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Ray-shaped pendant

Costa Rica (Chiriqui) or Panama (Coclé), 11th – 12th century AD.

Gold

6.5 x 6.5 x 1.9 cm

FGA-ETH-AM-0278

Provenance

Private collection, Dallas, acquired before 1980

Galerie 1492, Paris

Acquired at Galerie 1492, Paris, 27.11.2020



In cauda venenum

Such a cute little stingray

With its adorable face and marble-like round eyes, this totally harmless ray seems to come straight from a comic strip. However, as the Latin saying goes: “the venom is in the tail”. For under its charming look, this piece hides the most gory aspect of the collection, as it echoes pre-Columbian cults. Indeed, gods of polytheist religions sometimes demand ritual practices which are now quite unfathomable for us.

To paint a ray's portrait

One would appoint a goldsmith of Mesoamerica, in the early 2nd millenium AD, who would first shape the animal's tail and triangular body, and then add two delicate gold balls for the eyes. Indeed, this pendant is a masterpiece of Coclé or Chiriqui goldsmithery (*fig. 1*). The craftsman did not try to produce a faithful depiction, but all the elements allowing the immediate identification of the animal are there: a broad, flat body with a pair of wing-like pectoral fins with pointed tips, protruding round eyes, and finally a tail with three pelvic fins and ending with a dorsal fin. In the present case, around the mouth at the top of the object, there are two spiraled loops, surrounded by wavy strips: an artist's fancy, or perhaps a depiction of the water and sand agitated by the ray? At the back of the piece, a suspension ring enabled to wear it as a pendant.

An appealing animal, for which the closest parallels, although less charming, were identified at the Museum of Fine Arts of Houston (*fig. 2*) and on the art market (*fig. 3*). All three pertain to the Chiriqui or the Coclé culture, and come from Panama or Costa Rica. With its cephalic horns, the art market piece may depict a giant manta ray. A closer research also disclosed ray-shaped pendants in the Chimu culture of Peru, as shown by a silver-plate in the online art market (*fig. 4*), or small gold rays adorning the edge of a plume ornament.¹

¹ Houston Museum of Fine Arts, Inv. 2010.394 (Bolivia/Peru, Tiwanaku culture, 400 – 1100 AD).



The animal is also present on two other pre-Columbian objects of the Fondation's collection (a shaman's cloak of the Chancay culture, *fig. 5*, and a Chimú vase, *fig. 6 and 7*),² to which one may add the Kiribati sword equipped with stingray barbs, in the Oceanian collection.³ A use also found in the Mesoamerican cultures,⁴ which suggests that this tail hides treasures of stinging aggressivity.

Not for the faint-hearted

Indeed, in pre-Columbian cultures – especially among the Maya –, blood was the cement of religious life, and of life as a whole. Making it pour from a prisoner's body by removing his heart, for instance, or the practice of self-sacrifice or scarification, was a magnificent way of rejoicing gods, in order to ensure human, animal and plant fertility, as well as the cosmic order (*fig. 8*).⁵ For the Maya, human blood was the most valuable and potent matter of the universe. If bloodletting was probably not a delight (apart from the spiritual satisfaction of pleasing the gods, and thus of contributing in the good working order of the universe), it was at least an honour reserved to the elite, which put the courage of the practitioner to the test: according to the Spanish Franciscan Diego de Landa (1524 – 1579), one of the first missionaries to preach in Yucatán, the person who would most often perform self-sacrifice was considered the bravest, and young children were also taught how to do it.⁶ These rituals could be performed during private or public ceremonies,⁷ sometimes related to the king's rise to power and to its legitimacy, as the inscriptions on lintels from Yaxchilan (Mexico) suggest.⁸

² Chancay cloak (Peru, 11th–15th century AD): FGA-ETH-AM-0159; Chimú vase (Peru, 3rd – 5th century AD): FGA-ETH-AM-0260.

³ FGA-ARCH-OC-0042: <https://www.fg-art.org/en/artwork-of-the-month-archives/the-art-of-armor-in-kiribati>.

