

AN EPIGRAPHIC ACCOUNT RELATED TO STRUCTURE 4 AT MACHAQUILA, PETÉN

*Alfonso Lacadena
María Josefa Iglesias*

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Among the Machaquila inscriptions published by Ian Graham in his classic work *Explorations in El Petén, Guatemala*, there were 22 interesting stone fragments with hieroglyphs associated to Structure 4 in that site (Figure 1; Graham 1967). These stones featured three different formats which consisted of:

- A series of flat stones with a horizontally arranged inscription, delimited in its upper and lower parts by plain frames.
- A second format –consisting of one single piece- similar to the former one but of smaller dimensions.
- A third format integrated by five stones with a concave surface and tenons with triangular profiles forming circular medallions.

Unfortunately, the irregular circumstances involved in the finding of these fragments did not make it possible to establish the original arrangement of the text and its architectural relationship with the structure.

The interest for clarifying, among other traits, the archaeological context of the sculpted fragments, led to consider for the 2003 field season an intervention with test excavations in the frontal central part of Structure 4, the presumed location of the findings. The test excavations conducted produced the recovery of new fragments of carved stones with hieroglyphs, clearly related to the previous findings, both because of the place where they were found –on the frontal bench and at the base of the structure- and because of their dimensions and carving style; in fact, some of the new fragments recovered matched the fragments published by Graham (Iglesias and Lacadena 2003; Figure 2).

In this 2004 field season, it was decided to expand the archaeological reconnaissance of Structure 4, in an attempt to solve the existing problems around the arrangement and original position of the hieroglyphic inscriptions in the building and to learn more about its construction stage and its relationship with the other buildings that integrate Plaza F to which it belongs. The new archaeological interventions have made it possible to recover other three new fragments of the

inscription and have provided suggestive indications about their original position in the architectural context of the building.

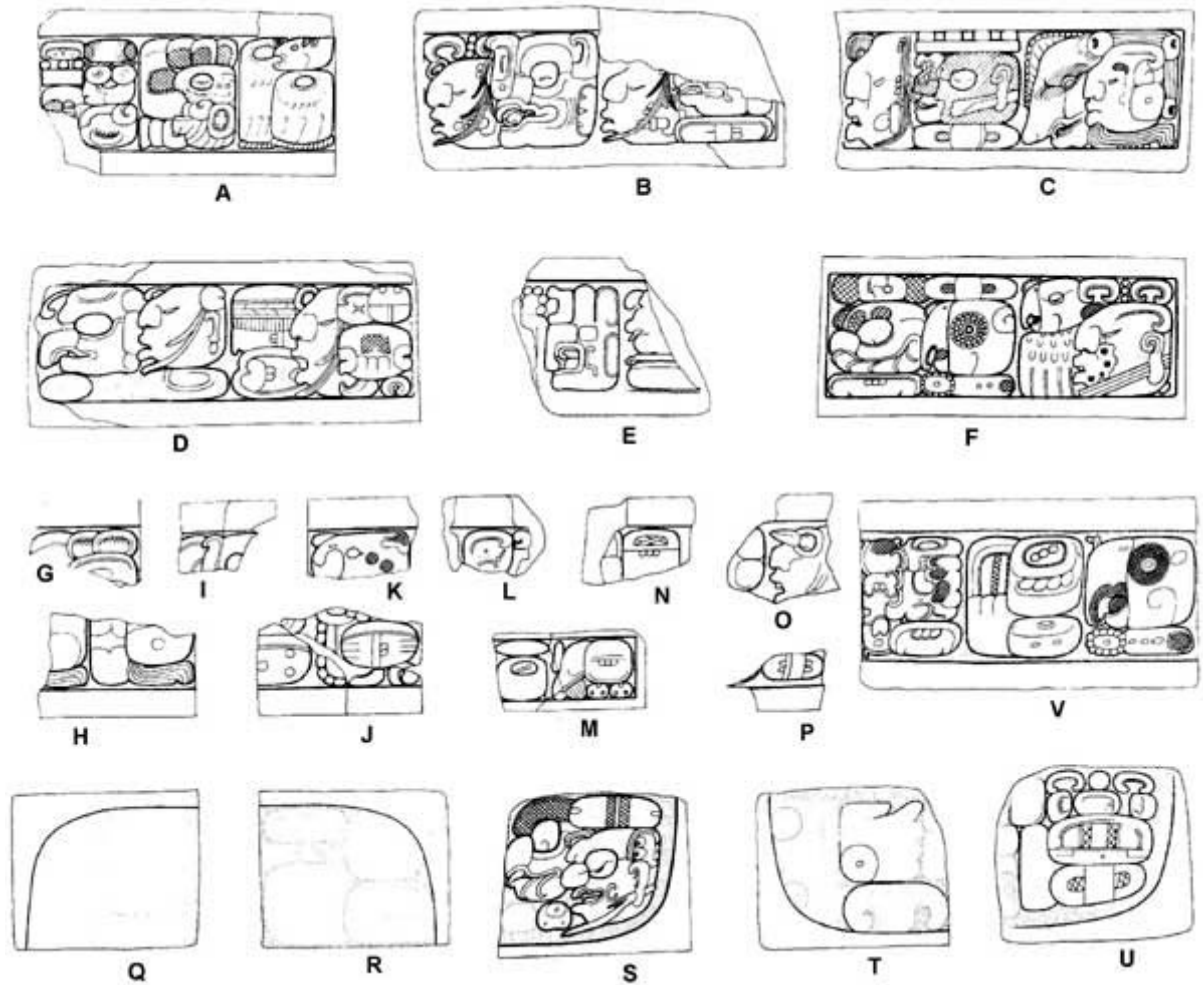


Figure 1. Glyptic fragments of Structure 4, Machaquila (after Graham 1967: Fig. 39).

