This paper discusses the Maya glyph depicting a stingray spine that was widely used in Maya bloodletting rituals as a lancet – a special instrument for drawing blood (Fig. 1). Beginning in the Late Preclassic, such lancets were made from stingray spines, obsidian, and flint, and were regularly placed in burials and caches. Stingray spines are frequently found in the pelvic region of skeletons and were perhaps contained in bags hung from belts. It is clear that bloodletting was basic to the institution of rulership and the lancet was a sacred object infused with power.

It has long been noted that the stingray spine appears in scenes depicting bloodletting rites (Joralemon 1974). For example, on Lintel 24 from Yaxchilan 'Ix-K'abal-Xook, kneeling in front of her husband the king 'Itzamnaah-B'ahlam the Great, pulls a thorn-lined rope through her mutilated tongue. The rope falls into a woven basket, which holds blood-spotted paper and a stingray spine (Schele and Miller 1986: 186). The inscription tells us that this event took place on the day 5 Eb, the fifteenth day of the month Mak, or October 28, AD 709: 'u-b'aah 'u-ch'ajbil ... "this is her image of her penance ...". On Lintel 25 'Ix-K'abal-Xook holds the same plate containing bloody paper, a stingray spine and a lancet (Fig. 2). Another plate with bloody paper and a rope sits on the floor in front of her. From this plate rears a huge serpent, Ya'x-Chiit-Naah-Kaan, suspended in blood scrolls. The day of this event is 'Itzamnaah-B'ahlam the Great's accession, October 23, 681: 'u-tsakaw 'u-k'awiil 'u-too'hk, 'u-pakal 'Aj-K'ahk'-O-Chahk ... "he conjured the wooden idol of [the god] 'Aj-K'ahk'-O-Chahk's flint and shield ...".

A comparison of the glyph in question with stingray spines found in burials and lancets for drawing blood on Maya monuments shows clearly that the glyph accurately depicts a stingray spine. Besides this, the glyph appears on stingray spines preceded by the third person ergative prefix 'u- and followed by owner's name: e.g., Holmul false stingray spine (Stuart, Houston and Robertson 1999: Il-46), and Piedras Negras stingray spine (Houston, Escobedo et al. 2000). To put it another way, the glyph functions like a name-tag and has a logographic meaning. The inscription on the stingray...
spine from Piedras Negras may be read and interpreted as the following: 'u-STINGRAY SPINE-(na) ...(?)-ya 'a-ku ch'o-k(o) K'IN-(ni)-'AJAW ... "this is the stingray spine of ... 'Ahku'l, K'ihna' prince" (Fig. 3).

Four times the 'Stingray Spine Glyph' appears in one of the metaphorical fathership expressions (Fig. 4): 'u-NIK?-li ye 'u-STINGRAY SPINE-(na) ... 'u-nikil y-eeh 'ur-n ... "he is the flower of the edge of the stingray spine of such-and-such" (Mathews 1991: 62). This enigmatic passage means "he is such-and-such's son" and makes good sense in the context, because as we know that the Mesoamerican peoples made an association between the concepts of the bloodletting ritual, creation and conception. They considered the blood shed from the male organ in bloodletting rituals to be the most creative, fertile and powerful substance in the universe. It is no coincidence that one of the most popular metaphorical parentage expressions 'u-b'aah 'u-ch'ajb'il y-ak'ab'aal ... "he is such-and-such's son" is literally translated "he is the image of the penance of the darkness of such-and-such". In this case, the "penance" ch'ajb' also refers to the idea of creation, and the "darkness" 'ak'ab'aal implies the pristine condition of the world still to be created, on the one side, and the pain suffered in the penance and bloodletting ritual, on the other. At the same time, the flower was considered as a symbol of the supernatural power and vitality of the soul so necessary for beginning a new life (see, for example, Burkhart 1992). In such a manner, children are indeed "flowers on the edge of their fathers' stingray spines".

The glyph in question also figures as part of the names of human or supernatural beings, for example: 'U-....-KAN "He is the Stingray spine of Snake" (mythic Palenque ruler; Palenque: Temple of the Cross Tablet, Central Panel and West Jamb; Temple XXI Bench), and HO'-....-K'UH "God is the Five Stingray spines" (Brussels Stela; Cancuen Looted Panel; Tortuguero Monument 8). The image of a stingray spine forms part of another undeciphered glyph depicting a bowl with offerings – shell, stingray spine, and 'tassel' ornament (Fig. 5). This glyph appears in inscriptions and iconographic imagery as a name of the so-called 'Quadripartite Monster's Headdress'. The final piece of evidence for a logographic value of STINGRAY SPINE for the sign in question comes from Tonina.

---

2 I wish to acknowledge the help of Marc U. Zender, who independently arrived at the same reading KOKAN for the 'Stingray Spine Glyph.' He pointed out to me two of four examples of the fathership expression under discussion (personal communication 2002). He also wrote that David Stuart had demonstrated the ye reading for the 'Tri-lobed Eye Sign'. Thus, this interpretation was impossible without Marc U. Zender’s help.

