

# The Ritual Suicide of Maya Rulers

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In 1981 Claus J. Bruder published a short article on a Classic Maya ceramic bowl which was then on exhibit in the Museo Popol Vuh in Guatemala. In this article entitled "Ein unbekannter Mythos auf einer Maya-Schale" (An unknown myth on a Maya bowl), Bruder described one of the eight scenes painted on this vessel (Fig. 1a) as an act of suicide by self-decapitation (Bruder 1981:65). Hales interpreted a similar scene on a codex style vessel (Fig. 1b) in the same way, as an individual committing self-decapitation (Robicsek and Hales 1981: 28,45).

Other examples of individuals cutting or having cut the sides of their necks with an axe or a knife are shown on a well known vase from Altar de Sacrificios (Stuart 1975:774-776) (Fig. 2), a painted vessel recently published by Kerr (Kerr 1992:371, File No. 2942) (Fig. 3), and the Dumbarton Oaks Panel from Palenque (Schele and Miller 1986:275) (Fig. 4).

As indicated by their body positions, in particular the raised heels of the principal actors and their companions, the autosacrifice constituted part, perhaps even the central theme, of a dance. As Grube concludes from his analysis of the dance-glyph, dance provided an important medium of communication with humans as well as with supernaturals in the life of the Classic Maya elite (Grube 1992:215). The autosacrifice-dancers mostly act in the guise of gods: God A' (Fig. 1b,2), possibly the *wits* monster (Kerr 1992: 371, File No. 2942), and G1 (Chac-Xib-Chac) of the Palenque Triad (Fig. 4), who appear to be their spirit companions as is indicated by the *way* glyph in the accompanying texts (Houston and Stuart 1989). These texts also specify them as members of a royal family by means of the *k'ul* prefix in the phrases of their names and titles

(Fig. 1b,2). In the case of the Dumbarton Oaks panel we can even identify the dancer as a *k'ul ahaw* of Palenque, now called *K'an Hok' Kitam* II (Fig. 4).

When the action of autosacrificers punching or hacking the sides of their necks is shown, the glyphic collocations are composed of the *ch'ak* glyph with the final consonant frequently being indicated by a *ka* phonetic complement, and the *ba* glyph directly joined. Inflectional prefixes and suffixes specify the varying aspects of these verbal phrases. All signs employed in these verbal collocations have been securely deciphered (Dütting 1979:59, Orejel 1990:4,6; Grube and Martin 1992; Schele and Mathews 1993:16,17). In addition, lexical and grammatical evidence is available from both the Yucatec and Ch'ol Mayan languages (Barrera Vásquez 1980, Mc Leod 1987, Josserand and Hopkins 1988, Smailus 1989). Therefore, a syntactical and morphological analysis is attempted for a precise reading of the autosacrifice glyph.

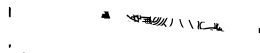
The analysis of the linguistic components of these texts yields the following results (Table 1):

Syntactically, there is but one nominal phrase following the initial verbal phrase to form the sentences. This is an indication of the verb being intransitive.

The nominal phrase is composed of names, titles, and manifestations of the agents. It can be quite elaborate.

In some instances another sentence is immediately adjoined, starting with the ubiquitous *u kahi* verbal phrase, but naming different individuals (fig. 5a,b,d).

Morphologically, the verbal root is that of a transitive verb *ch'ak*: *cortar con golpe, con*



**Fig. 1.** Bloodletting from the carotis: a. (Bruder 1981:65); b. Drawing by Alexander Voss after Robicsek and Hales 1981:28, Vessel 40.

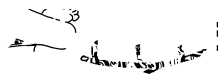


Fig. 2. The carotis-bloodletter from the "Altar Vase". Drawing by Alexander Voss after G. Stuart 1975:774.

*hacha o otro instrumento* (Barrera Vásquez 1980:122).

Following and immediately attached to this root is the reflexive particle *ba* producing one of a number of verbs,

que son formalmente reflexivos (raíz verbal transitiva + partícula reflexiva), pero que se usan semánticamente como verbos intransitivos. El sufijo (aquí mejor dicho una partícula) se une con una raíz tan íntimamente que pierde su sentido primario y se toma como parte de la raíz. Los reflexivos en su uso normal necesitan un prefijo pronominal ergativo. Algunos de estos existen sólo con "reflexivos congelados", otros se pueden usar también como verbos transitivos sin elemento reflexivo (Smailus 1989:36,37).