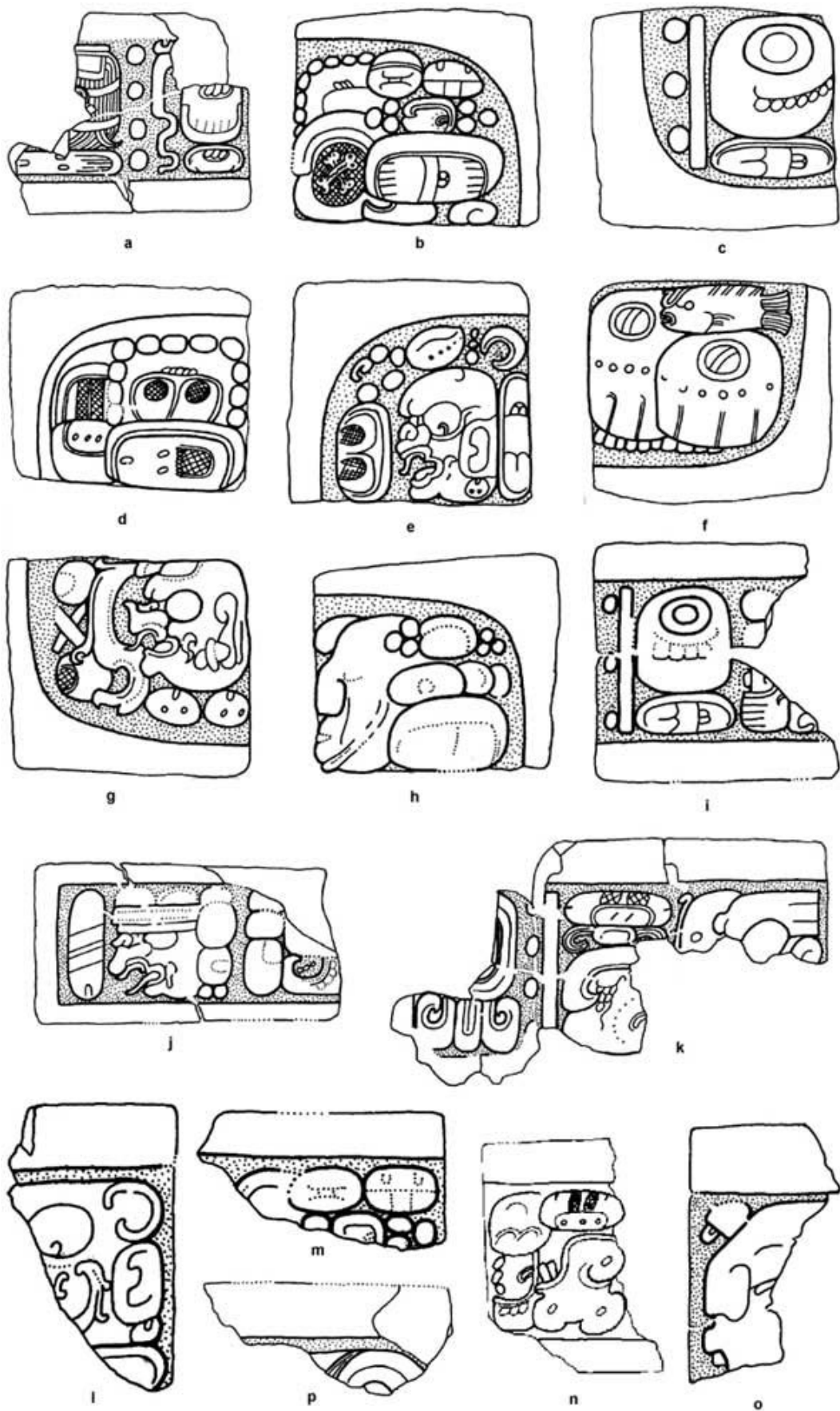


Figure 2. New glyphic findings in Structure 4, Machaquila (drawings by A. Lacadena).

THE MONUMENT'S FORMAT

Since Graham's publication, it has been generally assumed that the recovered fragments in Structure 4 were a part of a hieroglyphic stairway. In fact, Graham never suggested that the flat ashlar or the others with a concave surface were a part of a stairway. The only fragment he did suggest it could be a part of a small step, was fragment M, with a flat format and smaller in size.

After one season of field works at the structure, it is possible to concur with Graham in his overall impressions: neither the flat ashlar nor those with the concave surface were apparently a part of any hieroglyphic stairway associated with Structure 4. This is a two-level structure; the first consists of the foundation on which the building rests, scarcely elevated on the plaza level, and formed by a single ashlar course; the second level is also formed by a bench, again with one single ashlar course, and it is level of the inner part of the building. Like the two elevations are small, with 0.30 m in height, and like in both cases the stone courses which formed their limits were complete, the lack of sufficient height and space would have prevented the sculpted stones from being there.

Only Graham's small ashlar fragment (1969: Fig. 39, M) and a new recovered fragment corresponding, as of its dimensions, to the same class, could have served that function, and perhaps were originally placed against the step of the first or of the second level. The back end they present of at least 0.20 m may have allowed for the presence of tread of an average small access step.

Due to the fractures present in some of the sculpted stones, Graham had outlined the possibility that they were inset panels in a wall or moulding situated at a certain height (1967:56). Thus, the fractures could be explained as a consequence of the ashlar collapsing from the top. Although Graham's suggestion is still valid, the fact should be outlined, nevertheless, that the fragments are not associated to wall remains whose collapse may have accounted for the place of the findings, but instead, to the area corresponding to the broad central bay of the building (Figure 3).

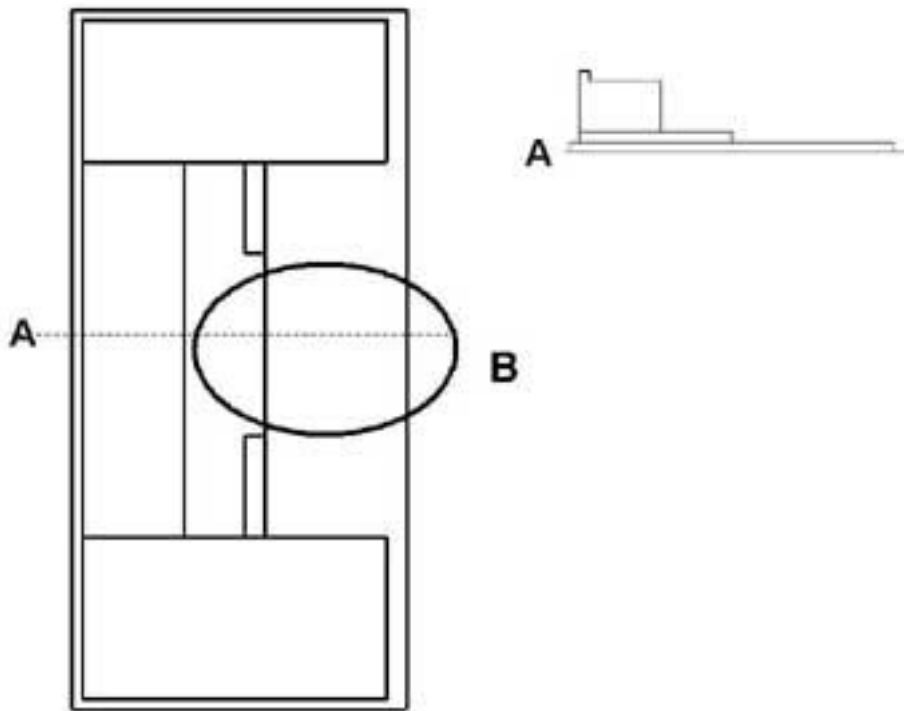


Fig. 3. Ground plan of Structure 4, Machaquila, showing the area where the findings took place (not at scale).

