize and Chunhuitz). Based on these data, the statistically significant factor was the proportional differences between Belize and Chunhuitz Groups (Table 2).

Xunantunich's royal palace assemblage was found to have 27% ash ware rims (including items too eroded to type) in contrast to Actuncan's noble palace assemblage that has only 13 percent. Breaking down frequencies of the ash wares into ceramic group provides even more information about unequal access to specific styles. While proportions of Belize Group are very similar across the two palaces, Chunhuitz Group account for 11 percent of Xunantunich's assemblage and only 2 percent of Actuncan's assemblage. Actuncan's lack of Chunhuitz Group rims is striking when compared to local households (Table 3). It is lower than any residential group at Xunantunich and more similar to proportions found at commoner households at San Lorenzo (LeCount 1999 Table 2) and Chan (Kosakowsky 2012), where these

types make up between two and four percent of the total assemblage. Imports such as Palmar, Achote Black or cream slip polychromes were non-existent at Actuncan's noble palace. In contrast, there are no differences between proportions of calcite wares and groups which indicates that these two sites are in the same ceramic sphere of production and exchange. Both Mount Maloney Black and red-slipped groups display very similar frequencies, while Cayo Unslipped makes up a slightly higher percentage of Actuncan's palace assemblage than Xunantunich's.

Given these patterns, Actuncan's access to Chunhuitz Group, which contains Benque Viejo Polychrome Type, was quite restricted. This pattern is unlike Belize Group that is found in roughly similar proportions across elite and commoner household assemblages. Previously, I have suggested that cost was a factor in the distribution of ash ware polychrome ceramics (LeCount 1999, 2016). Chunhuitz Orange types are far less standardized in size and more stylistically diverse than Belize Red types. They also required additional production steps (LeCount 1996). Higher production costs may have translated into higher exchange values in

markets for Chunhuitz Orange compared to Belize Red types, thereby limiting access to locally made polychrome vessels for those at the lower rungs of the socio-economic ladder.

However, there has to be more to it than this given the data from Actuncan's palace. Cost should not have been a factor in buying Chunhuitz Orange types in markets for this noble household. Something else was restricting access to locally made polychromes, and LeCount suggest it might have to do with reciprocal or redistributive mechanisms. The diversity of styles and sizes within Chunhuitz Group speaks to more small-scale production techniques and exchange relations limited to patron and clients or kin groups.

### **Conclusions**

In conclusion, results of formal ceramic analyses indicate that most rooms within the noble palace served multiple purposes including eating, cooking and storage; however, there are some exceptions. Structures 21A and 21B, which are located along the back (northern) edge of the complex, were reserved as areas to cook and store food. Further, rooms on the summit of the range structure appear to have been set aside for small-scale exclusive feasting, cooking and storage. While it is common for Mayanists to infer that feasting took place in palace rooms, we are struck by the evidence for cooking and storage in palaces. While the scale of Maya storage may not have rivaled empires built on staple finance like the Inka (D'Altroy and Earle 1985), they were nonetheless engaged in having and holding food and drink. More research is needed to understand what was stored in these vessels, how long were they stored, and who provided them. The answers to these questions will go a long way in understanding the political economy of Late Classic Maya society.

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### **References**

- Awe, Jaime J.  
2008 Architectural Manifestations of Power and Prestige: Examples from Classic Period Monumental Architecture at Cahal Pech, Xunantunich and Caracol, Belize. *Research Reports in Belizean Archaeology* 5:159-173.
- Ball, Joseph W., and Jennifer T. Taschek  
1991 Late Classic Lowland Maya Political Organization and Central Place Analysis: New Insights from the Upper Belize Valley. *Ancient Mesoamerica* 2:149-165.
- Chase, Arlen F., and Diana Z. Chase  
2012 Belize Red Ceramics and their Implications for Trade and Exchange in the Eastern Maya Lowlands. *Research Reports in Belizean Archaeology* 9:3-14.
- D'Altroy, Terence N., and Timothy K. Earle  
1985 Staple Finance, Wealth Finance, and Storage in the Inka Political Economy. *Current Anthropology* 26(2):187-206.
- Foias, Antonia E., and Ronald L. Bishop  
2007 Pots, Sherds and Glyphs: Pottery Production and Exchange in the Petexbatun Polity, Peten, Guatemala. In *Pottery Economics in Mesoamerica*, edited by C. A. Pool and G. J. Bey III, pp. 212-236. University of Arizona Press, Tucson, Arizona.

