



# Glyphs for “Handspan” and “Strike” in Classic Maya Ballgame Texts<sup>1</sup>

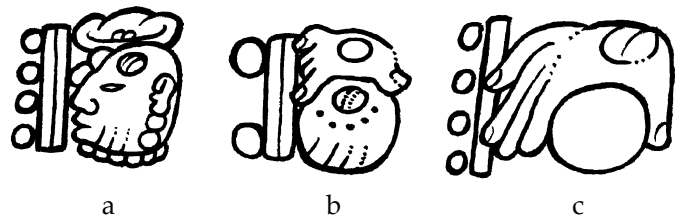
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Part ritual, part recreation, and almost wholly mysterious, the ancient Maya ballgame has long been regarded as an enigmatic entity. Literally dozens of ballcourts are known; untold hundreds of pieces of ballgame paraphernalia are housed in museums; and yet we know frustratingly little for certain about the rules of the ancient game, its purpose or its origins.

Recently, however, the veil of obscurity has begun to lift from these most intriguing of all relics of the Mesoamerican past. Archaeological investigations have revealed the construction history of ballcourts, disclosing their Preclassic origins and convincingly embedding them in cultural, historical and political trajectories of which they form an integral part. Further, anthropologists’ and historians’ diligent sifting of ethnohistoric documents and careful comparison with surviving ballgame traditions have begun to reveal something of the rules, purpose and underlying rationale of the game.

The aim of this paper is to further refine our understanding of Classic Maya ballgames (ca. A.D. 250-900) through an exploration of two previously undeciphered logographs. The first represents a right hand shown palm down and with thumb and forefinger spread (Figures 1b, 1c, 5a and 5b). The second represents a left hand tightly grasping a semi-spherical stone object (Figures 6, 7c, 8-11, 13a and 13b). While both appear with some frequency in ballgame scenes and associated texts, and while each has seen a fair amount of discussion by scholars, satisfactory readings and explanations of these important glyphs have yet to materialize. This is no doubt due at least in part to the eroded state of a number of key examples of these signs at Yaxchilan, Copan and El Peru, coupled with the unavailability of a sufficiently large number of painted examples prior to the publication of Justin Kerr’s corpus of unprovenanced ceramics. Neverthe-



**Figures 1a-c.** Examples of the “number”-*nahb* compound labelling ballgame balls in monument and pottery scenes. a) Site Q Ballplayer Panel 1, Art Institute of Chicago (after a photograph by Justin Kerr). b) Yaxchilan H.S. 2, Step X (after a photograph by Ian Graham, CMHI 3:163). c) Vase K5206 (after a photograph by Justin Kerr). (All drawings by the author unless otherwise stated.)

less, sufficient evidence now exists to read these glyphs, respectively, as **NAHB** “handspan” (in reference to the size of the ball) and **JATZ’** “to strike, hit” (in reference to the ball’s role in play). Despite such prosaic meanings, it will be seen that a better understanding of these logographs allows us to identify a number of important ballgame-related texts in contexts not directly associated with ballgame imagery. These previously unrecognized texts shed substantial new light on core ballgame myths, and therefore on the underlying mythological rationale of ballgame ritual.

## The Ball Compound

Nicholas Hellmuth (in Mayer 1980:46, and Robicsek and Hales 1981:172) first noticed that the large balls typical of Classic ballgame scenes were frequently labeled with a complex glyphic compound composed of a prefixed set of bar-and-dot coefficients followed by somewhat more

<sup>1</sup>Previous versions of this paper were presented at the Eighth Annual UCLA Maya Weekend, Cotsen Institute of Archaeology, October 13-14, 2001, and the 22nd Annual Maya Weekend of the University of Pennsylvania Museum, March 26-28, 2004. I would like to thank Richard Leventhal and Loa Traxler, respectively, for their kind invitations to present my work at these prestigious meetings.

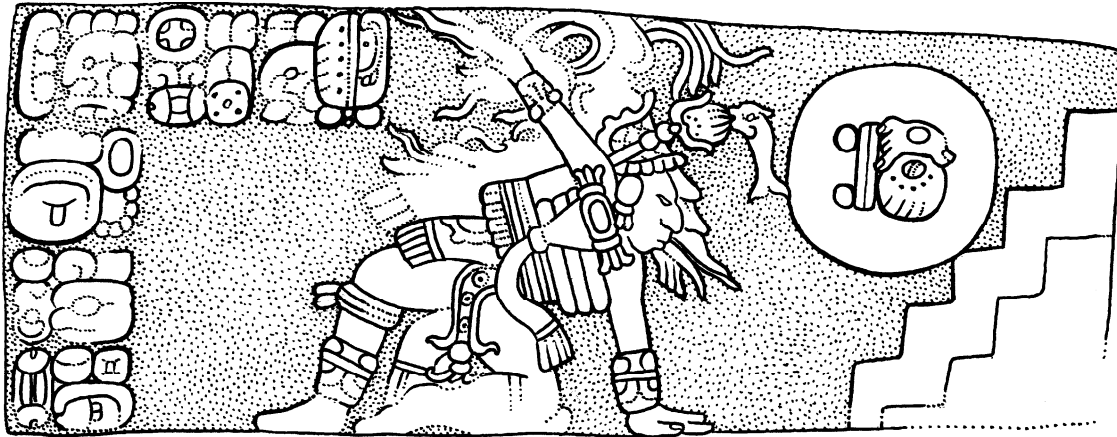


Figure 2. K'an Tok Wayib of Yaxchilan plays ball in the guise of a wind god. Yaxchilan H.S. 2, Step X (after a drawing and photographs by Ian Graham, CMHI 3:163).

variable elements (Figures 1 and 2). Although he didn't attempt either a reading or a translation, Hellmuth supposed that the compound might refer to the "final score" of the game depicted, a suggestion which has influenced much subsequent thinking on the subject (e.g., Boot 1991:237-9; Macri 2000:29; Macri andLooper 2000).<sup>2</sup> Linda Schele and Mary Miller (1986:252, 255 and note 22) were the first to notice the phonetic significance of the variant spellings of this compound—often simply **na-ba** (Figure 1a), though occasionally with an undeciphered "hand" sign either followed by **ba** (Figures 1b, 2) or, more rarely, appearing alone (Figure 1c). They took this to signal *nab*, which they linked to Maya terms for "water-lily" and "standing water", though they acknowledged that the term seemed of dubious significance in these contexts.