Morphologically, this intimate connection can best be explained as a noun incorporated in the transitive verbal root, the result of

this process being a new intransitive verbal stem (McLeod 1993: personal communication), just as described above by Smailus as the function of his *elemento reflexivo*.

The nominal character of the lexeme *ba* is documented linguistically for the Tzotzil of Zinacantan:

*ba-il* n3d (1) *cara o rostro*, (2) *gesto, la cara*, (3) *haz, la cara*, (4) *presencia* (Laughlin 1988,I: 161).

This nominal character also fits well with the omnipresent *u ba-* statements introducing names and activities of persons depicted on monuments, on vases, and in wall paintings (Schele 1982:160-174). Expressing a static verbal phrase, *u ba(h)* in all of these cases can be translated as "(This) is the presentation, the figure, the resemblance of (see Proskouriakoff

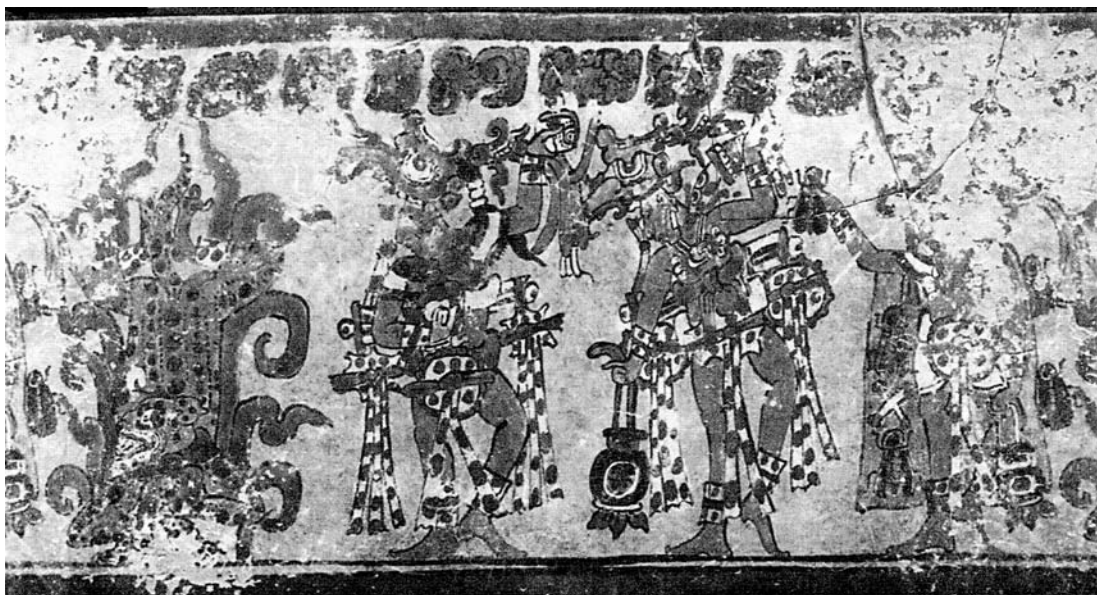


Fig. 3. Maya Vase #2942 © Justin Kerr. Used with permission

1968:249), with names and titles of the respective individuals immediately following, or with the activity depicted being inserted as a verbal noun and coupled to the *u ba(h)* statement by means of the preposition *ti* in its temporal func-

tion (Josserand, Schele, and Hopkins 1985; Grube 1992:203, 205; Smailus 1989:149-151).

*Ch'akba* thus takes on the nature of an intransitive verbal stem with the meaning of something like "to self wound". The inflected and noninflected occurrences can be translated as follows:

*ch'ak ba n(a)* = *ch'akbá'an* 'he was self wounded' (*Participio completo, estrictamente predicativo*; Smailus 1989:132-135). See Table 1,a.

*u ch'ak ba h(i)* = *u ch'akba(h)* 'he self wounds' (3rd Pers.Sgl. Incomplete; Smailus 1989:36) See Table 1,c.,f.

*ch'ak ba y(a)* = *ch'akba-i* 'he self wounded' (3rd Pers.Singl. Complete). In colonial Yucatec normally *ch'akba-nahi* would be expected (Smailus 1989:37). See Table 1,g.

