



## THE GLYPH FOR ANTLER IN THE MAYAN SCRIPT

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The glyph numbered 291 in Sir John Eric Thompson's catalogue (1962), T291, depicts a 'deer antler'. In the Classic Period inscriptions the sign in question is quite frequently found in the name phrases of powerful humans, deities and supernatural creatures. Some examples are given below:

**'a?-[ku?]-lu-mu-chi 'a?-[ku?]-lu-ANTLER-b'a** – the name of a deity recorded on La Mar Stela 1, A11 (Fig.1), and on the Sotheby's Panel, I2 (Fig. 2);

**ANTLER-chi-CHAN** – the name of the so-called 'Deer-Snake' on codex style ceramics (Fig. 3);

**YAX-ANTLER-JOL** – the name of the 4<sup>th</sup> king of Yaxchilan (Fig. 4);

**ANTLER-CHAN-na-'a-ku** – the name of a captive from Hiix-Witz recorded at Yaxchilan (Fig. 5);

**ANTLER--INVERTED-VASE** - title of the Yaxchilan king Ya'xuun-B'ahlam IV, also applied to earlier Yaxchilan kings and possibly recorded on the San Diego Cliff carving (Figs. 6, 7, 9, 10 and 11);

**T4--ANTLER--INVERTED-EARTH, T4--'a--ANTLER--INVERTED-EARTH** – a title of the 26<sup>th</sup> king of Tikal (Jasaw-Chan-K'awil's title) on Tikal Stela 5 (Fig. 8), and bones and jade vessel from Tikal Burial 116 (MT38A, 38C, 38D, 50, and MT56).<sup>1</sup>

In this note we present iconographic and phonetic evidence that points towards a reading of **XUKUB'** "horn, deer antler" for this glyph.

<sup>1</sup> If we are correct in our interpretation of the sign collocation. In fact, the ANTLER glyph here may be a part of the complex INVERTED-EARTH glyph. Probably, the sign we have transliterated here as T4 is not a true T4 (the logograph **NAJ** HOUSE), but we failed to find a better designation or nickname for the sign in question.

## Iconographic evidence

As we have observed, the glyph in question depicts a deer antler. In itself, this fact tells us little about the semantic value of the glyph. Often the imagery of a glyph is completely unrelated to its semantic value (Stuart 1995: 47-57). On the other hand, the ANTLER glyph, though it may not be consistently associated with syllabic signs, appears in combinations with various logographs. Such a distribution strongly suggests a logographic value. Taking this observation into consideration, we can start to discuss some iconographic evidence that points to a semantic value of ANTLER for the glyph. First, it is noteworthy that sometimes the ANTLER--INVERTED-VASE title of Yaxchilan kings is substituted by the DEER-GOD glyph representing the head of a 'creature with antler' (Figs. 10, 11). This rare glyph is also attested in name phrases such as **CHAK**--ANTLER--INVERTED-VASE--DEER-GOD "Red Deer-God" and **'IK'**--DEER-GOD "Black Deer-God" (Figs. 12, 13).<sup>2</sup> Second, one of the Chijil-Chaan "Deer-Snake" animal spirit companion's names on the codex style ceramics is ANTLER-**chi-CHAN** "[Horned?]-Deer-Snake" (Fig. 3). The Codex style Chijil-Chaan is usually depicted as a snake that has very large ears and antlers attached to the head. The Deer God comes out of the mouth of this fantastic snake (Grube, Nahm 1994). Commonly, the names of animal spirit companions attested in glyphic captions on the ceramics provide literal descriptions of their physical characteristics. Thus, this name provides some further evidence that the meaning of the ANTLER glyph is "horn, antler".