Importantly, they also noted that the numerical coefficients were limited to the numbers 9, 10, 12, 13 and 14. This restriction to a small set of coefficients—coupled with the persistent absence of any secondary notation—led them to doubt Hellmuth's suggestion that they recorded a score. Instead, they proposed that the coefficients may have referred to the number of "captives" or "human sacrifices" at stake in the game, a suggestion motivated in part by their martial interpretations of Classic ballgame imagery. There are problems with this interpretation as well, but suffice it to say that the **na-ba** spellings remain unexplained in their hypothesis, and many scholars still consider the term effectively undeciphered (Colas and Voss 2001:188; Freidel et al. 1993:357).

More recently, and building on the key substitution with **na-ba** spellings first noted by Schele and Miller, a number of scholars (including the present author) have come to the conclusion that rather than *nahb* "waterlily", a quite different but either partially or completely homophonous root *nahb* "handspan" may have been intended instead (Lacadena and Wichmann, in press; Macri 2000:29; Macri andLooper 2000:2; Zender 2002:404). Such an interpretation would certainly explain the logographic substitution for these **na-ba** spellings, a palm-down right hand with thumb and fingers outstretched (Figures 1b, 1c, 5a, 5b). Lexical support from relevant languages is equally encouraging:

Ch'ol	-ñajb	"sufijo numeral para contar cuartas de la mano (numerical suffix for counting handspans)" (Aulie and Aulie 1996:79)
Tzeltal	-nahb	"medida del pulgar al dedo del corazón (measure from the thumb to the middle finger)" (Slocum et al. 1999:80, 318)
Yucatec	náab <naab>	"handspan" (Bricker et al. 1998:192) "palmo (span); la cuarta parte de la vara castellana (fourth part of the Spanish vara)" (Barrera Vásquez et al. 1980:545; Thompson 1970:330)
Mopan	naab	"cuarta" (Ulrich and Ulrich 1976:136)
Itzaj	naab	"cuarta (vara) / quarter-rod, measure from outstretched thumb to little finger (8-9 inches)" (Hofling and Tesucún 1997:468).

<sup>2</sup>The most divergent suggestion is surely that of Marvin Cohodas (1991:261-3), who advocated reading these compounds as "#-chaan", and related them to the Classic depictions of God L and his owl familiar. Nevertheless, there is no support for any such reading of the well-known **na** and **ba** signs in these contexts.

There can be little doubt that these forms are related, for all are the expected reflexes of an ancestral form *\*nahb* "handspan". This finds further support in the morphology of numerical classifiers, which are typically derived from positional and transitive roots through the infixation of *-h-* (Berlin 1968:20-23; Hironymous 1982:14-27). Indeed, Bricker et al. (1998:192) suggest that the Yucatec term *náab* (< *\*nahb*) "handspan" may itself have been derived from the transitive verb *nab* "place near, lay aside" via historical infixation of *-h-*.

So what are we to make of these compounds? While some are still tempted by Hellmuth's suggestion to see these as ballgame scores—perhaps as "the number of slaps or blows of the hand allowed in the course of the ballgame" (Macri and Looer 2000:3; see also Macri 2000:29)—I prefer a more literal interpretation of the "handspan" term. Given that the single most common context of these compounds is as a label for balls, it stands to reason that it should provide either a personal name or some generic designation for the ball itself. As such, I have argued that these numerical compounds provide us with a circumferential measure of the size of these balls in "handspans".<sup>3</sup>

While not all of the lexical sources agree on the precise manner in which this measure was taken, it is intriguing that the Colonial Yucatec and modern Itzaj sources agree in equating the *nahb* measure to about 8 or 9 inches (21-23 cm).<sup>4</sup> If we accept a median measure of 8.5 inches, we can quickly calculate the circumference and diameter of the ball sizes encountered in Maya art:

No. of Handspans	Circumference	Diameter
9	76.5 inches (194.3 cm)	24.4 inches (61.9 cm)
10	85 inches (215.9 cm)	27 inches (68.7 cm)
12	102 inches (259 cm)	32.5 inches (82.5 cm)
13	110.5 inches (280.7 cm)	35.2 inches (89.3 cm)
14	119 inches (302.3 cm)	37.9 inches (96.2 cm)

If these measurements are valid, then Classic Maya ballgame balls would have measured from just over two feet to well over three feet in diameter (62 to 96 cm), with an average of 2.5 feet or about 80 cms. These measurements tally well with the observed size ranges of balls portrayed in iconography, at least as compared with associated ballplayers (Figure 2), and thus provide some measure of support for this hypothesis. Moreover, the largest sizes—13 and 14 handspans—also correlate well with the occasional depictions of captives trussed up and rolled into balls almost a meter in diameter (Figure 12). But there is still

<sup>3</sup> Just as this article was going to press, I became aware that Michael Coe (2003:199-200) has also linked the *na-ba* spellings to the Yucatec term for "handspan", arguing as I have that it most likely refers to a measure of circumference.

<sup>4</sup> The Spanish *vara* measured some 83.6 cm, a quarter of which would have been 20.9 cm or some 8 1/4 inches. This agrees well with Hofling and Tesucún's (1997:468) "8-9 inches".

