

Occam's Razor, Confirmation Bias, and the "Conquest Slabs" of Building "J" at Monte Albán, Oaxaca, Mexico: A New Proposal

Nathalio Mauricio Caplan 

Instituto Tecnológico y de Estudios Superiores de Occidente (2024), Tlaquepaque, México
Email: tlcnate1@outlook.com

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Abstract

Research at Monte Albán led by Alfonso Caso began in 1931 and extended across 18 field seasons. Based on his investigations, Caso proposed that the images of inverted figures on Building "J" represented towns conquered by Monte Albán through the depiction of their defeated leaders: "elements suggested to Caso that these were historical records related to the conquest of certain places". Since Caso made this designation, little if any work has been done to offer alternative proposals as to the purpose of the slabs. Díaz, 2026; Fahmel, 1991; and Robles, 2011 have all done work on Building "J" and have accepted Caso's proposal. This paper offers an alternative explanation. It argues that Caso, due to confirmation bias, may not have considered other possible explanations: "people tend to test hypotheses in a one-sided way, searching for evidence consistent with the hypothesis they hold at a given time". In support of this argument, this paper presents evidence such as slab placement and the presence of a stucco covering that is contradictory to the "conquest slabs" proposition. This paper also proposes that Occam's razor may have been a factor in the designation of the slabs as propaganda. Occam's Razor is presented in a variety of forms. We will offer two of its formulations. This document proposes a new interpretation of the "conquest slabs" as simple construction elements reused from other works at the same site. These were placed in Building "J" in the most practical and logical manner: with their wider flat faces pointing downward and without taking into account the previously existing carvings.

Keywords

Monte Albán, Building "J", The Observatory, Conquest Slabs, Monte Albán

1. Philosophical Background

We present three concepts as the foundation of our proposal. The first concept is confirmation bias:

“Confirmation bias represents a specific case of selective perception. We look for information that reaffirms our past choices and eliminate that which contradicts our judgments” (Robbins & Judge, 2009, p. 185).

Likewise, “a study [...] shows that whoever seeks information among their colleagues and employees—even if it is negative—and explains their decisions, is more effective” (Robbins & Judge, 2009, p. 43).

In our proposal, we will see how this bias leads us to make decisions and form ideas based on information that reconfirms our assumptions. We will also analyze how Caso might have ignored several details of Building “J” that contravened his hypothesis regarding the “conquest slabs”.

In second place, we address Occam’s razor (Barry, 2014): William of Ockham (c. 1287-1347) was an English philosopher, logician, theologian, and Franciscan friar (Larsen, 2011) who proposed a methodological principle summarized in postulates such as:

“Entities must not be multiplied beyond necessity” (Barry, 2014).

“Of two competing theories, the simpler explanation should be preferred” (Dui-gnan, 2026).

A third factor to consider is the reuse of construction materials in Monte Albán, a recurrent custom throughout Mesoamerica and this particular site, its history that Caso himself noted: “These sculpted stones were used in the North Platform, simply as building material, *and show that they were torn from old constructions*” (Caso, 1931, author’s italics).

In his proposal, Caso seems to have moved away from these principles. His explanation of the slabs develops a series of theoretical complications that are in conflict with the simplicity rule and that we question or reevaluate under a new perspective.

2. Fieldwork

For this investigation, several visits were made to the archaeological site of Monte Albán on September 22, 2024, September 29, 2024, and June 27, 2026. On the dates of September 22 and 29, 2024, an initial review of Building “J” was carried out, and relevant photographs were taken. During the visit on June 27, 2026, previously taken photos were reviewed and data was added to identify the location of what each photo represents. On that same date (June 27, 2026), a visit was made to the archaeological site of San José Mogote in the Etla valley of Oaxaca to take photos documenting the presence of stucco in various places of the main pyramidal building. On July 5, 2026, a visit was made to the archaeological site of Yagul in the Tlacolula valley of Oaxaca to identify the presence of stucco at that location.