## Phonetic evidence

Three different words for "horn, antler // cuerno, cacho" are widely spread in Mayan Languages. The first of them, reconstructed as pM \*'uuk'aa' is not attested in Ch'olan, Tzeltalan or Yukatekan languages. Thus, this etymon is unlikely to be found in hieroglyphic inscriptions (Kaufman, Norman 1984: 137). Two other words xukVb' and xulub' are attested in many Maya Lowland languages representing diffused terms.<sup>3</sup>

Yukatek	<u>xulub'</u>	(Bricker et al. 1998)
Lacandon	(šul-u')	(after Fisher 1973)
Mopan	<u>xulub</u>	(Schumann 1997)
Itzaj	(šulú')	(Armas 1897)
Ch'ol	<u>xulub</u>	(Aulie & Aulie 1998)
Tzeltal	<u>xulub'</u>	(Kaufman & Justeson 2003)
Tzotzil	(šulub')	(Delgaty 1964)
Tojolabal	<u>xulub'</u>	(Lenkersdorf 1979)
Mocho	<u>xuulub'</u>	(Kaufman 1967)
Tuzanteco	<u>xulub'</u>	(Kaufman & Justeson 2003)
Motosintlec	(šalub', šulub')	(Schumann 1969)

<sup>2</sup> Nikolai Grube (2002) suggests the **SIP** reading for the logograph. He relates the god under discussion with Yukatek <šip> "spirits who live in hills and are charged to guard deers for hunters", and with a deity depicted in the Dresden Codex (page 13), whose name is spelled as **HUK-si-pu** Huk-Si'p "Seven Sins?".

<sup>3</sup> Parenthesised entries are from John Dienhart's dictionary (1989). John Dienhart's sources are then named in the table. Words given in pointed brackets (<...>) are from sources that are not clearly reliable with respect to transcription.

Q'eqchi'	<u>xukub'</u>	(Sam Juárez et al. 1997)
Ch'ol	<u>xukub'</u>	(Aulie & Aulie 1998)
Ch'olti'	< <u>xucab</u> >	(Morán 1695)
Chontal	<u>xukub</u>	(Keller & Luciano 1997)

Terrence Kaufman and William Norman (1984: 137) reconstruct both etymons for proto-Ch'olan. From the examples above, it seems more reasonable to suggest that the proto-Ch'olan word for "horn" was xukVb'. It probably was xukab', because the harmonisation of the second vowel according to the first one in disyllabic words is a characteristic feature of Ch'olan languages contrary to Yukatekan, where the first vowel is harmonised by the second one, cf. development of pM \*sib'ag "soot" (after Kaufman, Justeson 2003).<sup>4</sup>

Yukatek	<u>sab'ak</u>	"soot"
Itzaj	<u>säb'äk</u>	"soot"
Ch'orti'	<u>sib'ik</u>	"tizne"
Ch'olti'	< <u>zibic</u> >	"carbón"
Ch'ol	<u>sib'ik</u>	"pólvora"
Tzeltal	<u>sib'ak</u>	"pólvora, tizne, hollín"
Tojolabal	<u>sib'ak</u>	"tizne, cohete"
Mam	<u>sb'ag</u>	"hollín, tizne, carbón".

The examples from La Mar Stela 1 and the Sotheby's Panel have an ANTLER glyph complemented by the **b'a** syllable. The example from La Mar, describes a 'k'atun' ending ceremony:

**'u-K'AL-TUN-ni yi-chi-NAL 'u-K'UH-li 'a-ku?-la-mu-chi 'a?- 'AK?-  
ANTLER?-b'a B'OLON-'OK-TE'**

'u-k'altuun yichnal 'u-k'uhil 'A[h]ku'?'-Muuch-'A[h]ku'?'-...b'-B'olo'n-'Okte'

"it is his stone-fastening in the presence of his god(s) 'Ahku'!-Muuch-'Ahku'!-Xukab'(.), B'olo'n-'Okte'".

The text from the Sotheby's Panel describes the dedication ritual of the wayb'il "sleeping house, temple" of the 'A[h]ku'!-Muuch-'Ahku'!-Xukab' deity (Fig. 2):

**'OCH-chi-K'AK' tu-WAY-b'i-li 'a?-[ku?]-lu-mu-chi 'a?-(ku?)-lu-ANTLER-b'a**

'och-k'a[h]k' tu-wayb'il 'A[h]ku'?'-Muuch-'A[h]ku'?'-...b'

"it fire-enters, the sleeping house of 'Ahku'!-Muuch-'Ahku'!-...b'".

This example suggests the reading of **XUKAB'** for the ANTLER glyph, because a – **Cu-b'a** suffix is not attested in the inscriptions and no -u'b' suffix is known in modern Mayan languages.