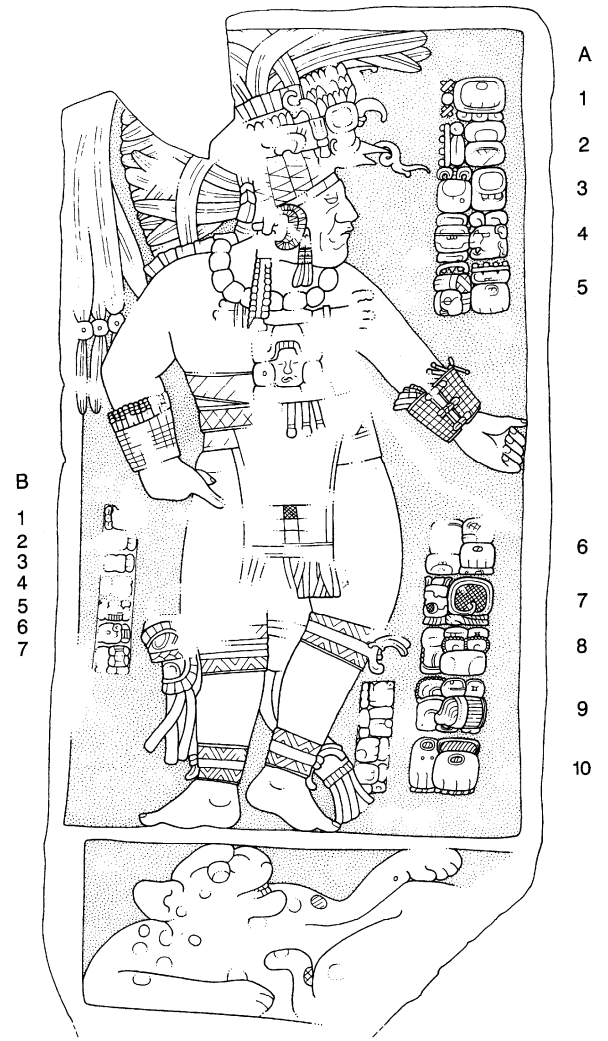


Figure 3. The king of La Amelia dressed as a ballplayer. La Amelia Panel 2. Drawing by Stephen Houston (1993: fig. 3-21).

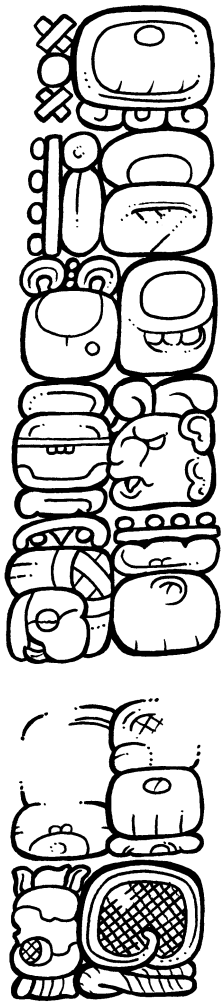


Figure 4. The names of a ballgame ball, La Amelia Panel 2 (after Houston 1993:fig. 3-21).

further support for the notion that these ball compounds provided a specific reference to the ball itself, rather than to an abstract score or count of sacrificial victims.

La Amelia Panel 2 (Figure 3) is one of two panels erected to either side of a sacrificial stairway in the site center, both depicting the early ninth-century potentate Lajchan K'awil Ajaw Bot in the characteristic paraphernalia of a ballplayer (Martin and Grube 2000:64-5). As first recognized by Linda Schele (Freidel et al. 1993:361; Schele and Grube 1990), the associated text kens the sacrificial death of a captive as the “throwing” of a ballgame ball (Figure 4):

ya-la-ja U-CHAN-na BAHLAM-NAL U-K'ABA-a 9-na-ba  
*yahlaj uchan bahlamn al uk'aba' baluun nahb*  
 “is thrown, the Master of Bahlamn al, (which is) the name of the nine-handspan (ball)”

Intriguingly, the text goes on to clarify this reference to the size of the ball with a statement to the effect that the “nine handspan (ball)” is itself the namesake of the “rubber ball” and “rope” of the king:<sup>5</sup>

\*ye-te-k'a-ba-IL U-“rubber.ball”-“rope”  
*yetk'aba'il u-?-?*  
 “(which is) the namesake of his rubber ball and rope”

While the precise meaning of “names” and “namesakes” in such instances is admittedly a bit difficult to penetrate, it nevertheless highlights the usage of the ball compound—*baluun nahb* or “nine handspans” in this instance—as a specific reference to the ball itself. Beyond supporting the hypothesis that these compounds truly do provide designations for the balls they label, however, they also make possible the identification of a number of hitherto unrecognized ballgame texts, as well as the unmasking of a divine patron of the Maya ballgame.

As first recognized by David Stuart and Stephen Houston (Houston and Stuart 1996), and discussed more recently by Alexander Tokovinine (2002), deity impersonation is a central theme of ballgame scenes and associated texts. Like the dramatic ritual reenactments staged in the Aztec *teotlachtli* or “divine ballcourt” (Nicholson and Quiñones Keber 1991), Classic Maya kings and nobles played ball in the guise of their tutelary gods as a powerful means of reiterating and reifying the founding myths of the polity. Thus, on a number of unprovenanced vessels and on a fragment of the hieroglyphic stairway of El Peru, kings take on the guise of an entity known variously as 7-? (Figure 5a) or 7-[TE']?-(wa) (Figures 5b, 5c, 5d). I will return to the issue of this god’s name presently, but it is important to note that in at least two instances the text goes on to clarify the act of impersonation as occurring *ti lajchan nahb* or “with the 12 handspan (ball)” (Figures 5 a, b).<sup>6</sup> While the two other texts make no mention of this deity’s signature size 12 ball, both refer to the impersonation as taking place either *ti pitzil* “in the act of ballplaying” (Figure 5c) or while the king *pitzij* “plays ball” (Figure 5d). Whatever his name, then, the association of this deity with ballgames and ballgame implements is undeniable.

As to the identity of this enigmatic ballgame patron, while Tokovinine (2002:4-5) saw this figure as related to the deer god *Huk Sip* or “Seven Sip”, I believe he misinterpreted the eroded TE' infix appearing in a number of examples as the diagnostic of a distinct entity known as the patron of the month “Pax”. In point of fact, this entity—itsself the head-variant of the sign TE'—is conflated here with the youthful “Chicchan” head. Given the occasional crossover between this head and AJAW in a number of early texts (Stephen Hous-

<sup>5</sup> For *etk'aba'* as “namesake” see Zender and Guenter (2000).

