## **Blood and Sacrifice**

Researchers are revamping notions about the ancient Maya and finding that ritual bloodletting and warfare once reigned supreme

By BRUCE BOWER

ove over Montezuma. Take a powder Columbus. The written history of the Americas began in 50 B.C., long before the ascent of the Aztecs or the arrival of the Europeans, and is studded with a string of kings whose lives and culture are just beginning to come to light. These once-proud rulers – Pacal of Palenque, Shield Jaguar of Yaxchilan and Yax-Pac of Copan, to name a few—are speaking to modern-day researchers thanks to dramatic advances in understanding the magnificent artwork and hieroglyphics of the Maya civilization.

In addition, continuing excavations of ancient Maya cities are turning traditional theories of Maya cultural evolutioninside out.

The Maya culture did not hit a deadend with Spanish conquest in A.D. 1541. About 2 million people who speak more than 30 Mayan languages still live in Mexico and Central America. Their forebears, whose civilization arose in the region's tropical forests around 300 B.C.,

left behind pyramids, temples and inscriptions that have intrigued scholars for the last 150 years.

During most of that time, researchers assumed that the images on stelae (carved tablets), temple walls, pottery and other artifacts showed mystical priests or gods primarily concerned with astrology and a complex calendar system. Furthermore, the archaeological remains at Maya sites were long believed to be the products of people who were peace-loving, religious, modest, conservative and clean, at least until the ninth century, when they began to adopt the bloody sacrificial habits of central Mexican invaders.

However, beginning in the early 1960s, the Maya took on a totally different cast as researchers started to decipher their complex writing system. First, Maya monuments were shown to contain "emblem" glyphs that refer to their city of origin. Then, a series of inscriptions was identified relating to births, accessions, wars, deaths and marriages of Maya kings, as were name glyphs for individual rulers. Finally, it was demonstrated that the hieroglyphics are a bona fide writing system with grammatical structure and phonetic symbols.

From there, the study of Maya language and the art to which it is indelibly tied took off. An up-to-date picture of the Maya, particularly during the Classic period or "golden era" that lasted from around A.D. 200 to A.D. 900, is presented in *The Blood of Kings: Dynasty and Ritual in Maya Art* [Kimbell Art Museum, Ft. Worth, Texas, 1986] by art historians Linda Schele of the University of Texas at Austin and Mary Ellen Miller of Yale University. The book was published in conjunction with a major exhibit of Maya art that opened on May 17 at the Kimbell Art Museum.

Handle of terra-cotta bowl from A.D. 350 to 500 depicts a cormorant rising from the "watery world" with a fish in its mouth. Bowl rests on four peccary heads thought to represent the pillars of the world.



Clay figurine dated between A.D. 600 and 800 shows Maya king in regalia associated with war and bloodletting.

ne of the book's central revelations is that the Maya were practicing bloody rituals on their own well before the arrival of the Mexicans. "Blood was the mortar of ancient Maya ritual life," write Schele and Miller. Rulers were viewed as descendants of gods. It was considered their duty to bleed and mutilate themselves on ritual occasions to cement their divine lineage and sustain the universe. Before going to war, for example, a king would puncture his penis with a stingray spine or a lancet made of jade or obsidian, while his queen would run a thorn-encrusted rope through her tongue. (Part of this ritual is shown on the cover.) The trauma of massive blood loss induced hallucinations in which royalty contacted the gods and dead ancestors.

Warfare between Maya cities was frequent, and its aim was largely the capture of royalty for torture and sacrifice rather than territorial expansion. Captives were often pitted against the conquering king in an ancient ballgame that was stacked in favor of the king; after inevitably losing the contest, captives were sacrificed and often decapitated. The Aztecs also had a penchant for human sacrifice, but Yale anthropologist Michael D. Coe points out that "they certainly never inflicted upon their victims the torture and mutilation that were characteristic of Maya sacrifice."

