UNDERSTANDING THE ARCHITECTURE OF THE SOUTH SECTOR OF CHOCOLA, SUCHITEPEQUEZ

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Mud architecture seems to be a dominant factor in the prehispanic constructions of the archaeological site of Chocola. This was already observed since the first field season conducted in 2003, with test units located very close to Mound 15 and to what is known presently as Cerro Partido or Mound 2. Here, "the mounds were made of dirt and when excavated dirt was the only thing we found, they were rounded in shape but not because they had no corners, but rather because the constructions were made of dirt and have collapsed" (Burkitt 1930:6). This author also noted that at the Altiplano the mounds were of dirt and featured the form of rectangular pyramids, a characteristic that according to him was not observed in Chocola. At that time, he was unable to define the façades or faces of the mounds.



Figure 1. View of the exploration, Pit 5.

This however was not entirely true, as his reports only referred to outer profiles, diameters and heights, and included no information about form or how the strata that integrated Mound 2 were arranged (Figures 1 to 4). This would have been of help to establish several possible architectural forms.



Figure 2. View of burnt stones.



Figure 3. Strata, Mound 2.

In order to establish a comparison of architectural features, the bibliography that presented construction techniques similar to those of Chocola was consulted. The case of Kaminaljuyu (Ohi 1994), regarding mud-built features, presented similar characteristics with the use of layers of refined *talpetate* and layers of plain mud, or mud used like refill or mortar to join together other materials.



Figure 4. Differences of materials in the excavation profile.

The test pits in Cerro Partido presented construction materials in earth and mud of a greyish and light brown color, at times with reddish spots or black areas, notoriously burnt surfaces whose form is so far ignored, as well as the elaborating procedure. Surfaces exposed to heat show a constant thickness of approximately 0.02 m. At the inside of the burnt areas there were large water-worn stones (cobbles), the mortar was sand with mixes integrated by small stones present in the red, yellow or bluegreen *taxcal*, in other cases. This type of burnt area was also found in the earlier excavation of Cerro Partido, when they were exposed by Burkitt's works.

The burnt areas are formed by truncated adjacent triangles standing on their bases, filled in turn by other inverted triangles that fitted into the two standing ones. This form of construction makes mud surfaces rise gradually in the form of a pyramid whenever the construction procedure is repeated several times. In other words, we would be talking of concave and convex forms –that is to say, the form of *guacales*-that complement one another.

The construction forms are made of mud and *taxcal*, although in our view, perhaps in the future it would be advisable to look precisely for structures built with this material, as well as with sand mixes. Due to the degree of consolidation of the material components, they tend to form *guacales* or washbowls that rest on their bases or are otherwise inverted with lateral slants of 45°, approximately. According to Hiroshi Minami, this is a very difficult form to reconstruct. Some of them may measure 10 m in length and 1.50 m in height or depth, and crossed one another in a north to south, or east to west direction. The sections were refilled with different mixes of materials whose function consisted in joining or sticking together these forms or masses.

In the investigations of the Miraflores Project (Martínez et al. 1996:397), there is reference to a similar construction system made in a single massive and complete construction event, corresponding to Mound B-V-5, dated to the Middle Preclassic period. The construction technique observed in both cases is consistent with the one rescued in the Cerro Partido excavations conducted by the Chocola Project in 2003.

In the case of Tak'alik Ab'aj, the mud excavation techniques have been already explained (Schieber 1991:33), with a description of an archaeological experience that may lay the foundations for future excavation works.

These three examples of mud architecture show the construction and architectural system as well as the possible forms that some buildings in the southern area of Chocola may have had. For this reason it is necessary to go back to Burkitt's work in order to widen and complement it, as it has been seen that there is a high frequency of cobble stones used in the construction of the platform of Mound 5 at Chocola. The abundant cobble stones of varied sizes and forms come from the nearby rivers, and were used in the construction of retaining walls, building façades and most likely in building foundations, using in the process the burning system to provide a greater solidity to their bases, as in the specific case of the platform of Mound 5.

MOUND 5

The architecture of Chocola, unknown so far, includes among its shapes a structure like that of Cerro Partido. It was built by using superimposed *guacales* made of mud, and in the specific case of Mound 5, with a stone wall made of cobble stones to create a platform of a size larger in its horizontal construction than in its vertical one. It was aligned in an east to west direction on its north side, with large stones of sizes that ranged from 0.30 m to 0.40 m. At the center there was a wall formed by five rows of stones; those that integrate the first row in the upper part and which form the maximum height are the largest ones, at first sight, and the remaining four under the surface, give the impression of being smaller because their largest portion remains hidden by the inner refill and the mortar that covers the joints between one stone and the other.