<sup>4</sup> In fact it is not always so, and the historic vowel assimilation in Mayan languages deserves an independent study.

The translation of names, especially deity names, is always problematic. We are tempted to compare this name with Yukatek <xulub> "el diablo, el demonio" (Barrera Vásquez 1995). Nevertheless, this meaning is attested only in a Pío Pérez dictionary of Colonial Yukatek and may be due to the influence of Spanish missionaries. In fact, in 16<sup>th</sup> century Christian Europe and even nowadays, the Devil was frequently depicted as a fearful horned creature. Taking into account the structure of the name, we would like to propose another interpretation. Xukab' as "the horned one" may be a descriptive name for "deer", "horned beetle", "leaf-cutter ant" or some kind of insect, cf. Yukatek xùulab' "cornfield ant", <xulab> "hormiga arriera"; Yukatek <asul keh> "abejorro a manera de langosta de largos cornezuelos y fuertes dientes con que corta un árbol como si fuera sierra", with the possible literal translation of "blue? [little] deer"; Lacandon xuuráb "hormiga"; Mocho xuulu=ngeh "tijerete (earwig)" (Barrera Vásquez 1995; Bricker et al. 1998; Una Canger 1970; Kaufman 1967).<sup>5</sup> Thus, the name from La Mar may be translated as "Frog is Turtle, Horned Beetle is Turtle" or "Frog is Turtle, Leaf-cutter is Turtle".

The final piece of evidence for our proposed **XUKUB'** reading comes from Yaxchilan. On Yaxchilan Hieroglyphic Stairway 2, step 8, 'Aj-Waak-Tuun Ya'xuun-B'ahlam is depicted playing a ball-game (Fig. 5). The ball he plays with encloses a captive, whose name is written as:

ANTLER-**CHAN-na 'a-ku HIX-WITZ-'AJAW**

...-Chan-'A[h]ku'l Hi[i]x-Witz 'ajaw

"...-Chan-'Ahku'l, king of Hiix-Witz".

This Hiix-Witz king was identified by David Stuart based on the fragmentary emblem glyph that follows the name of the captive. David Stuart (personal communication, 2003) noticed that a character with the same name ANTLER-Chan-'Ahku'l appears on El Pajara Stela 2, and suggested that the sites of El Pajara, Zapote Bobal and La Joyanca belonged to the Classic polity of Hiix-Witz. Interestingly, Yaxchilan Hieroglyphic Stairway 3 (Fig. 14) also mentions a captive from Hiix-Witz taken by the same 'Aj-Waak-Tuun Ya'xuun-B'ahlam:

BAT-**ku-b'u CHAN-'AHK-[ku?] HIX-WITZ-'AJAW-wa**

...kub'-Chan-'A[h]ku'l Hi[i]x-Witz 'ajaw

"...kub'-Chan-'Ahku'l, king of Hiix-Witz".

Here, chan "sky" is written by the SKY-BIRD glyph, and 'a[h]ku'l "turtle" with the TURTLE-HEAD glyph with a possible **ku** infix. Assuming that the BAT glyph is a **xu** syllable, we may read the name as Xukub'-Chan-'A[h]ku'l "Sky-Turtle is Horned". In this scenario the Hiix-Witz king mentioned in Hieroglyphic Stairway 3 would then be

<sup>5</sup> Yukatek xùulab' "cornfield ant" and Lacandon xuuráb "hormiga" may constitute an unrelated set of cognates. <Asul> of <asul keh> is not necessarily a borrowing from Spanish azul "blue", as we assume in our translation.

the same as that depicted on in Hieroglyphic Stairway 2, except that in the former, the ANTLER glyph is spelled phonetically.

In conclusion, we would like to state that there is good iconographic, semantic and phonetic evidence in favour of the reading proposed. We also should add that the glyphic forms **XUKAB'-b'a** xukab' and **xu-ku-b'u** xukub' probably represent dialectal isoglosses attested in the inscriptions, cf. Ch'olti' <xukab> and Ch'ol, Chontal xukub'.

### ***Evidence in favour of the [xu] syllable***

The **xu** reading for the BAT syllable was suggested by Nikolai Grube a long time ago (cited after Looper 1991). This reading still remains not widely accepted between 'fellow-epigraphers'. Our interpretation is partially based on this reading, therefore we should consider arguments in favour of it.