So much for the stereotype of mellow stargazers.

aya stone reliefs, sculptures and paintings clearly show these practices, but the reality of blood ritu-

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A Maya noble decked out in ballgame gear, portrayed in ceramic figure from A.D. 700 to 900, wears a full jaguar hide and a necklace of jaguar claws. In his right hand he holds a handstone, which may have been used to set the ball in motion.

als and sacrifice was ignored or glossed over until many of the glyphs that line the borders of these artworks were decoded. There are three types of glyphs: pictographs, each representing an entire word; phonetic signs, representing the sound of a syllable; and semantic signs, specifying one of many potential meanings. Maya scholars estimate that about three-quarters of the glyphs on monuments have been deciphered, but translating combinations and chains of glyphs is still no picnic. Single signs have multiple functions and meanings, and there are different signs that stand for the same sound.

The Maya were also inveterate visual punsters, say Schele and Miller. A king's name and title, for instance, could be written in many different forms, but the words and sounds of each variation are the same.

Nevertheless, translations are proceeding rapidly, since researchers now know how the Maya arranged verbs, objects, subjects and punctuation in their written language. Most inscriptions are made up of a date; the name of the subject (often a king), which can take as many as 30 glyph blocks (several glyphs per

block); and an event such as the capture of a lord.

Another event commonly depicted on objects of all types, say Schele and Miller, is death. According to the inscriptions, the Maya believed that death called the soul to a type of hell known as Xibalba, where it faced a series of trials and competitions with the Lords of Death. Defeat doomed a soul to burial in the evil-smelling Xibalba, whereas victory allowed it to dance away and, with other reborn ancestors, guide its descendants.

similarly, the rebirth of Maya studies is helping researchers to dance at an ever-quickening pace toward new revelations. A symposium organized by the Kimbell Art Museum last month provided several cases in point.

At the symposium, Yale anthropologist Floyd Lounsbury explained that the Maya developed a complex "day count" calendar 16 centuries before a similar system was devised in Europe. Maya kings used the calendar to determine the birthdates of the gods from whom they claimed to be descended and to mark anniversaries of those hallowed dates. Planetary movements crucial for various

rituals were also tracked with the calendar, says Lounsbury. Warfare, for instance, was initiated on the days surrounding the appearance of Venus as the evening star.

"But it isn't known," he notes, "whether the calendar system was part of a clever chicanery used by rulers to invent gods' birthdays and dupe the masses, or if rulers really believed that they could determine what had happened in a previous cosmological era."

lthough Maya ritual life closely followed the stars, recent excavations indicate that back on earth the progress of this civilization bore no resemblance to the predictable shifts of the heavens. Traditional theories, says anthropologist Arthur Demarest of Vanderbilt University in Nashville, Tenn., hold that culturally advanced Maya from the highlands (located to the south in parts of what is now Mexico and Guatemala) began to migrate to the northern lowlands (extending across the Yucatan Peninsula into what is now Honduras, Guatemala and Belize) around A.D. 100, stimulating a regional population expansion and advances in art, writing, timekeeping and construction characteristic



Rollout photograph of a vase from A.D. 600 to 800 shows an attendant, at right, offering painted ceramics to an enthroned ruler. At left, another ruler is attended to by a woman. Hieroglyphics line the top of the scene.

## ". . . (I)f there's one thing the Maya loved, it was bloodletting."

of the Classic period.

In the last five years, however, archaeologists have identified ceramic styles in the highlands dating to between 500 B.C. and A.D. 250 that do not appear at lowland sites from the same time period. This evidence, along with other features of lowland sites, "has destroyed the myth that a highland intrusion caused the growth of Maya civilization," says Demarest, "and reveals a social and political complexity [in the lowlands] as advanced as that in highland centers."

A good example is El Mirador, now being excavated by Demarest and his colleagues from Harvard University and the University of Pennsylvania in Philadelphia. This site, says Demarest, was even more advanced than highland centers during the period from about 400 B.C. to A.D. 250. It contains pyramids much larger than those built hundreds of years later during the Classic period, he notes, although construction techniques were better later on.