3. Building “J” of Monte Albán

Building J, situated in the south-central portion of the Main Plaza of Monte Albán, “is one of the most enigmatic constructions of Mesoamerican pre-Hispanic architecture” (Fahmel, 1991, pp. 94–101). We cannot assert that the current condition of Building “J” matches exactly that of its period of occupation: “As Caso himself points out, upon starting his excavations he located numerous sculpted slabs that had fallen from the walls of the original building” (Caso, 1938, 1947, as cited in Fahmel, 1991, p. 82). Affirming that they are in their original positions remains speculative: “In this task [of reconstruction] it was necessary to intervene with a crane due to the weight of the sculptures, which allows one to venture that upon falling they remained in positions very close to their original place” (Fahmel, 1991, p. 82). As we will show, the reutilization of building materials was common. **Figure 1** is one such example of the many that exist.

The walls of Building “J” where the “conquest slabs” are located are on a structure that sits on a wide, horizontal foundational slab. **Figure 2** identifies this foundational layer as “Plataforma Superior” and the slabs of our focus as “Piedras Verticales” (The original document was written in Spanish and later translated into English).

The Monte Albán II leaders chose to list the names of those regions that represented the limits of the 30,000 km. territory over which they claimed authority. The names of these places were displayed on stones set in the most unusual building ever erected in the Great Plaza. Building J [...]. Building J may have functioned both as a war memorial and as a territorial map listing 40 or more places up to 150 km distant that were brought into Monte Albán’s sphere either by colonization, conquest, political pressure, or alliance by royal marriage (López & López, 2009).

There is considerable information that Building “J” was not built in one phase but, rather, it went through several construction phases which include the relocation of construction materials from other buildings: “Building J incorporated dozens of finely carved orthostats that must originally have been part of an earlier graphic program located within a building that was at least partially coeval with Building L—Sub” (Tsukamoto & Takeshi, 2014, p. 157).

4. Classification Methodology

During the site visits, the slabs were classified according to their shapes as being “regular” or “irregular”. Larger flat sides of the slabs were identified according to their placement on the walls.

Another category was applied to identify stones and masonry that are utilized to fill-in smaller spaces not occupied by the large slabs.

Finally, slabs are noted as being “carved” or “engraved” or being “uncarved”. The term “smooth” is avoided as few, if any, of the slabs can be called “smooth” as they are both worked and/or weather worn.

Building “J” is the only building at the archeological site that is not oriented in

a North-South axis. During field work a compass was used to establish North and from there derive the compass points in the descriptions of the various constructive elements.

5. Reuse of Construction Material

There is significant evidence of the practice of reusing construction materials originating from various parts of the site and relocated according to the needs of the moment. We present one such example in **Figure 1**:



Figure 1. Slab representing a “Danzante” probably originating from Building “L” or “Gallery of the Danzantes” and relocated to the west side of the northern platform. Left side in natural state. Right side highlighting the indicated slab (Author’s photo, enhanced in ChatGPT).

Based on this information, it is highly probable that the “conquest slabs” were not in their original location when Caso discovered them. This calls into question that they were conceived as militaristic propaganda or dominance displays (Caso, 1931). There is evidence that Building “J” itself contains slabs originating from Building “L” or Gallery of the Danzantes.

6. A Proposed Alternative

An attempt is made to demonstrate that Caso may have been mistaken in interpreting the slabs as propaganda elements. An alternative is proposed that adheres to Occam’s razor (Barry, 2014) and remains conscious of confirmation bias (Nickerson, 1998).

Emphasizing the principle of parsimony (Occam), the simplest explanation is deduced by observing the physical arrangement of the slabs in Building “J”. In the section identified as the “upper floor,” four large slabs are located; one of them described as a “slab with ancient lines or reliefs”. These slabs form an almost contiguous row, with the intermediate spaces filled with smaller stones and mortar.