⁴ Lothrop, *Coclé*, p. 97-99; de Borhegyi, "Shark Teeth, Stingrays Spines", p. 283.

⁵ de Landa, *Relation*, p. 124-125; Joralemon, "Ritual Blood-Sacrifice", p. 59.

⁶ de Landa, *Relation*, p. 124-125.

⁷ Schele, Freidel, *A Forest of Kings*, p. 68-69; Schele, Miller, Kerr, *The Blood of Kings*, p. 180.

⁸ Davletshin, "Glyph", p. 1.



Self-sacrifice implied the piercing of a well-irrigated organ or body region: genitals for men, cheeks, lower lip, ears or tongue for women. And as Diego de Landa tells us: “with the blood which flowed from all these parts”, they “anointed the idol” (a figure of the deity).⁹ A figurine kept at the American Museum of Natural History depicts a nobleman sitting cross-legged, wearing a rope collar, engaged in the bloodletting rite with an object aimed at his exposed penis (*fig. 9*).¹⁰ This instrument, which also appears on the Yaxchilan lintels, either in a bowl or held by a practitioner, and also seen in the hands of a shaman on a Coclé plate,¹¹ is no other than a stingray’s spinal blade. In all cases, it is recognizable by its barbs and pointed tip.

Stingers, blades and lancets

In order to let blood pour in abundance, one had to use naturally pointed and sharp tools: a ray’s stinger – “a knife in the water”, to quote the title of a seminal article –, a bone copy of it, or obsidian blades.¹² All these objects became sacred when used for this purpose,¹³ and even embodied the “perforator god”.¹⁴ Ropes, sometimes equipped with knots or thorns (shark teeth?)¹⁵, as on Lintel 24 from Yaxchilan, were also used in the ritual (*fig. 10*). This lintel depicts Lady K’ab’al Xook pulling a rope through a slit in her tongue. In front of her knees is a small woven basket where the rope or blood-stained cloth was stored. Other spines, like the dermal spines of the porcupine fish, may have been used for the same purpose.¹⁶ The purpose of this act of bravery was not the death of the practitioner, but the appearance of visions connecting them directly with the world of ancestors and gods, during the supreme offering: on Lintel 15 from Yaxchilan, a big snake with an ancestor head, emanating from the blood,

⁹ de Landa, *Relation*, p. 124-125. The main depictions of this self-sacrifice have been gathered by Joralemon, “Ritual Blood-Sacrifice”, *passim*.

¹⁰ New York, American Museum of Natural History, Department of Anthropology, 600 – 800 AD: Schele, Miller, Kerr, *The Blood of Kings*, p. 180, p. 192 and p. 203, pl. 69.

¹¹ Labbé, *Guardians of the Life Stream*, p. 36-37, fig. 30 and p. 105; Cooke, “Observations”, p. 123, fig. 11. a.

¹² Benson, “A Knife in the Water”, p. 176.

¹³ Davletshin, “Glyph”, p. 1.

¹⁴ Joralemon, “Ritual Blood-Sacrifice”, p. 65-66; Schele, Miller, Kerr, *The Blood of Kings*, p. 176, fig. IV.1.

¹⁵ Newman, “Sharks in the jungle”, p. 1528.

¹⁶ Maxwell, “Beyond maritime symbolism”, p. 93.



appears in front of Lady Wak Tuun who is about to practice the ritual (*fig. 11*). It represents the path connecting the two worlds.¹⁷

The wonderful world of rays

The dreadful ray stinger may have played a big part in the reception of these visions. As cartilaginous fishes whose superorder comprised more than 600 species, rays were a universe of their own. They dwell in the temperate, tropical and subtropical waters of the globe.

And how about their huge evocative power? Here is just a small array of names in English: thornback ray, undulate ray, shagreen ray, Lusitanian cownose ray, brown ray, blackchin guitarfish, bottlenose skate, spotted eagle ray, spiny butterfly ray, porcupine ray, giant guitarfish, giant devil ray, not to forget the giant electric ray.¹⁸ The order myliobatiformes, like the one we are dealing with, display a diamond shape and a tail equipped with a venomous stinger, thus their common name “stingray”. This order comprises 8 families, among which the *Dasyatidae*, which has 8 genera.