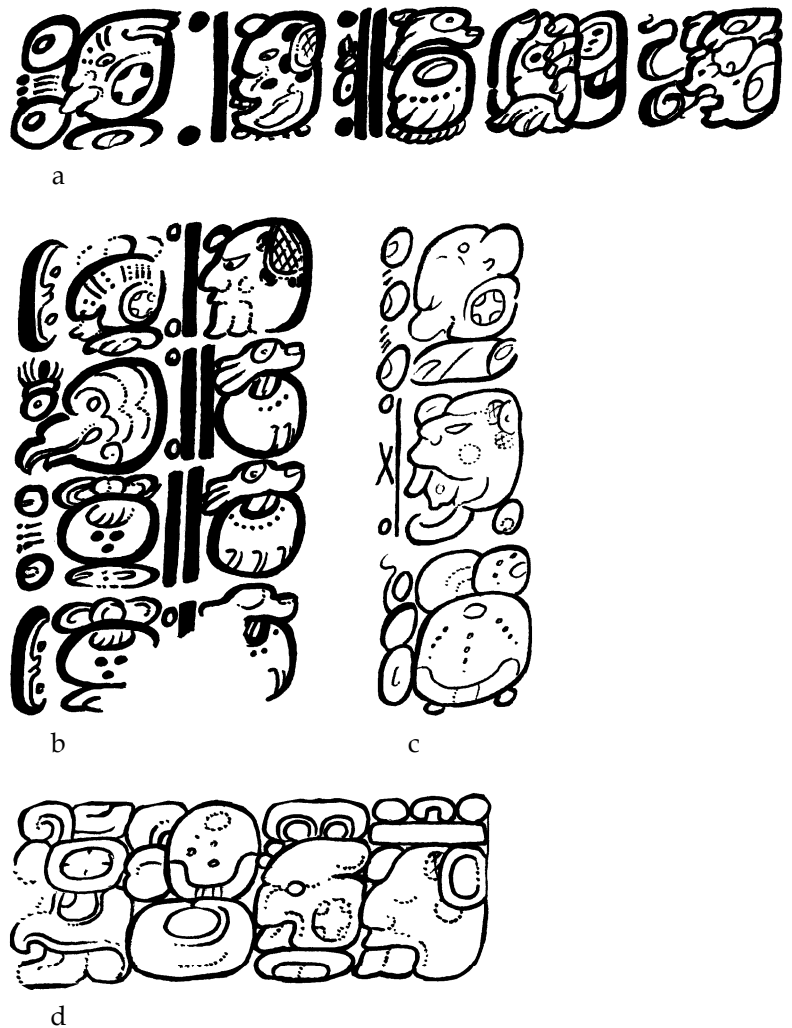
<sup>6</sup> The second text (Figure 5b) goes on to implicate two further balls, including a *lajuun nahb* or “ten handspan (ball)” and just possibly a *huk nahb* or “seven handspan (ball)”, though damage to the vessel makes the rest of the phrase and its articulation with the name of the impersonator somewhat difficult to assess.

ton, personal communication 2003)—coupled with the final and apparently non-obligatory **-wa** in at least one instance (Figure 5c)—it is tempting to read the **TE'** simply as a numerical classifier and the whole as *Huk Ajaw* or *Hukte' Ajaw* "Seven Ajaw", perhaps the Classic cognate of Vucub Hunahpu of the K'ichee' *Popol Vuh* (see Tedlock 1996:91-98). This would in turn suggest that the "Chicchán" head is itself the portrait glyph of "Seven Ajaw", and would have the benefit of explaining the aforementioned formal distinction between it and the more common **AJAW** sign. Moreover, as the brother of Hun Hunahpu and a ballplayer of no mean skill, Vucub Hunahpu would certainly have made a suitable patron of the Classic ballgame.

### The "Stone-in-Hand" Glyph

Somewhat rarer and unfortunately less variable in its spelling and complementation than the **NAHB** logograph, the "stone-in-hand" sign has been much slower to yield to decipherment. Grube and Nahm (1994:688-9, 708-9) were the first to describe the major contexts of the sign and to outline its salient features, pointing out that it represents a left hand tightly grasping a stone (Figures 6, 7c, 8-11, 13a-b). Based on a unique spelling on an unprovenanced vessel (Figure 6)—where the sign is prefixed by **ja-** and suffixed by **-ma**—they tentatively proposed a reading of **JAM** (or **HAM**) for the sign, though they readily acknowledged that the reading made little sense in any of the sign's contexts (Grube and Nahm 1994:689).

More recently, Timothy Knowlton (1999) has proposed a reading of **TOK** "to burn, to take", based on the **to-** signs occasionally prefixed to "stone-in-hand" in the names of jaguar spirits depicted on a number of Codex Style vessels (Figures 8c, 10-11). However, given that the putative **to** prefix never appears outside the context of this "jaguar" name, it seems unlikely that it functions solely as a phonetic complement. Rather, the prefix is probably meant to be read as a fully functioning part of the jaguar's name phrase—perhaps as **TOK**, a value the **to** syllable is known to carry elsewhere, and possibly a reference to the writhing coils of the snake that envelop



Figures 5a-d. Impersonating "Seven Ajaw". a) Vase K1383 (after a photograph by Justin Kerr). b) Vase K635 (after a photograph by Justin Kerr). c) Vase K3296 (after a photograph by Justin Kerr). d) El Peru H.S. block (after a field drawing and photographs by Ian Graham).

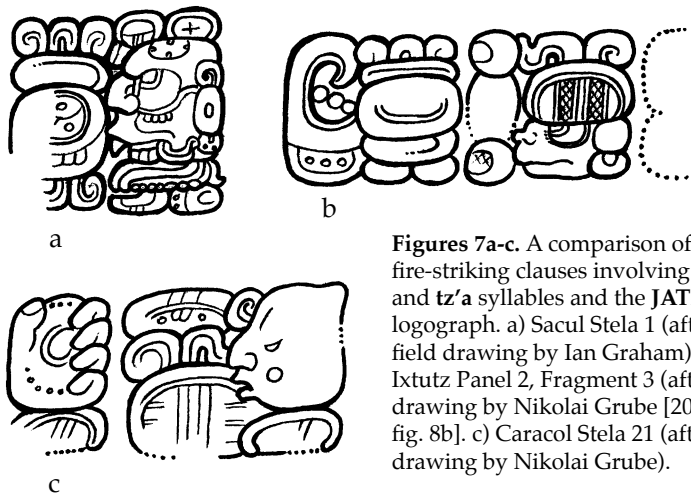


Figure 6. Phonetic complementation of the "stone-in-hand" sign, **JATZ'**. Vase K2068 (after a photograph by Justin Kerr).

