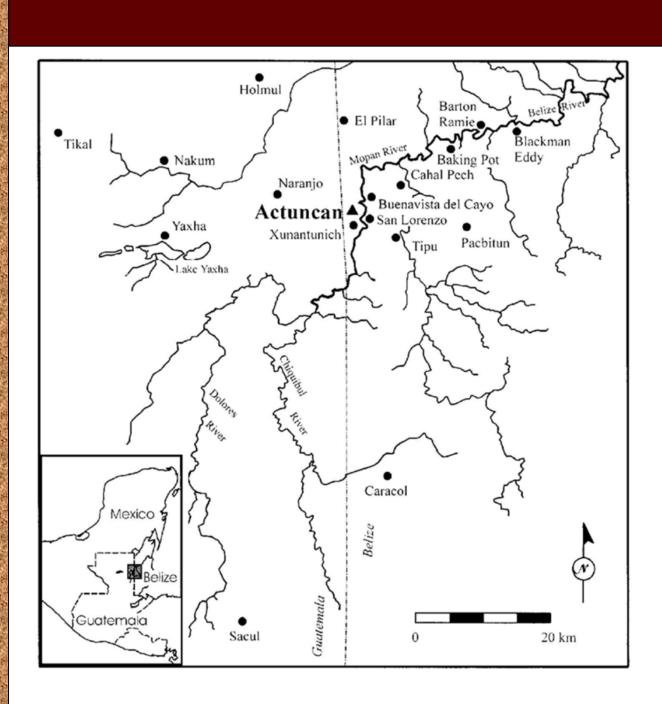
Shared Practices and Identities in the Northern Settlement of Actuncan, Belize



Overview

This poster examines how urban families developed and shared neighborhood identities at the Maya city of Actuncan, Belize, ca. AD 800-900, a time when the city experienced rapid population growth as surrounding centers, including Xunantunich, declined. To investigate household relationships, this research considers the nature and location of activity patterns in and around three commoner households to infer shared practices and the shared identities that those activities both enabled and constrained. Examination centers on the notion of "practices of affiliation," or beliefs and behaviors that contribute to the creation and expression of community or neighborhood identity. Multiple methods were employed, including subsurface testing, soil chemical residue analysis, and macro- and microartifact analysis, to produce overlapping datasets of the sample area. The data were examined spatially using geostatistics as well as with quantitative assessment. This research contributes to the understanding of urban processes of growth and decay in this region, and how they are linked to the behaviors of social factions in neighborhood communities.

