

Archaeological Investigations at Chawak But'o'ob, A Late Classic Maya Escarpment Community in Northwestern Belize

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Ancient Residential Terracing at Chawak But'o'ob, Belize

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Abstract

Dry-slope contour terraces (also known as hill-slope and bench terraces) are a commonly encountered landscape modification in the Maya lowlands that are traditionally associated with Prehispanic agriculture, water management, and soil conservation. Archaeological investigations at the densely-occupied, Late Classic-period escarpment site of Chawak But'o'ob in northwestern Belize have revealed extensive dry-slope contour terracing that supports relic domestic platforms and multi-roomed foundation braces. The stacked residential terraces of this commoner community have parallels outside the Maya area and expand our understanding of the functional variability of Maya terracing.

Introduction

Residential utilization of hill-slopes is a common householder settlement pattern throughout Mesoamerica. This paper aims to discuss an ambiguous and often overlooked form of hill-slope settlement herein labeled *residential terracing*, which denotes a group of house units occurring atop leveled, agricultural-like terraces. Terracing itself has been a common technique for agricultural and hydrological management throughout the world, and is particularly prominent along the western-pacific highlands of the New World, extending from the south-western United States, through Mexico, Guatemala, and

continuing down along the stretch of Andean highlands in South America. In the Central American region, agricultural terraces are such prominent features of the aboriginal landscape that Paul Kirchoff's historic delineation of "Mesoamerica" denoted terracing as a cultural trait.¹ Accounts of structures on terraces are often subtly noted, but rarely is it specified whether house units have been constructed *on top* of the terraces or simply *near* them- a differentiation, as you will see, that our site is now eliciting. This paper will illustrate one approach in understanding these subtle features through investigations undertaken at Chawak But'o'ob, a humble, ancient Maya escarpment site along the Rio Bravo drainage in Northwestern Belize.

Terracing Background

Until now, there have been three general categories in which all terraces have been classified, based on their functionality: agricultural, hydrological, and architectural. Agricultural terraces are the well-known intensive planting surfaces used to enhance production yields, fertility and sustainability. The bench terraces along the shores of Lake Atitlan in southwestern Guatemala, for instance, are a well known system of intensive agricultural terracing still employed in conjunction with extensive agricultural systems such as milpas.² Hydrological terraces are constructed to control and channel water into basins, ravines and agricultural fields. Both of these varieties modify areas to mitigate flooding and soil erosion. The third major category of terracing is architectural: these are the long, formal platforms of large house complexes, temples and other buildings seen at monumental Mesoamerican sites. Architectural terraces are distinctly formal and, despite

¹ Kirchoff, 1943

² Wilken, 1971

their use to support elite domestic structures, these are not to be confused with the humble, agricultural-style, residential terraces described below.

Site Context

Our approach to residential terracing begins in the Programme for Belize Conservation and Management Area in Northwestern Belize,³ at the site of Chawak But'o'ob (the name of which means "land of long terraces" in Yucatec Mayan).⁴ All seven site-groups at Chawak But'o'ob are associated with some form of terracing, and six of the seven groups display residential terraces, with nearly 20% of the site's structures occurring atop them.⁵

Group B Residential Terraces

Of these six groups that display residential terracing, Group B has received the most intensive investigation to date. Hidden under a millennium of sub-tropical soil accumulation and erosion, the substantiality of the terracing here was hardly realized until major clearing and excavation was undertaken. Averaging between one and two meters high, 10-20 meters in width and 60-100 meters in length, seven dry-slope terraces have been found stacked down the escarpment for about 100 meters. All seven terraces are fronted by formally constructed, cobble-filled stone walls, largely exhibiting a non-irrigated, dry-slope, agricultural morphology yet are supporting 18 platforms and 10 house foundation braces atop them.

³ Investigations of agricultural and hydrological terracing within the PFB area have been reported by Beach, Dunning, Lohse, and Hughbanks, among others.

⁴ Chawak But'o'ob (aka RB 47) has undergone nearly 10 years of investigation by the Rio Bravo Archaeological Project, headed by Dr. Stanley L. Walling of the University of Texas at Austin, formerly Montclair State University

⁵ More accurately, 62 of the 350 known structures at the site are residentially terraced

During the 2004 and 2005 field seasons, major clearing, wall-stone recovery, humic soil removal, stone by stone mapping, soil-core sampling, and full-scale excavations were pursued on the foundation braces. These braces contain up to three rooms apiece, measure between 10 and 15m in length, 5 and 10 meters in width, and have an average internal surface area of 120 m², which is ten times the surface area of the average commoner platform at the site.

Major trenching and excavation has so far been concentrated on Foundation Brace B. Ten core samples, four excavation units, stone-by-stone mapping, and a 4.5x1m trench were all carried out on this structure.⁶ Foundation Brace B consists of 2 large rooms separated by a well constructed, double-line stone wall, a smaller room running perpendicular on the eastern edge, and a possible open patio extension on the southern end. The excavation unit investigating the double-wall between Rooms 1 and 2 found two, well-constructed, cobble-filled lines of sizable vertical stones⁷ tightly secured in a cobble and gravel matrix. Excavations of the eastern stairway and western bench features were cleared only of their organic humic layers, leaving their identification still unclear. More complete definition of internal features such as access-ways and benches will be the focus of future investigations.