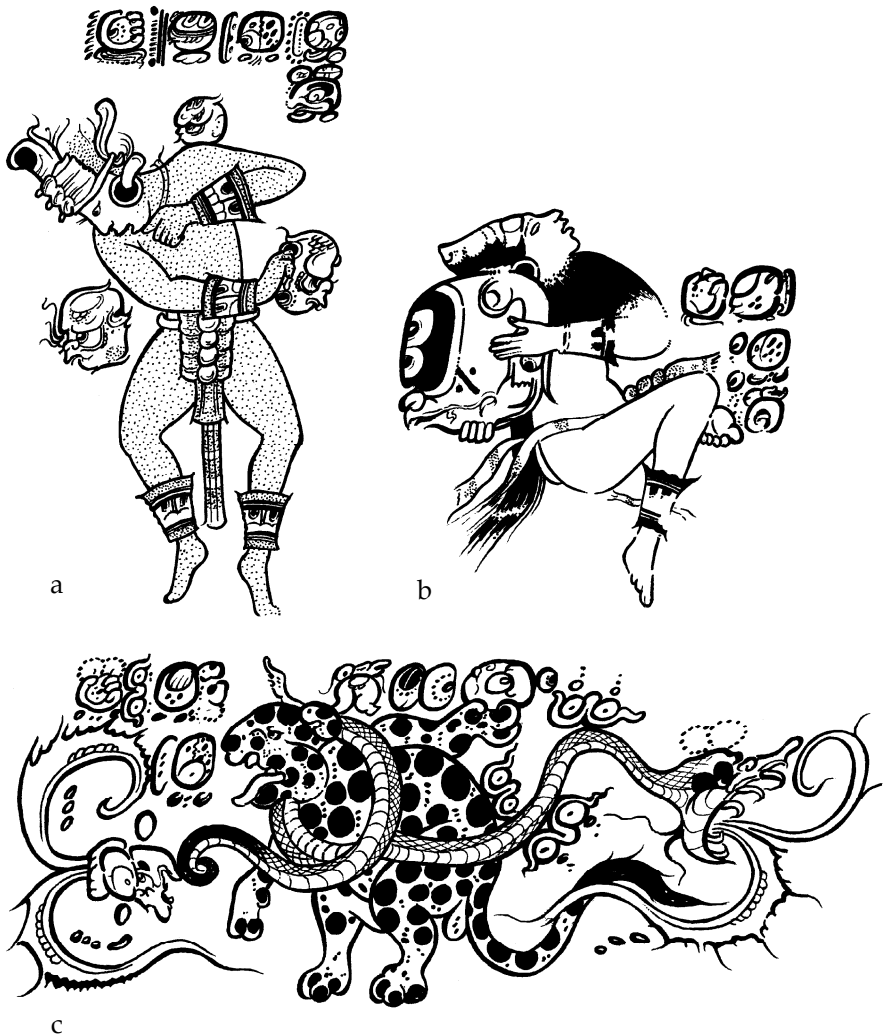
him, features frequently marked by TOK signs in these and other contexts (Figure 8c; see also Miller and Martin 2004:102-3; Taube 1989:fig. 24-17). In any event, the **to/TOK** prefix in these contexts probably has little bearing on the phonetic reading of the “stone-in-hand” sign itself.

The first real hint of the sign’s value appears in the context of the enigmatic “fire-striking” clauses of the Classic Maya Supplementary Series. As recognized by Grube (2000), some of these phrases are written syllabically as **ja-tz’a-la (U)-K’AHK’**, *jatz’al k’ahk’* “struck is (his) fire” (Figures 7a and 7b) or **ja-tz’a-li U-K’AHK’**, *jatz’aal uk’ahk’* “struck is his fire” (as on Naachtun Stela 8; see Grube 2000:103). Although of uncertain equivalence, a variant spelling appears wherein the “stone-in-hand” sign may substitute for the **ja** and **tz’a** syllables (Figure 7c). This raises the possibility that “stone-in-hand” actually reads **JATZ’** “to strike” or “to hit”, a well-known term with cognates in all of the Ch’olan and Yucatecan languages (Kaufman and Norman 1984:121). This possibility would certainly have the virtue of explaining the iconic origin of the sign—i.e., a hand holding a cudgel-like stone—and is further strengthened by the initial **ja-** complement first noted on “stone-in-hand” by Grube and Nahm (Figure 6). In all, the **JATZ’** value seems reasonably strong and is certainly worthy of further investigation.

The “stone-in-hand” glyph is frequently associated with *way* spirits on Maya vessels (Figure 8), where it apparently refers to the large, anthropomorphized stones held by these otherworldly spooks. As Karl Taube (2001) has shown, such fantastic scenes are perhaps best seen as mythic echos of actual blood sports. Like Classic boxers, these figures threaten opponents with heavy stone cudgels (Figure 8c) or hold them out in combat readiness (Figures 8a and 8b). Like ballplayers,



Figures 7a-c. A comparison of fire-striking clauses involving **ja** and **tz’a** syllables and the **JATZ’** logograph. a) Sacul Stela 1 (after a field drawing by Ian Graham). b) Ixtutz Panel 2, Fragment 3 (after a drawing by Nikolai Grube [2000: fig. 8b]). c) Caracol Stela 21 (after a drawing by Nikolai Grube).



Figures 8a-c. Boxing characters in Classic Maya art. a) Vase K791 (after a photograph by Justin Kerr). b) Altar de Sacrificios Vase (after a photograph by Otis Imboden, in G. Stuart [1975:775-6]). c) Vase K2284 (after a photograph by Justin Kerr).

they are frequently well protected, wearing long, heavy hipcloths and yokes to protect their kidneys and other vital organs (Figure 8a; see also Orr 2003: fig. 10), while heavy headbands and wristbands control the flow of sweat (Figures 2, 8a and 8b), keeping eyes and hands dry, thereby ensuring an unimpeded view as well as a good grip on weapons.

While there is some variation in the spelling of his name—variably given as **JATZ'-AHKAN-na** (Figure 9), **JATZ'-no-ni a-AHKAN-na** (Figure 8a) and **JATZ'-ni AHKAN-na** (Figure 8b)—the most common of these boxing spirits was apparently known as *Jatz'oon Ahkan* or even *Jatz'noon Ahkan*, "Striking Ahkan" (Figures 8a and 8b).<sup>7</sup> A particularly grim variant of the Bacchanalian god of intoxication first recognized by Grube and Nahm (1994:708-9; see also Grube 2001:294-5), this character usually sports dark body paint and tied-back hair, and frequently wields anthropomorphic stone cudgels that reveal his additional role as a patron of Maya blood sports.