3 The reading NIK for the 'Flower Glyph' is uncertain, but highly probable, I believe. The fact that this glyph refers to a word "flower" is beyond question.
(Monument 20), where in a rare paired variant of the TZ'AK glyph the two logograms STINGRAY SPINE and CH'ICH' "blood" are used to represent the concept of "wholeness" and "completeness" (Stuart 2003).

In inscriptions, the possessed form of the 'Stingray Spine Glyph' is proceeded by the third person ergative prefix 'u-', showing that the word could begin with any consonant except the glottal stop <'>. Sometimes the glyph is complemented with the suffix –na: on the Tablet of the 96 Glyphs from Palenque, stingray spine from Piedras Negras Burial 82, Palenque stuccos from Temple XVIII, and Rufino Tamayo Monument 1 (Marcus 1984: Fig. 1, 4). Alfredo Barrera Vázquez's Maya-Spanish dictionary mentions Yukatek entries "kokan "hueso de pescado en forma de una aguja áspera, que usan los indios para atravesar la piel que levantan en las partes enfermas de su cuerpo, para curarlas (fish bone in the form of a sharp needle that Indians use to pierce the skin, which they lift up in sick parts of the body, in order to heal them)"; 'kokan "espina de pescado (fish bone)", "kokantah "[va] curar con el kukan, operando con él ([transitive verb] to heal with the kukan, using it)" [Barrera Vázquez 1991: 330]). Although the complements ko/cho- and –ka/cha-na for the 'Stingray Spine Glyph' are unknown, the reading KOKAN is ideally suited for the context and seems plausible.

The words kokan "curación que se hace por medio del sangrado ejecutando con comilones de serpiente (medical treatment which is made by means of the blood-letting with serpent fangs)", and kòoh-kan "fang (snake), used to prick forehead in treatment against headache", attested in Modern Yukatek, may be related to the entry mentioned in Alfredo Barrera Vázquez's dictionary (Bastarrachea, Yah Pech, Briceño Chel 1992: 96; Bricker, Po'ot Yah, Dzul de Po'ot 1998: 31). The short <a> vowel from the Modern Yukatek entries is in good agreement with the na phonetic complement in the Maya glyphs, because the synharmonic spelling suggests a short vowel. It is unclear how the Cholan cognate of Yukatekan #kokan should sound — kokan, chokan, kochan, or chochan — because the gloss is not attested in other Mayan languages. Nevertheless, in view of the Late Classic shift <k/k'➔h/ch'> before <a, o, u>, at least in the Early Classic Period the word should take the form kokan.

In conclusion I should mention that the reading offered is undermined by the Yukatek entry kòoh-kan from the dictionary of Victoria Bricker and her co-authors (Bricker et al. 1998). They analyse kòoh-kan as a compound "serpent's fang" consisting of the two roots koh "tooth, beak, fang" and kaan "snake." When the two roots are joined to form a compound, the long vowel migrates to the first root, i.e. the vowel in koh is lengthened, and the vowel in kaan is shortened (Victoria R. Bricker, personal communication 2002). Based on their analysis and the iconography of the Rio Azul tombs, Marc U. Zender, who independently arrived at the KOKAN~CHOCHAN reading, suggests that the 'Stingray Spine Glyph' probably originated as a serpent's tooth (personal communication 2002). The problem is that in this case the mythic Palenque ruler's name — 'U-Koohkan-Kaan "He is the Snake's tooth of Snake" — does not make sense. Because of this I am disposed to suggest kòoh-kan "serpent's fang" as being a late reinterpretation – an example of so-called folk etymology – of the word "kokan "stingray spine."

---

4 I am grateful to Stephen D. Houston, who pointed out to me the last example (personal communication 2001).
References

Barrera Vásquez, Alfredo

Bastarrachea, Juan, Ermilo Yah Pech, and Fidencio Briceño Chel

Bricker, Victoria, Eleuterio Po'ot Yah, and Ofelia Dzul de Po'ot
1998  *A Dictionary of the Maya Language As Spoken in Hocabá, Yucatán*. Salt Lake City.

Burkhart, Louise M.

Covarrubias, Miguel
1957  *Indian Art of Mexico and Central America*. New York.

Fernández, Miguel, and Heinrich Berlin

Graham, Ian, and Eric von Euw
1977  *Corpus of Maya Hieroglyphic Inscriptions, Volume 3, Part I: Yaxchilan*. Cambridge, MA.

Houston, Stephen D., Héctor Escobedo, Mark Child, Charles Golden, Richard Terry, and David Webster

Joralemon, David

Marcus, Joyce

Mathews, Peter

Ruz Lhuillier, Alberto

Schelle, Linda, and Mary E. Miller

Stuart, David

Stuart, David, Stephen Houston, and John Robertson