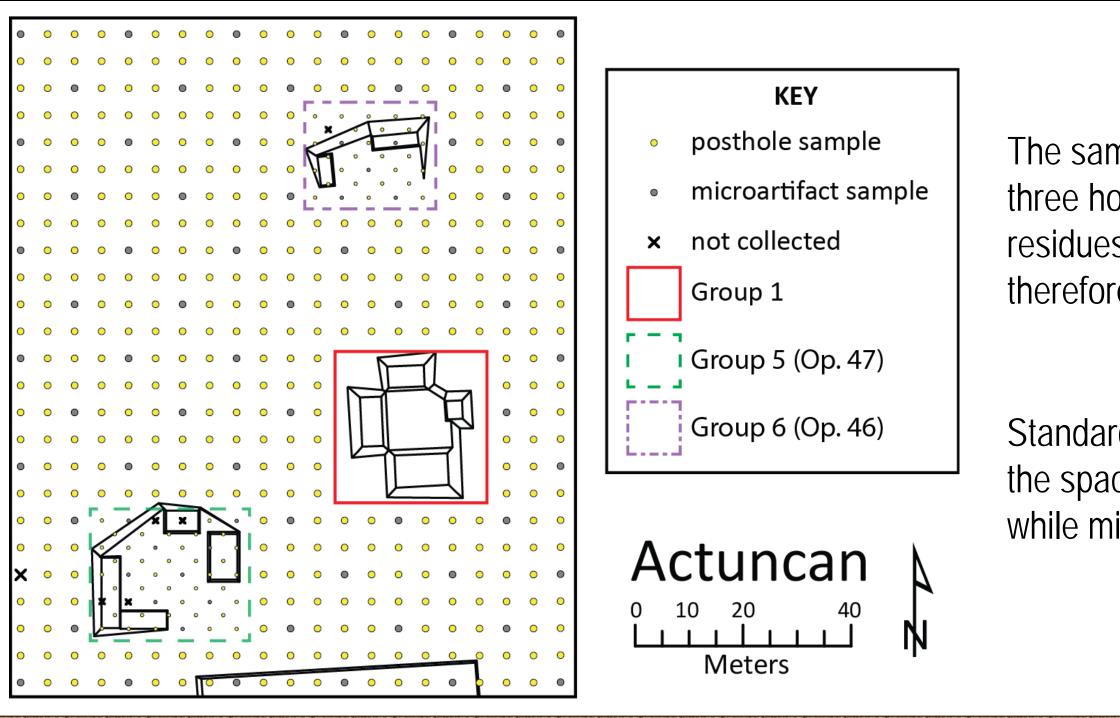
Study Area



Actuncan is located in the upper Belize River Valley, near the Guatemalan border. It consists of 14 ha of civic and domestic buildings, and is situated on a ridge overlooking the Mopan River, a tributary of the Belize River. The settlement itself is roughly 2 km north of the well-known and studied center of Xunantunich. Ceramics indicate that the area was continually occupied from the Preclassic period into the Postclassic period.

The focus of this research is an area referred to as the Northern Neighborhood. This region houses an abundance of residential groups in close proximity to one another. The investigations focused on three residential groups occupied during the Terminal Classic. These areas were selected for investigation due to their known contemporaneity and close proximity.

Sampling Strategy



Methods: Soils

Soil samples were collected in the field and stored in sterilized Whirl-Pak® bags to prevent contamination. Inductively coupled plasma-mass spectrometry (ICP-MS) using the Foss mild acid-extraction technique (0.60 M HCI + 0.16 M HNO3, trace metal grade) was used to characterize chemical concentrations (10-ml Foss to 1.0 g soil). The calibrated concentrations of 21 elements were determined: AI, Ba, Ca, Co, Cr, Cu, Fe, Hg, K, Mg, Mn, Na, Ni, P, Pb, Sr, Ti, U, V, Y, and Zn. The results were reported in parts per million (ppm) of the element.

Methods: Artifacts

Two categories of artifacts are considered in this study: macroartifacts and microartifacts. Macroartifacts were those artifacts collected from the $1/_4$ inch mesh in the field (and thus larger than $\frac{1}{4}$ --inch). Microartifact samples were collected in the field using a 2-L measured scoop and brought back to the field laboratory for processing. Each sample was divided into three size fractions using a set of three nested screens:

- 1. over $1/_{4}$ -inch (Fraction 1)
- 2. between $\frac{1}{4}$ -inch and $\frac{1}{8}$ -inch (Fraction 2)

All samples were divided by material class, counted, and weighed.

Kara A. Fulton Dept. Of Anthropology, University of South Florida, Tampa

The sampling area consisted of a 100 m x 120 m rectangle encompassing three households. Note that Group 1 was previously sampled for soil chemical residues and had been extensively excavated prior to this study. It was therefore omitted from the sampling space for this part of the study.

Standard clam-shell style posthole diggers were used to systematically sample the space. Macroartifact and soil samples were collected from each posthole, while microartifact samples were collected from a subset of postholes.

3. between $\frac{1}{8}$ -inch and $\frac{1}{16}$ -inch (Fraction 3)

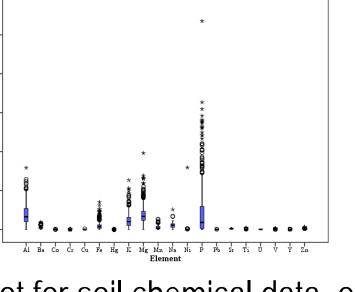
Actuncan 回 7 Plaza Map by David W. Mixter after Daniel J. Salberg (2012) Don C. Perez (2011) James O. McGovern (1993)