A number of different BAT glyphs are attested in the inscriptions, among them the logograph for "bat" **SUTZ'** suutz' and the **tz'i** syllable.

Recently Marc U. Zender (circular e-mail to fellow epigraphers, 2001) has suggested that numerous BAT glyphs are present in the script; some of them are logographic, others phonetic. He states that the BAT glyph of **xu** is distinguished from other BAT signs by '**AK'AB**' infixes which often conceal its eye, and which evolves into the 'animal-head marker' which has been commented on by a number of epigraphers.

Although Nikolai Grube's suggestion was based on an incorrectly identified substitution in female titles at Yaxchilan, there are a lot of glyphic identifications assuming the phonetic value of **xu** for the glyph. Some examples follow:

**CHAK-'a-xu-la?** Chak-'Axu'l? – name of a spirit animal companion on vessel K1211 (Fig. 15). Nikolai Grube and Werner Nahm (1994) interpreted this spelling as ah-chak-xu "read leaf-cutter ant", cf. Ch'ol xu' "arriera, leaf-cutter ant". We disagree mostly on iconographic grounds, but also note an unexplained graphic transposition of the 'a sign. The creature seems very similar to a horned beetle, cf. Ch'ol jāx "escarabajo ciervo".

**Pi-tzi-li xu-'u** pitzil xu' – an object with which dances the 16<sup>th</sup> Copan king Ya[']x-Pasaj-Chan-Yopaat on vessel K3296 (Fig. 16). Pitzil is an adjective from pitz "ball-game", and xu' may be related to Ch'ol xu'il "pedazo, astilla".

**Xu-ku-b'u** xukub' "horn, antler".

**Xu-chi-'AJAW** Xuuch? 'ajaw – emblem glyph attested at Quirigua.

**Xu-ku-pi** xukpi – name of bird-sceptres with which Yaxchilan kings dance (Lintels 2, 5). Matthew Looper (1991) compared this spelling with xuk-pi "bird" of John Attinasi's Ch'ol lexicon (1973: 338) and related the depicted bird with motmot (a kind of bird *Momotus momota*). The last suggestion is problematic, because it is based on Ch'ol xwuquip "pñdulo de corona, *Momotus momota*" (Aulie, Aulie 1998).

**Xu-ku-ya-'AJAW** Xuku'y? 'ajaw – emblem glyph attested at Copan and Quirigua.

**Ya-xu-ni** ya[']xuun – a part of the celebrated Bird-Jaguar name from Yaxchilan Stela 12, D4 (Fig. 6) commonly spelled as **ya-YAXUN-B'ALAM** "Jaguar is Cotinga". The "lovely cotinga" *Cotinga amabilis* interpretation was originally suggested by Barbara MacLeod based on the colonial Yukatek <yaxum> and an elicitation in the field (personal communication 2003). David Bolles gives <yaxum> as the *Cotinga amabilis* (Bolles 2001). However, this definition cannot be accepted because it is based on the comparison with a modern gloss ranchon. In the Chilam Balam of Chumayel, <yaxum, yaxum> is a name of a bird often accompanied by the name of quetzal *Pharomarcus mocinno*. Obviously, this confusion between <yaxum> and <kuk> is the reason why Ralph Roys states that the form is "apparently a name for the quetzal" (Roys 1933: 63). In Colonial K'iche' dictionaries, <raxon, raxom> is mentioned as "ave de plumaje azul celeste", "un p6jaro de pecho musgo y alas azules" (Bolles 2001). Cf. also Q'eqchi' raxon "azulejo (p6jaro de color azul)", raxon tz'unun "gorriyn azul, cerro cerca del crique en Livingston Izabal" (Sam Juárez al. 1997).

The Yukatek <yaxum> obviously is a borrowing from Ch'olan languages. The corresponding proto-Mayan root can be reconstructed. The meaning *Cotinga amabilis* for the original proto-Mayan root and the word attested in the hieroglyphic inscriptions is uncertain, but certainly they referred to a kind of bird with blue or green feathers.

**Ya-xu-nu B'ALAM-ma** Yaxun-B'a[h]lam – the name of the Ixtutz prince recorded at Naj-Tunich (Stone 1995: 180-181, Fig. 7-31). Possibly it is a late example of Bird-Jaguar's name showing the loss of vowel length.