In other words, says Demarest, El Mirador is out of sync with the widespread notion that the Maya civilization reached its peak after A.D. 300. Apparently, lowland Maya centers flourished and faltered at different, unrelated times. This was probably due, he suggests, to the fragile power base of Maya kings. A forceful, charismatic king could hold together alliances with less powerful rulers in surrounding areas and encourage cultural growth; the kingdom might fall apart or succumb to invasion when a less adept successor took over.

he haphazard cultural development described by Demarest also applies to the Honduran site of Copan, once a major Classic center, reports anthropologist William Fash of Northern Illinois University in De Kalb. Copan was first settled around 1,000 B.C., he says, and had a "fling with complex culture" before a decline and rebirth around 400 B.C.

Another aspect of Demarest's scenario is supported, contends Fash, by inscriptions and drawings on several temples constructed at Copan during the late eighth century, which depict the heads of

noble lineages aligned to Copan's last king, Yax-Pac. This tactic was used by Yax-Pac to strengthen ties with his subordinates, says Fash. The Copan power structure crumbled, however, when Yax-Pac died. A big reason for the collapse, according to Fash, is that Yax-Pac probably outlived his heirs, and no one, literally, could fill his shoes. "Those are the breaks," he says, "when the entire world revolves around the blood of kings."

ut the Maya world did not exist in a vacuum, points out Schele. Images and costumes associated with bloodletting and sacrifice — which had become the principal state rituals by at least 150 B.C. — were influenced by the Teotihuacan culture of central Mexico. Maya contacts with these people extend back to around A.D. 100, says Schele; the Guatemalan site of Kaminaljuyu contains Teotihuacan-style ceramic pots and may once have been part of a neutral trading zone.

In a preliminary study, Schele finds that certain images used in Teotihuacan, including a mosaic monster with a round eye and arching nose, consistently turn up on lowland Maya artifacts containing scenes of war and self-sacrifice and references to the appearance of Venus as the evening star. Outfits used in Teotihuacan sacrifices also appear to have been adapted by the Maya, says Schele, "because if there's one thing the Maya loved, it was bloodletting.

nlike the Teotihuacan culture, the Maya developed their own writing system, which is now providing glimpses of the political bureaucracy reigned over by Classic Maya kings. David Stuart, a Princeton (N.J.) University undergraduate who is already a leading investigator of Mayan glyphs, recently identified a sign that refers to elite nobles who ran secondary centers connected to main cities. The distinctive glyph occurs before rulers' names on inscriptions recovered from several sites in the western lowlands along the Usumacinta River. The markings date to no earlier than around A.D. 750, says Stuart.

"The apparent effort to establish sec-

ondary rulers and define the area of a capital's influence," he contends, "may reflect rising political and economic tensions during the Classic period."

In the past several months, Stuart also has pinpointed a glyph used by scribes to sign their work. As with the "subsidiary ruler" sign, the "scribe" sign occurs before an individual's name. In one case, Stuart says, a king's son is clearly identified as a master scribe. "We know scribes were very important to the Maya," he notes. "The craftsmen of their writing were probably of the highest social rank."

hile art, writing and construction achieved majestic heights during the eighth century, the foundation of the Classic Maya world was crumbling, according to art historian Miller. The growth of royal families and the need for sacrificial victims, particularly kings, resulted in widespread, near-constant warfare documented on stelae from that time period, says Miller; economic and artistic tributes demanded by victors probably emptied many cities of skilled artisans and supplies. The sacrificial blood of divine kings was no longer holding the world together and feeding the faith of the populace. "Many Maya may have fled to the jungle by the end of the eighth century," proposes Miller, "abandoning the cities where they were the obvious targets of their enemies.'

Yet Classic Maya images of warfare and bloodletting did not disappear at that point, adds Miller; they show up again in Aztec art of the 15th century. Like the Maya, the Aztecs probably adapted images from conquered territories for their own uses.

Other aspects of the Maya civilization have not fared so well over time. For example, Spanish conquerors destroyed many books that dealt with historical, mythological, religious, astronomical and mathematical matters. Only four of these texts, written on folded bark, are known to have survived.

"The discovery of a single [additional] bark-paper book of Classic date," says Coe, "or, even better, 10 or 20 of them, would probably change all our thinking about these strange people."