In the Caribbean, the most common species are *Dasyatis americana* (southern stingray, *fig. 12*), *Dasyatis say* (bluntnose stingray) and *Urobatis jamaicensis* (yellow stingray), which are also attested by archaeological excavations, notably on sites like Tikal, Palenque, Caracol, Cozumel and Sitio Conte.¹⁹ In the Gulf of Panama, whence our little jewel may come, the most common ray species is the *Dasyatis longa* (longtail stingray). Myths have retained the animal’s capacity of inflicting a fatal wound, as in an Arawak myth (French Guiana) explaining the origin of the poison used for fishing.²⁰ Due to its toxic dirt, a boy was poisoning fishes just by swimming in their water, after which they could still be eaten; when fishes took revenge and attacked the child, the deadly blow was delivered by a ray. Due to its shape and

¹⁷ Schele, Freidel, *A Forest of Kings*, p. 68-69. An interesting parallel might be drawn with the ritual flagellation of young Spartans in the cult of Artemis *Orthia*; these flogging rituals were rites of endurance and not of execution, although some sources regret that things sometimes went wrong.

¹⁸ Adapted from: https://fr.wikipedia.org/wiki/Liste_des_noms_vernaculaires_de_raie

¹⁹ Haines, Willinck, Maxwell, “Stingray spine use”, p. 84-85; de Borhegyi, “Shark Teeth, Stingrays Spines”, p. 283.

²⁰ Lévi-Strauss, *Le cru et le cuit*, p. 268, M 146.



harmful abilities, the ray was closely linked to blood, and notably menstrual blood: in the mytho-poetical mind of the North and South America, it was commonly related to female reproductive organs (the ray's body corresponding to the woman's womb, and its tail to the vagina);²¹ moreover, *in cauda venenum*, the Warao of Venezuela compare the venomous ray to a young woman.²²

Secret weapons

Stingrays are in fact rather shy and peaceful, but they are easily frightened and know how to defend themselves if they sense danger. Their main natural predators are sharks, and some fishermen's tales mention the encounter of sharks with stingray barbs embedded in their jaws.²³

Another predator is of course man, against whom the animal can retaliate by means of three different weapons: lashing, stinging and envenomation. They are indeed equipped with a whip-like tail, and use this lashing motion to sink their sharp spine in the body part with which they are in contact. Due to its backward-facing serrated barbs, this blade is hard to extract, as it gets firmly fixed in the flesh and soft tissues of the victim. If vital organs are touched, the injury can be fatal.

And as if these excruciating wounds were not enough, the stingray is also venomous: along the length of the spine is a series of ventrolateral-glandular grooves lined with soft spongy tissue and venom-producing cells which, when ruptured by the whip-like action of the tail, release a powerful neurotoxin: this venom spreads over the stinger, and thus enters the victim's tissues. This can notably cause cardiac arrhythmia, throbbing, sharp or shooting pain, nausea, diarrhea, muscular spasm, paralysis, swelling, dizziness, infection and necrosis of the wounded tissues... to mention but a few of the curses held in this fiendish tail, which can

²¹ Graham, "Creation imagery", p. 287-288. In the Yaruro myths (Venezuela), the creator goddess Kumañi pierces her tongue with a stingray spine to beget the world with her blood, see Wilbert and Simoneau, *Folk Literature of the Yaruro Indians*, p. 21-23.

²² Lévi-Strauss, *Du miel aux cendres*, p. 264, n. 1.