**Yu-xu-lu** y-uxul "the carving of" – this may be related to Tzeldal <ux> "rasgar como ladrillos" (de Ara 1986: 414) as was independently suggested by Alfonso Lacadena and Dmitri Beliaev (Dmitri Beliaev personal communication, 2001). Numerous inflected and derived forms are attested.

Here we haven't considered some unusual and problematic spellings with the sign discussed. But it may be seen from the examples above that there are a lot of examples where the **xu** value seems to work. An important fact is that the BAT glyph is frequently associated with various phonetic signs pointing to a syllabic value, and in particular it is frequently associated with various **Cu** signs pointing to the value of **Cu**. The spelling of **xu-u** is a strong argument in favour of this value, because in Hieroglyphic Maya the vowel before a glottal stop in final position is always short.<sup>6</sup> The same conclusion suggests the alternation between **ya-xu-ni** and **ya-xu-nu** spellings that possibly reflects the loss of vowel length.

## Acknowledgements

We would like to thank Dmitri Beliaev, Barbara MacLeod and Soeren Wichman for their most valuable comments on a preliminary version of this note. Special thanks should be given to Randa Marhenke for her help in searching references to the Yukatek <yaxun> "lovely cotinga" and stylistic revision of the manuscript. Naturally, any mistakes or misapprehensions are our own.

<sup>6</sup> We are aware of only two possible spellings of ...CVV' in the Maya inscriptions. These are dialectisms and come from Northern Yucatan: **wo-i** Woo' "name of the 2<sup>nd</sup> month" and **ti-ho-i** Tihoo' (Ti'ho'?) "place name".

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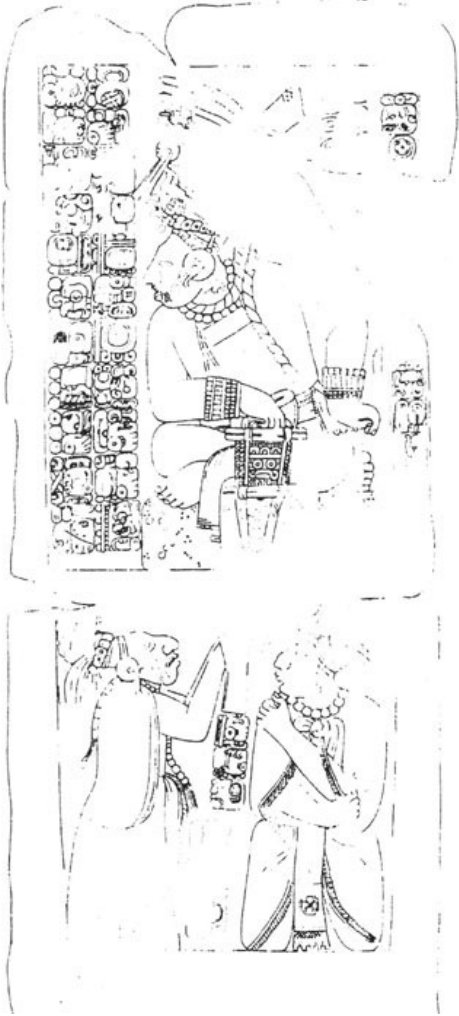
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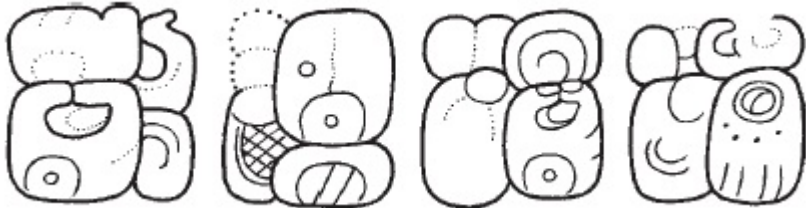
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**Figures**