Secondary in importance only to "Striking Ahkan", another fabulous boxing spirit represents a stone-wielding jaguar encircled in the coils of a lightning serpent as sparking or dripping star signs affix themselves to the bodies of both creatures (Figure 8c; Grube and Nahm 1994:688-89). While complex and somewhat variable in spelling (Figures 8c and 10), his name can now be read as **JATZ'-Ia-TOK-EK' HIIX** or *Jatz' Tokal Ek' Hiix* "Striking Sparking-Star Jaguar", a straightforward description of the associated iconography. Still relentlessly enigmatic, the name must nevertheless have carried some currency, for at least one Late Classic king seems to have taken this complicated epithet as his regnal name (Figure 11).<sup>8</sup>

Like the ballgame itself, there were probably elements of both sport and ritual in Maya blood sports. Frequent association of boxing scenes with ballcourts might suggest the former (Orr 2003; Taube 2000), while depictions of mythological characters engaged in boxing reveal an important religious component, perhaps associating combative bloodletting with agricultural



Figure 9. The **JATZ'** sign in the name of the Boxing God A'. Vase K5070 (after a photograph by Justin Kerr).



Figure 10. The **JATZ'** sign in the name of the Boxing Jaguar. Vase K1652 (after a photograph by Justin Kerr).

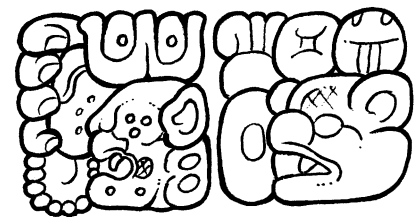


Figure 11. The **JATZ'** sign in the name of a captive king of Sak Tz'i'. Tonina M.83 (after a drawing and photographs by Ian Graham, CMHI 6:113).

<sup>7</sup> It's not impossible that the occasional **-ni** suffixes here reflect a **TUUN** or "stone" sign conflated with the **JATZ'** main sign. If so, a more complex name like *Jatz'ontuun Ahkan* or "Stone-Striking Ahkan" might be contemplated.

<sup>8</sup> Simon Martin (personal communication 1999) first mentioned the significance of this spelling to me (see also Martin and Grube 2000:188-189).

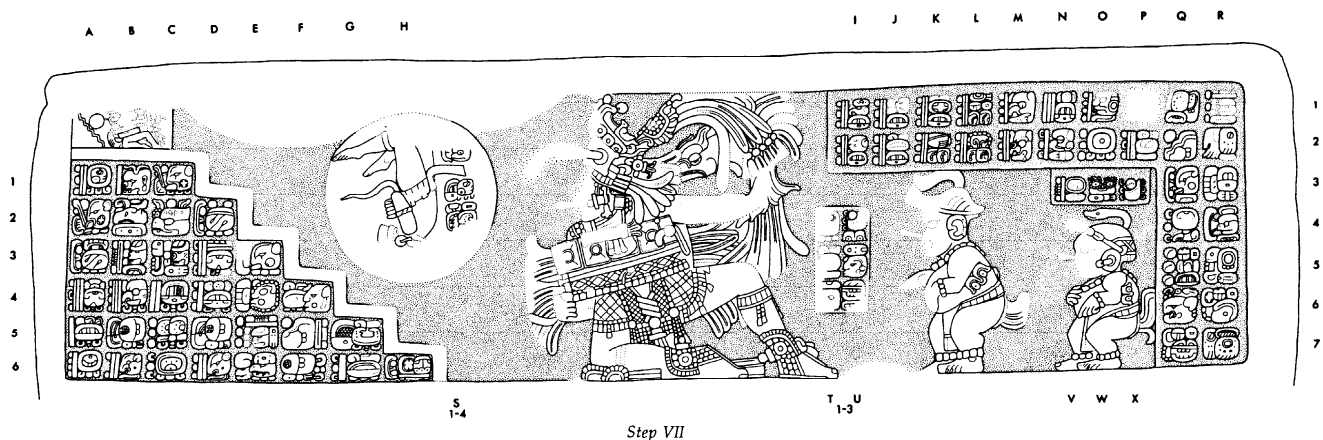


Figure 12. The king of Yaxchilan plays ball in the guise of the Waterlily Serpent. Yaxchilan H.S. 2, Step VII. Drawing by Ian Graham (CMHI 3:160).





**Figures 13a-c.** Dedicational clauses involving the **JATZ'** sign and the syllables \***ja** and **tz'i**. a) Yaxchilan H.S. 2, Step VII: Q1-Q2 (after a drawing and photographs by Ian Graham, CMHI 3:160). b) El Peru H.S. block (after a field drawing and photographs by Ian Graham). c) Copan H.S. (after a drawing by Barbara Fash).

themes such as rainmaking or crop abundance. Indeed, a number of modern Mesoamerican groups still practice highly-ritualized forms of boxing in times of drought. Intriguingly, ritual practitioners in Guerrero still take on the guise of rain-making jaguars perhaps not all that different from “Striking Sparking-Star Jaguar”, and square off against their heavily-padded opponents (Brody 1988; Cordry 1980; Orr 2003:90-1). The aim is to let blood, and thereby to stimulate rainfall through sympathetic magic.

Another important context of the **JATZ'** glyph is in scenes of ballgame sacrifice, as on Step VII of Yaxchilan Hieroglyphic Stairway 2 (Figure 12). Here, the late eighth-century king Bird Jaguar IV assumes the guise of the Waterlily Serpent—a god of wind, water and cenotes, and the classic Maya counterpart of the Central Mexican deity *Quetzalcoatl* (Taube 1992:56-59; see also Robertson 1990). Bird Jaguar IV is depicted not only in the guise of this god, but also in full ballplayer apparel, including a yoke, protective hipcloth and kneepad. As dwarf servitors of the god look on, the king-cum-supernatural has just dealt his captive a telling blow, sending his bound body careening wildly off the sacrificial steps. This climactic event is described in the associated text as **JATZ'-na-ja 3-a-ha-li EHB** or *jaatz'naj uhx ahaal ehb* “the three-conquests stairway is struck” (Figure 13a). Essentially the same formula is also known from the hieroglyphic stairways of El Peru and Copan (Figures 13b and 13c), the former no doubt associated with the impersonation of “Seven Ajaw” discussed above (Figure 5d). Although somewhat eroded, the Copan spelling apparently substitutes \***ja** and **tz'i** signs for the “stone-in-hand” glyph, providing further evidence of a **JATZ'** value for the logograph.<sup>9</sup>