*ch'ak ba (?)* = *ch'akba (?)* 'self wound' or 'self-inflicted wound' (See Table 1,b.,h.)<sup>1</sup>

On the monuments of the Palenque ruler *K'an Hok' Kitam* the *ch'ak-* verbal glyph occurs without the *ba* reflexive element, but with the numeral *ox* prefixed instead. According to Kathryn Josserand *ox* may be used here to represent the collective prefix *x-* when used before roots formed with a back vowel.<sup>2</sup> The meaning of *x-* when prefixed to verbs is: "the people who do (the action specified)" (Josserand 1993:per-



Fig. 4. K'an Hok' Kitam II of Palenque dancing the carotis bloodletting rite on the Dumbarton Oaks Panel. Drawing by Linda Schele (Schele and Miller 1986:275).



**Fig. 5.** Carotis-bloodletting under duress. Waxaklahun u Bah K'awil of Copan. a. QRG St.F west, B11-B14; b. QRG St.J, H1-H8, E1. c. QRG St.E west, B11-A13a. From Maudslay 1889-1902,II:Pl.40,46,31. Pat Buts' K'awil of Seibal. d. DPL St.16. C2-C6. Drawing by Ian Graham. From Graham 1967:Fig. 7.

sonal communication; Josserand and Hopkins 1988 I:NEH 1,11).

Thus,

*ox ch'ak (ka) na = x ch'ak-á'an* would mean 'he of the kind of people who were hacked with a blow', see Table 1,d.,

and

*ox ch'ak (ka) = x ch'ak* 'he of the kind of people who hack with a blow', see Table 1,e.

An "autosacrificial" act with axe blows *per se* cannot be deduced from the verb morphology in these Palenque texts because the *ba* reflexive element is not incorporated. However, the two mutually complementary statements in conjunction with the iconography on the Dumbarton Oaks panel strongly suggest such an activity as its central theme. *K'an Hok' Kitam* obviously performed this ritual act on himself more often than once in his life as is indicated by the collective prefix *x-* used with the participle form of the *ch'ak* verb (Table 1,d.). It was the basis for the important title he bears. How he possibly could have survived this extremely dangerous act is explained later.

Statements from the Petexbatun polity are similar from a semantic point of view in that they imply rather than explicitly express the autosacrifice. Yet they are structured quite differently. The two texts read: *ch'ak u su ba l(i) = ch'ak u subal* 'the axe blow is his offering', followed by the name glyphs of *Pat Buts' K'awil* who was obviously a prominent member of the nobility at Seibal, (Table 1, i,j).

An axe blow "presented as an offering" by a high ranking individual who was most probably captured in a raid on his native polity the day before as the texts on the monuments imply, is most certainly a blow directed against himself.

As Smailus points out, *los reflexivos en su uso normal necesitan un prefijo pronominal ergativo* (Smailus 1989:36). Such is the case in two other autosacrifice texts, one from Palenque, the other from La Mar:

*iwal ch'ak(ka) y(i) u ba = iwal ch'ak-i uba* 'and then he hacked with a blow his self'. (Table 1,k).

*ch'ak(ka) y(i) u ba = ch'ak-i uba* 'he hacked with a blow his self'. (Table 1,l).

As is evident from these examples, the

may be significant since abbreviated clauses are the hallmark of elegance in speaking modern Yucatec Maya.

The same tendency may also be reflected in the incorporation of yet another noun in the glyphic conflation of the verb phrase on the Altar vase (Fig. 2). As is evident from the face paint, the individual acts in the guise of god A'. The eye markings from his face are repeated in the T757 variant of the *ba* grapheme. This iconographic reflex in the *ba* grapheme was pointed out to me by Linda Schele. So the grammatical subject in this scene is not the individual depicted but his spirit companion, god A'. The glyphic text, therefore, actually consists of two phrases which can be translated as: God A' was self wounded. He is the spirit companion of (title and origin of the individual). The glyphic text on the vase from Robicsek and Hales (Fig. 1b) is quite similar: Self wound god A'. He is the spirit companion of (title and origin of the individual).