Interpretation

Four possible construction events were revealed in the 2004 and 2005 findings. Though the structure now rests as a foundation brace on Terrace 6, it was originally constructed as a single-roomed platform on Terrace 5. The new Terrace 6 was built at the

⁶ Walling, et al. 2004 and 2005 field reports and Davis, Walling, "Landscape Modifications..." n.d.

⁷ The stones range in size up to 60cm x 30cm

beginning of the second occupation phase so that it partially overlapped and covered the lower terrace. Expansion continued until the fourth phase, which represents the relic brace in evidence today, and has “a total surface area of approximately 70 m²,”⁸ four-times the area of the original platform. Thus, the Group B terraces were expanded and maintained over multiple occupation periods- perhaps generationally- not unlike the incremental building stages of agricultural terraces

The existence of multi-roomed units, double-lined stone walls, stone-fronted armatures, and open patio extensions exhibits a consistent architectural style quite different from the house mounds and patios found throughout the rest of the site. Also interesting is the fact that these four construction levels are not paralleled by any of the other commoner houses at the site, a majority of which have evidence of only one construction phase. Ceramics suggest that virtually all construction at the site occurred between A.D. 700 and A.D. 800, a period characterized by exponential settlement expansion throughout the Programme for Belize area. The multiple construction phases, beginning in late Tepeu 1/early Tepeu 2, present the possibility that the Group B terraces were one of the first occupied areas of the site. The construction fill and artifact assemblage were consistent throughout all the rooms, making their specific functions ambiguous, but when taken in conjunction with the thick inner walls and spacious dimensions, this may support a theory for multi-family residences during the final occupation phase, and presents the likelihood of a high population density during the last few decades of the Classic period at Chawak But ‘o’ob.

Discussion

⁸Davis, Walling, nd. “Ancient Landscape Modification”

Terracing is a feature where many interpretations can be applied to questions of population density, intersite variability, settlement patterns, household construction, and space utilization. However, the Group B terraces challenge conventional terrace interpretations. Although these terraces initially appeared similar to agricultural ones known elsewhere in the Maya area, our investigations indicate that these terraces were actually engineered as residential space, with all evidence suggesting that they were never used for the large-scale, intensive agricultural development usually associated with dry-slope contour terracing.

Furthermore, it seems likely that upon identifying terrace features, archaeologists too often categorize them as either agricultural or hydrological, without further investigating alternative functions. The more active recognition of residential terraces, however, may engender a better understanding of the population pressures occurring in the lowlands during the late/terminal classic periods.

Because of the current state of ambiguity surrounding whether similar features have been found elsewhere in the Maya lowlands, the closest known areas for comparable reports of terracing are along the periphery of Monte Alban in Oaxaca and the post-classic site of Cihuatan in El Salvador. However, both are outside the Maya area.

In Oaxaca, Feinman, Nicholas, and Haines have reported that over 100 residential terraced *sites* may exist.⁹ The site of El Palmillo alone, located on the periphery of Monte Alban, has over 1400 residential terraces, enough to support an estimated 5000 people on their surfaces. The level of settlement density observed there far exceeds the population of people living at the height of the Group B terraces, but nonetheless they exhibit a

⁹ Feinman, Nicholas, and Haines, 2002

similar utilization of traditional agricultural features for the purpose of settlement and have implications on our understanding of the pressures influencing ancient resource management.

At Cihuatán in El Salvador, domestic house mounds and other structures were also discovered atop hillslope terraces. These units are clustered together but are more comfortably spaced than those exhibited in Oaxaca. Such a lack of population pressure brings into question why people would ever settle on a terraced hillside? What are the advantages of using a technique employed primarily for agricultural intensification for a purely domestic function?

As William Fowler infers, these features may provide a “dual purpose,” modifying hillsides for both residence and kitchen gardens while subsequently freeing-up arable land elsewhere.¹⁰ This would seem a logical step for areas experiencing increased population pressure, and thus, supports Gene Wilken’s logic that because of high labor inputs, terrace construction must be preceded by a population high enough to have an available labor force- not to mention a mechanism for organizing, controlling, and planning the construction process.¹¹ Dunning, Jones, Beach, and Luzzader-Beach also suggests such a settlement pattern would have an “ecotonal” advantage of living between both upland and lowland resources.¹² Residential terracing may therefore be a means of making the outskirts of the Mundo Maya physically and economically supportive of an expanding Late Classic population.

Conclusion

¹⁰ Fowler, 1989:113

¹¹ Wilken, 1987:102,107-111

¹² Dunning, Jones, Beach, and Luzzader-Beach, 2003

The more active recognition of such features as residential terraces may engender a better understanding of population pressures occurring in the lowlands during the late/terminal classic periods. An estimated 20% of the terraces at Chawak But 'o'ob are residential; if a proportional number of house foundations were found among the thousands of other dry-slope terraces in the lowlands, how significantly would our understanding of Maya demography be altered? Based on the treatment of residential terracing in the existing literature, it seems clear that further description is needed in defining and discussing these ambiguous features. The residential terracing investigations at Chawak But'o'ob are therefore contributing to the growing documentation on "the invisible Maya,"¹³ as Kevin Johnston has labeled them, and has generated a need for a more thorough identification of domestic terrace functionality in the Maya lowlands.

¹³ Johnson, 2004

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