The text presents Bird Jaguar IV's sacrificial act as a modern-day echo of the decapitations of three supernatural beings deep in mythological time (Freidel et al. 1993:356-62; Martin and Grube 2000:130). These references to ancient struggles between ancestral gods no

doubt comprise the underlying mythical charter of the ballgame, distorted versions of which still survive in the seventeenth-century K'ichee' *Popol Vuh* (Martin and Grube 2000:130). The parallels with this foundational myth are further rounded out by the father's and grandfather's own impersonations of the Waterlily Serpent on two associated steps (6 and 8), wherein they also dispatch unfortunate captives. Seen in this light, Bird Jaguar IV's ritual reenactment of this ancient myth squarely placed his actions in the context of these foundational events, thereby lending cosmological significance to these key acts of captive sacrifice.

Yet such reenactments probably played a practical role as well, usefully reminding lesser nobility and royal women of their divinely-ordained roles as servants and helpmeets of the king. Thus, while Bird Jaguar IV and his ancestors assume the guise of the Waterlily Serpent and vanquish captives kenneled as ancient enemies of civilization, lower-ranking nobles appear in the guise of the arguably more servile *Ik' K'uh*, or “Wind Gods”, and play not with defeated captives, but with *lajchan nahb* or “twelve handspan” balls (Figure 2) (Stuart et al. 1999: II-44; see also steps 4, 5 and 12). Meanwhile, queens either place balls in play (steps 1 and 11) or conjure gods of lightning and fecundity (steps 2 and 3). In this way, ballgame myths and associated blood sports served as social charters (Malinowski 1984:101), naturalizing the social order and placing its origins squarely in the numinous otherworld of the mythological past.

<sup>9</sup> As Lacadena (in press) has shown, *-n-aj* endings in the hieroglyphic script probably reflect the passivization of non-CVC constituents. The disharmonic spelling of **ja-tz'i** or *jaatz'* is therefore intriguing (see Houston et al. 1998), since it may point to an initial derivation of *jatz'* as *jaatz'*, a noun meaning “whip” or “cudgel” (e.g., Yucatec *háatz'* n. “whip”, Bricker et al. 1998:93) before its re-derivation as a verb (*jaatz'a?*) and eventual passivization in the form *jaatz'naj*. In other contexts, the better known **ja-tz'a-la** and **ja-tz'a-ja** spellings probably reflect participial and passive inflection, respectively, of the unadulterated root *jatz'*.