²³ De Borhegyi, "Shark Teeth, Stingrays Spines", p. 283.



also provoke an irreversible cardiac standstill.²⁴ And even if the ray has been killed, the venom on its stinger remains active for 48 hours after the animal's death.²⁵

A driller's kit

For a long time, archaeology has taken into account the Maya reliefs and glyphs, as well as the stingray blades found on several sites of the Mesoamerican area, notably in tombs and funerary deposits, as is the case at Sitio Conte (Panama), which pertains to the Coclé culture.²⁶ Assemblages comprising stingray spines have been found in tombs, placed next to the pelvic region of high-ranking persons, as they were perhaps stored in a pouch hanging from their waist;²⁷ they were also found in votive caches, often in association with shark teeth. These spines seem to have been carefully cleaned, probably for a use implying no other risk than the ones inherent to the bloodletting rite.²⁸

One may wonder if self-sacrifice, however important, suffices to exhaust the complex relation between man and ray. The answer is no: the animal was consumed, and probably also offered to the gods, as the ray vertebrae found at the inland site of Caracol suggest.²⁹ And what about the "visions" aimed for through self-sacrifice? Were the flow of blood, pain and the excitement caused by the whole context enough to induce them? Apparently not. If an extreme loss of blood can indeed induce a comatose state in which one can perceive visions, the loss of blood is so serious that death is fairly inevitable, which was not the aim

²⁴ Benson, "A Knife in the Water", p. 180-181; Maxwell, "Beyond maritime symbolism", p. 91; Haines, Willinck, Maxwell, "Stingray spine use", p. 85-86.

²⁵ Maxwell, "Beyond maritime symbolism", p. 92; Haines, Willinck, Maxwell, "Stingray spine use", p. 87.

²⁶ Lothrop, *Coclé*, p. 211, tomb 1 (bundle of stingray spines placed next to the body), p. 54, fig. 34, tomb 32; see also Benson, "A Knife in the Water", p. 177.

²⁷ de Borhegyi, "Shark Teeth, Stingrays Spines", p. 282-283; Davletshin, "Glyph", p. 1. A stingray spine found at Piedras Negras (Guatemala) bears the name of its owner: 'Ahku'l, K'ihna' prince, see *Ibid.*, p. 2.

²⁸ de Borhegyi, "Shark Teeth, Stingrays Spines", p. 282-283.

²⁹ Haines, Willinck, Maxwell, "Stingray spine use", p. 89; Cooke, "Observations", p. 116.



of the ritual.³⁰ One might think that these visions were rather induced by stimulants of different kinds.³¹

Stingray venom may have played a part in this process. As for the Maya world, E. Benson has proposed that dried rays were transported from the coasts to the inland, and that their venom was stored in vessels for their anaesthetic or psychoactive properties: in this regard, she mentions that the Lacandon Maya would pierce their ears “when in a state of intoxication”, and that bloodletting was performed in the Gran Chaco “during drinking bouts”.³² On the Coclé plate mentioned above, a restless shaman is waving stingray spines.³³ That the venom extracted from this dangerous tail could have been used – in a form which remains to be determined (diluted, as a drink, or as anointment?) – to anaesthetize the pierced zone, thus softening the pain of the act, or to produce visions, is an interesting idea which would deserve a closer look by specialists.

Back to our cute little stingray

As far as I'm aware, jewels like the little ray studied here, which does not pertain to the Maya but to the Coclé or Chiriqui culture, or vases like the Fondation's – which belongs to a completely different culture from Peru –, were not sufficiently taken into account by specialists of rituals. Indeed, the vase certainly depicts a venomous ray, the *Dasyatis*, as its barbed tail suggests, and if our little gold pendant is rare, it is not a unique piece. A closer look also shows that the tail of our little ray splits at the tip: the dorsal fin, and the stinger. Everything is in this tail, as harmful and venomous as can be...

The object, which escorted the deceased to their burial place, carries a meaning, even if its original archaeological context is lost, as is the case for many artefacts in ancient collections. The animal was at least a mediator between the world of the living and the world of

³⁰ Gronemeyer, “Bloodletting and Vision”, p. 11.