The archaeological interventions conducted in Structure 4 by the Spanish-Guatemalan team would point to a novel alternative. In one of its latest construction stages, Structure 4 was added a bench that run across the back part of the building. This bench was masonry-built, with an outer front that consisted of a layout of façade stones facing a core composed of old construction elements of the building, mortar, and pebbles. On the front of the bench, in the section of the broad doorway and as a decorative feature, probably the different fragments with glyphs were displayed. The indications in support of this possibility are varied:

- In the first place, fragments of carved stones with hieroglyphs were found in the context of a controlled excavation –though not necessarily in a primary context- on the floor, at the foot of the limit of the central part of the bench.
- In the second place, the shape of some of the fragments with rear triangular spikes, suggests they were conceived to be set in a core as part of a wall, in this case, the front wall of the bench.
- In the third place, the bench features a remarkable degree of destruction in its central portion, suggesting that the fragments may come precisely from that place.

If, as suggested, the hieroglyphic fragments of Structure 4 were part of the front of a masonry bench, then, which was the original arrangement? Some of the stones show a concave surface and a triangular tenon, and feature groups of four that form circular medallions. The five stones of this type documented by Graham (1967: Fig.

34, Q-U) and the other seven found in the more recent excavations form exactly three such sets of four blocks. There is a good probability that all of them are there. On the other hand, Graham outlined as a disconcerting fact, that three of the flat stones with horizontal inscriptions showed vertical frames also on their left and right parts –fragments B, C, F-, pointing to the fact that originally, they were somehow separated from the rest of the flat fragments (1967:56).

The possibility is being considered that these three isolated stones could correspond, precisely, with the three also circular medallions, placed on top of them like capitals, thus explaining their independency from the rest.

The other flat stones with upper horizontal band may have been placed on top of these medallions with capitals, to form the upper edge of the front of the bench. The resulting format, although for the time being lacking any possible comparison, most of all in that which has to do with its construction technique, is not fully alien, however, to the format of other known decorated benches, such as Hieroglyphic Bench 1 from Dos Pilas (Houston 1993), where one horizontal band with hieroglyphs rests on top of two pillars with two sculpted hieroglyphic medallions integrated by four hieroglyphic blocks each.

DATING OF THE INSCRIPTION

The inscription in Structure 4 at Machaquila had originally two calendar references. A total of six fragments integrate the remains of that which originally was a Calendar Round, and which constitutes the first of two calendar expressions present there (Figure 4a). All these fragments belong to the same flat, horizontal ashlar stone which presumably, and according to the syntax used in Maya texts, opened the inscription and was placed at left. Unfortunately, the Calendar Round cannot be truthfully reconstructed. In the absence of the numeral and the day of the *tzolk'in*, the date of *haab'*, *9 Keh* is insufficient to provide a dating to the monument, as it recurs each 365 days.

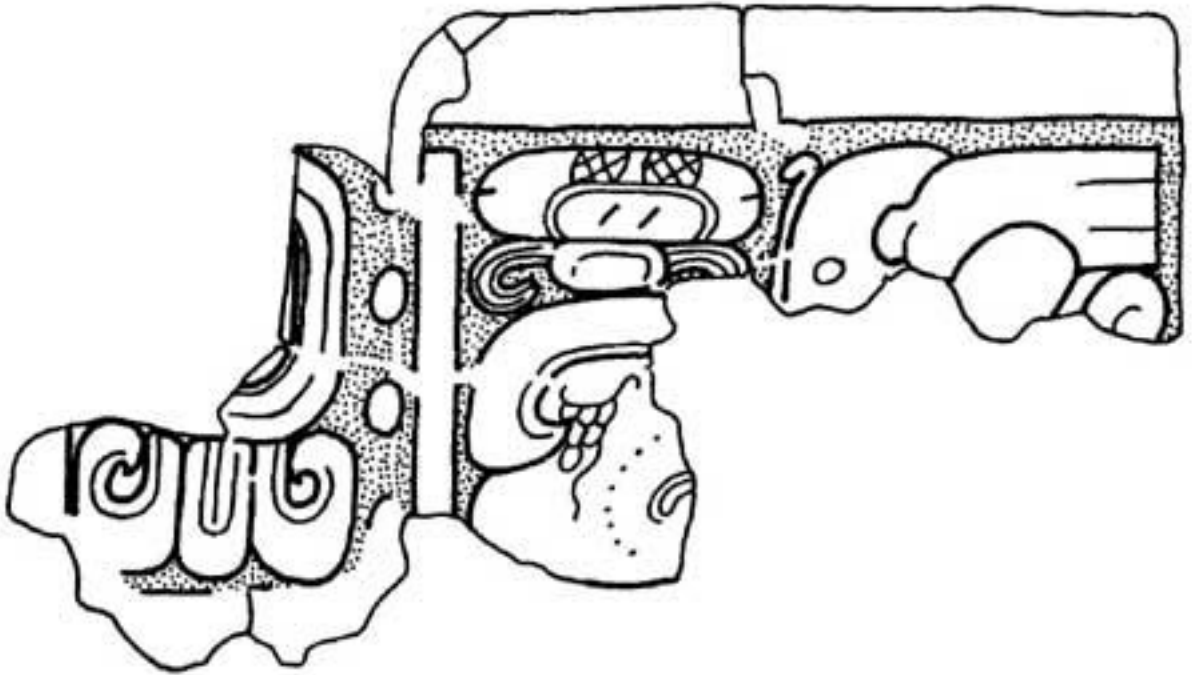


Figure 4a. Calendar references in the inscription of Structure 4 at Machaquila: Calendar Round (fragment E-95).

A second calendar reference is found in fragments T and U reproduced by Graham (1967: Fig. 39, Figure 4b). This calendar expression consists, like Graham himself suggested, in a *katun* anniversary preceded by the expression **TZUTZ-yi**, *tzutz[uu]y* "it's over". Thus, it would make sense to presume that this *katun* anniversary was connected with the date of the Calendar Round, although it is unclear whether this indicated the origin of the anniversary count or its completion.

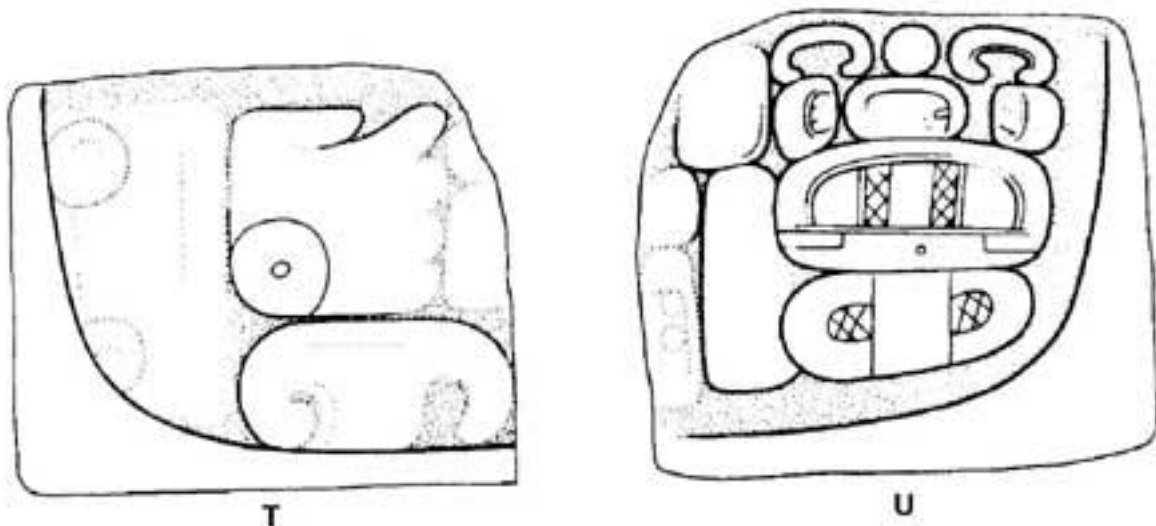


Figure 4b. Calendar references in the inscription of Structure 4 at Machaquila: fragments T and U (after Graham 1967: Fig. 39).