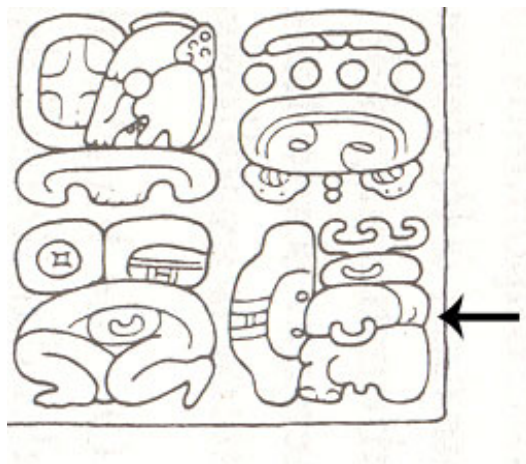
**Figure 1:** La Mar Stela 1, (c.f. blocks A9-B11). The 'k'atun' ending ceremony (after unpublished drawing by John Montgomery).



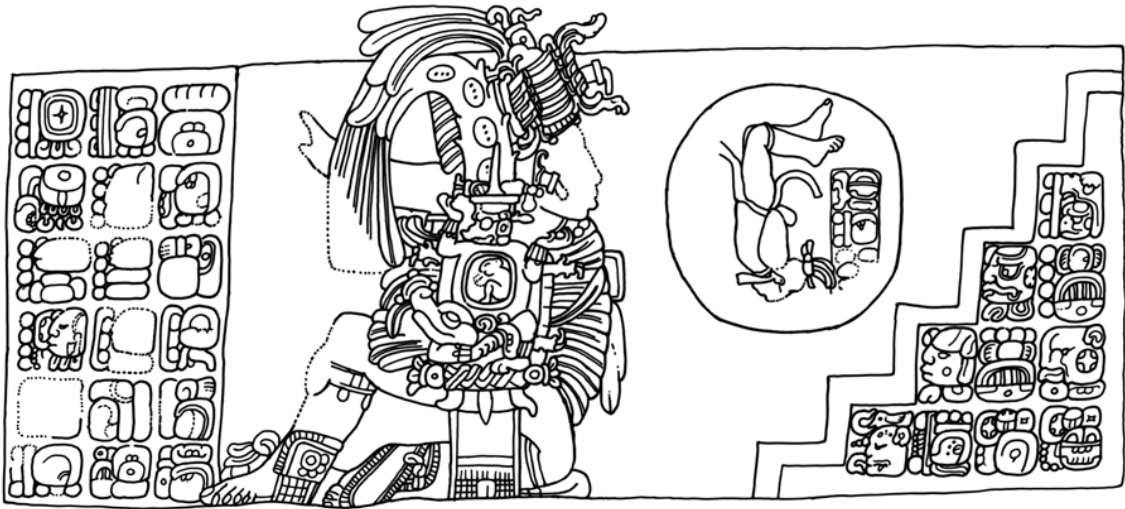
**Figure 2:** Sotheby Panel. Dedication statement (after Stuart, Houston, Robertson 1999: II-46).



**Figure 3:** Deer-Snake spirit companion with glyphic caption, K7794 (after photo by Justin Kerr; [www.mayavase.com](http://www.mayavase.com)).



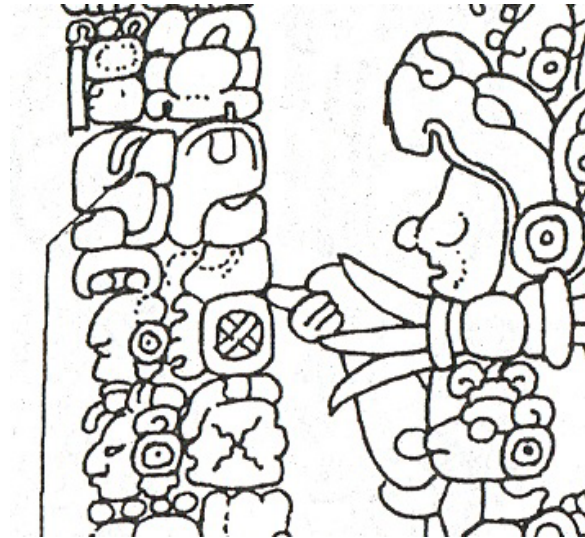
**Figure 4:** Yaxchilan Lintel 11/60, blocks C7-D8. The name of the 4th Yaxchilan king (after drawing by David Stuart; Mathews 1997: 74).