The two sacrificial instruments which the autosacrificer on the Altar vase holds—an axe in his left and a pointed knife in his right hand—may provide the clue to the identity of his spirit companion, god A', whose name glyph is painted so prominently on his cheek. The graphic elements of which this so-called "percentage sign" (T509) is composed may in fact depict a (sometimes gaping) cut flanked by two punctures, the typical wounds which axe blade and knife point produce. If this interpretation is correct, god A' is the god of autosacrifice which quite frequently must have been lethal, especially when done on critical areas of the body such as the side of the

**Fig. 6.** The carotis-triangle. a. With head in upright position. b. With head bent sideways.

independent reflexive element, prefixed with its ergative pronoun, is less frequent in the inscriptions of the Classic Period than Smailus' reflexive particle directly "frozen" to the verb root. This very intimate amalgamation shortens the verb phrase in speech and in writing. This



**Fig. 7.** Maya Vase #3844 © Justin Kerr 1988. Used with permission.

The area of the neck at which the blows of the *ch'akba* dancers are directed is characterized by a major artery, the *Arteria carotis communis*. The *A. carotis comm.* bifurcates into the *A. carotis externa* and the *A. carotis interna*, the former mainly supplying blood to the outer facial areas, the latter to the interior of the skull, in particular the brain (Fig. 6a). The area of this bifurcation point is called the "Carotis triangle" (*Trigonum caroticum*). It exhibits great variance in its position, but normally the bifurcation point and the lower portion of the *A. carotis int.* are covered by a strong muscular band, the *Musculus sternocleidomastoideus*. When the head is being bent, the *M. sternocleidomastoideus*, changes its position, to expose the bifurcation point. At the same time the *A. carotis int.* is pushed forward thus bringing it more in line with the *A. carotis ext.* and narrowing the triangle (Fig. 6b).

An explanation for the strange gesture performed by two of the *ch'akba* dancers using their own hair to pull their heads to the side, could be that these individuals attempted to positively sever their *A. carotis comm.*, in particular its deeper branch, the *A. carotis interior*, in order to commit suicide. This suggestion is also based on the large quantities of blood gushing from the wounds in both cases (Fig. 1). Stopping bleeding from the *A. carotis* by compression is successful only when there are tiny, needle-like perforations, and only if compression occurs immediately. In such cases the bleeding can be stopped within 3-5 minutes. Any larger cut requires vascular

**Fig. 8.** Penis-blood-sacrificer with ek' balam. Drawing by Elisabeth Wagner after Kerr 1992:443, File No.3844

neck. This would explain why glyph T509 was used as an allograph for the *kimi*-skull from Early Classic times on (Thompson 1950:Fig.7; 1962:107; Grube 1990:105).



**Fig. 9.** The carotis-bloodletting-rite danced on the "Altar Vase". Drawing by Alexander Voss after G. Stuart 1975:774-775.



**Table 1:** Hieroglyphic texts related to carotis-bloodletting. a.ALS: "Altar Vase".b.Robicsek and Hales 1981: Vessel 40. c.PAL: House C, HS: C1. c.PAL: Palace Tablet L13-K15. e.PAL Dumbarton Oaks: Panel E-I. f.QRG: St.E west, B12b-A13a. g.QRG: St.J, H3-G5. h.QRG: St.F west, A12a-A13a. i.DPL: St.16, D2-C3. j.AGT: St.2, D1-C2. k.PAL: Tablet of the Creation, B1-C2. l.MAR: St.3, A6.

surgery. When the *A. carotis* was cut and bleeding cannot be stopped, the chances of survival with compression only are approximately 5%. The brain can cope with sudden and substantial deficit in blood supply (infarct) to the brain only for very short periods. After three minutes brain damages occurs. After 15 minutes damage become irreversible and, together with the considerable loss of blood, leads to death.<sup>3</sup>

For the Maya these circumstances were possibly not as grim as they may appear at first glance to us. Even today indigenous maize farmers, the *milperos* of Yucatan, know of certain medicinal plants which are highly effective in closing wounds and stopping hemorrhages. When clearing and weeding their *milpas* Maya farmers frequently suffer self inflicted wounds from their extremely sharp agricultural tools, the *cohas* and *machetes*. These cuts occur mostly in the lower arms and legs because these parts of their bodies are inevitably exposed to the swings of the tools. Major arteries in the wrist and ankle areas are, therefore, constantly endangered and often damaged. In such a case, with no medical aid available within a range of many kilometers, the *milperos* use a shrub called *ek' balam* (*Croton flavens* L.) which rapidly seals the damaged

blood vessel. To close wounds in muscular tissue the bark of the *bakalche*'-tree (*Bourreria pulchra* Millsp.) is applied.<sup>4</sup> Here follows a description in the Mayat'aan of Telchaquillo, municipio de Tecoh, Yucatan, of how these plants are utilized:

- 1 *Ma'alob le ti'a'al le xek' balamo*  
Well, this xek' balam of ours,
- 2 *ma'alob uts'abal lu yiits ti'a'al u xot kuba maak*  
the resin of it is well applied on his cut by a person
- 3 *wa kuch'ak kuba*  
if he hacked himself.
- 4 *beyxa'an tun xaano u yiitso beyxa'ano piits'il kupiits'il*  
Then, in the same way as the resin, also the nap is nipped.
- 5 *le kuts'a'abal yook'ol*  
It is applied on top.
- 6 *kuts'o'okole kuk'a'axal*  
When this is finished it is dressed.
- 7 *Yaan xaan hump'el (este) mata u k'aba xbakalche*  
There is also a certain tree by the name of xbakalche.





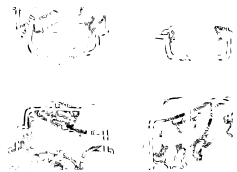
**Fig. 10.** The carotid-bloodletter-title. K'an Hok' Kitam II of Palenque. a. PAL Palace Tablet C1-C9. b. PAL Palace Tablet K6-K14. Drawing by Merle Greene. From Greene Robertson 1985a:258. Lady Xoc of Yaxchilan. c. YAX Lnt.24 G1-G4. Drawing by Ian Graham. From Graham and Eric van Eeuw 1977:3:53

- 8 *beyxa'an kutseen maalob u so'ol*  
Its rind also offers a benefit.
- 9 *kuho'ochale kuts'abale*  
It is scraped off, it is applied
- 10 *layli xaane kubetik u yoxele*  
and in the same way it also forms its scar
- 11 *tia'al le xoto wa le ch'ako*  
over a cut or a blow.
- 12 *tumen le meyehilo'ob k'a'axo*  
Because the workers in the woods
- 13 *cada k'in tu kinpahlo'ob si hats'ke*  
hurt themselves every day when they chop.
- 14 *k'a'ana'an le ba'alo he'elo kumeyaho'ob*  
These things are necessary for them when they work,
- 15 *hexbey xiwe beyxa'an cheo'ob.*  
just as well the shrub as also the trees.

The term *kuch'ak kuba* (he wounds himself) in line 3 is almost identical to the last two glyphic examples, k. and 1., in Table 1.

Furthermore, it is interesting to note that both plants apparently have a strong astringent effect immediately forming what will later develop into a scar (line 10). Thirdly, the knowledge and use of the medicinal plants is obviously an integral and important part of the daily work of a *milpero* (lines 14,15).

The Maya of Classic times obviously used the *ek' balam* shrub in much the same way as their modern descendants, in order to stop hemorrhages after their blood sacrifices.<sup>5</sup> As Elisabeth Wagner pointed out to me, of the eight individuals engaged in sacrificing blood from penises on a painted vessel recently published by Kerr (1992:443, File No. 3844) (Fig. 7), one bears a bundle inscribed with *ek' balam* (T95.751). The glyphic caption above his head-dress also designates him as being in the guise of his spirit companion, a boar from the North, according to Nikolai Grube (Fig. 8). Also, the bottom of the rimmed *ak'bal* vessels held by the *ch'akba* dancer and his companion to the right on the Kerr vase (Kerr File No. 2942) are decorated with three leaves of exactly the same pointed



**Fig. 11.** Another carotis-bloodletting-rite celebrated at Palenque. PAL: Tablet of the Creation. Drawings by Merle Greene. From Greene Robertson 1991:268, 271, 273.

laurel-leave-shape as the leaves of the ek' balam-shrub.<sup>6</sup>

### Summary and conclusions

Opening the sides of their necks with a blow from an axe or a puncture from a knife appears to have been a special mode of auto-sacrifice, i.e. bloodletting from the *carotis*, performed by the members of the highest nobility among the Classic Maya. It was certainly not self-decapitation. Trying to behead oneself in the way depicted a person would sever vital nerves (Fig. 6b) midway, and be dead before it was completed. Yet the operation did involve an extremely high risk. The chances of survival were indeed slim unless care was taken to keep damage to the *carotis* small, and to stop the hemorrhage immediately after bloodletting.