Despite these difficulties, it is possible to risk an approximate dating as of other indirect indications, combining both the archaeological and the epigraphical information. One portion of the inscription –the twelve stones with their corresponding glyphic blocks that form the circular medallions- is carved on stones with a concave surface and a triangular spike. Differently than the parallelepiped-shaped stones placed face-wise which were used to support the weight of the upper courses, the ashlar stones with the triangular spike were set in the mix and pebble core of the wall, to face its exterior part (Figure 5). The construction with triangular-spiked stones corresponds to a very peculiar construction technique that employs veneer masonry, identified in the Central Lowlands in places such as Ucanal, Calzada Mopan, El Chal or Ixkun, being a late architectural trait chronologically associated in Petén with the Terminal Classic period as of 800 AD (Laporte and Mejía 2002a: 67-68, 71; Laporte and Mejía 2002b:43).

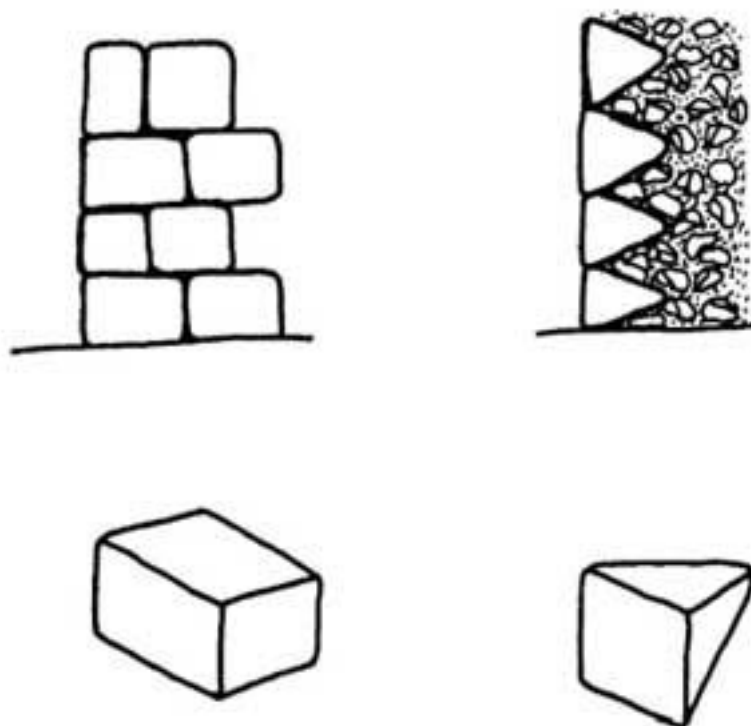


Figure 5. Construction techniques: a) stones placed face-wise; b) veneer masonry.

The epigraphic text is not contradicting this late dating suggested by the archaeological analysis. From the point of view of palaeography, the text in Structure 4 shows traits that in the region correspond to the advanced Late Classic and Terminal Classic periods, like the graphic designs featured in T181bis, T528 (see, for instance, Ixlu, Altar 1, B4, and Jimbal, Stela 1, B1, for late examples of such graphic designs), or the feminine logogram *IX /IXIK* (compare, in Machaquila, the form for representing this same sign in Stela 11, dating to 9.15.10.0.0, and in Stela 6, dating to 10.0.5.16.0). In addition, the text shows peculiar linguistic traits, typical as well of an advance Late Classic period, such as the loss of the glottal in the expression “the guardian of”, written in the two occasions it appears in the text –in Graham’s fragments F and V- like **u-CHAN-na**, *uchan*, and not like **u-CHAN-nu**, *ucha’n*, the earlier form (Lacadena and Wichmann 2004). Likewise, the possible writing of

“house” in Graham’s ashlar D like **na-ji**, *naaj*, and not like **NAH-hi** or **na-hi**, *naah*, points to the loss of contrast between the aspirated (/h/) and velar (/j/) glottals, a phonological process documented also for the well advanced Late Classic period (Grube 2004).

CONTENT OF THE INSCRIPTION

The inscription of Structure 4 at Machaquila is heavily fragmented. The irregular circumstances that surrounded the finding of the first fragments with the irremediable disturbance produced in the archaeological context (Graham 1967: 56-58), makes it impossible to establish the order in the original arrangement of the different stone blocks that contained the hieroglyphic text. Besides, the inscription is incomplete. With the knowledge we now have about the Classic Maya syntax, we see an absence of verbal and connecting expressions among the characters mentioned. All this recommends caution at the time of speaking about the content of the inscription. Nevertheless, and keeping always in mind these considerations, it is possible to elaborate on some aspects of the contents of this text, which provide crucial information regarding the political history of the site.

CHARACTERS

The inscription in Structure 4 is undoubtedly interesting for the large number of characters involved. Even though the fragmented and incomplete condition of the inscription prevents, for the time being, to recognize them all, some of them may be identified.

Among the characters present, at least a couple of them, two females, are worth mentioning. Combining the already available information with the fragments published by Graham with the new findings, we now know that one of the two females mentioned was specifically from the city of Machaquila (interestingly, written as **IX-T174-ti-su**; Figure 6a). The other was a foreign woman, named with the title of *IxAhkul ajaw*, “princess of *Ahkul*” or *IxMak ajaw*, “princess of *Mak*” according to how the logogram on the carapace of the turtle is read, like **AHK** or like **MAK** –the latter possibility has been recently suggested by M. Zender (S. Guenter, personal communication 2004; Figure 6b).