³¹ Gronemeyer, “Bloodletting and Vision”, *pass.*

³² Benson, “A Knife in the Water”, p. 184 *sq.*

³³ Labbé, *Guardians of the Life Stream*, p. 36-37, fig. 30 and p. 129: he might be performing rituals to trigger germination, during celebrations ensuring the fertility of the world; Cooke, “Observations”, p. 123, fig. 11. a.



ancestors, but it may also be a reminder of scarification and self-sacrifice ceremonies performed during the life of the owner.

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Bibliography

Benson, Elizabeth P., "A Knife in the Water: the Stingray in Mesoamerican Ritual Life", *Journal of Latin American Lore*, 14, 1988, p. 173-191.

Cooke, Richard, "Observations on the religious content of the animal imagery of the 'Gran Coclé' semiotic tradition of pre-Columbian Panama", in Jones O'Day, Sharyn, van Neer, Wim, Eryvynck, Anton, *Behaviour behind Bones. The zooarchaeology of ritual, religion, status and identity*. Proceedings of the 9th Conference of the international Council of Archaeozoology, Durham, August 2002, p. 114-127.

de Borhegyi, Stephan F., "Shark teeth, stingray spines, and shark fishing in Ancient Mexico and Central America", *Southwestern Journal of Anthropology*, 17, 1961, p. 273-296.

Davletshin, Albert, "Glyph for Stingray Spine", 2003.
Mesoweb: www.mesoweb.com/features/davletshin/Spine.pdf

de Landa, Diego, *Relation des choses du Yucatán (1566)*, Paris, Belles Lettres, 2014.

Graham, Mark Miller, "Creation Imagery in the Goldwork of Costa Rica, Panama, and Columbia", in Quilter, Jeffrey, Hoopes, John W. (eds), *Gold and Power in Ancient Costa Rica, Panama, and Columbia*, Dumbarton Oaks, Dumbarton Oaks Research Library and Collection, 2003, p. 279-299.

Gronemeyer, Sven, "Bloodletting and Vision Quest Among the Classic Maya", *Human Mosaic*, 34, 2003, p. 5-14.

Haines, Helen R., Willink, Philip W., Maxwell, David, "Stingray Spine Use and Maya Bloodletting Rituals: a Cautionary Tale", *Latin American Antiquity*, 19, 2008, p. 83-98.

Joralemon, David, "Ritual Blood-Sacrifice among the Ancient Maya: Part I", 1974.



Mesoweb: www.mesoweb.com/pari/publications/RT02/Joralemon1974-OCR.pdf

Labbé, Armand J., *Guardians of the Life Stream: Shamans, Art and Power in Prehispanic Central Panamá*, Santa Ana, The Bowers Museum of Cultural Art, 1995.

Lévi-Strauss, Claude, *Le cru et le cuit*, Paris, Plon, 1964 (*Mythologiques*, I).

Lévi-Strauss, Claude, *Du miel aux cendres*, Paris, Plon, 1966 (*Mythologiques*, II).

Lothrop, Samuel Kirkland, *Coclé. An archaeological Study of Central Panama, I, Historical background, excavations at the Sitio Conte, artifacts and ornaments*, Cambridge, Peabody Museum of Archaeology and Ethnology, Harvard University, 1937 (*Memoirs of the Peabody Museum of Archaeology and Ethnology, Harvard University*, VII).

Maxwell, David, "Beyond maritime symbolism. Toxic marine objects from ritual contexts at Tikal", *Ancient Mesoamerica*, 11, 2000, p. 91-98.

Newman, Sarah E., "Sharks in the jungle: real and imagined sea monsters of the Maya", *Antiquity*, 90, 2016, p. 1522-1536.

Schele, Linda, Miller, Mary E., Kerr, Justin, *The Blood of Kings. Dynasty and Ritual in Maya Art*, Fort Worth, Kimbell Art Museum, 1986.

Schele, Linda, Freidel, David, *A Forest of Kings: the Untold Story of the Ancient Maya*, William Morrow and company, inc., New York, 1990.

Wilbert, Johannes, Simoneau, Karin (eds.), *Folk Literature of the Yaruro Indians*, UCLA Latin American Center Publications, Los Angeles, 1990.