This first row reveals a fundamental technical detail: the slabs are placed with their widest and flattest side facing downward and their irregular side facing upward. From a strictly constructive perspective, the simplest explanation is that it is much easier to settle heavy, irregular stones on their wide, flat base, leaving the

irregular edge facing upward to be leveled later using masonry fill.

In **Figure 2**, **Figure 3** and **Figure 4** we can see that following this procedure and after placing the first row, the builders used fill to convert the irregular surface into a flat level upon which to erect the next row of significantly sized stones.

In **Figure 5** and **Figure 5(a)** we can see that the placement here mentioned applies to slabs both carved and uncarved:

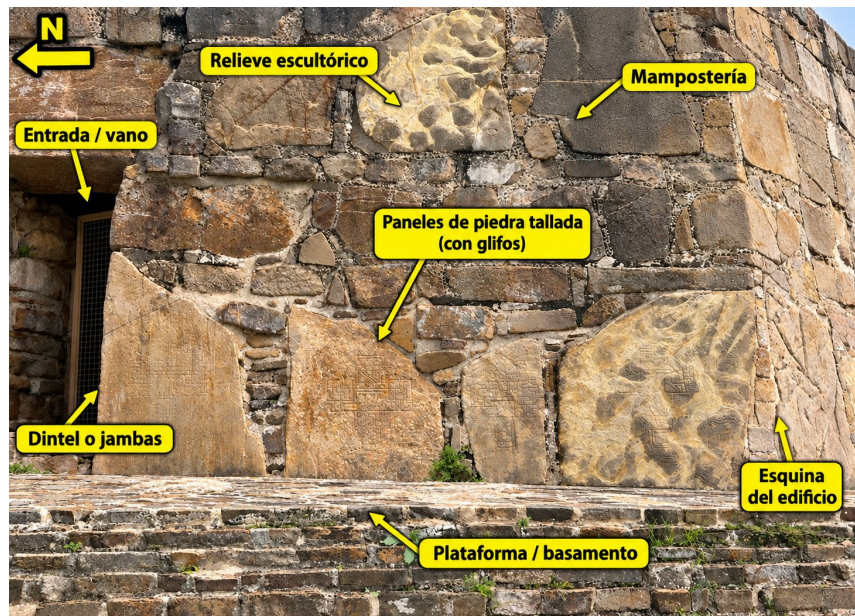


Figure 2. Northwest wall of Building “J” near the southern side (Author’s photograph; annotations with ChatGPT).

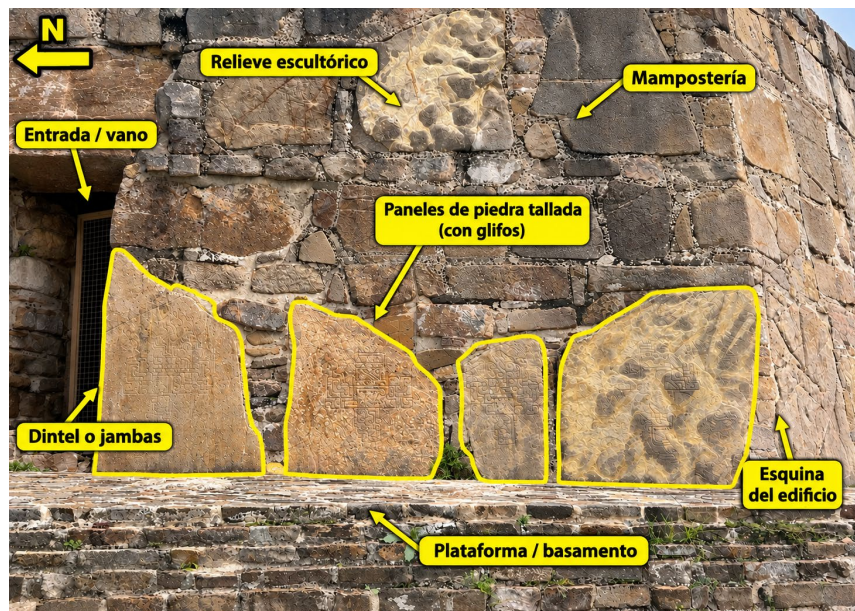


Figure 3. Northwest wall of Building “J” near the southwest side with highlighted edges showing slab placement is with wide, flat side downwards (Author’s photograph; highlighted with ChatGPT).