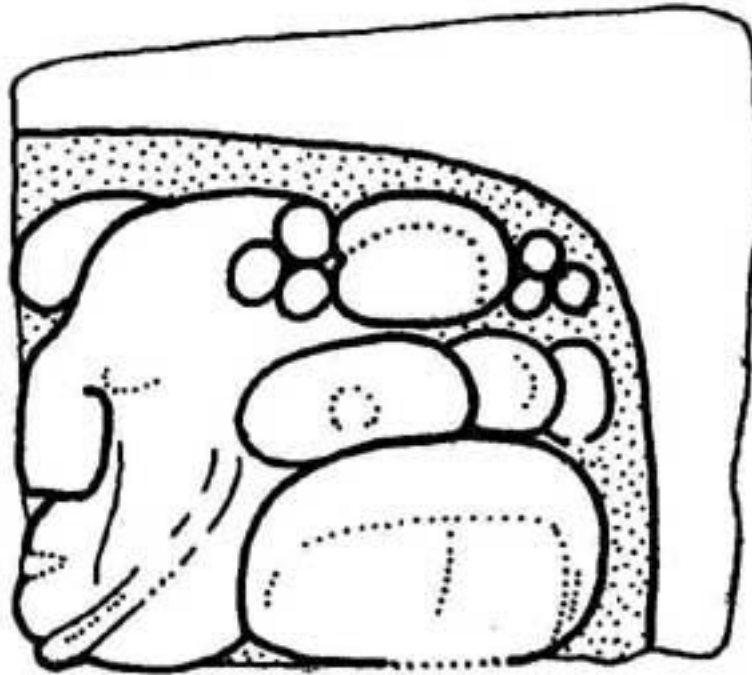
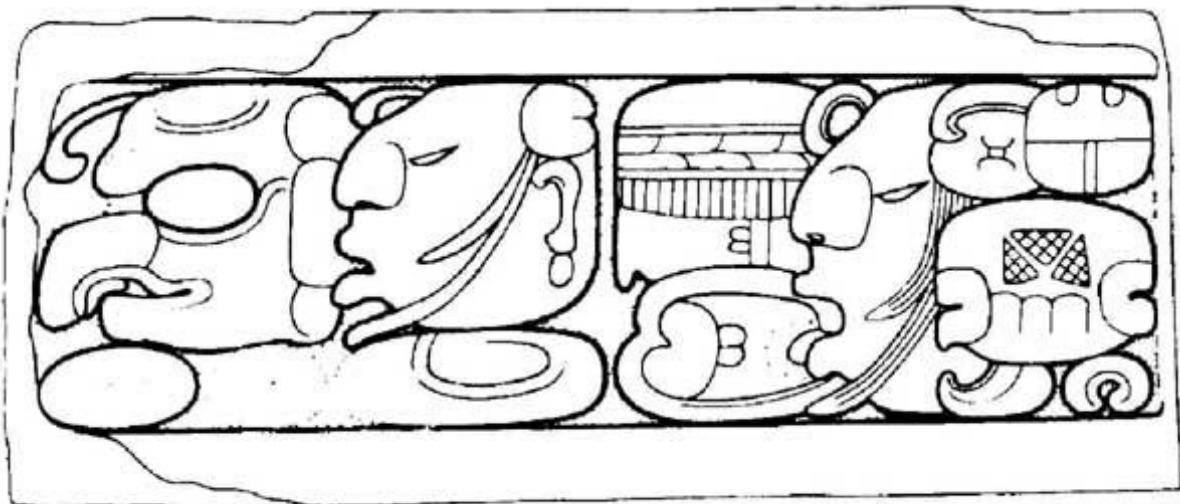


Figure 6. a) Machaquila woman in E-92.



D

Figure 6. b) Fragment D (after Graham 1967; Figure 39).

Independently of the correct reading, we favour Stephen Houston's view in considering that definitely, this toponymic reference has nothing to do with Cancuen, as it was previously hypothesized (Houston 1993:116). If in fact it is *Ahkul*, it would possibly be related to the modern toponym of San Juan Acul, located in the region at north of the Petexbatun (Houston 1993: 116-117); if it in fact is Mak (or any abbreviated variant of *Mak[VI]*, it would then be referring to some place in the region that has not been identified so far. In any case, it would be indicating the place of origin of the princess. The relationship between these two women –or between one

of the women with a third one- is a mother-daughter one, as indicated in Graham's fragment B.

Together with the mention of these women in the text, other male characters, though it is not known how many of them at this time, were mentioned. Fragments of names and titles may be recognized among the remains gathered. The nominal clause of one of these male characters shows the expression **MUT-II**, *Mut[uu]l* (Figure 7), which refers to the name of two major political entities of the Classic period, Tikal and Dos Pilas/Aguateca (Mathews and Houston 1985; Houston 1993; Martin and Grube 2000: 64-65). Given the fact that the syntactic context is uncertain, we would only be able to speculate with the political implications of such a mention, something we shall not do at this time.

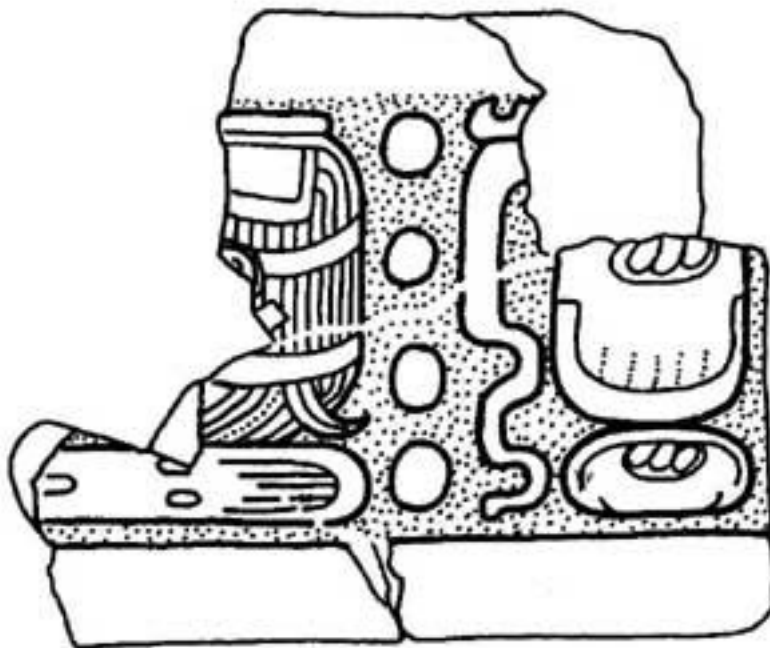


Figure 7. The expression **MUT-II**, *Mut[uu]l* in fragment E-85 of Structure 4, Machaquila.

But, no doubt, of all the male characters mentioned in the inscription of Structure 4, the most important one is the character that from now on we shall call "*Scorpion'Ti'Chaahk*, which occurs twice in the text. His name includes one sign that has not been deciphered for now, which represents a tail or a scorpion claw, followed by the signs **TI'**, *ti'* 'mouth' and **GOD B-ki**, *Chaahk* (Figure 8a). One of the mentions shows how the design of the logogram of God B incorporates, precisely, this peculiar trait, a long feature that ends in a sting or pincer on the lower mandible (Figure 8b), and which constitutes a previously unknown aspect of god *Chaahk*, which could be paraphrased as '*Chaahk-with scorpion-mouth-tail*', or '*Chaahk-with scorpion-mouth-pincer*', depending on whether one may consider that the feature represented is a tail with a sting, or a leg with a pincer. The absence of a definition between 'tail' and 'pincers' is a consequence of the Maya representations themselves, where these two elements are not iconographically distinguished, neither in the Classic (Robicsek and Hales 1981:83, vase 109), nor in the Preclassic period (Madrid Codex, pp. 7, 31, 44, 48; Paris Codex, p. 23; Figure 8c-d). *Chaahk's*

association with the scorpion is not entirely strange: one representation in the Madrid Codex clearly shows this god with the tail of that beast (Figure 8e).