- Kosakowsky, Laura J.  
 2012 Ceramics and Chronology at Chan. In *Chan: An Ancient Maya Farming Community*, edited by C. Robin, pp. 42-70. Gainesville: University Press of Florida.
- Harrison, Peter D.  
 1970 The Central Acropolis, Tikal, Guatemala: A Preliminary Study of the Functions of its Structural Components during the Late Classic Period. Ph.D. dissertation, University of Pennsylvania, Philadelphia.  
 2003 Palaces of the Royal Court at Tikal. In *Maya Palaces and Elite Residences: An Interdisciplinary Approach*, edited by Jessica Joyce Christie, pp. 98-119. University of Texas Press, Austin.
- Hendon, Julia A.  
 1991 Status and Power in Classic Maya Society: An Archaeological Study. *American Anthropologist* 20(4):894-918.  
 1987 The Uses of Maya Structures: A Study of Architecture and Artifact Distribution at Sepulturas, Copan, Honduras. Ph.D. dissertation, Department of Anthropology, Harvard University, Ann Arbor.
- Jamison, Thomas R.  
 2013 Excavations at Structure 19. In *The Actuncan Archaeological Project: Report of the 2012 Field Seasons*, edited by Lisa J. LeCount, pp. 15-34. On file at the Belize Institute of Archaeology, Belmopan.
- LeCount, Lisa J.  
 1996 Pottery and Power: Feasting, Gifting, and Displaying Wealth among the Late and Terminal Classic Lowland Maya. Unpublished Ph.D. dissertation, Department of Anthropology, University of California, Los Angeles.  
 1999 Polychrome Pottery and Political Strategies among the Late and Terminal Classic Lowland Maya. *Latin American Antiquity* 10(3):239-258.  
 2016 Classic Maya Marketplaces and Exchanges: Examining Market Competition as a Factor for Commodity Distributions. In *Alternative Pathways to Complexity: A Collection of Essays on Architecture, Economics, Power, and Cross-Cultural Analysis in Honor of Richard E. Blanton*, edited by Lane F. Fargher and Verenice Y. Heredia Espinoza, pp. 155-173. University Press of Colorado, Boulder.
- LeCount, Lisa J., John H. Blitz, and Rebecca Scopa Kelso (editors)  
 2005 Actuncan Early Classic Project: Report of the Second Season. On file at the Belize Institute of Archaeology, Belmopan.
- LeCount, Lisa J., E. Christian Wells, Thomas Jamison, and David W. Mixter  
 2016 Geochemical Characterization of Inorganic Residues on Plaster Floors from the Palace Complex at Actuncan, Belize. *Journal of Archaeological Science Reports* 5:453-464.
- Lawhon, Taylor D.  
 2018 Classic Maya Palace Complex at Actuncan, Belize: A Functional Analysis of Room Architecture and Ceramic Assemblages. Unpublished Master's Thesis, Department of Anthropology, The University of Alabama, Tuscaloosa.
- Mixter, David W., and Carolyn Freiwald  
 2013 Excavations at Group 8. In *The Actuncan Archaeological Project: Report of the 2012 Field Seasons*, edited by Lisa J. LeCount, pp. 35-80. On file at the Belize Institute of Archaeology, Belmopan.
- Mixter, David W., Thomas Jamison, and Lisa J. LeCount  
 2013 Actuncan's Noble Court: New Insights into Political Strategies of an Enduring Center in the Upper Belize River Valley. *Research Reports in Belizean Archaeology* 10:93-106.
- Tokovinine, Alexandre  
 2016 "It is his Image with Pulque": Drinks, Gifts, and Political Networking in Classic Maya Texts and Images. *Ancient Mesoamerica* 27(1):13 - 29.
- Widmer, Randolph J.  
 2009 Elite Household Multicrafting specialization at 9N8, Patio H, Copan. In *Housework: Craft Production and Domestic Economy in Ancient Mesoamerica*, edited by Kenneth G. Hirth, pg. 174-204. Archeological Papers of the American Anthropological Association, Number 19, Washington DC.
- Yaeger, Jason  
 2005 *Revisiting the Xunantunich Palace: The 2003 Excavations*. Report for The Foundation for the Advancement of Mesoamerican Studies, Inc.  
 2010 Shifting Political Dynamics. In *Classic Maya Provincial Politics: Xunantunich and its Hinterlands*, edited by Lisa J. LeCount and Jason Yaeger, pp. 145-160. University of Arizona, Tucson.