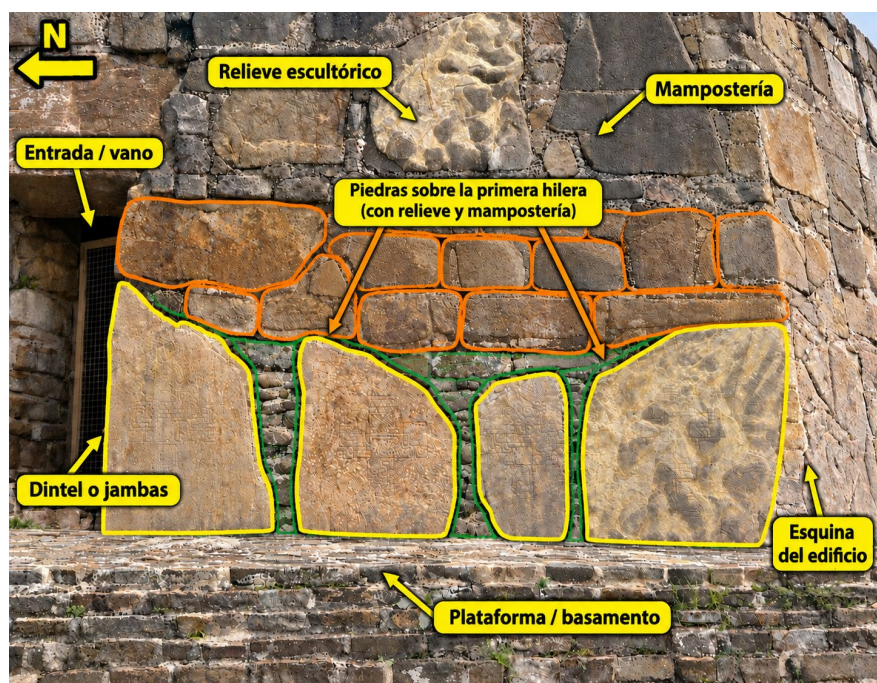


Figure 4. Northwest wall of Building “J” near the southwest side, highlighting the fill over the first row (in green) to create a flat surface intended for the second and third rows (in orange) (Author’s photograph; highlighted with ChatGPT).



Figure 5. Northwest wall of Building “J” showing uncarved slabs to the left of the tunnel entrance. These follow the same placement previously mentioned with the flat and wide side placed downwards.

The northeast side of Building “J” contains several carved stones, but the southwest side houses most of the so-called “conquest slabs”. In **Figure 6**, we can analyze this sector under the same principle of simplicity and we again observe the technique of settling the slabs on their widest and flattest side (yellow highlight), filling the gaps with smaller masonry (green highlight), and leveling with two small rows (orange highlight) to form a base for the upper row of medium stones.