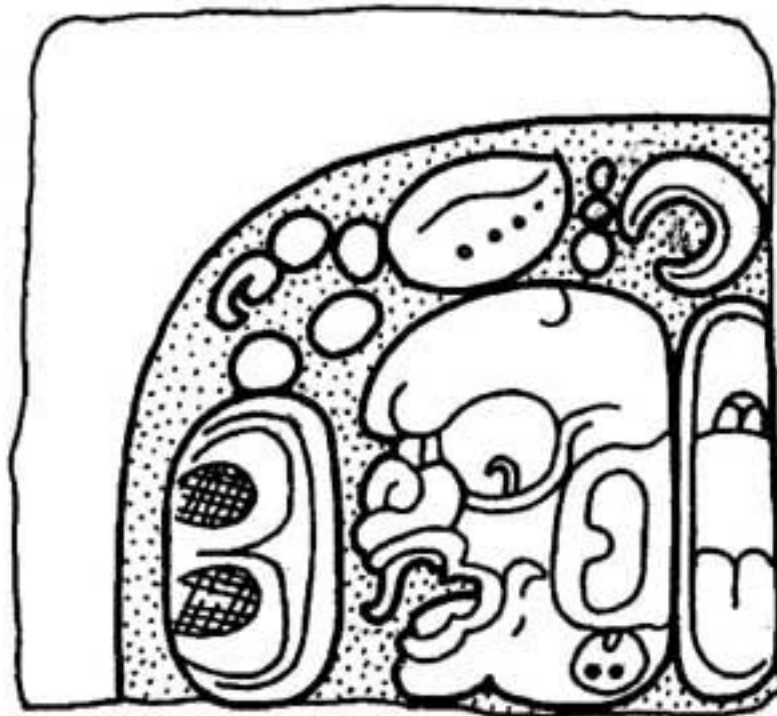


Figure 8. The 'Scorpion' king *Ti' Chaahk* of Machaquila: a) Fragment E-89.

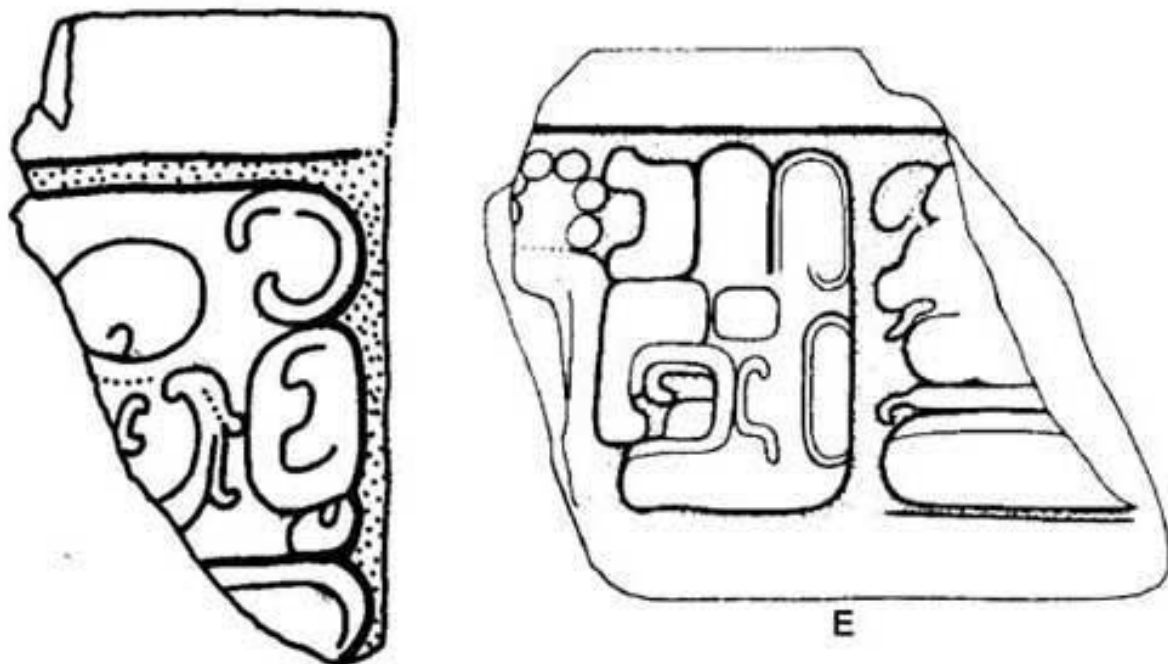


Figure 8. The 'Scorpion' king *Ti' Chaahk* of Machaquila: b) fragments E-93 and E (E after Graham 1967: Fig.39).



Figure 8. The 'Scorpion' king *Ti' Chaahk* of Machaquila: c) Representation of a scorpion in the Classic period (according to Robicsek and Hales 1981: Vase 109).



Figure 8. The 'Scorpion' king *Ti' Chaahk* of Machaquila: d) Representation of a scorpion in the Paris Codex, 24; (according to Villacorta and Villacorta 1977).



Figure 8. The ‘Scorpion’ king *Ti’ Chaahk* of Machaquila: e) God B with a scorpion tail in the Madrid Codex, 31 (according to Villacorta and Villacorta 1977).

In one of the few glyphic sequences that may be reconstructed in the inscription – this piece of information, advanced in Iglesias and Lacadena (2003) can now be confirmed-, ‘*Scorpion’ Ti’ Chaahk* is clearly associated to the titles of *k’uh[ul]* T714-**su-ajaw**, ‘sacred king of Machaquila’ and *B’a[ah]* *Kab*’ ‘head of the earth’ or ‘prince of the earth’, preceded by numeral 28, like in the title clauses of other late rulers of the site and the region (Figure 9). ‘*Scorpion’ Ti’ Chaak* is, therefore, a new king of the site. Given the fact that –as already noted- the way in which the façade stones with triangular spikes were carved constitute a late architectural trait in Petén, documented since 800 AD, it is possible to try to place this king within some timeframe, by conciliating both the archaeological and the epigraphical information.

The dynastic history of Machaquila has been acceptably well documented for this temporal frame (Fahsen 1984). There is an uninterrupted sequence of kings, apparently with no voids, since the restoration of the dynasty in the person of *Ochk’in Kalo’mte’* (associated with dates between 800, when he takes office, and 810 AD), ‘*the guardian of ... b’ul K’ahk*’ (sometime between 821 and 824 AD), and *Juntzak*

Tok' (associated with dates between 824 and 840 AD). '*Scorpion*' *Ti' Chaahk* could fit well in the five-year period (810-815 AD) between the reigns of *Ochk'in Kalo'mte'* and *Siyaj K'in Chaahk II*, or else after king *Juntzak Tok'* sometime after 840 AD, the last date associated to this king in Stela 5.