The builders probably were concerned with the aesthetic presentation of the wall, as one of the stones that crown the upper portion of the wall is in an almost perfect horizontal position, probably in correspondence with the position it had in origin, protruding from the rest of the construction. This stone was checked with a plumb

and level to establish its horizontality, and it was corroborated that it was put in place as if the builder had laid it down with an extreme care to indicate the final height the wall was to have. This stone also showed signs of having been carved to accommodate the one that supported it in the lower face. All this probably granted an excellent visual finish to this part of the wall.

The stones perpendicular to the façade of the building are equidistant to one another; then one would be led to think that the building had particular dimensions, or otherwise this would suggest an attempted symmetry in the construction. The mortar that fills the joining between the stones is prepared with dirt of a light brown color and small stones that work like pebbles, thus providing cohesion and amalgam to the mix to firmly join together the stones.

In some areas, there is a notorious use of stones of a smaller size that vary from 0.15 m to 0.20 m, which work like a support and/or a wedge for the larger stones, and further fill the small spaces between the large stones. The foundation or base that supports the construction consists of a mix of *taxcal* with sand and very tiny remains of a micaceous material, and it is there where the stones of the first row rest, from bottom to top. This was probably the original plaza floor, an architectural detail observed in the east profile of Pit 14-113.

We have also observed that some spaces were refilled with dirt only whenever the large and small stones formed spaces or cavities, similarly to several examples observed in Colonial buildings of Antigua Guatemala.

This wall is positioned 14 m away from the central axis of the mound; consequently, it could be assumed that a similar wall probably exists, equidistant from the center and at the same distance to the south, and that accesses thereto consisted of steps placed on the west and east fronts. The average height at the center of the wall is of 1.25 m from the base to the row of stones that crown it; however, towards the east side of the wall there is some sort of wedge that ends in a point of only three rows of stones.

The exhaustive revision of the details in Pit 14-113 allowed us to observe that the stones of the lower row rested on a type of refill made with *taxcal*, which generally shows small remains of vegetal charcoal, although we do not know for the moment whether this is the result of intentional burning to solidify this architectural feature that supports the five stone rows or not. In regard to the previous statement, there is an apparent similarity with that which Burkitt discovered and described, while it is as well hypothesized that it could be a construction pattern that remained in force for a long time. The study of Kaminaljuyu previously referred to, could suggest that the burning of buildings may have been accidental and a consequence of some armed conflict, but we now think that this was not the case, and that this could be a construction pattern of the Altiplano, of the South Coast and of Chocola.

DISCUSSION

The discovery of the wall of Mound 5 led to the re-examination of the architectural traits in the archaeological sites of Palo Gordo, for being the closest one to Chocola, and Tak'alik Ab'aj, places that show very similar architectural features with rounded corners. In Tak'alik Abj'aj there are walls with similar characteristics in a number of structures. Also in Palo Gordo there are structures with resembling forms, both in their dimensions and the cover of the façades, which consist of large cobble stones or pebbles.

In prehispanic times, Mound 5 was likely to be among the first buildings that anyone coming to trade goods from the South Coast to the Altiplano would encounter, as it is one of the large buildings or platforms located south of Chocola. The ideological connotation it involves is power. It is a large building, even now. The individuals in charge of this building would probably deny access to anyone unwilling to abide to the local conditions or demands involved in passing through Chocola on their way to the Altiplano. It is common knowledge that there was an ancient colonial road that led to the city of Santiago, across Chocola (Oscar Haussier, personal communication 2004). The visual impact generated by a large building raises questions such as: What crossed people minds when they first saw the building? What was the character of the building: was it military, and at the same time the symbolic representation of some ruler? The visual goal was no doubt achieved, first because of the mound dimensions and second because of its cover, made of huge cobble stones.

It is not possible to erect a building such as this one without considering the amount of labor involved, for example, the number of workers in the *taxcal* quarries. Who transported the river cobbles? Who prepared the mortar for joining the stones together? The masons involved, their assistants, the superintendent in charge of the construction. Who provided food for them? This all points to a well politically organized society, and a hierarchical one, suggesting that a large number of individuals were at the service of this ruler and involved in the maintenance of the city as such.

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Figure 1 View of the exploration, Pit 5

Figure 2 View of burnt stones

Figure 3 Strata, Mound 2

Figure 4 Differences of materials in the excavation profile