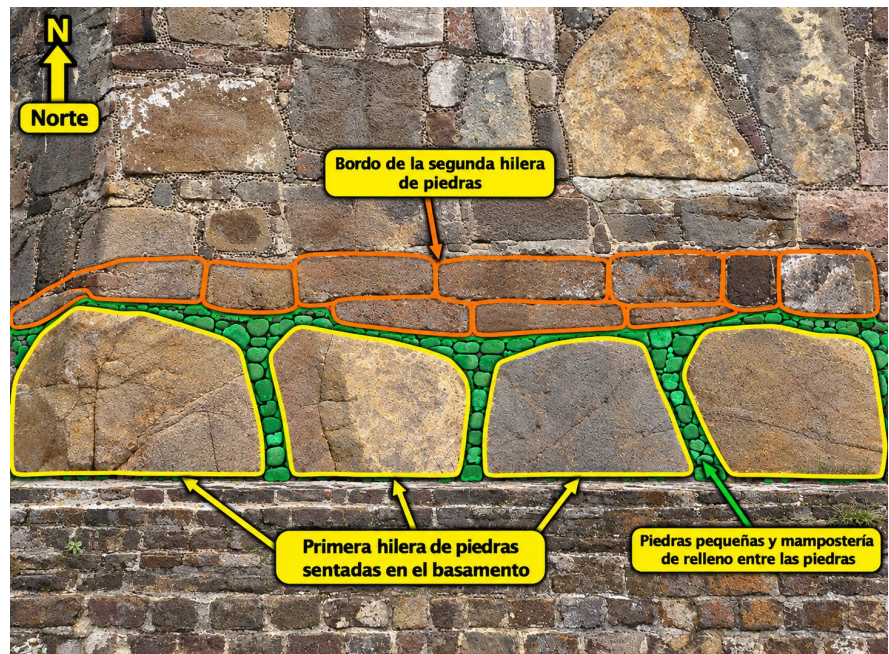


Figure 6. Left side of the southwest wall, Building “J” (Author’s photograph; annotations and highlighting by ChatGPT).

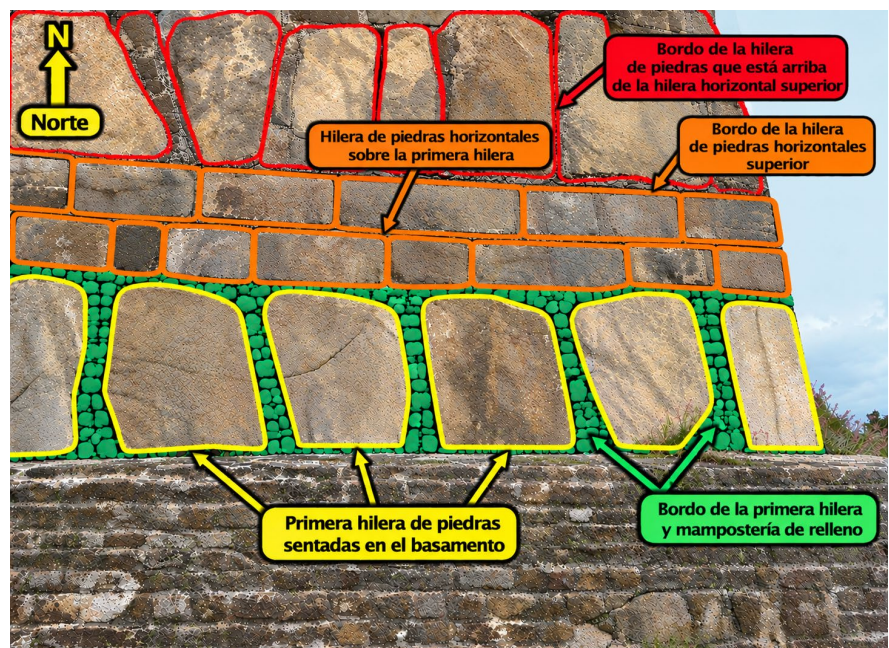


Figure 7. Right side of the southwest wall, Building “J” (Author’s photograph; highlighting with ChatGPT).

In **Figure 7**, the pattern is confirmed: the large slabs at the upper floor level (yellow highlight) present the wide and flat side downward and the irregular side upward, being filled with smaller stone (green highlight) to receive an upper leveling row (orange highlight). This is finished with a new row of large slabs placed following the now identified pattern: large, flat side downward.

7. The Spatial Factor and the Visibility of Propaganda

Building “J” “is the only one that is not oriented from north to south like the rest of the site’s constructions, offering an orientation of $\sim 47.5^\circ$ NE [...] it points toward the stars instead of following the city’s grid” (Díaz, 2026).