If he survived, the *carotis* bloodletter

must have acquired considerable prestige as is evident from the titles of the Palenque-ruler K'an Hok' Kitam II.<sup>7</sup> Whereas *K'an Hok' Kitam* performed this type of bloodletting obviously of his own free will, other nobles like *Waxaklahun u Bah K'awil*, the thirteenth ruler of Copan, and *Pat Buts' K'awil* of Seibal appear to have done so under duress. This can be safely deduced from the fact that the rulers of Quiriguá and the Petexbatun polity respectively, on whose monuments these autosacrifices are recorded, claim to be responsible for them, as is expressed by the *u kahi*-glyph preceding their names (Fig. 5 a,b,d).<sup>8</sup>

The behavioral pattern thus documented consists of three variations:

Firstly there are those who completely severed their *carotis* thus committing an act of

suicide on their own free will. The *ch'akba* dancers on the vase from the Museo Popol Vuh and on the Robicsek and Hales vase belong to this group.

Secondly there are those who offered blood from their *carotis* but did not die because precautionary measures were taken, i.e. the *carotis* was only slightly opened and *ek' balam* was applied. K'an Hok' Kitam II of Palenque and the dancer on the Kerr vessel (File No. 2942) belong to this group.

Thirdly there are those who were forced to offer blood from their *carotis* but were denied the necessary aid. So they died in an act of imposed suicide. Waxakiahun u Bah K'awil of Copan and Pat Buts' K'awil of Seibal belong to this group.

A special case of this last variation is the event described on the Creation Stone at Palenque. Here two individuals named *k'inil kayom* 'day fisher' and *ak'ab kayom* 'night fisher' whom Werner Nahm interprets as the "Paddler Gods" are the agents in a *carotis* bloodletting, *ch'ak-i uba*, event (Table 1,k.).<sup>9</sup> The inscription continues listing a number of names and titles which are introduced by the *u kahi* glyph and mentions at least two other individuals to be responsible for this dual autosacrifice (Fig. 11). This situation corresponds neatly to the event related in the Popol Vuh where Hunahpu and Xbalanque decapitate each other at the demand of Hun Kame and Vuqub Kame, lords of Xibalba (Edmonson 1971:137, Tedlock 1985:153). The iconography of the panel may actually illustrate the scene. The individual in the right cartouche guised as Chac Xib Chac appears to be swinging and singing on his stone seat. This posture is very similar to that of the Quirigua ruler on Altar L from that site, who sits on two glyphic collocations which indicate that he danced *ak'otah* a dance in this pose while being visited by king Imix-God K from Copan (see Schele and Freidel 1990:31; compare Grube 1992:Fig.4.c.). The man in the left cartouche wields an axe.<sup>10</sup> The tablet, much as the ceramics mentioned above, may, therefore, commemorate an important *carotis* bloodletting rite held at Palenque in the mythic tradition of the Popol Vuh.

In fact, the entire complex of *carotis* autosacrifice may possibly be understood as a ritual in which Hunahpu's and Xbalanque's dance of decapitation and resurrection as related in the Popol Vuh was either mimicked or reenacted as real suicide in a ceremony.

Suicide, as described in the third variation of *carotis*-bloodletting above, may in addition be understood as an act of bravery in a situation characterized by ultimate and unequivocal defeat. This was probably the case with Waxaklahun u Bah K'awil of Copan and with Pat Buts' K'awil of Seibal. Landa describes an example of such acts of courage:

They tell the story of a Spanish cross-bowman and of an Indian archer, who, as they were both very skillful, were trying to kill each other, but who were unable to take each other off guard, and the Spaniard feigned negligence with one knee bent on the ground, and the Indian shot him in the hand, which followed up the arm and separated the arm bones from each other, and at the same time the Spaniard discharged his cross-bow and hit the Indian in the breast; and the later, feeling that he was fatally wounded, in order that it should not be said that a Spaniard had killed him, cut off a vine like an osier, and much longer, and hanged himself with it in the sight of all. And there are many examples of these acts of courage (Tozzer 1941:61-62).