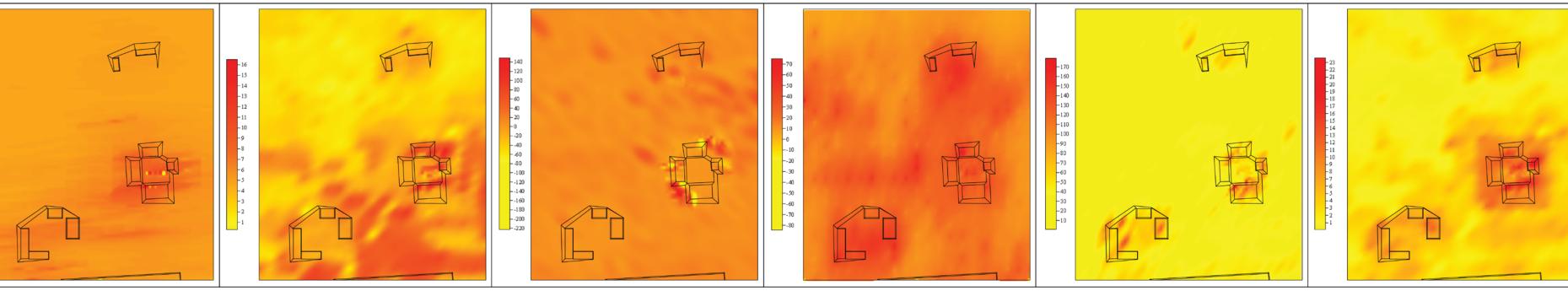


Results: Soils

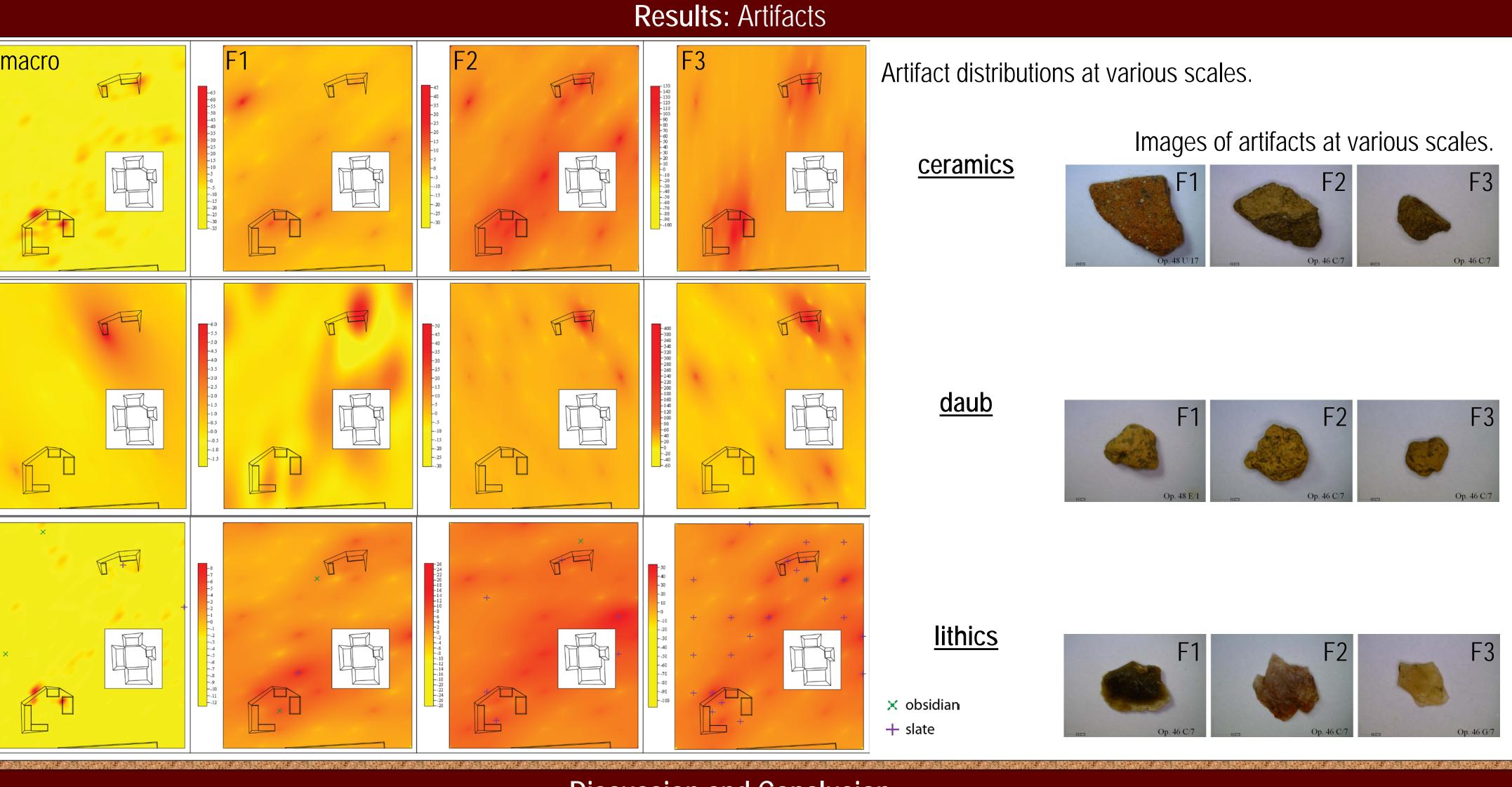


P, Fe, K, and Mg, and to a lesser extent Ba, Mn, have wide ranges and outliers. This indicates that these elements vary across space and are likely useful for detecting activity areas. Ca was excluded from further analysis due to the limestone substrate of study region, Na was omitted because it is too reactive to be useful, and AI was removed due to it being a natural component of local clays. The selected elements were then examined spatially using kriging, an empirical model that interpolates unknown values based on known values.

Boxplot for soil chemical data, on-site samples (ppm, n = 703)



Kriged image maps showing spatial distributions of (from left to right) extractable P, Ba, Fe, K, Mg, and Mn.

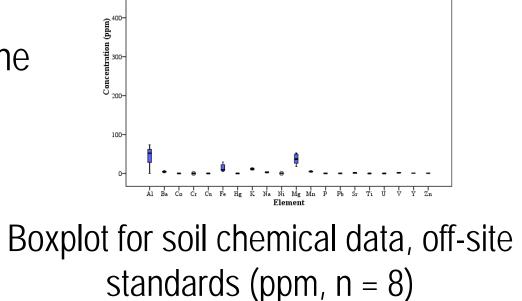


Discussion and Conclusion

If activities and their locations were specialized, we would expect to see clear definitions of activity loci in the form of hotspots (dark red in the spatial distribution maps) which represent areas where chemical or artifact concentrations are at significantly higher levels. Alternatively, if activities were overlapping and generalized, we would expect to see a more homogeneous distribution. Many chemical and artifact distributions show hotspots; however, not all hotspots are associated with visible architecture. Additionally, some distributions show relatively homogeneous distributions in the open spaces surrounding architecture. This suggests that not only the patio groups, but also the empty spaces between architecture are being heavily trafficked in a generalized way. Further, the hotspots represent areas where activities were likely more specialized.

Specifically, daub is more prevalent in the eastern portion of Group 6 than elsewhere, though it also appears to extend fairly far beyond the formal patio space of Group 1. Ceramic and lithic hotspots also appear off structure from Group 1. Perhaps the daub surrounding Group 1 represents temporary perishable structures for specialized activities involving high quantities of ceramics and lithics. The high concentrations of P, often associated with food consumption and preparation, and Mn, related to organic refuse disposal, surrounding the patio suggest the specialized activities likely included food, possibly for ceremonial feasting. Additionally, the presence of elevated levels of Fe, linked with iron oxide (a mineral commonly used in ceremonial contexts) including rituals using ochre and hematite) at Group 1 supports the existence of ritual activities. The absence of these patterns in the other groups suggest that the specialized activities in Group 1 may have been practices of affiliation, or community events that included members from other nearby households.

In conclusion, residential areas at Actuncan appear to have been very busy places. People did not confine themselves to the formal patio spaces but, rather, were interacting with the entire landscape in a major way. Group 1 appears to have been a loci for more specialized activities than the rest of the area and may have been an arena for ceremonial feasting involving other members of the community. Shared practices such as this would help to enhance inter-household relationships and contribute to the creation and expression of shared social identity.



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