The main entrances to the structures in Monte Albán generally occur via frontal staircases bordered by balustrades (alfardas) (Robles, 2011). This indicates that the “conquest slabs” are located in what corresponds to the back part of the structure, not an ideal place for the visual dissemination of a political or military message.

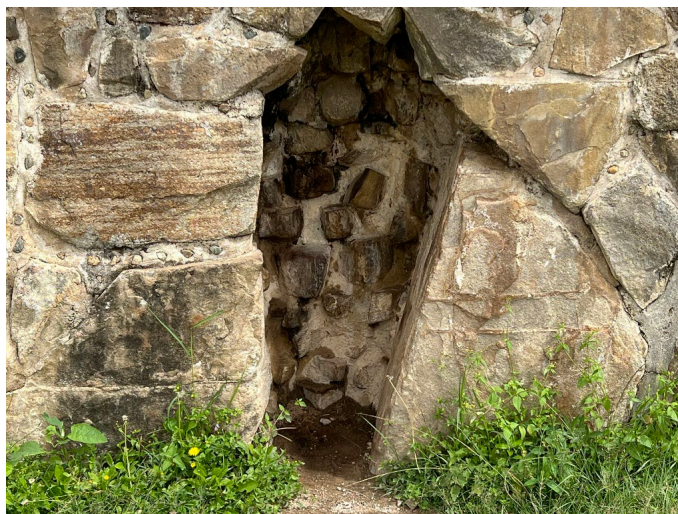


Figure 8. Niche at the base of the northwest wall of Building “J” (Author’s photograph).



Figure 9. Inverted figure on right side of cavity not visible from the front of the wall (Author’s photograph).

There are other details that reinforce this argument. **Figure 8** and **Figure 9** are located on the northwest side of the building. Here we find a niche located at the lowest visible level. Upon inspecting its interior, an inverted image is observed on the right side: if the intention was to communicate political dominance, hiding the relief goes against the idea of these figures being propaganda.

8. The Evidence of Stucco Coating

The most overwhelming argument against the propagandistic function of the carvings is the widespread use of stucco.

“Towards the end of this [Formative] horizon, the calendar, numbering, and hieroglyphic writing begin; [as well as] the use of stucco to coat constructions” (Piña Chan, 1960).



Figure 10. San José Mogote, stuccoed surface on the north staircase (Author's photograph).



Figure 11. San José Mogote, detail of stuccoed surface (Author's photograph).

The main buildings of Monte Albán were covered with this material: elite residences and palaces featured “walls flattened with stucco” (González, 2011, p. 27), while temples erected on stone platforms were “covered with stucco [...] and painted” (Licón, 2011, p. 67). This technique is also observed in other sites such as San José Mogote (Licón, 2011, p. 133); see Figure 10 and Figure 11 and Yagul (Figure 12). Figure 13 is one of many examples of the existence of stucco covering in Monte Alban itself.

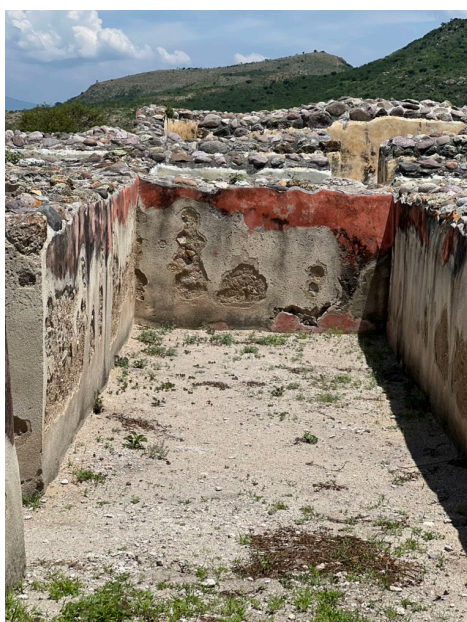


Figure 12. Patio E, Yagul: stuccoed and painted surface (Author’s photograph).