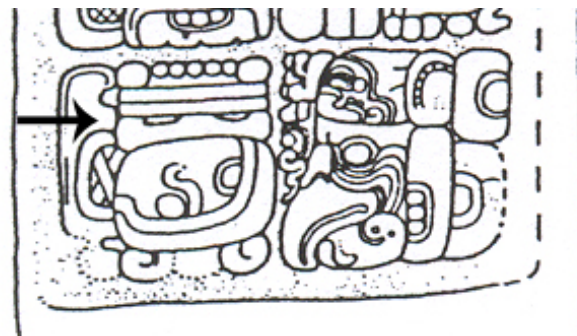
**Figure 5:** Yaxchilan Hieroglyphic Stairway 2, Step VIII (after drawing by Ian Graham; CHMI 3-3: 162).



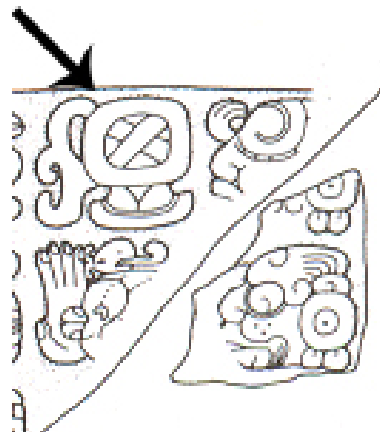
**Figure 6:** Yaxchilan Stela 12, river side, blocks C3-D6. The name and titles of Ya'xuun B'ahlam IV (after drawing by Linda Schele).



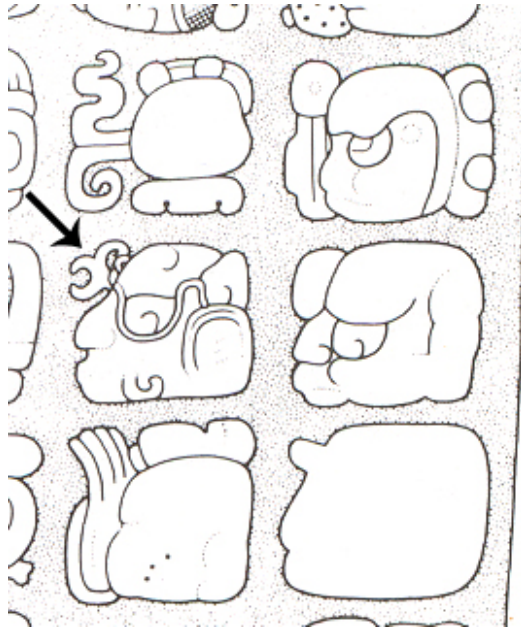
**Figure 7:** Fragment of the San Diego Cliff Carving (after drawing by Linda Schele 1989: 2).



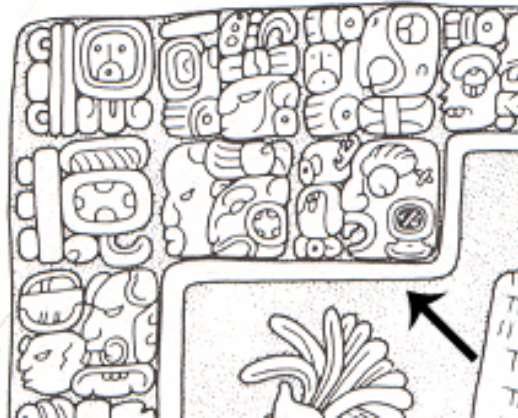
**Figure 8:** Tikal Stela 5, left side, blocks A12-B12 (after Jones, Satterthwaite 1982: Fig. 5).



**Figure 9:** Yaxchilan Lintel 34 (after drawing by Ian Graham; CHMI 3-2: 77).



**Figure 10:** Detail of Yaxchilan Lintel 22, blocks C5-D7, with Deer God title at D5-C6 (after drawing by Ian Graham; CHMI 3-1: 51).