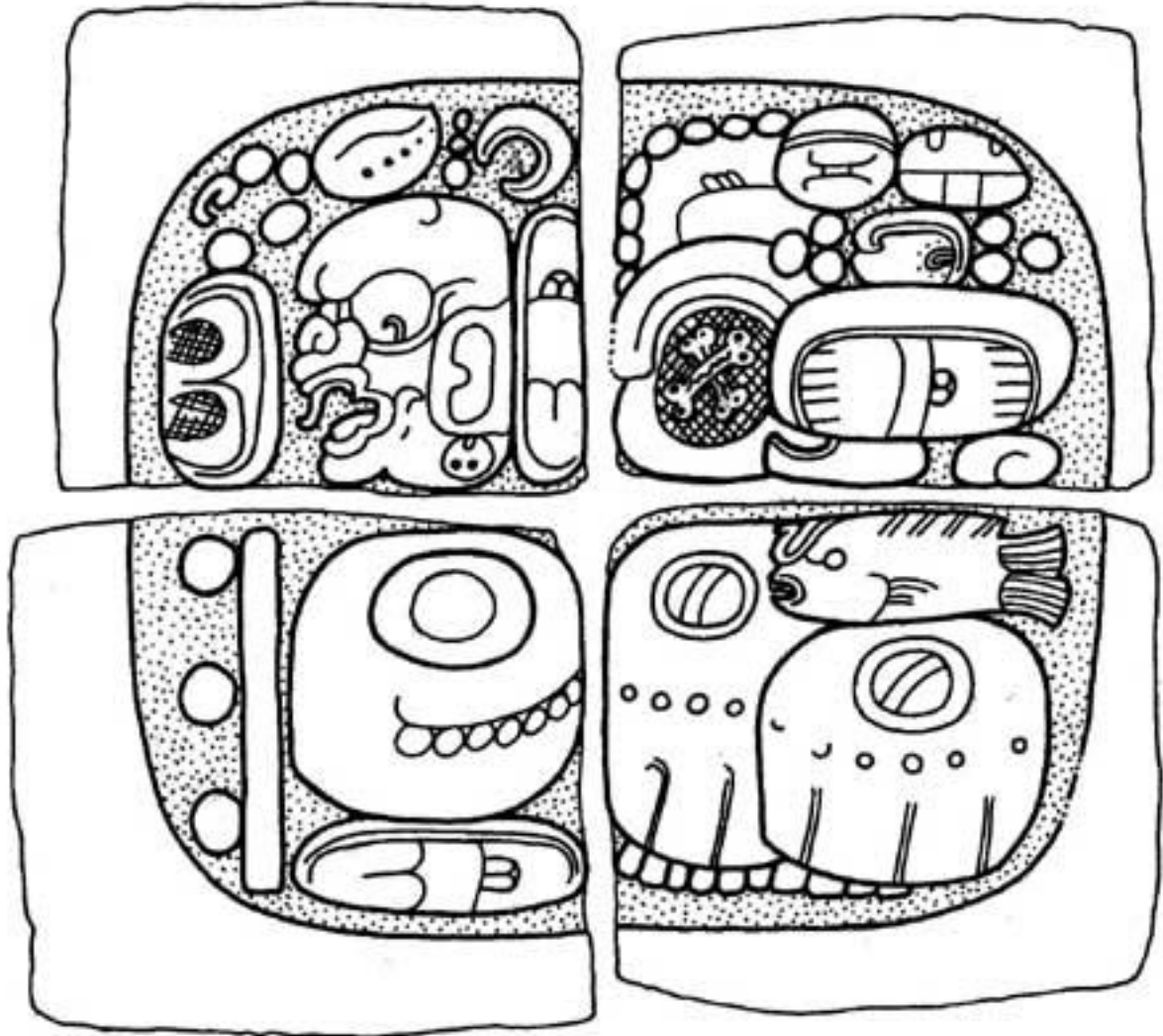


Figure 9. Fragments with a concave format E-89, E-86, E-87 and E-90, Structure 4, in their probable original sequence.

EVENTS

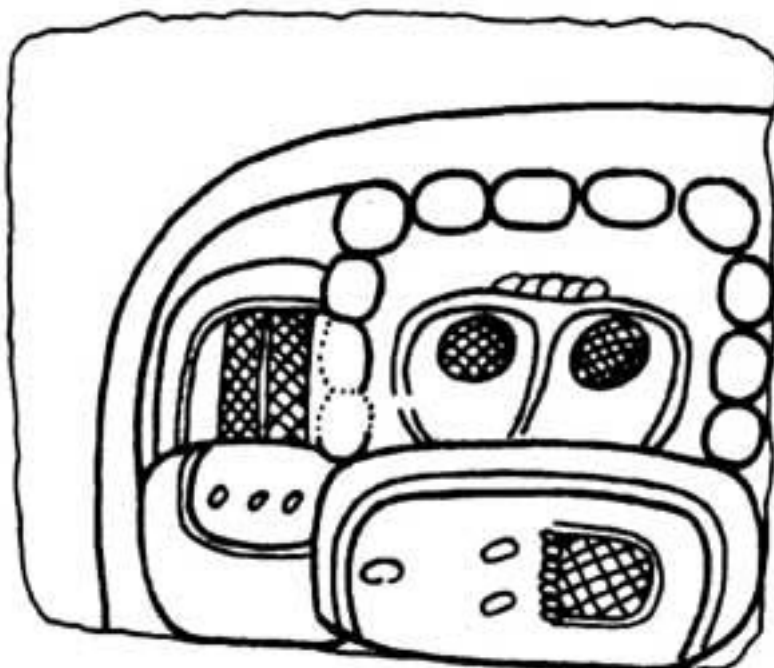
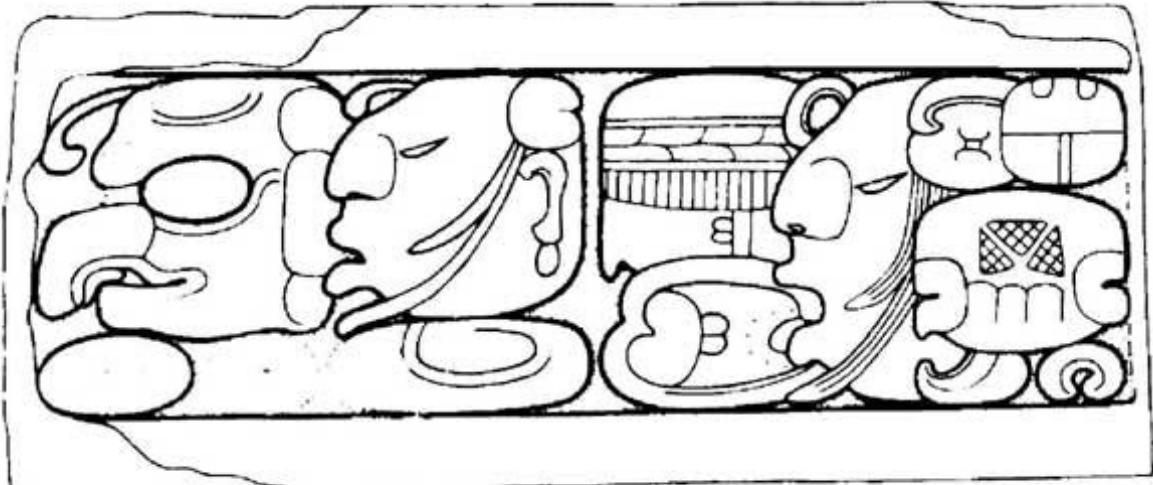


Figure 10. The verbal expression *i-HUL-li*, *i huli*, 'and then he arrived', in fragment E-88 of Structure 4, Machaquila.