Figure 13. North Platform, Monte Albán: stucco remnant (Author’s photograph).

If the slabs of Building “J” had been designed to display military messages, they would not have been covered by a layer of stucco that hid the carvings. Nevertheless, in various points of Building “J” itself, there are clear remains of stucco covering (see **Figures 14-17** and **Figure 18**). The hypothesis of military propaganda only stands if the verifiable presence of stucco over the reliefs is ignored due to confirmation bias.



Figure 14. Stucco remnant on a slab of Building “J”, north-west side (Author’s photograph and enhancement).

9. The Propaganda Aspects of Building “J”

The concept that the slabs of Building “J” have propagandistic purposes relies on the idea that these slabs are in their original placement (Caso, 1947, as cited in **Beyer, 2000**, p. 5). They have also been interpreted as being an “outline [of] the subjugated territorial limits of the early Zapotec state” (Marcus 1976, 1983, 1992 in **Tsukamoto and Takeshi, 2014**). These and other proposals rely on the idea that investigators “have assumed that the inscribed orthostats were originally related to Building J, and [...], that Building J had a single construction phase”. **Tsukamoto and Takeshi (2014)** “suggest an alternative to these interpretations, [they posit] instead that this second monumental narrative references revered individuals from Monte Albán”.

As is described here, the presence of stucco in various slabs goes against the propaganda aspect of the slabs.



Figure 15. Slab with carving on the side of one of the interior corridors of Building “J”, southwest side (Author’s photograph).



Figure 16. Same slab as **Figure 15** with highlighted stucco remnants (Author’s photograph and highlighting).

There are numerous examples that many, if not all, of the constructions in Monte Albán were covered with stucco. One is presented here in **Figure 17**:



Figure 17. Building “G”, west side (Author’s photograph).

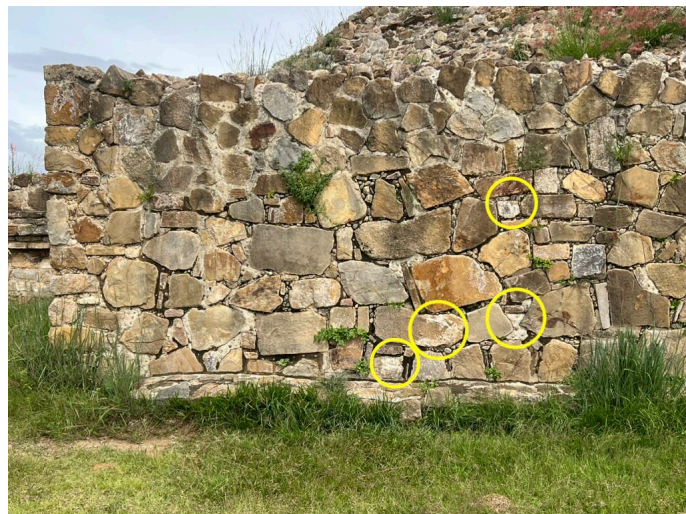


Figure 18. Building “G”, west side, with highlighted stucco remnants (Author’s photograph and highlighting).

10. Conclusion

It is compelling to think that the carved stones termed “conquest slabs” by Alfonso Caso did not fulfill the political function attributed to them for nearly a century. A similar phenomenon occurs with the so-called “Danzantes,” whose figures carry that name because they were thought to depict people dancing and are now reinterpreted based on their anatomy and analytical context as being prisoners who were sacrificed and, in many cases, mutilated (Fahmel, 2019).

The physical, architectural and historical evidence presented suggests that the slabs functioned as merely reused blocks, arranged in the most practical way available: setting their flat face down and leveling the upper irregularities with masonry. Having been covered by layers of stucco, the carved iconography was hidden from view, which invalidates its purported function as visual propaganda of

territorial dominance.

Conflicts of Interest

The author declares no conflicts of interest regarding the publication of this paper.

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