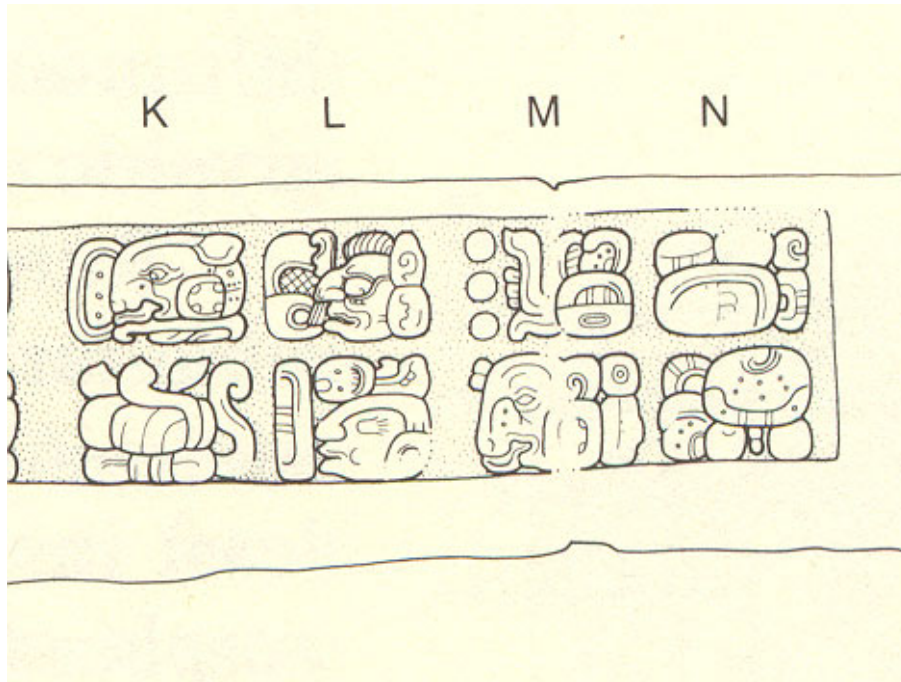


**Figure 11:** Deer God title. Detail of Yaxchilan Lintel 1 (after drawing by Ian Graham; CHMI 3-1: 13).

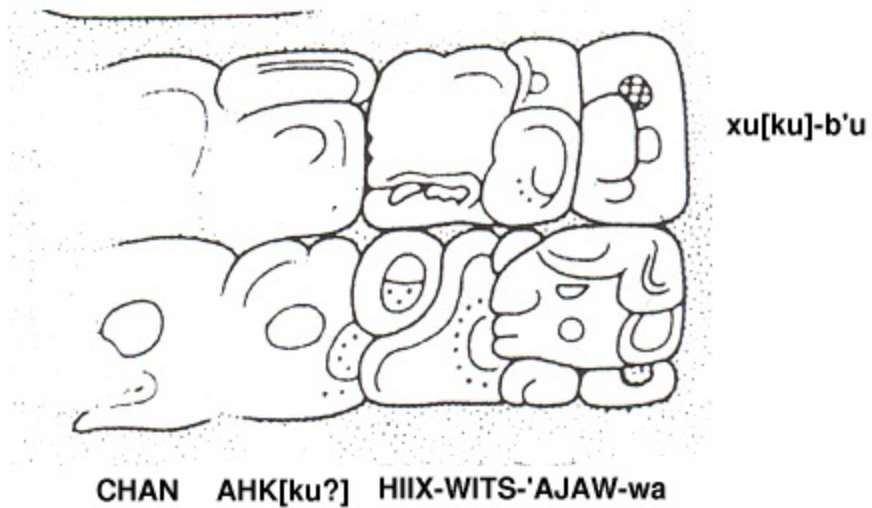


**Figure 12:** Deer God title. Early Classic tripod vessel, Central Peten style (after Hellmuth 1987).





**Figure 13:** Deer God title. Dos Pilas Hieroglyphic Stairway 4, Step V (after drawing by Ian Graham; Houston 1993).



**Figure 14:** Yaxchilan Hieroglyphic Stairway 3, Step V, blocks A2-B2 (after drawing by Ian Graham 3-3: 171).



**Figure 15:** Horned Beetle spirit companion with glyphic caption, K1211 (after photo by Justin Kerr; [www.mayavase.com](http://www.mayavase.com)).



**Figure 16:** Ya'x-Pasaj-Chan-Yopaat dancing with pitzil xu', K3296 (after photo by Justin Kerr; [www.mayavase.com](http://www.mayavase.com)).