## References

- Aulie, H. Wilbur and Evelyn Woodward Aulie  
1996 *Diccionario Ch'ol de Tumbalá, Chiapas, con variaciones dialectales de Tila y Sabanilla*. Second edition, edited by E. F. Scharfe de Stairs. Summer Institute of Linguistics, Mexico.
- Berlin, Brent  
1968 *Tzeltal Numeral Classifiers: A Study in Ethnographic Semantics*. Mouton, Paris.
- Boot, Erik  
1991 The Maya Ballgame, as Referred to in Hieroglyphic Writing. In *The Mesoamerican Ballgame*, edited by G. W. van Bussel, P. L. F. Van Dongen and T. J. J. Leyenaar, pp. 233-244. Rijksmuseum voor Volkenkunde, Leiden.
- Bricker, Victoria R., Eleuterio Po'ot Yah and Ofelia Dzul de Po'ot  
1998 *A Dictionary of the Maya Language as Spoken in Hocabá, Yucatán*. University of Utah Press, Salt Lake City.
- Brody Esser, J. (editor)  
1988 *Behind the Mask in Mexico*. Museum of New Mexico Press, Santa Fe.
- Coe, Michael D.  
2003 Another Look at the Maya Ballgame. In *Il sacro e il paesaggio nell'America indigena*, edited by D. Domenici, C. Orsini and S. Venturoli, pp. 197-204. CLUEB, Bologna.
- Cohodas, Marvin  
1991 Ballgame Imagery of the Maya Lowlands: History and Iconography. In *The Mesoamerican Ballgame*, edited by V. L. Scarborough and D. Wilcox, pp. 251-88. University of Arizona, Tucson.
- Colas, Pierre R. and Alexander Voss  
2001 A Game of Life and Death - The Maya Ball Game. In *Maya: Divine Kings of the Rainforest*, edited by Nikolai Grube, pp. 186-91. Könemann, Cologne.
- Cordry, D.  
1980 *Mexican Masks*. University of Texas Press, Austin.
- Freidel, David, Linda Schele and Joy Parker  
1993 *Maya Cosmos: Three Thousand Years on the Shaman's Path*. Quill, New York.
- Graham, Ian  
1982 *Corpus of Maya Hieroglyphic Inscriptions*, Vol. 3, No. 3. Peabody Museum, Cambridge.
- Graham, Ian and Peter Mathews  
1996 *Corpus of Maya Hieroglyphic Inscriptions*, Vol. 6, No. 2. Peabody Museum, Cambridge.
- Grube, Nikolai  
2000 Fire Rituals in the Context of Classic Maya Initial Series. In *The Sacred and the Profane: Architecture and Identity in the Maya Lowlands*, edited by P. R. Colas, K. Delvendahl, M. Kuhnt and A. Schubart, pp. 93-110. Acta Mesoamericana, Volume 10. Berlin.  
2001 Intoxication and Ecstasy. In *Maya: Divine Kings of the Rainforest*, edited by Nikolai Grube, pp. 294-5. Könemann, Cologne.
- Grube, Nikolai and Werner Nahm  
1994 A Census of Xibalba: A Complete Inventory of way Characters on Maya Ceramics. In *The Maya Vase Book*, Volume 4, edited by B. Kerr and J. Kerr, pp. 686-715. Kerr Associates, New York.
- Hironymous, Michael O.  
1982 *The Origin of Yucatec Tone*. Unpublished MA Thesis, Brigham Young University.
- Hoffling, Charles A. and Félix Fernando Tesucún  
1997 *Itzaj Maya Spanish English Dictionary*. University of Utah Press: Salt Lake City.
- Houston, Stephen D.  
1993 *Hieroglyphs and History at Dos Pilas: Dynastic Politics of the Classic Maya*. University of Texas, Austin.
- Houston, Stephen D. and David Stuart  
1996 Of Gods, Glyphs and Kings: Divinity and Rulership among the Classic Maya. *Antiquity* 70:289-312.
- Houston, Stephen D., David Stuart and John Robertson  
1998 Disharmony in Maya Hieroglyphic Writing: Linguistic Change and Continuity in Classic Society. In *Anatomía de una Civilización: Aproximaciones Interdisciplinarias a la Cultura Maya*, edited by A. Ciudad Ruiz, et al., pp. 275-296. Madrid: Sociedad Española de Estudios Mayas.
- Kaufman, Terrence S. and William M. Norman  
1984 An Outline of Proto-Cholan Phonology, Morphology, and Vocabulary. In *Phoneticism in Mayan Hieroglyphic Writing*, edited by J. S. Justeson and L. Campbell, pp. 77-166. State University of New York, Albany.
- Knowlton, Timothy  
1999 The Stone-in-Hand Glyph. *FAMSI*: <[www.famsi.org/research/kerr/articles/stone-in-hand](http://www.famsi.org/research/kerr/articles/stone-in-hand)>.
- Lacadena, Alfonso  
in press Passive Voice in Classic Mayan Texts: CV-*h-C-aj* and -*n-aj* Constructions. In *The Linguistics of Maya Writing*, edited by S. Wichmann and A. Lacadena. Salt Lake City: University of Utah Press.
- Lacadena, Alfonso and Søren Wichmann  
2003 The Representation of the Glottal Stop in Maya Writing. In *The Linguistics of Maya Writing*, edited by S. Wichmann and A. Lacadena. Salt Lake City: University of Utah.
- Macri, Martha J.  
2000 Numeral Classifiers and Counted Nouns in the Classic Maya Inscriptions. *Written Language and Literacy* 3(1):13-36.
- Macri, Martha J. and Matthew G. Looper  
2000 A New Interpretation of the Ball Compound. *Glyph Dwellers* 6. University of California, Davis.
- Malinowski, Bronislaw  
1984 [1946] Myth in Primitive Psychology. In *Magic, Science, and Religion and Other Essays by Bronislaw Malinowski*, edited by R. Redfield, pp. 93-148. Harper Collins, New York.
- Martin, Simon and Nikolai Grube  
2000 *Chronicle of the Maya Kings and Queens*. Thames and Hudson, London.
- Mayer, Karl H.  
1980 *Maya Monuments: Sculptures of Unknown Provenance in the United States*. Acoma Books, Ramona, CA.
- Miller, Mary and Simon Martin  
2004 *Courtly Art of the Ancient Maya*. Thames and Hudson, London.
- Nicholson, H. B. and Eloise Quiñones Keber  
1991 Ballcourt Images in Central Mexican Native Tradition Pictorial Manuscripts. In *The Mesoamerican Ballgame*, edited by G. W. van Bussel, P. L. F. Van Dongen and T. J. J. Leyenaar, pp. 119-133. Rijksmuseum voor Volkenkunde, Leiden.
- Orr, Heather  
2003 Stone Balls and Masked Men: Ballgame as Combat Ritual, Dainzú, Oaxaca. *Ancient America* 5. Center for Ancient American Studies, Washington, DC.
- Robertson, Merle Greene  
1990 The Celestial God of the Number 13. *Triptych* (Sept/Oct 1990), pp. 26-31. The Museum Society, San Francisco.
- Robicsek, Francis and Donald M. Hales  
1981 *The Maya Book of the Dead: The Ceramic Codex*. University of Oklahoma Press, Norman.
- Schele, Linda and Nikolai Grube  
1990 Six-Staired Ballcourts. *Copán Note* 83. Austin, Texas.
- Schele, Linda and Mary Miller  
1986 *The Blood of Kings: Dynasty and Ritual in Maya Art*. George Braziller, New York.
- Slocum, Marianna C., Florencia L. Gerdel and Manuel Cruz Aguilar  
1999 *Diccionario Tzeltal de Bachajón, Chiapas*. Instituto Lingüístico de Verano, Mexico.
- Stuart, David, Stephen D. Houston and John Robertson  
1999 Recovering the Past: Classic Mayan Language and Classic Maya Gods. In *Notebook for the XXIIIrd Maya Hieroglyphic Forum at Texas, Part II*, pp. 1-96. Maya Workshop Foundation, Austin.
- Stuart, George  
1975 Riddle of the Glyphs. *National Geographic* 148(6):768-91.
- Taube, Karl  
1989 Ritual Humor in Classic Maya Religion. In *Word and Image in Maya Culture*, edited by W. F. Hanks and D. S. Rice, pp. 351-82. University of Utah Press, Salt Lake City.  
1992 *The Major Gods of Ancient Yucatan*. Studies in Pre-Columbian Art & Archaeology, Number Thirty-Two. Dumbarton Oaks, Washington, DC.
- 2001 American Gladiators: The Ballgame and Boxing in Ancient Mesoamerica. Paper presented at the 8th Annual UCLA Maya Weekend, Cotsen Institute of Archaeology, October 13-14, 2001.
- Tedlock, Dennis  
1996 *Popol Vuh*. Simon and Schuster, New York.
- Thompson, J. Eric S.  
1970 Sufijos Numerales y Medidas en Yucateco. *Estudios de la Cultura Maya* 8:319-39. Mexico.
- Tokovinine, Alexandre  
2002 Divine Patrons of the Maya Ballgame. *Mesoweb*: <[www.mesoweb.com/features/tokovinine/Ballgame.pdf](http://www.mesoweb.com/features/tokovinine/Ballgame.pdf)>
- Ulrich, E. Matthew and Rosemary Dixon de Ulrich  
1976 *Diccionario Maya Mopan*. Instituto Lingüístico de Verano, Guatemala.
- Zender, Marc  
2002 The Cavern of Naj Tunich. In *The Definitive Guide to Archaeology*, edited by Paul G. Bahn, pp.404-5. Weldon Owen, London.
- Zender, Marc and Stan Guenter  
2000 Three Kings of Late Classic Tortuguero. *Pre-Columbian Art Research Institute Newsletter* 31 (Spring 2000), pp. 6-8. San Francisco.