Like it was already anticipated (Iglesias and Lacadena 2003), one of the fragments of the inscription features the expression **i-HUL-li**, *i huli* 'and then he arrived' (Figure 10). From the characters identified in the text with lineage titles, two belong to Machaquila –the so-called 'lady of Machaquila', and the 'Scorpion' king *Ti' Chaahk*-, while the other one is clearly of a foreign origin, the 'princess of *Ahku'* or the 'princess of *Mak'*. In our belief, the inscription commemorates the twentieth anniversary of the arrival of this latter woman to Machaquila, perhaps as the wife of 'Scorpion' king *Ti' Chaahk*, who was the one that probably celebrated this event with the remodelling of Structure 4 and the dedication of the commemorative inscription.



D

Figure 11. a) Fragment D of Structure 4, Machaquila (after Graham 1967: Fig. 39).

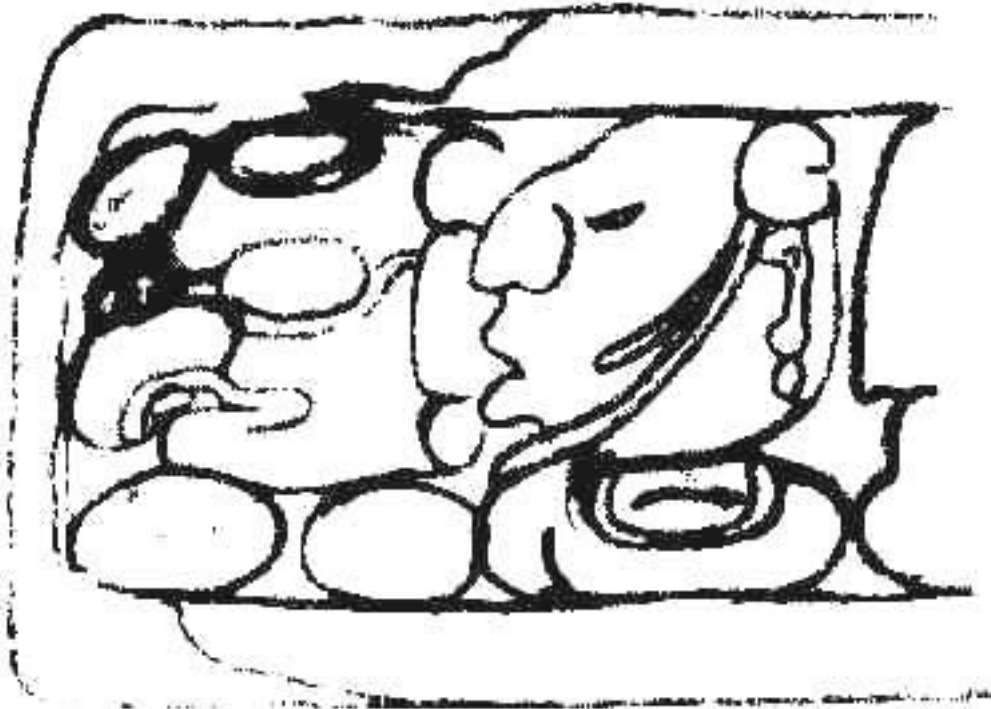


Figure 11. b) Fragment D re-drawn (after a pencil sketch by A. Lacadena).

An examination of Graham's fragment D in the permanent exhibition of the National Museum of Archaeology and Ethnology in Guatemala, allowed us to read the blocks that preceded the title of origin of the princess like **HUN-ia-na-ji OTOT**, *Hu'n[aj]l Naaj Otot* (Figure 11). Although the possibility that *Hu'nal Naaj Otot* as being the name of the princess should not be ruled out, it would certainly be a very unusual name for a person, with the incorporation of the expressions *naaj* and *otoot*, two terms used in the Classic for 'house'. Instead, we suggest considering *hu'nal naaj ootoot* as a minor toponym. *Hu'n* is the Classic term for 'royal headband', 'diadem', or 'crown'. *Naaj* is a

phonologic variable of *naah* 'house'. It is followed by the logogram **OTOT**, *otoot*, again a term for 'house', without the possessive pronoun *y-*. The term *naah* is used to refer to minor structures within major constructions (for example, the *Sak Nuhkul Naah* of the Palenque Palace, or the *Sax Xok Naah* of the Ek' Balam Acropolis). The word *otoot*, also literally 'house', designates all kind of constructions, from small structures to major palaces and even entire Acropolis. The term *otoot* comprises in fact all these meanings, to designate, according to the context, a 'house', a 'shrine', or a 'palace'. We may speculate with the possibility that *Hu'nal naaj otoot* is the name of either Structure 4, or the residential assemblage in Plaza F, which belongs to the major palace complex that forms the entire north half of the monumental center of Machaquila, and the place where the princess arrives.

Keeping in mind the above considerations, the expression that narrated this event, written in Graham's fragment D (1967: Fig. 39) may have been

HU'N-la na-ji OTOT IX-AHK-AJAW-wa

Hu'n[a]l naaj otoot IxAhk[ul] Ajaw

[Ilegó] 'a la Casa de la Banda Real de palacio la princesa de *Ahkul'*

the princess of *Ahkul* [arrived] in the House of the Royal Band of the palace

or else, if the logogram in the carapace of the turtle is read as **MAK**

HU'N-la na-ji OTOT IX-MAK-AJAW-wa

Hu'n[a]l naaj otoot ixMak Ajaw

[Ilegó] 'a la Casa de la Banda Real de palacio la princesa de Mak'

the princess of *Mak* [arrived] 'in the House of the Royal Band of the palace'

CONCLUSIONS

Summarizing, the efforts of the Spanish-Guatemalan archaeological team in Machaquila has allowed for the recovery of new hieroglyphic fragments belonging to Structure 4, as well as for gaining a greater knowledge of their archaeological context. Among the new historical information recovered, the mention of a new ruler of Machaquila, '*Scorpion*' *Ti' Chaahk'* should be outlined, a ruler who dedicated the inscription to commemorate the anniversary of one katun of the arrival to the city of a foreign woman of royal blood, perhaps one of his wives. With the combined archaeological and epigraphical information, it is now possible to date the inscriptions and consequently the remodelling of Structure 4 with the construction of the hieroglyphic bench, to some time between 810 and 815 AD, or after 840 AD.

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