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## Notes

- 1 Glyph block A12a in Maudslay's drawing of the hieroglyphic text on QRG St.F, west, shows an additional grapheme which is probably to be read after the *ba* reflexive particle. However it cannot be identified with certainty from the drawing only. It could be the head variant of the *hi* grapheme thus yielding *ch'akbah(i)* as the complete reading (Maudslay 1889-1902, II: P1.40; Schele and Mathews 1993: 16, 17).
- 2 The collective prefix with vowel initial roots is the omnipresent *ix-*.
- 3 The surgical aspects in this paper were provided by Dr. Ute Bergander, Evangelische Krankenanstalten Duisburg Nord, Duisburg, Germany. Any misunderstandings or mistakes in translating German medical terms into English are the responsibility of Jürgen Kremer.
- 4 The scientific taxa for these plants were taken from the concordance in Mendieta y Del Amo 1981 who in turn base much of their work on Barrera Mann, Barrera Vazquez, Lopez Franco 1976. Both lists are ambiguous in that they confound the *ek' balam* and *ik' aban-* shrubs. The latter is deadly poisonous. Extreme

caution is advised when working with these plants because they look very much alike.

5 In retrospect it appears overly simplistic to assume that the terrible blows, cuts, and holes which the Maya administered to their bodies should have healed with just a piece of cotton put on or wrapped around. The bandages depicted in the iconography appear to have served the sole purpose of holding the vegetal agents in place until they have "formed their scar" as Fausto Uc Flores describes it.

6 In the autosacrifice scenes either the *ch'akba* dancer himself, or one of his companions, hold these *ak'bal* pots. They may have been used to carry *ek'balam* leaves or their resin or both (Fig. 4,9).

7 *K'an Hok' Kitam* acquired his prestigious title of *x ch'ak Ix ch'aka'an* presumably during the earlier years of his life, a supposition which is supported by the fact that in the two cases, where this title is recorded on the Palace Tablet it is immediately preceded by another title, that of *ch'ok* 'prince' or *ch'ok-el* 'princeship' (Fig. 10). After all, a young person will be able to survive such a trauma more easily than an older person. Normally, at old age the effects of arteriosclerosis will already have restricted the blood supply to the brain. Any additional under supply will, therefore, develop its detrimental effects quicker and more pronounced.

On Yaxchilan Lintel 24 the same carotis-bloodletter title in its female version as *na ch'aka'an* 'she who was hacked with a blow' is part of the name phrase of Lady Xok (Fig. 10c). But there is also the possibility that in this case the act of having perforated her tongue with a blow is expressed because that is what the iconography shows her doing—passing a cord through a hole in her tongue. If one prefers the first interpretation, as I do because she already bears the title while (*ti*) performing her act of collecting (*ch'amil*) the blood from her tongue (Schele, Stuart, and Grube 1991:6,7) then the *na ch'aka'an* title of Lady Xoc would be another example of prestige oriented carotid bloodletting similar to that of *K'an Hok' Kitam II* of Palenque.

8 Quirigua Stela F records another carotid autosacrifice under duress on its east side at D16a-D19. The name glyphs are only partially preserved, but are not those of Waxaklahun u Bah K'awil of Copan or Buts' Tiliw of Quirigua. The dates are not historical, as they go back a considerable length of time. So mythological events, which may have served as a ritualistic model for Waxaklahun u Bah's autosacrifice may be referred to.

9 Werner Nahm proposed the reading and the interpretation of the two name glyphs in a message to John S. Justeson dated 9 February 1989.

10 Greene Robertson, in her description of the figure in the left cartouche, identifies the shaft of the axe as part of the hairpiece. But a closer look at the photo (Greene Robertson 1991:81,270) shows that the tassel dangling from the forehead is separate, and that the axe is shafted in the same way as that of *K'an Hok' Kitam* on the Dumbarton Oaks Panel, i.e. in the coil of a serpent (See Fig. 4). Also the upper end of the shaft is decorated with what looks like a large blossom, very similar to that on the terrible instrument shown on the Robicsek and Hales vessel (Fig. 1b). There can be no doubt that the object in question is a sacrificial axe.